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FOR THE IMPROVEME

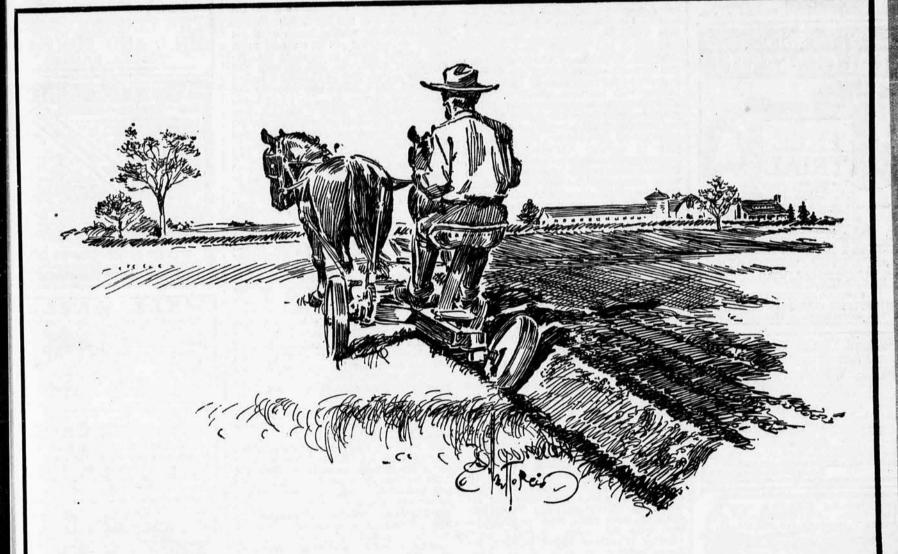
Assign OVS Y DECEMBER 9, 1911.

ROM the cold Atlantic shores to the pitiless sage-brush desert America was peopled by the good and the bad, the conservative and the adventurous, but always by the courageous.

Seeking relief from the bonds of human action and the curtains of imagination these have seen the bow of promise and have dug 'neath its pavonine glow.

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Over the Editor's Table

Just a bit Personal by the Editor For KANSAS FARMER Folks

ITH this issue I become editor-in-chief of KANGA THE in-chief of KANSAS FARMER. I am glad to get onto the job. This is the realization of a boyhood To become the editor of an agricultural paper—a good one—is the thing to which I have long looked forward and for which I have been preparing for a good many years. I have in mind some well defined ideas of what a first-class farmer's paper should be, and I will work these ideas into Kansas Farmer. It is not my purpose to at this time review these ideas. Suffice it to say that I believe the so-called "farm" paper is not a good farmer's paper unless it is a good farm guide—a good paper to farm by. KAN-SAS FARMER has been such a paper for many years—that's one reason I am one of its owners and now its editor. There are at least two kinds of papers made for farmers and called "farm" papers. One is the very common kind. It is a hodge-podge of farm news, good, bad and indifferent advice regarding farm matters, and the subscription cost of which is little or nothing. Such papers exist only as a vehicle for a miscellaneous lot of advertising—legitimate and illegiti-mate. The other kind is an agricultural paper, and there are not a great many such in this western country. The people who own such papers must make a living, of course, so these papers are operated for profit like the first named; but this latter type of paper makes an honest endeavor as a teacher—every issue pointing the way to better live stock, better care and use of the soil, more prosperous and happy farm homes and inspiring cleaner thinking and better living. That's the ideal agricultural paper. We each work to our ideal—high or low, according to the individual. I will do my best to continue to give to Kansas Farmer readers an agricultural paper approaching that ideal. If tural paper approaching that ideal. If every man in every walk should do his best all the time, what a different world this would be.

Mr. I. D. Graham, whose unceasing and untiring efforts have kept Kansas Farmer in the front rank of agricultural papers, will continue on the editorial staff, but in a capacity giving him greater opportunity for justice to himself and satisfaction to his readers. The arrangement is one, too, by which the plan of making Kansas Farmer a greater paper may be perfected. Mr. Graham is now live stock editor. His whole energy will be devoted to making the live stock department of Kansas FARMER of the greatest possible value to the farmer, breeder and feeder. He will be at the service of the live stock advertiser, and his wide acquaintance among breeders in the middle west will enable him to render invaluable assistance to patrons of Kansas Farmer. Mr. Graham's personal preference lies in the direction of his new duties and he, too, feels that he is now entering upon the work of his choice. By the way, Mr. Graham will continue to write the first page epic. The work of no other Kansas agricultural writer has ever been copied to the extent of Mr. Graham's first page paragraphs. Mr. Graham and Mr. Reid weekly give Kansas Farmer a front page feature possessed by no other paper in the world, and this feature is much appreciated by "old reliable"

This column will become a permanent feature of Kansas Farmer. In it I will write some things which cannot be classified under other headings in this agricultural weekly. I may slop over occasionally. Most people do. But an editor must have some place in which he can write the things he really feels, whether it's about better farming, religion, politics, the other fellow or himself. I think this will prove an interesting department, and I hope helpful.

As editor of what I really believe to be the best agricultural paper in Kansas, you cannot realize how glad I am that in its columns do not appear a single questionable advertisement. KANSAS FAMER prints no liquor advertising, no medical advertising, no fake land or min-

ing advertising, or any other sort of objectionable advertising. That means that our advertising columns are carefully edited for the protection of the morals as well as to safeguard the pocketbooks of our readers. By the way, Kansas FARMER was the first paper—agricul-tural or otherwise—to free its advertising columns from objectionable advertise-ments and to guarantee to its readers the fair dealing of every advertiser who bought its space. When you buy an agricultural paper you should get decent and reliable advertising reading as well as decent and reliable reading on agri-cultural topics. Only a few days ago Mr. Barth, our advertising manager, refused two contracts, aggregating \$1,050, tendered by medical concerns. The copy was as decent as any medical advertising could be, but there is so much fake in this medical advertising business that it is impossible for us to draw the line on "fake" or legitimate, so we turn it all down. It hurts the pocketbook a bit to refuse a \$1,000 worth of business tendered on a silver platter, but Mr. Barth refused it without batting an eye, and why—because these columns must be kept clean. I have faith in our readers to the extent that they appreciate the decision we have made in keepof their homes. Advertisers appreciate this stand, too, and an advertiser who helps us maintain such a position deserves the support of KANSAS FARMER readers.

Two weeks ago I was asked to attend a farmers' institute and talk about feeding skim milk to calves. I accepted the invitation and made the speech. While dinner was being served, a good-natured, big-hearted and intelligent farmer asked his neighbor if the skim milk calf man was on hand. I was pointed out and the farmer, shaking my hand, said he was in deep trouble with a bunch of calves which were doing poorly on skim milk, and he had hoped to meet at this in-stitute a man who had actually fed milk to calves, and he thought I looked too much like a fellow who probably had heard how it was done, but had never really done that thing. By the same process of reasoning many people wonder why this or that man, as an editor, has a license to advise regarding farm methods or agricultural practice, and with the feeling deep in their hearts that he knows nothing about farming or the farmer's needs, they refuse to regard seriously, let alone practicing, any suggestion he has to offer. This suspicion, this doubting, this lack of confidence causes many well meaning and otherwise progressive farmers to remain in the old rut. If they dared to trust what they read there would be much more practice of the tried and successful methods so generously and studiously exploited by the agricultural press. The fact is, that much of many papers of the kind first mentioned in this article is the veriest tommyrot, and the farmer knowing it justifies his suspicion, and his lack of confidence enters into every proposition wherein book learning is involved. Too much is written to and talked to the farmer, and not enough for him.

When I had finished that skim milk calf speech the doubtful hearer knew that I had fed skim milk. A man can't talk long on that or any other farm subject until his hearers know whether he is the genuine or a fake. Before I have written much for KANSAS FARMER you will know whether I've ever farmed or not and whether or not I am able to say anything worth remembering or trying. Twenty-five years of farming—real farming and doing everything any man on a farm has ever done—and meeting with more than average success, I think, and with ten years of travel in every top-notch agricultural section of the United States, with my eyes and ears open all the time, searching for the truth, and with enough sense to know what is good or bad for Kansas farmers, should give me some qualifications for this job.

Ja Borman

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LOSS THROUGH NEGLIGENCE.

HE editor has long entertained the idea that one of the heaviest farm losses, and that for which there was the least excuse, is that resulting from the poor care given farm implements during the season when not

A few weeks ago the editor visited a farm on which in one pile was a thousand dollars' worth of farm implements -not junk, but implements used on the farm the past season-with no protection, no oil or grease on the mould-boards of plows or on the shovels of cultivators, and no paint on the wooden parts. In the field stood a corn binder eft at the end of the last row cut, and in the hay meadow close beside a hay stack was the mower and rake.

This was on the farm of a successful farmer-a farmer who has made money and is well-to-do. He was a farmer who could afford just such extravagance if he so chose. But he was setting a had example for his three or four boys, each of whom, it is hoped, will own and

operate a farm. The lack of care of farm implements too often occurs on farms whose own-ers can ill afford the loss. It requires about \$1,000 worth of implements to equip a farm of 160 acres. It has been determined that these implements redetermined that these implements require replacing every five years if not The same authority says these housed. The same authority says these implements will last twelve years if housed, oiled and painted as they should be. It is my judgment the life of a set if implements given no care is less than five years, and that with good care the same implements will last fifteen years. Giving the careless farmer the benefit of all doubt, by the above figures he is losing \$1,000 every five years. He is actually losing the money, too, because when his machinery is worn out or rot-ted or rusted out he must replace it. The \$200 a year lost is in itself a nice little profit.

Our grandfathers, who had little farm machinery, because in their day little was made for the farmer's use, were ideal care takers of everything. We recently visited an old Indiana farm and in the all here were cradles, wooden m the old barn were cradles, wooden rakes and forks, self-rakes, etc., apparently as good as new. In this day in this country the scythe hangs all winter in a tree. When we stop to think, do we really have any kick coming on low prices, high rents, high cost of living, etc., while we continue the most reckless extravagance in which an agriin the old barn were cradles, wooden reckless extravagance in which an agri-cultural people have ever indulged? We cultural people have ever indulged? prosper because of a munificent Providence rather than because we help ourselves.

THE FARMER A SPECIALIST.

Every farmer is capable of specializing along some line. The chances for success are increased if a man selects one line of work and unceasingly hammers away at it. If a man is a wheat farmer, grow the best wheat—pure-bred wheat-and sell it for seed at two times the price of wheat for milling. There is room for a great many seed wheat growers in Kansas. If a farmer must grow wheat, let him grow the best and

with all his heart.
There is the same opening for the farmer who has corn land and prefers to grow corn. After the start is once made it costs no more to grow seed corn than corn for feed. Pure-bred seed corn of varieties adapted to this section, the same well dried and stored and germinative will be seen than the same will be seen than the section of the same will be seen than the section of the secti ing qualities tested before shipment, will give many farmers a pleasant and profit-

able business. Such opportunities for specialization could scarcely all be named in this column. They pertain to each plant and its seed and to each kind of live stock With this specialty the farmer, of course, would conduct general farm operations. If he grew seed wheat he would have tows, pigs and horses like other farmers. Think a little along this line. You may conclude something worth a trial.

KANSAS FARMER

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

Published weekly at 625 Jackson St., Topeka, Kan., by The Kansas Farmer Company. ALBERT T. REID, President. J. R. MULVANE, Treasurer. S. H. PITCHER, Secretary.

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.

CUARANTEED CIRCULATION OVER 60,000

RUSSIAN THISTLE AGAIN.

The news press has been giving a good deal of space lately to the Russian thistle. The newspapers say the thistles are a high-class forage-equal, in fact, to alfalfa. Like many good things, though, it has just one fault, and that is the thorn-except for which, in the estimation of the newspapers, the thistle would be a great feed. The same papers report that some man or men will offer a substantial prize to the student of Kansas University who will breed the thorn off the thistle and thus produce a really valuable feed. Here is hoping some young man gets the money. But, it's too bad that while earning it he can't spend his time at something worth

A million times more good would result from the developing of a strain of Kafir which would mature in the Russian thistle country a week or ten days earlier than our present known varie-ties. Likewise an alfalfa plant somewhat more hardy and drouth-resisting than any alfalfa now grown in that sec-tion. Either in the case of Kafir or tion. Either in the case of Kaffr of alfalfa there is a great possibility to accomplish something really helpful and worth while. There are opportunities with a half dozen plants to perform for the farmer of the western third of Kansas a service of real value.

The Russian thistle is a pest—and will be so long as it is grown. Fox tail makes a fair hay—it is worth cutting when there is nothing else—but the farmer whose land is well set in fox tail would give the world to get rid of it. We have seen Russian thistles grow un-We have seen Russian thistles grow under all conditions. When they grow thick and are not woody, cattle eat them. Growing thick, the thistle does not get tall—when it grows tall the plants are thin on the ground and the stems hard. Under conditions by which they might be grown for feed they might out a third of a ton cured to the acrecut a third of a ton cured to the acre. A 160-acre farm wouldn't grow enough thistles to feed the work stock. In the western country, among farmers, they joke about the Russian thistle for feed. The western country deserves serious consideration at the hands of those who have in their hands the means of experi-

JE 36 Farm machinery which is not properly oiled and sheltered during the idle season will last only about one-third as long as that which is cared for. Supposing the farmer to have a thousand worth of necessary machinery on his place. If properly cared for this will last him about 12 years on the average, but if not cared for it will have to be replaced in about four years, and besides will have to be scoured and repaired every spring when work is pressing and time is precious. Good care, then, simply means that \$1,000 is saved every four years, and this means about \$28 per month. A shed to protect such tools might cost from \$50 to \$100, and thus the saving would be assured. Is this a good investment in which \$28 a month is made on \$100 worth of shed?

JE JE JE With the coming of white frost there has been a noticeable check in the ravages of hog cholera, and later reports indicate that the loss has been greatly overestimated in certain localities, at least. Last spring's crop of pigs was thought to be one of the largest that had farrowed in late years, and the experts now estimate that the cholera has about reduced the number to normal, but that the general shortage of hogs all over the country is sure to make prices firm for the next two or three years. With her enormous acreage of alfalfa and the biggest crop of Kafir in her history, Kansas ought to be able to take care of a good many here this winter. care of a good many hogs this winter and be ready for the big demand which seems sure to come in the spring.

THE FARMER'S IMPORTANCE.

When the farmer increases his net income without impairing his capital, he creates new wealth, swells bank deposits, puts more money into circulation and increases the demand for everything which is for sale.

If he uses poor methods and does not use the mature spreader he is living off of his capital and "the last state of that man is worse than the first."

To some extent, everybody is a merchant, and every man and every business is dependent upon the success of every other man and every other business. No matter who you are or what your business, you cannot alter this ele-mentary fact. The laborer who has mentary fact. nothing to sell but his day's work; the grocer with his sugar and beans; the railroad company with its service, or the truck gardener with his lettuce—all are interested in and dependent upon the products of the soil.

No other single occupation or business is so indispensable to every other business as is farming. No wonder, then, that every other business is, and should be, interested not only in farming, but in successful farming.

THE GRASS LAND.

Many farmers have been known to express regret that so much of their land had been plowed up instead of be-

ing left in native grasses.

In the earlier days of Kansas farming it was generally supposed that the most profitable method of handling the land was to turn under the sod as quickly as possible and get the land into crops. Now it is found that grass is a very

Now it is found that grass is a very valuable crop and no land is more valuable than that which is down to a permanent alfalfa crop.

Wild grass pasture and hay land is very scarce and is eagerly sought after, and yet it seems beyond the power of Kansas farmers to get it either by purchase or by seeding.

Blue stem seed can be purchased of dealers and doubtless much of it is sold.

dealers and doubtless much of it is sold, but it is rarely that one hears of any considerable acreage being put down to

Is this because seeding is not successful or because it is not thought to be worth while? There are many places where blue stem and other grasses will grow which are not available for al-falfa. What have our readers done in the way of resowing the native grasses?

JE JE JE Perhaps the state of Illinois never suf-Perhaps the state of Illinois never suffered from such a scourge of hog cholera as during the present fall season. Reports indicate that there are large sections of that state which are entirely depopulated of hogs, and such a disaster interferes most seriously with farming operations. In order to overcome the difficulty presented by this condition, at least in part, one cattle feeder who could not get hogs to follow his cattle, hit upon the expedient of substituting geese. This feeder bought 500 geese in Tennessee, and is much pleased with his experiment, as he finds that the birds pick periment, as he finds that the birds pick up every grain of his 60-cent corn and that they are fattening very rapidly. Here is a hint for other feeders where hogs are scarce.

Do you have a fanning mill? If not, and there is none in the neighborhood you can borrow, it would be a good plan to buy. You will have a half dozen kinds of seeds to clean before another

Settle down to business—hard work and intelligent effort. The two are required if you would succeed. Today is

quired if you would succeed. Today is the day, and where you are is the place. Here is as good as yonder, and today better than tomorrow.

Scrub father begets scrub son. A scrub bull or scrub seed corn beget their kind. The scrub can't win. Breed

OUR GUARANTEE

MANSAS FARMER aims to publish only the advertisements of reliable persons or firms, and we guarantee our subscribers against loss due to fraudulent misrepresentation in any advertisement appearing in this issue, provided, that mention was made of KANSAS FARMER when ordering. We do not, however, undertake to settle minor claims or disputes between a subscriber and advertiser, or be responsible in cases of honest bankruptcy of advertiser after advertisement appears



FARMERS' WEEK IN TOPEKA.

During the growing season the farmer is the busiest of men and is compelled to devote his energies to the physical side of life, but, after his season is over and his crops stored, he has leisure for mental employment as well.

One of the greatest opportunities af-forded for mental growth to farmers of Kansas is included in "Farmers' Week in Topeka," which will, this winter, begin on Monday, January 28, with the sessions of the Kansas Improved Stock Breeders' Association.

This is the greatest association of its

kind in the United States, and its annual meetings afford those who are in-terested in our greatest industry, an occasion for comparing methods and re-sults and for listening to and discussing topics that are presented by experts in their several lines. It also affords the breeder a chance to meet with his customers and to form new acquaintances among people who may become such. Its social features and banquet are high-

ly prized by its members and guests.

At this great breeders' meeting there will be presented such live subjects as the serum treatment for hogs; the dairy cow; the silo—how to build and fill it; sheep and conservation; failures in the show ring; scientific breeding; local breeders' associations; the horse's feet; hog feeding for profit; and an evening address by President H. J. Waters of the Kansas State Agricultural College.

Opportunities for the discussion of

these and other topics will be afforded and the sessions will close with the annual breeders' banquet on Wednesday evening.

Beginning at 4 o'clock on Wednesday, January 10, the annual meeting of the Kansas State Board of Agriculture will be held. The program will be announced in due time.

This year a new association will be included. This is the Kansas Association of County and District Fair Managers, which will hold its first annual meeting beginning on Tuesday, Janu-

The Kansas Swine Breeders' Association; the Kansas branch of the Red Polled Cattle Club of America; the Kansas Veterinary Medical Association, and others will hold business or other ses-

sions during the week.

The meetings of Farmers' Week, while largely attended and of vital interest, are deserving of greater attention on the part of the farmers of Kansas, and per-haps nowhere else can he get so much real value for the small expenditure of time and money necessary to attend them.

These meetings are free and everybody is invited.

The small farmer—the 160-acre manis reading everything he can get his hands on regarding the adaptability of the farm tractor to his needs and conditions. It seems to us that some types of tractors are very close to marking his of tractors are very close to meeting his requirements. The Kansas Agricultural College official paper ventures this opinion: "Traction power is no more thought of as a joke. While this division of the implement industry is yet in its infancy, the use of traction power on the farm is likely to revelutionize on the farm is likely to revolutionize the present system of farm manage-ment."

ment."

It is said that this winter agriculture is being taught in 7,000 Kansas schools. That is indeed a good start. Of course, agriculture is not actually being taught. But we heard enough of something like agriculture in a country school a few days ago to lead us to believe that it will be taught as soon as the country teachers get next to the "study." While we fellows who have been hammering many years for the teaching of the fundamentals of agriculture in the district school have the privilege of criticising, we must remember that 7,000 teachers must first learn what to teach and how must first learn what to teach and how to teach it.

Corn and Alfalfa for Dairy Cow

D. H. OTIS.

D. O. Otis, the author of this article, is a Shawnee County, Kansas, boy, who through his connection with the Kansas state Agricultural College has done as much as any other man to point Kansas farmers to more economical and better feeding of the milch cow. For several years his effects have been similarly devoted to the Wisconsin farmer through the agricultural college of that state. He is more than making good in every job he undertakes.—Editor.

Three factors stand out prominently in successful dairy production: First, the man; second, the cow; and, third, the feed. It is only a phase of the latter subject that I am to discuss at this time.

In order to comprehend the feeding problem in dairy production we need to realize that the dairy cow is an animated machine that has for her mission the conversion of feed into milk. I need not dwell here on the fact that cow machines vary immensely in their efficiency. If we are to realize the most of our feeds, we must, as a matter of course, see that they are fed to efficient cows.

Just what happens to the feed after it is consumed by the cow is a debatable question. As Governor Hoard says, the inside of the cow is a dark place, and no man has yet been able to fathom all the mysteries wrapped up in the inside workings of her body.

all the mysteries wrapped up in the inside workings of her body.

There is, however, one fundamental principle that applies to cow machines as well as to all other machines, viz., that there must be ample and a properly proportioned supply of raw materials that go to make up the finished product. What does the dairy cow need? If we analyze the product she manufactures, milk, we will get our cue. On an average, whole milk contains approximately the following ingredients:

 Water.
 87.22%

 Ash.
 .71%

 Casein and albumen.
 3.50%

 Sugar.
 4.88%

 Fat.
 3.69%

It stands to reason that the dairy cow in manufacturing the above product must have the raw material out of which the above ingredients are formed, and must have it in sufficient quantity and in right proportion. In addition to this, she must first of all be supplied with sufficient food material for the maintenance of her own body.

maintenance of her own body.

The first step in supplying the needs of our dairy cow is the analyzing of the different feed stuffs, and then submitting them to the chemical laboratory of the cow's stomach and see how much and in what proportion the various feeding stuffs will supply the desired ingredients.

Some Important Factors in Feeding.
In studying these feedstuffs there are several important factors to be considered.

Many authorities measure the value of feed by its total digestible nutrients. This has been proved not to be entirely correct, for although a feed is digestible, it may contain more bulk, require a large amount of energy in chewing, in secreting digestive juices, and in warming up extra water for a suitable solvent. This is called by some "the facility of digestion." At the Connecticut experiment station (Storrs) an experiment was carried on with two 1,000-pound cows fed on a maintenance ration of 6½ pounds of corn meal containing 4½ pounds of digestible nutrients. The same cows required for maintenance 13½

Kansas Should Feed Its Live Stock As Can No Other State

By D. H. OTIS, Wisconsin Agricultural College

pounds of mixed hay containing 711 pounds of digestible nutrients. In this instance one pound of digestible nutrients in corn was equal to 1.67 pounds in mixed hay. Another experiment with pigs resulted in 230 pounds of digestible nutrients in skim milk to produce 100 pounds of gain. With skim milk and shorts there were required 258 pounds of digestible nutrients, and with shorts 294 pounds.

294 pounds.

All things considered, milk would rank first in facility of digestion, followed by concentrates, second, and roughage, third. With roughage the facility of digestion is greater with early cut than late cut hay, is greater with silage than corn stover.

SEASONABLE FEED.

Our live stock are looked upon as animated machines for the purpose of converting our raw feed into finished animal product. To furnish this product the animal must be supplied with the right kind and right quality of raw material. The standards that have been adopted as a result of numerous experiments indicate how much protein, carbohydrates and other extract they need under various conditions and circumstances. While these standards are by no means absolute, they serve our purpose as guides. Our farm feeds usually contain ample quantities of carbohydrates and other extract, but where alfalfa and clover are not grown in large quantities there is a likelihood of being a deficiency in protein, and when buying concentrated feeds we usually buy them not for the carbohydrates, but for the protein. Before purchasing these we need to settle whether we need protein nutrients or total nutrients. If it is the former, we will select some nitrogenous roughage, as alfalfa, clover, or cow pea hay, and for grain, oil meal, linseed meal, gluten meal, or other highly nitrogenous feeds. The selection of these feeds and the grouping of them to make what is known as a balanced ration has been agitated through our institutes and the agricultural press, and are now familiar to all leading stock breeders. For properly balancing our live stock rations we cannot put too much emphasis on the value of alfalfa

and clover as abundant sources of digestible nitrogenous nutrients.

The relish with which an animal eats its feed has much to do with the effect of that feed on the body. It regulates the amount eaten and when properly assimilated the more the animal eats the larger amount of product it turns out. By supplying an animal with food that it eats readily, it will help it to eat its other food better and in larger amounts. A palatable food stimulates the digestive juices, and the supposed good of many of our stock foods rests in the palatableness that they may impart to other feeds. It is important to preserve this quality as far as possible in all feeds. Hay should be so cured that the animals are anxious for it—yes, and so fragrant that they are ravenous for it. Greediness of appetite is a great factor in economical production of live stock products. Any feed that will so regulate the animal as to keep it in good health and condition will add much to the final results. Linseed meal, corn silage, and roots are all examples of feeds that are greatly relished by our live stock.

Variety is very closely related to palatability. It helps to keep the appetite keen and the animal healthy and vigorous. By having several feeds, one can supplement the other, as one may be deficient in ash and this deficiency made up by the other. Recent experiments show that ash plays a very important part in the nutrition of farm animals. It is also known that the digestible protein in one feed does not necessarily possess the same nutritive value as the digestible protein in another feed. By feeding a variety, one will make up where the other falls down, and the feeder can feel reasonably sure that he is giving his animals sufficient nutrients, even though we do not, in our present knowledge, know the exact function of these nutrients.

Having considered the different factors that enter into the value of a feed, it is interesting to take two of our most promising feeds, corn and alfalfa, and see how they conform to these requirements.

ments.

COBN FOR GRAIN.

According to Henry, "Corn is the greenergizing, heat-giving, fat-furnish food for the animals of the farm. * No other grain that the farmer groyields, on a given space and with given expenditure of labor, so much a mal food, both in grain and forage, does the Indian corn plant."

Corn is partic larly appetizing to classes of animals. While a ration a dairy cow can be made without us corn, it is seldom done where corn obtainable. Corn, while such a valual and indispensable feed, should not und ordinary conditions constitute the entigrain ration. It is deficient in cru protein and ash, and should be fed conjunction with other feeds rich these ingredients. It will be noted th under the headings of digestibility affacility of digestion corn stands o prominently as a feed easily digest and containing a large number of union feet available energy.

Corn silage and roots are examples feeds that are greatly relished by o live stock. Of the various palatal feeds, corn silage is doubtless the chea est and most effective. Roots, whi

serving an excellent purpose, requi about twice as much labor to produce. Corn silage adds palatability and v riety to the ration, is a cheap feedproduce and to store, and doubtless go farther than any other feed to solve t problem of restricted pasture acreage to tide over scant pastures during drouth.

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By converting the corn crop into a age, the farmer can handle his creates cheaper and with less waste than by a other method. C. L. Hill, of Wisconsi reports that it costs him from 50 to cents a ton to put his corn crop in t silo, or about \$7.00 per acre. The san acre of corn, he figures, would yield I baskets of corn that would cost hi \$6.00 to husk, which, with the cost cutting, stacking shredding and grindin would be about double what it costs put the same crop in the silo. Silage greatly relished by the cows and caus a glossy appearance of the hair, similated pasture grass. It is convenient feed, and is available summer or winte SILAGE AN ECONOMICAL FEED TO STORE

Corn silage is not only palatable at cheap to produce, but it is an economic feed to store for the production of tot nutrients. This is shown as follows:

One ton of mixed hay occupies 40

cubic feet.

Eight tons of corn silage occupy 40 cubic feet.

One ton of mixed hay contains 1.74

pounds of dry matter.

Eight tons of corn silage contain 4,22

Pounds of dry matter

pounds of dry matter.

One ton of mixed hay contains 90 pounds of digestible dry matter.

Eight tons of corn silage contain 2.50 pounds of digestible dry matter.

It will be noticed that the farmer castore two and one-half times as much dry matter in the silo as he can in hay mow.

THE USE OF SILAGE DURING A DROUTH. Silage, when kept in sufficient quant ties, is always ready to use when needed. The advantages of summer feeding silage, particularly during periods drouth, is fully appreciated by those when the tried it. During the latter part of the summer when pasture was scar or dry, corn silage was fed to the University dairy herd. The flow of mill from the herd was never maintained well during this period of the year at thas been by the use of corn silage. The summer silo is sure to become more important factor in successful dairying.

SILAGE GROWING IN FAVOR FOR ALL

CLASSES OF STOCK.

The economy of silage in beef production has not been as thoroughly established as for dairy production. It has however, been tested by a number experiment stations and by stockmen with excellent results. There is no question as to the value of corn silage for sheep. By careful handling it is also proving a valuable aid to the calfeder, and recently silage has been for to horses with very encouraging results. The fact that silage is so useful for these various classes of live stock ought to give additional incentive to the dairy man to provide for an ample supply of this most excellent feed.

Corn silage should be fed as a supplement to and not as an entire substitute (Continued on page thirteen)

A CCORDING to Henry, "Corn is the great energizing, heat-giving, fat-furnishing food for the animals of the farm. * * * No other grain that the farmer grows yields, on a given space and with a given expenditure of labor, so much animal food, both in grain and forage, as does the Indian corn plant."

Corn silage adds palatability and variety to the ration, is a cheap feed to produce and to store, and doubtless goes farther than any other feed to solve the problem of restricted pasture acreage or to tide over scant pastures during a drouth.

Alfalfa is a legume remarkably rich in digestible protein. It is also a heavy producer, averaging under our northern conditions about four tons of hay to the acre. By using it judiciously with other feeds it is possible for the dairy farmer to obtain well balanced rations for his live stock from feeds grown entirely on the farm.

When we think of alfalfa as a perennial plant, that it produces a larger yield than any other hay crop, that it extends its roots into the lower soil and brings up plant food from the sub-soil, that its roots are covered with tubercles, the home of micro-organisms that have the power to lay hold of the nitrogen in our atmosphere and convert it into plant food, thus leaving the soil richer than it was before the alfalfa was grown, we cannot but help think that alfalfa is a wonder plant—D. H. OTIS.







A LITTLE STUDY OF AVAILABLE FEEDS WILL INCREASE EFFICIENCY AND ECONOMY TO BOTH MAN AND TEAM. ALFALFA WILL BE TREATED IN A CHAPTER BY ITSELF.

HORSE WORK FEEDING

Kansas Climate and Kansas Feeds Produce the Best Among Horses

By DR. C. W. McCAMPBELL

In these days of keen competition and high prices, which necessitate the strictest economy in all lines of business, the problem of feeding the work horse economically, and at the same time such combinations of feeds that will insure the greatest efficiency, has become one of vital importance, not only to the Kan-sas farmer, but also to the owners of the great army of horses that work in

the great army of horses that work in our towns and cities.

When compared with the experimental work done in feeding other kinds of live stock, we see that comparatively little work of this nature has been done in the feeding of horses, and until recent rears the general feeding practices have been fixed largely by tradition, custom, or arbitrary rule. While it is true that successful horse feeders, and many transfer, livery and omnibus companies have developed excellent systems of feeding developed excellent systems of feeding and caring for their horses, still the re-sults of their knowledge and experience have not been available for general use, and there still remains much room for improvement in our horse feeding methods in general.

It will be remembered that the functions of food are to repair the waste of the body, to promote growth in an animal, to furnish heat and energy, and to store up or lay on fat, and for these purposes only the digestible portions of the food is to be taken into considera-

The nutrients that maintain these functions are ash, protein, carbohydrates and fat. A definite amount of these nutrients is required to insure the most economical performance of these functions; a shortage of any one means an unbalanced ration, and a waste both actual and potential. Too often the wrong concentrate is used because its composition and the function of the nutrient it contains are not clearly understood. It is well, then, to note carefully just what part each of these nutrients play in maintaining these functions.

1. Ash is the residue after the combustible portion of the feeding stuffs have been burned in the body. It consists chiefly of lime, soda, potash, magnesia, iron, sulphur, etc., and is found Fincipally in the bones, though it is also found in small quantities in other tissues of the body. A considerable supply of ash is found in all our common leading to a second common l feeding stuffs.

2. Protein substances are those which contain the element nitrogen. All the other nutrients—ash, carbohydrates and lat-contain no nitrogen and are often spoken of as non-nitrogenous nutrients.

Protein substances, or flesh formers as they are often called, go to form the muscles and also enter largely into the composition of the skin, tendons, blood, herves, hair, internal organs, etc.

Protein may also furnish, when occasion requires, material for the production of heat to maintain the warmth of the body and muscular energy. It is held by many to be a stimulant to muscular and functional activities in general; and probably forms some body fat. No substance that does not contain

nitrogen can be substituted for or converted into protein. Hence, the absolute necessity for a certain amount of protein material in a horse's ration. Such feeds as cottonseed meal, oil meal, peas, bran, shorts, alfalfa, clover and cow nee her contain a covernation.

peas, bran, shorts, alfalfa, clover and cow pea hay contain a comparatively high per cent of digestible protein.

3. Carbohydrates furnish most of the energy for the production of heat and work by an animal, and are obtained from the various feeds in the form of starch, sugar and fibre or cellulose. They are not stored up in the body in the form of carbohydrates, but are converted principally into glycogen, a form of animal starch which is stored for future use in the liver and muscular tissues of the in the liver and muscular tissues of the animal. When this glycogen is needed, it is in turn converted into fat and some are burned immediately to supply heat and energy. Corn, barley, oats, wheat, Kafir corn, and the various hays and fodders contain high per cents of digesti-

ble carbohydrates.

4. Fat is found in the various feeds in smaller amounts than either protein or carbohydrates. It is either stored up in the body as fat or burned immediately

to furnish heat and energy. Cottonseed meal, oil meal and corn are rich in fat, cottonseed meal containing about three

times as much digestible fat as corn.
We see, then, that heat and muscular energy may be produced, first and principally from the carbohydrates, then from the fats, and lastly, if necessary, the protein substances. But we from the protein substances. But we must bear in mind the fact that fat is worth about 224 times as much as either protein or carbohydrate in the produc-

protein or carbohydrate in the production of heat and muscular energy.

Fat in the body is produced from the fat of the food and also, to some extent, from the carbohydrates of the food eaten, but the protein in the body is produced only from the protein contained in the food that is eaten.

So much for the nutrition phase of this discussion. The real question is, "What feeds or combinations of feeds can we feed the work horse here in Kansas most economically and at the same time the most satisfactorily?"

Of the many grains used throughout

Of the many grains used throughout the country as a horse feed, none are more popular than oats. They are keen-ly relished, and the nutrients they con-

tain are just about the right proportion to make a balanced ration; but the idea that they contain an element which gives a horse more spirit and energy is only a horse more spirit and energy is only one of a number of popular fancies or traditions. If a horse be fed on any other suitable ration and kept in a healthful and thrifty condition, he will have just as much life, spirit, and en-durance as he would if fed upon an oat ration. Oats alone are a safe concentrate to feed because the hulls mixed with the grain make a lighter and looser mass in the stomach, allowing the digestive juices to permeate the mass more thoroughly, thus insuring a more perfect digestion. This is a point worth con-sidering in feeding many concentrates which should always be mixed with bran, which should always be mixed with bran, chopped hays or something to prevent packing in the stomach. This tendency to packing is more pronounced in a horse's stomach because of the absence of a churning or mixing motion. But with all the advantages possessed by oats, they are not an economical horse feed in most sections of Kansas. It is a noteworthy fact that the quality of oats in many parts of the United States a noteworthy fact that the quality of oats in many parts of the United States has been deteriorating for the past few years, and in Kansas the acreage, as well as the yield per acre, has been decreasing for the past twenty years. In 1888 we find the acreage given as 1,656,-814, which averaged 33 bushels per acre, while in 1908 the acreage was but 831,-159, and the average yield 20 bushels per acre. These conditions have helped to raise the price of oats to such a level that they can no longer be considered an economical horse feed in most parts of our state when we compare their cost economical horse feed in most parts or our state when we compare their cost and feed value with the cost and feed value of other available feeds. So a problem we have before us is to select a grain or combination of grains that will take the place, either entirely or partly, of oats in our horse feeding op-

Of the many feeds available and that might be substituted, perhaps corn is the one used most, especially in middle and southern portions of the corn belt, thousands of horses in these regions not knowing the taste of any other kind of grain. The high per cent of carbo-hydrates and fat (heat and energy sources) it contains and its comparative cheapness should not be overlooked in

preparing rations for our work horses.

At the Ohio Experiment Station extensive experiments have been conducted comparing the value of corn and oats as a ration for work horses, with the following results:

1. Corn-fed horses endured hard work during the hot weather as well as the oat-fed horses.

2. The use of corn for forty-eight weeks, to the exclusion of other grains, was not detrimental to the health of the work horse.

3. The use of corn did not induce laziness and lack of endurance; neither did the use of oats induce increased spirit or endurance. 4. With mixed hay (clover and timo-

(Continued on page eighteen)

Photographs of Kansas Farm Scenes Wanted.

Liberal Payment for Good Ones.

KANSAS FARMER wants a number of good photographs of Kansas farm scenes. Not necessarily photographs of the largest farms and farm buildings, although these are very desirable. If you have or can get a photograph of a good view of your farm, send it in before December 30 next.

For each of the three best photos submitted we will send a For all others submitted and judged good enough for the purpose of this competition, we will pay for each...... 1.00

What the Photographs Should Show.

Preferably a view taking in the principal farm buildings, houses, barns, windmills, silos, hog houses, cattle sheds, etc., with roadways, trees and fences, in the building plot.

However, any unusual view or scene of the farm that may show the result of particular method of arrangement or system of production, will have equal consideration. Photos should be from plates larger than 4 x 5, and finished in sepia on some paper other

plates larger than 4 x 5, and limited in separ on some paper than Velox or similar ones.

The editor will decide on the merits of each photograph, and send out checks in payment of those selected, as he may place their value. All photographs submitted are to become and remain the property of KANSAS FARMER, with full right to use as it may desire. Sender's name and address must be written on the back of each photograph submitted. Address photographs to KANSAS FARMER, Topeka, Kansas.

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Don't waste a minute of this merry day. Have the presents ready Christmas eve. Hang each stocking up. Arrange the presents that won't go inside in little piles around each stocking.

Then, when all have gone to sleep, sneak into each bedroom a jolly-faced Big Ben.

He'll ring the merriest Christmas bell you have ever heard and get the family down to see the presents bright and early so the whole Don't waste a minute of this

ents bright and early so the whole day will be yours to fully enjoy. Big Ben is a gift worth the giv-ing, for he is a clock that lasts and

serves you daily year after year. He is not merely an alarm clock he's an efficient timepiece—to get you up or to tell the time all day—a clock for bedroom, parlor, library or hall.

Big Ben stands seven inches tall. He's massive, well poised, triple plated. His face is frank, open, easy to read—his keys large,

strong, easy to wind.

He calls you every day at any time you say, steadily for ten minutes, or at repeated intervals for fifteen.

He is sold by jewelers only—the price is \$2.50 anywhere.

If you cannot find him at your

jeweler's, a money order sent to his designers, Westclox, La Salle, Illinois, will bring him to you express charges paid.

Five Crops of Alfalfa in One Season the Record of Sacramento Valley, California

Alfalfa, which has made wealthy more farmers in the irrigated West than any other known product, is grown to perfection in California. Five crops, with the corresponding profits, are not uncommon in this marvelous state.

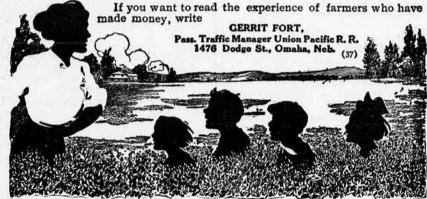
And there is still enough land in California for you, and more is being put under water every year.

When you have made up your mind to sell your farm in the East and take the money to buy 40 acres, which will make more money in California with not so much work, travel over the

Union-Southern Pacific

STANDARD ROUTE OF THE WEST

Electric Block Signals Excellent Dining Care



KANSAS WESLAYAN BUSINESS COLLEGE

THE EFFICIENT SCHOOL FOR BANKS AND RAILROADS. Furnishes more Bankers, Civil Service help, Commercial Teachers, R. R. Stenographers, and Telegraphers, than any other school. U. P. contracts to take all our male operators, and allow salary while learning. We guarantee position for complete course or refund tuition. Twenty instructors, eighteen rooms, one thousand students. TERMS REASONABLE.

NEW FEATURES—Farm Accounting, McCaskey Register, Wireless Telegraphy Write for catalog and Free Tultion Prize Offer. No agents out to get you to sign up Address, T. W. ROACH, Pres. 201 S. Santa Fe, Salina, Kansas.

It is time now to be thinking about next year's work. This is the time for next year's work. This is the time for planning. A plan made now can be changed a dozen times before work begins next spring. If you wait until next spring you will awake some morning to find the frost out of the ground, and the warm sun calling you to the field will cause you to plan the season's work on short notice and possibly result in a grave mistake. The season's farm work ought to be so well settled in your mind that when spring work begins you know that when spring work begins you know just what crops are to be planted, how just what crops are to be planted, how many acres of each, how long it will require to plant each, and the date on which planting will begin, weather permitting. I well recall a neighbor who planned his work to better advantage than any other man I ever knew. That man could accomplish more work than any other two men I have ever seen. any other two men I have ever seen. He was always crowding the work. The work never crowded him. He was successful, too. Try it.

There is a lot of work to be done this fall and winter while you are planning. One thing demanding prompt attention is that of cleaning up the farm. The country is full of chinch bugs. Last season was favorable to their growth season was favorable to their growth and increase, and so has been the fall. You have millions snugly housed in the bunch grass in the fence rows and along the roads and along the hedges. Burn the grass just as soon as you can. By burning the grass and cold weather following practically all the bugs will be destroyed. You should not be content to alone do this. Get the neighbors to clean up. Try to organize the farmers of your township into a chinch bug burning brigade. ing brigade.

You can scoff at book farming as much as you please, but sooner or later you will be forced to recognize the merit of the work of that grand body of men which make up the force of our experiment stations. I think the chinch bug burning campaign a year ago in Sumner County, Kansas, when an area of 17½ miles of farm land was burned over, will well illustrate the value of the expert. The burning was done under the direction of Dr. T. J. Headlee, entomologist of the Kansas Agricultural College, and with him every farmer in the area

The 1911 crops harvested in the burned area were much better than those in the surrounding territory—this condition atsurrounding territory—this condition attributable to the absence of chinch bugs.

A. E. Berry, a farmer in the burned district, says that destroying the chinch bug infested grass made him nearly \$1,000. In the 17½ square miles a saving of about \$7,000 on the wheat alone must be attributed to this burning. That is more than it cost the state to carry on all its bug investigations. Wheat on all its bug investigations. on the burned area averaged 2.1 bushels, worth \$2 more an acre, and the oats, which were only slightly infested with bugs, yielded a little less than one bushel an acre more on the burned ground than on the unburned ground. Corn fields adjacent to fields of small grain in the burned districts had no corn sucked dry and killed at harvest time, while corn fields in the unburned territory showed from one to forty rows ruined.

Doctor Headlee and his assistants have learned that the bugs establish winter quarters in the clumps of bunch grass and patches of big blue stem. Bunch grass is seen as a feature in every part of the state infested with chinch bugs. It was learned, also, that while some bugs sought winter shelter in weeds and piles of rubbish and crev-ices of some sort, practically every one thus protected perished before spring. So the bunch grass was burned and ob-servations lead to the belief that during the past summer the bugs on the unburned area have ranged from six to twenty times as numerous as those on the burned section. To locate the home of the chinch bug is a valuable discovery. Now that we know where to find him, let us show him no mercy.

The shortage of roughage in some sec-tions will cause wheat to be pastured

closely and at times when stock shot not be on the ground. If it is a mat of pasturing the wheat or selling stock, I would use the wheat crop save the stock. Whether wheat be purely stock and a wholly well to the stock. save the stock. Whether wheat be p tured or not depends wholly upon a season. In the Kaw valley wheat h grown rapidly this fall and pastura when the ground was dry was the pasture of wisdom. If the wheat is small at the ground dry and loose, as it is many sections this season, pasturing we do the wheat no good. Small grow cannot help but result in very close croping, and that is daugerous. It is a judgment that fall pasturing under judgment that fall pasturing under vorable conditions is not likely to res in damage. Spring pasturing is off disastrous. To determine the effects late spring pasturing, the Kansas Ag cultural College mowed, last spring, acre of wheat growing upon low, in ground. The weather following was v dry and the yield was about half that which was not mowed. If the had been sufficient moisture after toutting, the difference in the yield proably would not have been so great.

I see from the country weeklies th farmers throughout the state have ganized community clubs to prevent destruction of quail by hunters. I move is a good one. I hope the sta will by law eliminate the open seas and prohibit the shooting of qua About one-fourth of the cultivated cro of the United States are destroyed insects every year. The quail is one our most important insect destroyed destroyed insects. our most important insect destroye From June until September the qua ration consists of over one-third insec He prefers insects that are the farme worst enemies. He is especially for of potato bugs, wire worms, cut worm and grasshoppers. A quail will eat fro fifty to one hundred potato bugs grasshoppers every day if the insec-are abundant.

Do you begin the winter with the ba yard clean? If not, it ought to cleaned or its condition will cost y money before the winter feeding seas is over. The depreciated value of manure will in itself be quite a loss; stock do not thrive in a yard knee de with manure. Cattle and hogs that a compelled to wade knee deep in m and filth and sleep in damp, unshelter places cannot consume enough feed keep in a gaining condition when tweather conditions are unfavorable. T manure spreader has simplified the manure ter of getting out the manure in the the manure can be handled faster at with less labor. The spreader results greater good from the manure, too, account of better spreading and thin spreading, by which latter more acrean be manured. If when you are reat to haul out the manure the cultivate fields are too wet do not use that fields are too wet, do not use that an excuse for not going on with hauling. A top dressing on the alfal field will pay big—likewise on the pri rie or tame grass pasture. Manure a valuable product of the farm, to whi too little attention is given. We mu seriously begin a study of how to use to best advantage.

On the farm of O. E. Walker, one Shawnee County's best farmers, Thanksgiving day I saw cows whi Thanksgiving day I saw cows whi were giving a summer flow of milk a ration of Kafir silage and alfalfa ha Not one bit of grain was being fed. Walker says silage and alfalfa hay producing for him this winter as mu milk as he has been able to get at other year on the best grain rations has been able to feed. Think of i Kafir roughage placed in the silo wi has been able to feed. Think of Kafir roughage placed in the silo wi a loss of less than 10 per cent in weight from the field to the cow, and alfal hay with no corn, bran, oil meal or an thing class of the cow. hay with no corn, bran, oil meal or an thing else, producing a summer milk flo on the last day of November. More that, the Kafir, when in a silo, is reaf for feed, requiring no hauling, no cho ping out of the ice. Mr. Walker sa he prefers corn silage to Kafir. Ye corn is the ideal silage crop. But, western Kansas, where Kafir grows whe corn refuses, think what a combination of silo and Kafir would mean.

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Sweet Clover Again.

The past year much has been said in these columns regarding the value of in these columns regarding the value of sweet clover for hay and pasture and of its adaptability to much of Kansas soil. Practically all the data obtainable regarding this plant comes through our exchanges from sections where sweet lover has been more on loss cultivated. clover has been more or less cultivated. This is from an Indiana paper:

"In the limestone counties of northern Kentucky bordering on the Ohio river sweet clover is becoming very pop-ular as a soil renovator and for hay and pasture. There are two varieties, the yellow and white blooming. The yellow is not as strong a grower as the white, but the stalks are finer and the per cent of leaves is much larger. It blooms two weeks before the white and stock seem weeks before the white and stock seem to like it green and as a hay also. The roots in both varieties are abnormally large, but soon decay when the crop is cut for hay. They will flourish where the soil is slightly acid. For hay for horses both varieties should be cut when is full bloom." in full bloom."

Will Have to Farm Better Some Day.

Ex-Governor Hoch, of Kansas, who now spends his time lecturing, and who by the way is in great demand, writes weekly letters of travel to his paper, the Marion Record. Here are two of his observations:

"To a Kansas man, accustomed to the ocean-like sweep of our great prairies, the farms of New England look almost grotesque. Every little nook and corner is utilized by the frugal husbandman. Why, if we farmed our land like that we could feed the whole country. And some day we will cultivate it like that. We'll have to.

"I saw something in Vermont the other day which strangely blended the past and present. A farmer was distributing a fertilizer over his fields with a modern revolving machine attached to his wagon drawn by a team of oxen. I must propel that sort of a machine with an electric motor when I go to farm-

Fall Plowing Kills Corn Ear Worms.

Nearly 100 per cent of all the corn grown in Kansas this year is wormy. Investigators for the entomology department of the Kansas Agricultural College, who have been in the fields, make this statement. Not for years has the percentage of infection been so large. Corn ear worms are responsible. And the reason that the damage was greater this year can be blamed to the drouth last summer. Corn grew so slow that a third brood of the worms was hatched on the silks and tassels. A third brood rarely hatches before the corn ripens. But when it does, as it did this year, the damage is greater.

The corn ear worms now are in the soil of corn fields that were infested last summer. They will remain there until next June. At present they are in the pupa state, but next spring they will become moths, whereupon they will begin to lay eggs which hatch into worms. Fall or winter plowing will kill the pupa that are wintering in the ground—that is, it will kill most of them, Dr. Headlee says. Enough, anyway, to cut the loss next year to one-half. Weather and insect enemies kill these was a superior of the control of the contr half. Weather and insect the spring these pupa, when exposed by plowing. Early planting of the corn in the spring that the spring damage. If it also will help to avoid damage. If it gets an early start the corn will be ripe before the third brood is hatched.

Cow Peas in Kansas.

The soy bean and cow pea agitation of a few years ago is apparently dead so far as it concerned central and western Kansas. However, in eastern Kansas, and particularly in the southeast, the cow pea has met with favorable consideration as a soil improver and protein feed. A Coffee County correspondent to a Nebraska paper, writing of cow peas,

"They take as long to cure as the first crop of alfalfa. They make such a very heavy growth that they must lay in the swath two or three days after being cut and must then be raked in small windrows to lay another two days and then be bunched up to lay two or three days more. Ours were sown on June 2 on plowed land with a wheat drill. We began sowing about one bushel per acre, but saw we would run out of seed before we got the field sown, so kept gradually shutting up the drill until at the finish we were sowing one-half bushel per acre. When we cut them we could not see one bit of difference in the amount of her made by ence in the amount of hay made by either thick or thin sowing. That it was

These Are the Big Money-Makers for Farmers-Which Do You Want?

This is the Age of Power. Not only our manufacturers, but thousands of farmers are piling up fortunes by the use of gas engines and power-driven machines. Here are the four biggest farm money-makers we know-the Sandwich Corn Sheller, Solid Steel Hay Press, Gas Engine and Feed Mill. Take a look at them.

SANDWICH Power-Driven Machinery

The Sandwich Corn Sheller

The Sandwich Corn Sheller

Our famous Two-Hole Type with right angle belt attachment, extra long feeder and swinging cob-stacker. Capacity 90 to 110 bushels per hour; shells clean, and cleans corn splendidly; has our oak framing; adjustable spoutfront; superior shelling mechanism; patented force feed; efficient cleaning shoes. The feeder extends far beyond frame, and well in crib if desired; cob-stacker swings in half-circle. Priced Right! A Big Money-Maker! For full description of this model, see pages 8 and 11 of free catalog, which shows many other types of shellers—some for horse power, some for hand power, others for gas power. We also make Sandwich Dustless Cylinder Shellers. Over fifty years manufacturing experience back of each machine.

Sandwich Solid Steel Hay Press



Buy a REAL Gas Engine!

Don't buy a "toy" engine. Get one with plenty of power for all ordinary farm purposes. Here's a portable gas engine that not only operates your separator, churn, washer, pump, grindstone and grain grader, but corn shellers, wood saws, hay presses, feed mills and other heavy machinery. Has special Speed-Changing Device and a score of other most modern features.

This engine was not built to meet a price. It was perfected and then the price was determined. Yet, considering its power, efficiency and dependability, it is the cheapest engine on the market, bar none. We furnish engines in all powers from 2 to 20 H. P. For complete description of this masterpiece engine, see catalog. Prices on request.

A Crackerjack Feed Mill



Feed Mills look a good deal alike, but there's a heap of difference in the way they work. This one is a wonder. Handles up to 50 bushels of corn per hour—mixed corn, oats, etc., up to 40 bushels, depending on size and power. May be equipped with Sacking or Wagon Box Elevator. Made in two sizes, Nos. 1 and 2. The smaller size may be run with 2 to 6 H. P. and the larger by 6 H. P. and over. Burrs are made in three patterns—fine, medium and coarse. Each Mill comes with fine and coarse burrs unless otherwise asked. These are reliable machines, of the same substantial quality as all Sandwich Machines. Send for Bookter Mills. Price is low, quality considered.

All Catalogs Free Send your name on postal, stat-

All Catalogs Free Send your name on postal, stating which of these work-saving,
wealth-producing, power-driven machines you are interested in, and
we shall be pleased to mall you catalog describing it. You can have
all four catalogs free if you wish them. Be sure to state whether it
is Corn Shellers, Hay Presses, Gas Engines or Feed Mills that you
want to know about. Mail postal today to

SANDWICH MANUFACTURING COMPANY, 715 Main Street, SANDWICH, ILL.

Sandwich Farm Machinery is Sold by Leading Implement Dealers Everywhere. We have Branch Houses at Cedar Rapids and Council Bluffs, Iowai Kansas City, Mo., and Peoria, Ill., where full stocks of machines and repairs are carried at all times. (83)

all heavy may be known from the fact that we made forty-two windrows-all the rake would carry-in a sixty-rod field. If stock eat them as well as those who have raised them say they will, we have struck just what we want in the way of a crop for building up land. Their effect is the same as that of clover or alfalfa."

Silage for Beef Cattle.

Now that the Kansas farmer is becoming interested in the silo and the inquiries are many regarding the value and use of ensilage, this from the prac-tice of Humphrey Jones, an Ohio beef feeder, will give much information. This will answer the query of our Erie (Kan.)

"Our practice has been to always feed all the ensilage and hay the cattle would eat and to add to the ensilage about one-third of cotton seed meal per cwt. per day, the same being mixed with the ensilage as fed. We have found that steers will eat of ensilage about five pounds per cwt. per day, and of hay a little less than one-half pound per cwt. per day, and that when there is added to the ensilage about one-third pound per cwt. per day of cotton seed meal that the gains made by the cattle are as great as any we have ever been able to obtain with a full feed of shock corn, or ear corn and clover hay." Mr. Jones says that his silos were returning him an additional profit the old method by rendering available all the feeding value of the corn plant, much of which would otherwise be wasted.

Tried and True Recipe for Curing Hams.

Last week's KANSAS FARMER contained recipes for curing hams. The publica-tion of these brought this from the edi-tor of Farm and Ranch, a Texas paper: "When all the animal heat is out of

the meat, trim the hams, cutting off three or four inches of the back or lower joint. Rub each piece with fine salt and put in a sweet pickle of brine, made as follows:

"To 40 gallons of water use one and one-half gallons of good syrup, 12 pounds of brown sugar (granulated will answer) and six ounces of saltpetre; add enough salt to float an egg. Boil this

until the scum rises, skim and set away until it cools. Then pour the brine over the meat, which has already been placed in a barrel or keg with the skin side down. The meat should be kept under the brine and it may be necessary to place a weight on it to hold it down. "The hams should remain in brine

from five to six weeks, according to the weather. When taken out, a clear, cool, windy day is preferred; rinse in clear water and hang up to dry. Smoke the hams well. Hickory chips are preferred for this purpose, as they give the meat a good flavor. The hams may then be wrapped in heavy paper and covered with canvas to exclude insects and retain the flavor of the meat. Shoulders and bacon may be cured the same way.

"This is a splendid way to make breakfast bacon. There is no danger of losing the meat when pickled first in this manner, if the weather should turn

Fall Plowing for Oats.

A Valley Falls, Kan., subscriber says he wants to do a good job of oats planting next spring, and asks if he should plow this fall.

Unless the subscriber's soil is heavy, we would not fall plow for oats. If the soil is heavy, plow if possible. It is strange that it's true, but the results of the experiment stations indicate that it does not pay to plow in the fall for oats. The yields from fall plowing are only slightly heavier than from spring only slightly heavier than from spring plowing or disking and harrowing. Of course, if the oats ground is foul, the weeds should be plowed under before seeding, or, if seeded, plowed deep to destroy as many seeds as possible. In this country unless oats are sown early and the early conditions for growth are forwardle, the weeds get the oat crop. favorable, the weeds get the oat crop. So seed oats on clean land.

A five years' experiment of the Kansas station gives the oat yield in spring sas station gives the oat yield in spring plowed ground 1.9 bushels per acre heavier than on fall plowed. In the same experiment, oats on unplowed land, but well prepared with disk, yielded 1½ bushels less per acre than on spring plowed. The evidence of a number of experiment stations is only slightly in favor of fall plowing for oats.



HARMAN SUPPLY CO. 190 Harrison St. Dept. 4639, Chica

Gasoline Engine-Stupendous offer on Schmidt's Chilled Cylinder Gasoline Engine, 3 h.-p. Absolutely free trial. If you keep it, send first payment of only \$7.50. Long time on





WAGON SENSE Don't break your back and kill your horses with a high wheel wagon. For comfort's sake get an

Electric Handy Wagon It will save you time and money. A set of Electric Steel Wheels will make your old wagon new at smal cost. Write for catalogue. It is free.

ELECTRIC WHEEL CO., Box 34, Quincy, III.



Seven Choice Washington County Farms at **Public Auction**

At Washington, Kansas

Wednesday, Dec. 20, 1911

Nearly 1,000 acres in all, located in the fertile Mill Creek Valley, 2½ miles from Washington. These farms range in size from 74 acres to 160 acres. Each farm has some as good farm land as lays out of doors. Good water, some timber, etc. All farms are served by rural mail service and mutual telephone. The improvements on most of these farms are moderate but comfortable. Washington county is one of the best counties in the state for diversified farming and stock raising. Some of these farms are ideal for dairy purposes. This part of Kansas is the natural three of alfalfa, and hogs can be produced cheaper here than in any part of the middle west. These farms will be sold separately to the high-est bidder on above date. Free transportation will be provided between now and sale day for parties wanting to inspect the lands. Come and investigate and talk with the successful farmers that own land adjoining this tract. Sale will be held in City Hall, beginning at 2 p. m. Very attractive terms will be made purchaser. Write for illustrated catalog, giving description of each tract, terms, etc., to G. Wertman, Sales Manager, Washington, Kan.

A. E. SWEETLAND, Blue Rapids, Kansas FRED OCHNER, Washington, Kansas G. WERTMAN, Washington, Kansas

Fieldman-Jesse R. Johnson.

Two 80 Acre Farms at Auction, Thurs. Dec. 14.

Four Miles Northeast of Riley and 7 Miles Southeast of Leonardville, Kan.

80 acres, about 45 acres in cultivation, 8 acres alfalfa, balance pasture, good 5-room house, arch cellar, new barn 34x52, with room for 90 tons hay, cattle shed, etc., bearing orchard, cribs and other outbuildings, good well and windmill.

80 acres, across road from above, about one-third under plow, balance pasture with never failing spring water. These farms are ideal for stock raising, dairying and diversified farming. Close to market, church and good schools, 20 miles from Kansas Agricultural College. Will be sold to the highest bidder without reserve. Sale at 2 p. m. For further information, terms, etc., write

EDWARD KIENINGER, RILEY, KANSAS

Auctioneer-James F. McCullock. Fieldman-Jesse Johnson.

Young Man!

Don't Waste Your Money this Winter. Take the Farmers' Short Course at the State Agricultural ou Get a Condensed Education of

Immediate Value. It Begins January 3-Lasts Ten Weeks.

Here's a course arranged for you as to hours and classes. It is made up of the important things you need to know and MIGHT NEVER KNOW IN A LIFETIME. The 10 weeks' expenses should not be more than \$50 or \$60. You throw that much away every winter. Open to young men over 17 years of age.

Don't forget the State Farmers' Institutes December 26 to 30. Fort Short course bulletin or catalogue apply to

Henry J. Waters, Pres., Box 27, Manhattan, Kan

(Correspondence Courses Offered.)

Sold Last Government Land. The last acre of government land in Mitchell County, Kansas, was sold a few weeks ago. The tract was composed of

40 acres of pasture land that had been left when homeseekers for half a century have taken up farms in Mitchell County. It was sold for \$1.25 an acre.

FARM POWE

DEVOTED TO GASOLINE ENGINES, TRACTORS TRUCKS, AUTOMOBILES AND MOTORCYCLES

Motorcycle "Drummer."
An Oakland, Cal., traveling man who
has forsaken trains for a motorcycle,
has proved to his own satisfaction that the new method brings a saving in time as well as in expense. He recently returned from a 256-mile trip, having been absent from his Oakland office just 48

He made calls at nine towns and figures that it would have taken four days to make the trip by train. His total expense was \$1 more than his railroad fare would have been. He thus saved two days' time, hotel bills and the large item of "extras."

Fuel Cost for Plowing.

In the plowing contest in which the world's plowing record was broken and reported in these columns, the engines were operated on a low grade of kero-sene distillate costing but 4 cents per gallon. The three engines consumed a total of but 22 gallons per hour, reduc-ing the fuel cost to less than 6½ cents per acre. To do work equal to the ca-pacity of this monster contrivance 100 men, 200 horses and 50 plows would be required; an investment in equipment and power of nearly \$50,000, a pay roll of \$150 per day, and a cost for board and feed of \$125 per day.

Auto Tire Care.
Regarding automobile tire care the
United States Tire Company is sending

out this:

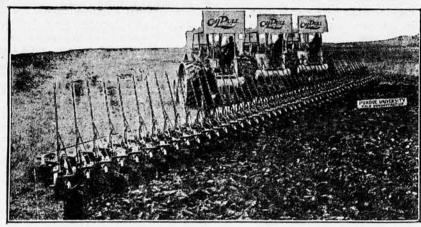
"When you lay up your car for the winter, remove the tires. First wash them carefully with soap and water, and then wrap them in strips of paper or cloth. Store them in a dark place which is kept as nearly as possible at a temperature of 50 degrees. If the tires are to remain on the wheels for a tires are to remain on the wheels for a

thereon in raised type cast with the tire or casing." The tire makers object to the new law on the ground that it does them an injustice. By marking the date on they are likely to meet objection on the part of purchasers. For instance, 1911 tires made in the fall of 1910 may not get on the market until the middle of the summer, and being marked 1910 there likely would be a demand on the part of the purchaser that he get the tires as seconds or old tires.

The breaking of world's records is always interesting, but the breaking of a ways interesting, but the breaking of a world's record in plowing is worth more to the farmer than the breaking of a track record. This picture is that of three oil pull tractors which hitched to one unit of 50 plows turned a stubble field at the rate of one acre every four minutes and fifteen seconds. This wonderful performance seconds. derful performance occurred at Purdue University, Indiana, October 14. This monster machine of fifty 14-inch plows in a single unit cut a strip nearly 60 feet wide, and required only four men to operate it.

Fifty years ago a farmer with his team of oxen toiled from dawn to sunset to break an acre of ground. Often one man was required to drive the team, while another held the clumsy plow, walking more than ten miles to each acre. Today, through the development of modern machinery, it is possible in the same number of miles of travel to plow 70 acres, and in the same period of time to turn almost a quarter sec-

It would seem that this mammoth gang could be of practical service only on ground absolutely level, but the dem-onstration proved that the plow readily adapts itself to uneven ground. Each of the fifty bottoms was independent



WINNING RIG IN WORLD'S PLOWING CONTEST.

considerable length of time when the car is out of service, jack up the wheels and leave only about five pounds of air in each tire. This keeps the tubes in shape and also keeps them soft and When the wheels are not jacked up and the car is allowed to stand for any length of time, the tires should be kept well inflated and the car moved occasionally, so that the tires do not flatten from standing too long in one

Must Make Bridges Strong.

An important ruling has been made An important ruling has been made by the state supreme court in Pennsyl-vania in regard to the strengthening of bridges for motor cars. The district court held that although a bridge which had broken down with a motor truck loaded with two tons of flour was suffi-cient for all demands when erected, it was the duty of the county since the introduction of the motor car to strengthen all bridges to such an extent they would be equal to all traffic requirements. The supreme court confirming this decision means that hundreds of thousands of dollars will be expended within the next year in improving bridges and culverts throughout the

Minnesota Says Put Date on Tires.

The Minnesota legislature has slipped through a new law which has stirred up the tire trade and which is far-reaching in its effects. The law says: "No person shall sell any rubber tire or casing for use on motor vehicles unless the name of the manufacturer and the year in which the same was made are conspicuously and permanently marked

of the others, rising and falling as easily and naturally as a wooden chip on the surface of rough water. The frame itself was pointed every six feet to meet the longer undulations of the ground, and thus keep the plow beams in their proper positions relative to the ground surface. Then five bottom sections were yoked together by the ordinary Oliver method just like so many parts of a sectional bookease, and they formed a complete, symmetrical plow, a feat im-possible except with this small unit type of construction.

Prof. W. M. Nye, head of the farm mechanical department at Purduc, pleased with the splendid success of the demonstration, said: "At least four years ago I predicted that this sort of thing would come into use on many Indiana forms." diana farms. One great objection has been that fields were too small. The maneuvering of this battery of immense engines and fifty plows in one twenty-acre field is a denial of that objection, and proof positive that the small type 'F' Oilpull yonder hauling five fourteeninch Oliver plows is entirely practicable in Indiana." President Stone of Purdue University, after observing the results of the wonderful demonstration, exclaimed: "I am glad I have lived long enough to see this. Farmer after farmer has objected that these great engines would mash the life out of the soil. I wish some of them could be here and see how wrong they are. There is no reason why power farming is not practicable."

Don't think all motorcycles are noisy because a few riders keep the "cut-out" open instead of carrying a horn.

LIVE STOCK



Sheep feeders did not fare so well in Kansas last year, but the prospects have brightened so they actually seem good. Chicago reports show that the sheep men who have seen the trend of things have been buying liberally of feeder that the state of the same and the same are the same as the same are stock, as there now exists an unusual combination of extremely short numbers and low prices.

One of the most serious phases of the One of the most serious phases of the hog cholera situation is to be found in the fact that the markets are glutted and demoralized by large shipments of immature and poorly fitted hogs. The disease itself is bad enough, but the scare which results in such shipments just doubles the injury. Yet what can be done? The only solution seems to be to require the scientists to work overtime and discover a remedy for the distime and discover a remedy for the dis-

If there is such a thing as luck, that man who has some growing hogs and some brood sows which he can save over for the spring farrow surely has some of it. From present indications hogs will be hogs next year, and the breeder who is prepared to supply his custom-ers will reap his reward in good prices. If reports are to be relied upon, the man with the hog will be "in it" during the next two or three years, and he certainly is entitled to it.

With the present price of corn the cat-tle feeders are looking about for any ration or combination which will bring ration or combination which will bring results and at the same time cost less money. The silo has perhaps proved the greatest economy in this emergency, as it will in any other, but there are yet some feeders who do not use ensilage, and they are turning to other things. A big Kansas feeder says that heretofore he has depended upon corn and alfalfa. but now he is adding cotand alfalfa, but now he is adding cot-tonseed meal to the ration in the belief that it will hasten results and perhaps cheapen cost.

Hog cholera is not caused by feed or the condition of the pen. It is a germ disease which is transmitted from herd disease which is transmitted from herd to herd and from hog to hog. Poor feed and a filthy pen will invite this disease by lowering the vitality and resisting power of the hog, which is the most delicate of all farm animals in some respects. Hogs kept on pasture with plenty of exercise, good feed and pure water are very much less likely to contract the disease because of their vigor of body. Hogs on pasture in summer or of body. Hogs on pasture in summer or with plenty of alfalfa hay in winter not only maintain their health, but grow into money much faster than dry lot

Did you ever think of the camera as a useful farm tool? Perhaps not, and yet it can be made a valuable one. Take live stock, for instance. On every farm there is, or should be, more or less of live stock for sale. In advertising these live stock for sale. In advertising these animals many replies are received from men who might easily become buyers if they could see the animals, but who hesitate when compelled to buy "sight and unseen." A good photograph of the animal sent with your answer to his questions will prove the best possible substitute for a personal inspection. This indicates the utilitarian value only, but the pleasure to be derived from the use of a camera is hard to m

One-third of the state of Illinois, the southern part, is worn out, and the soil depleted of its strength, according to a statement sent out by the Farmers' Institute. The soil in that region is lacking in humus and is deficient in phosphorus and nitrogen. It is also "soured," and the problem of bringing back its producing power is a serious one. This section has long been known as Egypt, because the people from surrounding countries could go down into it to buy corn. The present condition is undoubtedly due to the long period of continu-One-third of the state of Illinois, the corn. The present condition is undoubtedly due to the long period of continuous corn cropping, and the authorities are now urging a rapid change to live stock farming, with special stress upon dairying and sheep raising as not only the most rapid means of restoring the soil, but perhaps the only one. It is

urged that nothing but wheat should be sold off the farm, and all other farm crops fed to live stock. This once rich section of a noted corn state furnishes an example of what is sure to come to other sections if the grain-farming and crop-selling methods prevail.

Combine Shipments to Help Farmers.

The merchants of Wamego, Kan., have combined in a produce association and in the future all eggs, butter and poultry brought there by farmers living in the surrounding country will be bought at one headquarters. The produce will be shipped to markets from the same single source. The merchants have formed the organization, they say, for the purpose of enabling them to pool their shipments, thereby gaining in market prices. The increases they will receive will be given to the farmers in increased purchase prices.

Breeders' Association Acts.

The Mitchell County Breeders' Association, Beloit, Kansas, sends official no-M. Keppel from its rolls and recom-mended a similar action to the Percheron Society of America, of which he was also a member. There were two charges. One, that in Mr. Keppel's sale, held on March 30 of this year, he substituted a colt foaled by a French draft mare for one foaled by a Percheron mare, and the other that he substituted French draft colts for Percheron colts in order to re-ceive prizes from the Percheron Society of America.

Horse Feeding.

The Illinois station recently made some valuable experiments in feeding work horses, and have developed some useful information. In making the experiments about one-half the hay ration was fed at night, a little more than onefourth in the morning, and less than onefourth in the morning, and less than one-fourth at noon. A comparison of clover with timothy showed slightly in favor of clover. Using chaffed hay with grain showed some gains, but not enough to pay for the chaffing. Alfalfa compared with timothy showed a saving of four pounds of grain per day in favor of the alfalfa-fed horses. Alfalfa-fed horses required one-fourth pound less of grain and one-third pound less of hay per day than did clover-fed horses. A ration of grain and one-third pound less of hay per day corn and alfalfa resulted in the saving of four pounds of grain per day when compared with a mixed ration of corn, oats, bran, oil meal and a hay ration of three parts timothy to one part alfalfa. When ground grain was compared with whole, the saving amounted to only 9 per cent, and this was not enough to pay for the grinding.

High School Busy With Farm Topics.

We are gradually coming to the place where the boys and girls in the country schools have a chance to learn something about the affairs of every-day farm life. It has taken much work to secure laws providing for the teaching of the funda-mentals of agriculture in the district school, and following such provision as has been made the results are gradually coming to the surface.

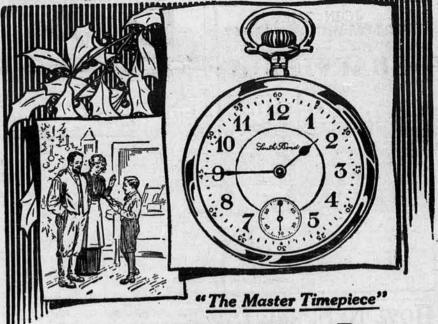
Prof. A. A. Miller, of the Chase County high school, Cottonwood Falls, writes that he has equipped his school with an eight-bottle Babcock milk and cream tester and the class in agriculture has mastered the process of milk and cream testing. The class will test milk or cream for anyone living in the county. By this means the farmer can determine the value of the milk from each individ-ual of his herd and know the relative value of his cows. The class has already

value of his cows. The class has already tested the germinating powers of many samples of seeds and have had demonstrations in grafting.

Prof. Miller will arrange for meetings in every part of the county on Friday afternoons or evenings at school houses or other convenient places of meeting where he can meet the farmers of the community and get before them matters community and get before them matters

of great importance agriculturally.

This sounds like business, and shows what a willing teacher can do. Notice is hereby given that other county high schools can well afford to follow the example of Chase County.



How to Make Your Boy a Better Farmer



S out" his day's work on the farm by the hour and how to follow out his plan with the help of a good watch. GIVE him such a watch—a South Bend Watch—FOR CHRISTMAS. Show him that systematic farm work doubles the efficiency of everyone and brings BIG-GER CROPS, and MORE MONEY TOR ALL OF YOU. Think this over.

The South Bend Watch is called—and IS—"The Master Timepiece." It takes six months just to make the parts, and sometimes another six months to adjust and regulate it so the watch will keep SOUTH BEND TIME, which means PERFECT time. Each watch is inspected 411 times and after it is ready for shipment must run accurately for 700 continuous hours before it is O. K. 'd by the Master Inspector. This is the famous watch that keeps time frozen in a cake of ice. Engineer Floyd of the "Twentieth Century Limited," between

New York and Chicago, carries a South Bend. It has run for the past five months without losing enough to detect on the minute hand. Think of that! YOU can have as good a watch.

Ask your jeweler about the South Bend and about the necessity of regulating the watch to your personality—something no mail order house can do with a watch.

Write for our free hoch "How Good."

Write for our free book, "How Good Watches Are Made." It tells all about

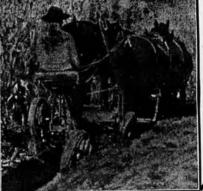
You can get a South Bend Watch in a solid gold case for \$75, or in less expensive cases at prices within anyone's reach. Give one to the boy this Christmas.

THE SOUTH BEND WATCH COMPANY Dept. 275 South Bend, Ind.



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crops. Till deep and store up spring moisture
against the longest drought. Our FREE Books on
Deep Tillage give actual reports from farmers
everywhere, on small as well as large farms.
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Deep Tilling Machine

which doubled wheat crop for J. W. Jefferson—more than doubled corn yield for J. H. Pinson—doubled flax yield for J. H. Scofield—made the heaviest spring oats crop that ever grew on John Wray's land. Statements signed by these men. The Spalding, by tilling 12 to 16 inches deep or more, prepares ideal seedbed in one of station. Send for free books completely illustrating this wenderful machine.

Spalding Department AJ 12

GALE MFG. CO., Albion, Mich. Send me your Free Books on Deep Tiliage. This places me under no obligation.





Rubber Roofing FREIGHT PAD to Ray Station East of Rocky Mon-Freight Rock Research Texas, Okla., Colo., N.D., S.D., Wyoo, Mont., N.M., La., Ga., Ala., Miss. and Fla., on all orders of three rolls or more. Special Prices to these States on request.

TWO-PLY - Weighs 35 lbs., 108 Square Feet, \$1.10 per roll.

THREE-PLY - Weighs 55 lbs., 108 Square Feet, \$1.30 per roll.

TERMS CASH: We save you the wholesalers' and retailers' profit. These special prices only hold good for immediate shipment.

Indestructible by Heat, Cold, Sun or Rain. Write for FREE SAMPLES or order direct from this advertisement. Satisfaction guaranteed or money refunded. We refer you to Southern Illinois National Bank. CENTURY MANUFACTURING COMPANY, Dept. \$28, East St. Louis, Ille.

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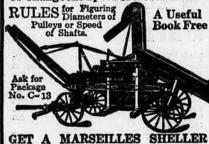


Tubular Cream Separator

Careful buyers choose the Dairy Tubular because it contains no disks, has twice the skimming forceofothers, skims faster and twice glean, wearsalifetime, guaranteed forever by America's soldest and world's biggest separator concern. No other has these advantages.

THE SHARPLES SEPARATOR CO.
WEST CHESTER, PA.
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How to Speed Up Or Change the Speed of a Corn Sheller



Whatever kind or capacity corn sheller you may want; whether hand or power, cylinder or spring, mounted or unmounted, we will be pleased to send you full information.

One and two-hole table feed hand shellers. Two, four, six and eight-hole force feed power shellers and shuck shellers with or without horse or gasoline power.

State what sheller was are interested in and he

State what sheller you are interested in and be ure to ask for PACKAGE No. C-13 OHN DEERE PLOW COMPANY Moline, Illinois

"MEN WHO KNOW" USE THE

DE LAVAL CREAM SEPARATOR

Why should YOU experiment or take chances with anything else?

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It is not unusual to get a letter from a western Kansas farmer saying that on account of the scarcity of feed he must sell some of his cattle. The farmer who is short of feed is confronted with a serious situation. This year all sorts of roughage is high in price—in fact, in some sections it cannot be bought at any and this condition cannot help but force the sale of cattle. To the western farmer the sale of his milch cows is especially serious, and every turn possible should be made to hold This is not because of the loss from cream sales, but particularly because western conditions of soil, rainfall and climate, make the live stock business—and the growing of cattle particularly—an absolute necessity to his permanent prosperity. With the milch cow gone the western farmer is without that source of revenue which keeps his grocery bills and running expenses paid up, and also without the foundation stock necessary to increase or rebuild his herd next season. Such farmer is justified in going to any extreme necessary to winter his breeding stock. Just what the farmer can do is for him to decide. But, by all means, keep the cows.

If necessary the farmer can well afford to borrow money at the prevailing rates of interest to buy feed. If he can get the feed he begins at once to realize on the investment because he has cream or butter to sell and the cows will be dropping calves between now and spring. The banker is the farmer's best friend. He knows what it means to have the territory of his trade depleted in breeding stock. He knows what a stoppage in cream sales mean to himself, as well as to the merchants of his town. Consult your banker on this as well as other matters—his advice is good whether it pertains to loaning money or something else. The bankers of this country have loaned money to farmers with which to buy cows and cream separators and silos, showing his faith in the dairy and live stock side of the country's business. I would borrow money only as a last resort, of course. But careful management in the maintenance of the herd, it seems in the maintenance of the herd, it seems to me, could not possibly result in loss. With the grass of next spring will come a demand for cattle at prices much higher than the present. The days of low-priced cattle are past. The business man placed in a similar position would have the business and position would be considered to the business. borrow if he could and consider that he was not taking long chances. I would not borrow money to feed cows to make milk, but would do it, I think, to keep my herd. And while feeding and keeping the cows I would get out of them all the milk I could.

I have a letter now from a western farmer who says he has very little feed and not enough to keep his cattle through the winter. He has some sor-ghum and Kafir roughage in cock, some shock corn and prairie hay, and two old straw stacks. He adds that he will dispose of his cows because they eat the most, and keep his young stock. I know how this farmer feels, because I have been in a very similar situation. The western farmer, particularly, should think twice before he depletes his herd. The above letter will form a basis for remark.

"Necessity is the mother of invention" is an old and, I believe, true adage. When a man is determined he usually finds a way to effect the accomplishment. When feed is scarce and highment. When feed is scarce and light priced it is up to the farmer to in some way make the feed go the whole distance and to get everything out of feed there is in it. I have experienced such conditions on the farm, and have by various turns carried the stock through the accomplete and generally small quantity of feed. on a seemingly small quantity of feed, or by the use of something which ordi-narily would not be regarded as feed.

I do not know how much feed of the several kinds the above mentioned farmer has, neither do I know how much stock he has. But the question confronting him is that of making the feed go as far as it will. I would at once get the sorghum and Kafir well stacked in the

barn yard. The chances are that not yet has it been badly damaged by rains, snows or by winds blowing dirt and sand into it. The loss from these sources has been estimated as high as 40 per cent. I would at once arrange to prevent that loss by stacking. I would stack the shock corn also. If it has nubbins in it I would husk them out before stacking. The prairie hay and straw are probably damaged as much as they will be, and can as well remain in the field.

The matter of feeding is the impor-The matter of feeding is the tant thing. To feed economically dry buildings or sheds are necessary. correspondent no doubt has buildingsif not some of the old straw might be used for sides and scrap lumber or cheap prepared roofing as a roof. In this respect the best possible arrangement should be made. A dry bed and protection from the worst storms is necessary for the greatest economy in feeding.

I would feed as much as possible from mangers or racks—the young stock from good racks and the cows from mangers. A good 10 per cent loss in feed results from careless feeding methods. Construct the racks so that feed cannot get trampled under foot. Do not store too much feed at one time in the racks— fill them often and the feed will be more appetizing and less wasted. Give the milch cows a feed night and morning in mangers. For this feeding use the choice roughage. Let the cows pick at the rack through the day with the young stock.

In the rack the bright straw should be fed, but do alternate straw with other roughage. The animal-whether cow hog or horse—appreciates a change of diet. The animal will in a variety eat feed it otherwise would not eat. The feed it otherwise would not eat. bright sorghum and Kafir I would feed the cows, aiming to dispose of the sorghum first. That part of the sorghum not eaten from the mangers by the cows should be placed at the disposal of the young stock. If there are pigs on the farm, give them a chance to chew on the butts of the stalks. Dispose of the Kafir following the sorghum. Kafir roughage keeps better than sorghum. Feed the corn fodder last. But it will be necessary to use some of each all along for variety's sake.

If our correspondent can get a thresherman to shred the Kafir or cane he will get more good out of these feeds. If shredded it should be stored in a building protecting it from the rain. ered corn crib would fill the bill. This shredded roughage dampened from day to day will be improved from a palata-oility standpoint. Shredded corn fodder in many sections is regarded as a choice feed. It is fed in troughs or mangers, of course. The roughage should not be wet when shredded—this to prevent moulding.

I have seen shredded fodder fed milch cows and fattening steers when it was moistened as above and with it mixed the grain feed. Assuming that our correspondent has husked some nubbins from his fodder I would grind corn and cob. Sweep mills for this purpose are a part of the equipment of most farms. I canhave shredded fodder, and will not discuss the mixing of corn and cob meal

If the supply of corn will permit, the milch cows should have a feed twice a day. The amount fed will depend upon the supply also. It is wonderful how just a little grain daily will make up for a scarcity of roughage. As the feeding season progresses and the young stock tire of the roughage ration, a small feed of grain night and morning two or three days a week will help wonderfully. I have fed wheat straw put through a cutting box and dampened and just a little grain mixed therewith. This makes the straw more palatable, and wheat straw has some feeding value—a great value when there is nothing else and if it can be prepared in such way that the animal will eat it.



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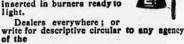
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The Kafir of our correspondent may have some heads and may have been cut and shocked in a way that the heads can be cut off and saved. If this is so, by all means remove the heads. Every farmer knows how this is done. Grind the Kafir heads and without threshing the seed. This gives a product similar corn and cob meal and can be used in the same way. It will pay this correspondent to grind this year. He cannot afford to feed corn or Kafir whole

The cows to be milked should have the choice of the best. They will be called upon to provide the cash which will keep the grocer paid up. But milk the cows giving the most milk. Those having been milked all summer should be allowed to rough it with the stock cat-tle. The milch cows should be given the best stabling conditions will permit.
The calves dropped between this time
and spring should have good care. Each mother will produce enough skim milk for her calf, but at the age of three weeks each calf should be eating a little grain.

Do not overlook the necessity of plenty of water at as near well tem-perature as possible. Water is not ex-actly a food, but the animal cannot get along without it, and animals having plenty of water do better than those which do not get enough.

I know that the above contains suggestions not out of line with the circumstances which inspire the remarks. It may be necessary for our correspondent to reduce his herd-but do not sell more stock than absolutely necessary. Carefully estimate the quantity of feed and the feeding season and go at it. A little extra work will make the feed go farther. Above all things, do not let it be your fault that you are again short A Rush County farmer writes that the hail stripped his corn of leaves and he put the green stalks from a hunand he put the green stalks from a hundred acres of corn in a silo. He says this silo will enable him to keep every hoof of stock in good shape. The silo will help a lot. A desperate effort in the western country will grow feed every year. Two silos on every farm will practically insure feed. Silage can be carried over from year to year. The year of plenty can take care of the lean year if the silo is used. If our correspondent hed his roughage in a silo he would not had his roughage in a silo he would not be worrying now.

Scours in Calves.

A McPherson subscriber writes that his fall skim milk calves are scouring badly and that he cannot cure the trouble, having tried all the common remedies.

Scours result from deranged digestive organs. The probabilities are that the subscriber is feeding too much milk. One-half gallon of skim milk at two feeds per day is enough milk. Kafir heads run through a cutting box or cut on a block with a corn knife make a per-fect grain feed with skim milk. The Kafir has a constipating effect and off-sets the laxative effect of the milk. Reduce the milk to the quantity named, feed a tablespoonful of blood meal in the milk for a few days, and use Kafir or shelled corn for grain feed. Be sure that pails from which milk is fed are kept clean. Allow the calves to exercise freely in the sunlight and keep quarters dry and clean.

Teaching Calves to Drink.

A Fostoria, Kan., subscriber who has never before tried rearing calves by hand, says he cannot get young calves to drink.

Let the calf get a good feed or two from its mother. This is good for the cow as well as calf. Do not offer milk from a pail to the calf for 12 to 18 from a pail to the calf for 12 hours. Let the calf get hungry. the first feed of the mother's milk at as near natural temperature as possible. Straddle calf's neck. Insert finger in mouth. If calf is hungry it will suck. If it does not suck it is not hungry, in which case defer feeding for a few hours. When calf and a much his roce in the When calf sucks, push his nose in the milk, keeping finger in the mouth. A little patience is required. The calf will disk his a required. drink before he starves or is injured by lack of feed.

Silage Does Not Affect Milk.

Some people grasp every possible ex-cuse for keeping in the rear of the pro-cession. A subscriber who retails milk in town says he does not buy a silo, because the milk produced from silage would not be good. For the benefit of this subscriber we quote Prof. Farrington, of Wisconsin, who is a high authority and whose statement is convenient:
"Perfectly sound silage, fed to cows in

a well ventilated barn and only in such quantities as they will eat up clean each time, has never been responsible for injuring milk in any way. In fact, the highest-priced milk sold at the present time to the most exacting customers is produced by cows fed silage during the

"The injury of dairy products by silage fed to cows is caused by the method of feeding at the farms where decayed silage is allowed to remain in the cow's manger and stalls so that the milk absorbed the strong odor which fills the sorbs the strong odor which fills the stable.

"Silage odors do not pass through the cow's system into her milk, but are absorbed by the milk as it is drawn from the cow. When this is prevented by careful feeding and ordinary ventilation, silage is an economical feed for producing milk and does not contaminate the

Calves and Ensilage Skim Milk.

A Fall River, Kan., subscriber says he has read in the Practical Dairyman that skim milk from ensilage fed cows is sure death to skim milk calves, and asks what we think or know about it. Not long since a man told me he had heard that ensilage would cause any animal to which it was fed to lose its teeth, and if fed in too great quantities off would come ears and tail. This man had not bought a sile and did not know of a sile in his locality.

silo in his locality.

It beats the world what stories will circulate and cause thinking men to doubt the silo. I doubt if anything so good as the silo has ever been fought so hard or so successfully delayed by wild-eyed and unscrupulous stories. It seems to be a part of the makeup of a considerable part of mankind to do everything erable part of mankind to do everything possible to block the wheels of progress. The silo has had more than its share.

Now, to answer the question. I do not believe that skim milk from ensilagefed cows will kill calves. I do not find any analyses of ensilage milk differing from those produced from dry feeds. There is no discoverable difference in the milk from the two feeds. I know hundreds of farmers successfully growing calves on ensilage milk. I know a dozen men feeding ensilage skim milk to the most valuable pure-bred calves in the world. I have never before heard the complaint. I know personally of ensilage feeding for 25 years. I would say to subscriber that there is nothing to the claim of Practical Dairyman. must be some other cause for calves' death.

To Avoid Milk Fever.

An Abilene, Kan., subscriber nearly lost a valuable cow from milk fever last fall, and since that cow is about to freshen again he wants to know how to avoid another attack.

Unfortunately it is the good milkers most likely to be attacked by milk fever. For at least two weeks before calving, feed a laxative ration. Plenty of green cured alfalfa hay will solve the feed question. If mill stuff is being fed, use bran. Avoid corn, Kafir or any other heating and constipating feeds. A few days before calving, reduce the grain ra-tion materially. Increase feed gradu-ally after calving. Prevention is better than treatment.

In case of milk fever the air treatment is regarded as very successful. The treatment for milk fever consists in milking out the udder and then filling it with filtered air. This is done by means of a milking tube attached to a rubber tube communicating with a rubber bulb or a bicycle pump. A cotton filter is put between the pump and the milking tube so that the air is filtered before it enters the udder. Instrument makers put up very good outfits at prices ranging from \$3 to \$5, and most any druggist can supply them.

Producing Beef Cheaply.

This judgment from the results of his own experience is challenged by Ralph Moss, an Indiana feeder. Note that he keeps the calf growing, that protein feeds enter strongly into the winter ration, that silage is indispensable and, above all, he must have a well bred, early maturing animal:

"Economical beef growing is the combined result of good breeding, generous feeding and early marketing. The cows, while not necessarily pure-bred, must be good and have at least two top-crosses. The bull, however, should be pure-bred and be early maturing and built along the lines of the model butcher animal. With a calf produced from such parentage and dropped in the spring, I feed corn and grass in addition to the dam's milk until the calf's 'grain stomach' has developed. After about six months I wean the calf and feed during winter a ration

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of corn, clover hay, corn stover and a little oil meal. The calf is then finished the following summer with corn, oil meal blue grass. By following this method of breeding and early maturity, getting the animal on the market as soon as possible and by the liberal use of silage and other rough feed for the breeding stock, I have found it to be not only pleasant but profitable."

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POULTRY

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It pays to exhibit your birds at a poultry show, for that is the place to find out the quality of your stock.

Plan to give sprouted oats a trial this winter. They help egg production and prove a strong factor in securing good health to the flock.

It you find it necessary to doctor a sick hen, put her by herself, where she will not endanger the rest of the flock. When a person is sick he needs rest as well as medicine, and you cannot expect good results in treating a sick hen if you allow the other chickens to molest and ill-treat her.

If you are selling dressed poultry, be careful not to break the skin, as this greatly mars the appearance. They can be made to look plump, after being picked, by first dipping them in water almost boiling and then in cold water. They should be hung in a cool place and allowed to remain several hours.

Before scientific study made poultry feeding the exact science that it now is, many practical poultrymen had found by actual experience that oats made a good food for fowls; but now that careful analyses show this grain to be altogether the best balanced grain feed that can be given to laying hens, and this is especially true when the oats are sprouted and fed in the early stages of germination, so that no one can afford to neglect its daily use for his fowls.

An order has been issued from the office of Dr. S. J. Crumbine, secretary of the State Board of Health, demanding that all cold storage eggs be labeled. This order takes effect at once. The a stamp or write a description on every egg, but each sack, package or case of eggs must be designated. This is for the purpose of educating the consumer on the quality of their purposes and on the quality of their purchases and for the purpose of equalizing prices in Kansas. Too many grocers have been selling cold storage eggs as "fresh eggs?" and the housewife has not been able to come back at them. There was no to come back at them. There was no legal authority to demand that fresh eggs be given. At this time of the year cold storage eggs are plenty on the market. But to sell them for fresh eggs was an injustice to the farmer who brought fresh laid eggs to the market. Goodness knows that fresh laid eggs at this time of year are hard to get and are worth the very highest price that is paid for them. But to be compelled to sell them at cold storage eggs' price was all wrong.

A subscriber says his chickens have small, black warts on their combs and wattles, and asks what the disease is and the remedy. The disease is chickenpox, and the warts not only appear on the comb and wattles, but also on the bodies of the fowls. The feathers, of course, hide most of these warts on the body, unless they are examined very closely. This disease is not necessarily fatal, but it will play sad havoc among the flock if not looked after in time. Chickenpox is generally followed by canker and rown and for that many the content of the c canker and roup, and for that reason don't allow the disease to get any headway. It is generally caused by the birds being allowed to roost and stay in damp houses and where things are not kept in a sanitary condition. When you first notice the disease the best thing to use is creolin or permanganate of potash in the water and give them no other drink. Remove the sores and apply pure dioxygen to the raw surface until the sore becomes quiet, after which you can apply pure creolin to these parts. In a few days, with careful treat-ment, the birds will be well. Dioxygen and creolin are two of the best remedies that can be used, although pure kerosene is often used in place of them, with good results. The best preventive for chicken-pox is to keep things clean, keep the houses dry, feed pure grain and clean water and you will not be liable to be troubled again.

The Profitable Age of Fowls.

The question as to which is the most profitable breed of fowls is very frequently asked. There are undoubtedly differences in breeds, but undue importance should not be placed upon breed. The trap nest has shown that there is more difference in individuals than in breeds. Breed isn't everything. We must get away from that idea in poultry husiness with "the best breed," as he believes, and has with it the notion that breed is everything, he will meet with inevitable failure. The breed may be all right, but the fowls must be encouraged to do their best by good care and manto do their best by good care and man-agement. When eggs are firm at 40 cents a dozen and the hens fail to respond, the owner is likely to become unreasonable and take up with another breed, and most likely the fault was not in the breed. The fault is usually one of two things; either the hens are of a poor or non-productive strain of the breed, or the management is poor.

It is a point in management that I wish to speak of here, one point in many that must be taken into account if poultry keeping is to be made a success. It is a question of the most profitable age of the hen. Poultrymen profitable age of the hen. Poultrymen who have kept in touch with poultry investigations during the past few years are pretty well informed on this point, but the importance of this subject is not yet generally appreciated. The writer carried on for several years at the Utah Experiment Station a line of experiments with the object of determining the value of the hen at different ages of egg production. The same hens were kept year after year under similar were kept year after year under similar conditions and a record kept of produc-tion and of food consumed. These ex-periments proved that the hen is different from the cow, which retains or improves her productivity with age. The first year was the most profitable, and there was a gradual decrease in productiveness each succeeding year. It is safe to figure this decrease at 25 per cent each year. With average prices for food and for eggs it is not profitable to keep hens after they have finished their second year of laying. The first, or pullet year, is very profitable, the second will give a satisfactory profit, but dur-ing the third year the egg yield will seldom pay for the food consumed.

These conclusions apply only, of course, where the eggs are sold at market prices. Fowls that have a special value as breeding stock should be kept longer, but the notion that "the old speckled hen" is the good layer should not be cherished unless she is caught in the trap nest. The fact that she sings a joyful lay, paints her comb a brilliant red and scratches a vigorous scratch, should not be accepted as sufficient grounds for commuting sentence.

It is safe to say that the poultry keepers of this state would be many thousands of dollars in the pocket by vigorously killing off the hens every two years and replacing them with new teels, with the executions noted above stock—with the exceptions noted above.

Where the pullets and hens are allowed to run together it will be necessary to mark them; otherwise it will be difficult to separate the old stock from the young when it is desired to market them. The usual method of marking is to punch a hale in the web between the toes when the chicks are hatched. This is easily and quickly done with a punch which may be pur-crased from the poultry supply houses for 25 cents. A number of different markings may be made in this way. Where the practice is to dispose of the hens every two years it will be sufficient to mark them everyother year.—JAMES DRYDEN, Oregon Agricultural College.

Free Land.

Another allotment of very choice valley fruit land is now ready for distribu-tion. Write immediately to the Jantha Plantation Co., Block 1525, Pittsburg, Pa., for application blanks. The only requirement is that five acres be planted in fruit trees within five years. Authorized improvement companies will plant the trees at reasonable prices, and market the fruit for the owners on shares.

140-Chick Brooder JIM ROHAN, Freeiden Belle City Incubator Comp Bog 18 Racine, Wis, Sam Thompson's Big



VACCINATE YOUR WOGS

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All serum subjected to severe test before distribution. Room 72, Live Stock Exchange, KANSAS CITY, MO.

SUCCESSFUL F

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Successful incubators
Successful brooders
Blart right for biggest profits. Write to



TURKEY

197 toms, 120 hens, Mammoth Bronze; 80 toms, 40 hens, White Holland. Prices to suit purchaser. We breed all the paying varieties of standard-bred poultry.

W. F. HOLCOMB, Mgr. Nebraska Poultry Co. Clay Center, Neb.

S. C. Buff Orpingtons

I won first on pen at Topeka 1911 show against 12 competing pens; also won at the other leading shows of the country. the large, heavy-boned kind. Send for my 1911 mating list; am ready to sell you egg for hatching.

EVERETT HAYES, R. 4, Hiawaths, Kansas.

WHY NOT HAVE A GOOD LIGHT? HERE IT IS!



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Bright, Powerful, Economical,
Odorless, Smokeless, Every
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THE STEEL MANTLE LIGHT
CO., 338 Huron St. Toleda, O.

CORN AND ALFALFA FOR DAIRY COWS.

(Continued from page 4.)

for hay or grain. It should be borne in mind that silage is carbonaceous and should be balanced with proper protein feeds. It is also a loosening feed, and should be used with a knowledge of its effects upon the bowels of the animals fed. This is especially true of calves and horses. Corn silage properly com-bined with other feeds in the hands of a judicious feeder will produce results that are most gratifying.

The Alfalfa Plant.

Alfalfa is a legume remarkably rich in digestible protein. It is also a heavy producer, averaging under our northern conditions about four tons of hay to the acre. By using it judiciously with other feeds it is possible for the dairy farmer to obtain well balanced rations for his live stock from feeds grown entirely on the farm.

ALFALFA A HEAVY PRODUCER OF DIGESTI-BLE NUTRIENTS.

Of the three groups of nutrients, protein, carbohydrates, and ether extract, the ordinary hays and grains of the farm contain plenty of carbohydrates and ether extract, but are apt to be deficient in protein. We buy linseed meal and cottonseed meal in order to make up this deficiency; in other words, we buy this deficiency; in other words, we buy them largely, if not entirely, for their

It will be noticed that mixed hay yields over twice as much digestible protein per ton and per acre as timothy hay; corn silage, a carbonaceous feed, yields only 18 pounds of digestible protein per ton, but on account of being a larger yielder, produces 180 pounds per acre. Red clover yields 136 pounds of digestible protein per ton, nearly two and a half times as much as timothy. It is a better yielder than the hays president, most light and consequently It is a better yielder than the hays previously mentioned, and consequently produces 272 pounds of digestible protein per acre, or 188 pounds more than timothy hay, or 95 pounds more than mixed hay. Alfalfa (three cuttings) yields double that of red clover; it is also richer than red clover, yielding 61 per cent more digestible protein. Combining high yield with high protein content, alfalfa makes a remarkable showing of 880 pounds digestible protein per acre, over three times the amount produced by an acre of red clover, and ten times that produced by timothy hay.

ALFALFA BOTH A BOUGHAGE AND PARTIAL ALFALFA BOTH A ROUGHAGE AND PARTIAL

SUBSTITUTE FOR GRAIN. A summary of feeding trials at various experiment stations with dairy cows shows that alfalfa can be made to take the place of at least one-half of the grain usually fed our dairy cows, and as the nutrients needed by dairy cows can be produced much more cheaply with alfalfa than with grain, the cost of pro-ducing milk may be greatly reduced by its use.

The cash returns from feeding this The cash returns from feeding this crop at the various experiment stations ranges from \$10 to \$20 per ton. With four tons per acre, these figures show excellent returns from the land devoted to alfalfa. A conservative estimate would indicate that the dairy farmer can increase his profits from 50 to 75 per cent by a liberal but judicious use of alfalfa grown upon his own farm.

Recently a Wisconsin farmer was suc-

Recently a Wisconsin farmer was successful in raising alfalfa for the first time. He commenced feeding it in place of other roughage, as corn stover, timothy, etc., but continued to feed the usual amount of grain. He submitted his ration to the Wisconsin experiment station for approval. It was suggested that since alfalfa contained a larger amount of digestible nutrients than ordinary roughage, he should reduce the amount of grain fed. He adopted the suggestion on a herd of fifty cows and watched the results. He gradually decreased the grain allowance until his cows were receiving five pounds per day per head less grain than formerly, without causing any decrease in the yield of milk. Five pounds of grain per cow for fifty cows for seven months' feeding amounted to twenty-six tons, which at \$20 per ton is worth \$520, or over \$10 per cow.

ALFALFA USEFUL FOR OTHER STOCK AS WELL AS DAIRY COWS.

Several experiments have been conducted to test the value of alfalfa hay as feed for hogs. The results show that when properly combined with grain, al-falfa will produce from 200 to 868 pounds (Kansas Bulletin 95, p. 90) of pork per ton. Ex-Governor Hoard re-ports that he has successfully fed his brood sows prior to farrowing on noth-

A Sure Way To Get More Eggs

Remember it is not always the amount of ration a hen eats that goes to make eggs, but the amount she digests—keep that fact uppermost in your mind—act on it—and you'll make the egg business a paying business. Dr. Hess has compounded a number of bitter tonics which help the hen to digest more of her food and thereby increase her egg yield.

DR. HESS Poultry PAN-A-

is the personal formula of Dr. Hess (M.D., D.V.S.); it solves the problem of converting nutritious food elements into eggs by sound digestion. By exactly the same process, Dr. Hess Poultry Pan-a-ce-a fattens broilers and helps the chicks to vigorous maturity. A penny's worth feeds thirty fowl per day—sold under the most liberal guarantee.

Our Proposition—You buy Dr. Hess Poultry Pan-a-ce-a of your dealer. If it fails to make your hens lay more eggs and keep your poultry healthy, he is authorized by us to refund your money.

1½ lbs. 25c; mail or express 40c; 5 lbs. 60c; 12 lbs. \$1.25;

25 lb. pail \$2.50; except in Canada and the extreme West.

If your dealer cannot supply you, we will. Send 2c for Dr. Hess 48-page Poultry Book, Free.

DR. HESS & CLARK Ashland, Ohlo

DR. HESS STOCK TONIC. Been 18 years on the market—proved a continuous success as a flesh, muscle and milk producer. Good for Horses, Steers, Hogs, Cattle and Sheep. Increases digestion—lessens nutritive waste of feed—makes a splendid conditioner. Not a ration—but makes a ration more valuable. Guaranteed just the same as Dr. Hess Poultry Pan-a-ce-a. 100 lb. sack \$5.00; 25 lb. Pail \$1.60. Except in Canada and extreme West and South. Send 2c for Dr. Hess Stock Book, free. Free from the 1st to the 10th of each month—Dr. Hess (M.D., D.V.S.) will prescribe for your ailing animals.

96-page Veterinary Book free for the asking. Mention this paper and enclose 2c stamp.

INSTANT LOUSE KILLER KILLS LICE

ing but alfalfa hay, with an occasional small allowance of skim milk.

Alfalfa also has produced excellent results in feeding steers, brood mares, growing colts, and even work horses. Poultrymen are advocating alfalfa for the production of eggs. A review of the results of feeding alfalfa with the various classes of animals shows it to be far the best known roughage for farm animals. Red clover has been rightly held in high esteem, but according to its composition and the results obtained in feeding farm animals, it has been found less valuable than alfalfa.

ALFALFA A WONDER PLANT.

When we think of alfalfa as a perennial plant, that it produces a larger yield than any other hay crop, that it extends its roots into the lower soil and brings up plant food from the subsoil, that its roots are covered with tubercles, the home of micro-organisms that have the power to lay hold of the nitrogen in our atmosphere and convert it into plant food, thus leaving the soil richer than it was before the alfalfa was grown, we cannot help but think that alfalfa is a wonder plant. There seems to be little or no question as to its adaptability to our northern conditions, and, as the feeding trials almost invariably show its superior results, it behooves us to urge our farmers cautiously but earnestly to grow this crop as soon as possible in order to get the largest net returns from their land.

Saving Money on Eggs.

Improper and antiquated methods of handling eggs in the United States result in losses that reach an estimated total of \$45,000,000 annually. This is 17 per cent of the estimated total value of the entire crop. Practically all this loss is borne by farmers and other producers, and a large part of it can be ducers, and a large part of it can be prevented. How the Department of Agriculture through its Bureau of Ani-mal Industry is solving this jroblem is told in Bulletin 141 just issued, entitled

"The Improvement of the Farm Egg."
In order to show how this loss might be prevented, the Bureau of Animal Industry sent experts into Kansas to conduct investigations. The results of the first season's work are given in detail in the bulletin, with suggestions for improvement that may be applied anywhere. "Although but one season has been spent by the Bureau in this work," says the Bulletin, "several much de-sired changes have been brought about. The most important of these was the adoption by shippers of the 'loss-off' system of buying and selling eggs."

Previous to the work of the Bureau, Kansas eggs were not very popular in

the market outside of the state. Quantity rather than quality was a handicap the shippers encountered. The imme-diate effect of buying on a "loss-off"

Cheer and Charity Christmas

SANTA CLAUS' PROCLAMATION.

During the month of December, 1911, every piece of mail should carry a RED CROSS CHRISTMAS SEAL

on the back of the envelope. Every bill, statement, receipt and check should carry a seal on its face.

RED CROSS CHRISTMAS SEALS can be pur-

chased for one cent each from every live, progressive, charitably inclined retail merchant in Kansas. The money received from the sale of seals will be used to send a traveling lecturer or nurse over the State, and for other anti-tuberculosis work. Help us in the fight against the Great White Plague.

Address all communications to

MRS. B. B. SMYTH, CHRISTMAS SEAL AGENT, Room 9, Fourth Floor, State House, Topeka, Kansas.

Kansas Association for Study and Prevention of Tuberculosis, State Agents.

Mail Orders Accompanied by Check or Money Order Promptly Filled.

You can transform any kerosene (coal oil) lamp or lantern into dazzling brilliancy with our wonderful Bright Light Burner. 50 candle power invisible and unbreakable Steel Mantle. Brighter than electricity, better than gas or gasoline, and perfectly safe. No generating—simply light like any kerosene lamp. Nothing to get out of order. Positively will not smoke or flicker.

AGENTS WANTED EVERYWHERE. Sells like wildfire.

all or spare time. Experience unnecessary. Make big meney—be independent, Write today. Act quick—territory going fast. Complete sample, postpaid, 30c, 4 for \$1.00. Money back if not satisfactory. BRIGHT LIGHT CO., Dept. 59 Grand Rapids, Mich.



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We will pay you the highest prices on your hides and furs. We build our business by giving every man a square deal. We charge no commission. We send you a check the same day shipment is received. We treat you right. The house that has been successful for 25 years could not stand if it did not satisfy its shippers. Try us and see. Write for full list and tags. See quotations on market page. JAS. C. SMITH HIDE CO.
St. Joe, Mo.; Wichita, Kan.; Grand Island, Neb.; Joplin, Mo.



WHITE PLYMOUTH ROCKS BEST ALL PURPOSE FOWLS IN EXISTENCE

GOOD TO LAY, GOOD TO EAT, AND GOOD TO LOOK AT.

White P. Rocks hold the record for egg laying over all other breeds. 289 eggs each in a year for eight pullets is the record, which has never been approached by any other variety. I have bred W. P. Rocks exclusively for 20 years and have some fine specimens of the breed. I sell eggs at "live and let live" prices, \$2 per 15, \$5 per 45 and I prepay expressage to any express office in the United States.

THOMAS OWEN

TOPEKA, KAN.

system produced such a marked change in the quality of the eggs reaching the market that outside buyers now manifest a preference for eggs bought in this manner

Copies of the bulletin may be procured by addressing a request to the Secretary of Agriculture, Washington,



ing Co., 108 2d St., Des Moines, Iowa-

Missing Page(s)

GRANGE The

DIRECTORY OF THE KANSAS STATE

OFFICERS,

State Grange Meeting.

The Kansas State Grange will meet in 40th annual session in Topeka December Sessions will be held in Representative Hall, where there will be ample

room and pleasant surroundings.

The Commercial Club of Topeka has made arrangements to assist in helping to entertain the visitors, of which we expect a goodly number from different parts of the state, and the visitors will be of a class of which any city may be pleased to entertain—intelligent, industrious producers of wealth.

Headquarters will be at the Fifth Ave-nue Hotel.

This is not election year and much good work may be accomplished. This session will precede the state and national elections.

The Grange is far removed from partisan politics, but with 1,000,000 intelligent patrons in this country, there is exerted a great influence for the betterment of mankind.

Valley Grange No. 736.

Special reports and business were discussed and acted on. The committee on constitution and by-laws made a partial report and were instructed to go over the secretary's books to find out how many by-laws had already been adopted. The brothers had an animated discussion on the protection of quail and other insect-eating birds, finally agreeing to organize a Farmers' Club, pledged to prosecute and to testify against any person they saw hunting quail on their own or a brother farmer's premises. The sisters then had a spicy discussion on "Substitutes for Potatoes," and "A Good, Easily Cooked Sunday Dinner." The brothers were not a bit backward about taking part in these discussions. It soon taking part in these discussions. It soon became evident that many of the dinners the brothers liked were good, but not easily prepared. Questions for the good of the order then were taken up until closing time, this including plans for making the Founder's Day meeting a public one.—E. Gobsuch.

Report of Coffey County Pomona Grange.

Good delegations from eleven of our Granges were present at this meeting. Bro. Reardon, State Lecturer, was present and gave one of his helpful talks on 'Lecturers' Problems," in the forenoon. After dinner his able address was along practical lines of work for the sub-orinate Granges and was most heartily commended by all who heard him. He was asked to talk on the National Grange dispute, but, after a few remarks on the subject, drifted off onto insurance matters, to the disappointment of all who wanted to hear both sides of the question. Some of the principles con-tended for were stated by a number who believe that the minority is right in most of their beliefs, and was received very cordially. Good delegates to the State Grange were chosen. Difficulties that had come up in some of the Granges were discussed, and recommendations made to those making the mistakes that it would be for the good of the order to avoid such doings in the future. Altogether, the meeting was a very helpful one.-E. GORSUCH.

Report of Valley Grange Meeting.

After the usual business routine the constitution and by-laws presented by the committee to whom this work was assigned, was adopted. The committee having charge of the Founder's Day meeting, reported that a public meeting had been arranged for. A brief talk on the origin and purposes of the Grange, and what the Grange has done for all formers and the people with resite. farmers and the people, with recita-tions, music and a masquerade menu for the supper, is to be the finishing touch. The lecture program called out a talk on the successes and failures of this season, one of the very best we have ever had. One of the surprises of this discussion was that there has been more failures with pedigreed seed, especially

ear's

new

corn brought from a hundred miles or more from here, than there has been suc-cesses. It was also learned that seed corn growth on bottom land does not do on upland or prairie. Those that had been growing the pedigreed seed corn for three years said they were going back to the best native seed they could get. It was reported that one farmer who had kept up his experiment, after five years was so well satisfied with the high-grade seed he thus secured that he still plants that variety. The conclusion reached was that it takes several years to acclimate corn, especially when it is brought from one hundred miles north of here. And while this is being done the farmer gets an inferior yield from his land. The first two or three years there is great growth of stalk and a small growth of ear. The next question was: "Does the average farmer clear 6 per cent on the capital invested in his farm and its equipment, and including his labor?" This question brought out much difference of opinion, especially how dependent the farmer is on weather high-grade seed he thus secured that he how dependent the farmer is on weather conditions, on the ability to secure help when he needs it to cultivate and care for his crops and on his market facilities. The brothers needed no help to keep up the interest in either of these discussions .- E. Gorsuck.

More Farmers' Institutes.

Central Kansas Circuit No. 2.-Lyons, December 4-5; McPherson, December 6-7; Great Bend, December 8-9; Wichita, December 11-12; Wellington, December 13-14; Newton, December 15-16; Cottonwood Falls, December 18-19; Emporia, December 20-21. Speakers, Mr. Coon and Mr. Crabtree.

Northeastern Circuit No. 3.—Oskaloosa, December 4-5; Tonganoxie, December 6-7; Effingham, December 8-9; Troy, December 11-12; Hiawatha, December 13-14; Seneca, December 15-16; Horton, December 18-19; Holton, December 20-21. Speakers, Mr. Wheeler and Miss Brown. Miss Brown.

Eastern Kansas Circuit No. 3.—Alma, December 4-5; Lawrence, December 6-7; Lyndon, December 8-9; Admire, December 11; Council Grove, December 12-13; Burdick, December 14; Hope, December 15; Woodbine, December 16; Chapman, December 18; Junction City, December 19-20. Speakers, Mr. Hine and Mr. Gearhart.

Central Kansas Circuit No. 3 .- Solomon, December 4; Lindsborg, December 5; Geneseo, December 6; Little River, December 7; Raymond, December 8; Sterling, December 9; Nickerson, Decem-

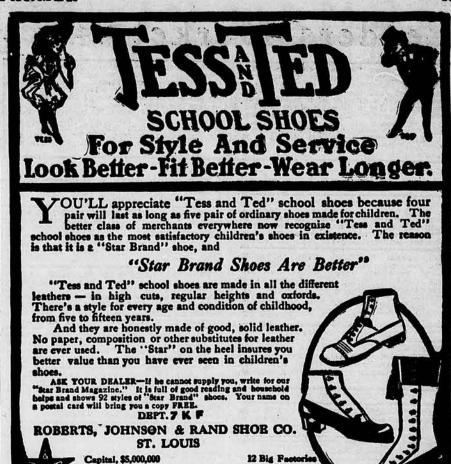
ber 11; Tampa, December 12. Speakers, Mr. Holsinger and Miss Nash. Southwestern Circuit No. 1.—Cimar-ron, December 4-5; Lakin, December 6-7; Syracuse, December 8-9; Johnson, De-Cember 11; Richfield, December 12-13; Hugoton, December 14; New Ulysses, December 15; Santa Fe, December 16; Garden City, December 18-19; Dodge City, December 20-21. Speakers, Mr. Umberger and Mrs. Simmons. North Central Circuit No. 3.—Marys-

ville, December 12; Blue Rapids, December 13-14; Frankfort, December 15-16. Speakers, Mr. Miller and Miss Dow.

Experiment in Soil Packing.

The North Dakota experiment station made an exhaustive series of experiments on 24 plats of wheat in 1911. It was found that the moisture in the top vas found that the moisture in the top 12 inches of soil largely determines the extent of plant growth, the soil below that losing or gaining but little in the course of the season. Also, the cultiva-tion of the soil five times during the growing season increased the amount of moisture in the soil by 211.5 tons per acre, or the equivalent of 1.88 inches of rainfall. This amount of water, if all used for the growing of crops, would produce two bushels of wheat to the acre and would show a nice profit over and above the additional cost of cultivation. The moisture increase in this case is generally considered to be low. The rainfall during the growing season was a little less than seven inches.







Because for lighting purposes nothing approaches it for convenience, safety and efficiency. It has been made possible for farms, no matter where located, to possess the brilliant, ever-ready, white light of electricity by the installation of an Individual Lighting Plant. The cost is small, the continuous benefit immeasurable. Individual Lighting Plants consist of a small gasoline engine, dynamo, switchboard and the famous Storage Battery called

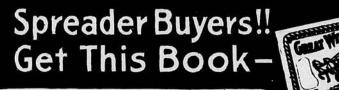
The "Chloride Accumulator"

the same type of battery used in the big lighting stations of most all of the large cities. This wonderful storage battery does away with starting your engine at the moment light is desired. Use your engine during the day to run farm machinery and then connect it with the dynamo for a few hours, whenever most convenient. The dynamo stores the battery with electricity which retains it so that when night comes and light is meeded you can send it flashing to any desired part of buildings or grounds by merely pressing a switch. Your light is always ready, on the instant, with the "Chloride Eccumulator".

Full information cheerfully furnished, without obligation on your part, by writing our nearest Sales Office. Ask for our book, "Electric Lighting Plant Book." THE ELECTRIC STORAGE BATTERY CO.

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This Star on every beel.

Buy Your Last Spreader First

ROCK ISLAND PLOW COMPANY 243B Second Ave., Rock Island,

writing advertisers please mention Kansas Farmer.

5-ft. Boiler Steel Hogtroughs \$1.95 Write for five descriptive develor FULTON SUPPLY CO., 1625 Fulton St., Chicago.

BULINION COLLAND COLLA

Readers Market Place

Advertising "bargain counter." Thousands of 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 ing buyers read the classified "ads"—looking for bargains. Your advertisement here reaches over a quarter of a million readers for 25c a line for oweek; 5c a line for four weeks, Additional weeks two weeks; 75c a line for three weeks; 80c a line for four weeks. Additional weeks after four weeks, the rate is 80c a line per week. Count 6 words to make one line. No "ad" taken for less than 50c. All "ads" sets in uniform style, no display. Initials and numbers count as words. Address counted. Terms always cash with order.

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

HELP WANTED.

ONE SCHOOL TEACHER IN NORTH-ern Oklahoma last winter made nearly as much on the side working for us as by teaching. We have a special proposition for teachers in the small towns and rural districts. Address Box 368, Topeka, Kan.

YOU ARE WANTED FOR GOVERN-ment positions. \$80 month to commence. Annual vacations, short hours, no "lay-offs," common education sufficient. Over 12,000 appointments coming. Influence un-necessary. Send postal immediately for free list of positions open, with description. Franklin Institute, Dept. R-88, Roches-ter, N. Y. anklin r, N. Y.

MALE HELP WANTED.

WANTED—MEN IN EVERY TOWN IN Mo., Kan., Ill., Neb., Okla., Ark. to take orders for nursery stock. Outfit free. Cash weekly. National Nurseries, Lawrence, Kan.

SITUATION WANTED.

WANTED—EMPLOYMENT ON A FARM to manage; am experienced. Reference; Best farmers in this country. Address, Man-ager Osage Trading Co., Baartlesville, Okla.

REAL ESTATE.

FOD SALE—80 A. ALFALFA LAND. IF interested write for list of ten 80 acre tracts near Salina. V. E. Niquette, Salina, Kansas

NEW EXTRACTED ALFALFA HONEY, 60-lb. can, \$5; per case of two cans, \$9. J. M. Ruyts, Carlsbad, N. M.

TO SELL YOUR PROPERTY, WRITE Business Agency, Min-Northwestern

FARM RANCH—1800 ACRES, LOCA-tion, central Kansas. For information write 304 Hall Bldg., Kansas City, Mo.

SNAP, IF SOLD IN THE NEXT 30 days—Fine 160 a., close to Kansas line. Dr. A. R. Allen, Paonia, Lock Box 27, Delta Co., Colo.

FOR SALE—80 A. IRRIGATED LAND, 2½ ml. from Sterling, Col., 2 ml. from sugar factory. No agents. Thos. W. Smith, Sterling, Colo.

BARGAIN—FINE LAFAYETTE COUNTY, Missouri, corn and clover farm, 230 acres. \$100 per acre. Write William Hoefer, Hig-ginsville, Mo.

SIXTY ACRES GULF COAST PRAIRIE, half in cultivation, all tillable, well drained, fenced, 2 miles Danbury, 6 miles Angleton, \$2,500, half cash. D. H. Hendrickson, Dan-

ARKANSAS PRAIRIE, TIMBER, RICE and general farm lands. Prices and terms reasonable. Lists free. W. P. Fletcher & Son, Lonoke, Ark.

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

FARMS WANTED—WE HAVE DIRECT buyers. Don't pay commissions. Write describing property, naming lowest price. We help buyers locate desirable property Free. American Investment Association, 43 Palace Bldg., Minneapolis, Minn.

FARMS AND BUSINESS PLACES bought, sold and exchanged. I bring buyers and sellers together. If you want to buy or sell, write me. Established 1881. Frank P. Cleveland, 1213 Adams Express Bldg., Chicago, Ill.

WRITE US FOR OUR LIST OF IMproved farms for sale. Some of the finest farms in Kansas and other states on easy terms and very low prices. We list only what we consider as genuine bargains. Garver & Co., Box 142, Topeka, Kan.

ONE OF THE BEST PAYING RANCHES in Greenwood county, Kansas, one mile from town and shipping point; 200 acres in cult., 100 acres of which are first bottom land; 200 acres in prairie meadow, 240 acres blue-stem pasture; 2 good sets of improvements; fine protected feed lots with living water; black limestone soil; cheap at \$36 per acre; corn on this ranch this year will make 50 bu. to the acre. J. C. Talbot, Eureka, Kan. make 50 bu. Eureka, Kan.

CANADA LANDS.

CANADIAN FARMS \$10 TO \$30 AN acre—long terms of payment or crop payment plan—big opportunities for homeseekers. Write today for free books and maps. J. M. Thornton, General Agent, Canadian Pacific Railway, Alberta Land Dept., 112 West Adams St., Chicago, Ill.

CANADIAN GOVERNMENT LANDS FOR homestead seekers. Priceless information regarding homesteads and laws for acquiring agricultural, timber and mineral lands in Canada. Wait—but don't wait till everyone sees it. 50c., postpaid. A. J. Wolbrink, Aberdeen, S. D.

POULTRY.

FINE WHITE WYANDOTTE COCKER-els, 75c. J. J. Benjamin, Cambridge, Kan.

BOURBON RED TURKEYS FOR SALE-irs, Lew Noble, Republic, Kan.

BOURBON RED TURKEYS—GOBBLERS or sale. Emma Avery, Woodston, Kan.

BUFF ORPINTONS FOR SALE—HARRY Cure, Atchison, Kan.

BUFF COCHIN COCKERELS, \$2.50 TO \$5; pullets, \$2. Housel, Smith Center, Ran.

FOR SALE—BRONZE TURKEY TOMS; weight 20 lbs. at 6 months old. Price, \$6. J. R. Gannan, Turon, Kan.

CHOICE ROSE COMB WHITE LEGHORN ockerels, \$1 each; six for \$4.50, this month nly. Mrs. Charles Dibben, Wakefield, Kan.

SILVER LACED WYANDOTTE COCKERels for sale, J. B. Fagan, Minneapolis, Kan., Route 4.

FINE BOURBON RED TURKEYS—TOMS, 5; hens, \$3; trios, \$10. Mrs. A. G. Friesz, Ceytesville, Mo.

FOR SALE—PURE-BRED BUFF ROCKS. Cocks, \$1; pullets, 75c; cockerels, 75c. Mary Conner, Cheney, Kan.

MIXED CHICKEN FEED. WE HAVE a good line of poultry feed and supplies. Write. D. O. Coe, 119 E. 6th st., Topeka.

S. C. BUFF ORPINGTON PULLETS and Cockerels. Eggs, \$1.50 per 15; \$6 per 100. Mrs. Ella Sherbunaw, Fredonia, Kan.

PRIZE-WINNING S. C. BROWN LEG-horns—Extra quality. Write your wants. Mrs. L. H. Hastings, Thayer, Kan. ROSE COMB REDS AND COLUMBIAN Wyandottes, \$2 each. A. D. Willems, Minneola, Kan.

THOROUGHBRED BRONZE TURKEYS or sale. Tome, \$6. M. H. McKeever, Downs,

FOR SALE—S. C. WHITE ORPINGTON cockerels and pullets. Ed Schmidt, Ottawa,

PARTRIDGE WYANDOTTE COCKER-is, high-class stock and premium winners. S. Jackson, Scranton, Kan.

GOLDEN LACED WYANDOTTES—Cockerels and pullets, \$1 up. J. K. Hammond, Wakefield, Kan.

RAMSEY'S RELIABLE RANGE ROCKS. Snow-white cockerels, \$1.00 to \$3.00. Photo free. Mrs. John Ramsey, Ft. Scott, Kan.

\$2 TO \$5 R. C. B. LEGHORN COCKER-els, \$1 to \$2; \$10 to \$20 per dozen. Mrs. J. E. Wright, Wilmore, Kan.

A FEW GOOD BARRED TO THE SKIN Barred Rock cockerels at \$1.00 and \$1.50 if taken soon. Mrs. Wm. Bumphreys, Corn-

BARRED ROCK COCKERELS, LARGE size, correct plumage. A few Partridge Wyandottes. For prices write David Morey, Nevada, Mo., Route 2. BARGAINS IN WHITE ROCKS, MAMmoth White Holland turkeys. Imperial Pekin ducks, White Cochin bantams. Satisfaction guaranteed. Write for prices. A. T. Garman, Courtland, Kan.

ROSE COMB RED PULLETS FOR SALE, utility kind, February hatched. Write quick. Prices reasonable. J. W. Sheirborn, Tabor, Iowa.

FOR SALE—150 S. C. WHITE LEGHORN utility cockerels. Extra large and white. Prices range from \$1 to \$3. Mrs. J. C. Wels, Holton, Kan.

R. C. REDS AND BARRED ROCK COCK-erels. From high scoring stock, \$1.50 up. Few pullets. Mrs. W. A. Schreier, Argonia, Kan. LARGE BONED R. C. R. I. REDS—DEEP red color, red eyes, long body, low-down tall, high scoring stock, \$2.50 each. Satisaction guaranteed. Osterfoss Farm, Hedrick, Iowa.

BARRED, BUFF, WHITE ROCKS, REDS, Wyandottes, Toulouse geese, Pekin ducks. The best of their kind. Winning record. Low prices. R. D. Warner, Whitewater, Wis.

PURE-BRED BARRED PLYMOUTH Rock hens, 75c; pullets, 50c. Pedigreed collie pups, \$8.00 and \$5.00. Fine stock. Percy Lill, Mt. Hope, Kan.

COCKERELS FOR SALE—WHITE ROCKS and Light Brahmas, \$2 apiece. Standard ared. Satisfaction guaranteed. M. F. Rickert, Seward, Kan.

COCKERELS, GOOD ONES—BARRED Rocks, White Rocks, Buff Orpingtons, White Wyandottes, Single Comb White Leghorns, Partridge Cochins, Rose Comb Rhode Island Reds. Kansas Poultry Co., Norton, Kan.

SNOW WHITE ROCKS—A FEW FINE young cockerels and pullets for sale. These birds are strictly high-class, not culls; need room and will sell cheap now. References, German-American State Bank, Topeka, Kan. Address, J. E. Spaulding, Potwin Station, Topeka, Kan.

S. C. BUFF LEGHORN 1911 BLUE RIB-bon winners at Topeka State Fair and K. C. Royal; 1-year-old hens, cockerels, both scored and unscored, for sale. Mrs. H. A. Stine, Rose Lawn Farm, R. F. D. No. 4, Holton, Kan.

BUFF WYANDOTTES—A FEW SPLEN-did cockerels coming on. Mated pens a specialty. Only good birds sold as breed-ers; all others go to the pot. Eggs and baby chicks in season. Wheeler & Wylie Buff Wyahdotte Yards, (formerly G. C. Wheeler), Manhattan, Kan.

DOGS

COLLIES; 100; PUPPIES, BROOD bitches and broke male dogs. W. R. Watson, Oakland. Iowa.

HOUNDS FOR SALE—COON, SKUNK and opossum hounds. Rash Bros., Centerville, Kan.

EXTRA FINE SCOTCH COLLIES AT argain prices. Address James Parker, bargain prices. Woodston, Kan.

SCOTCH COLLIES—PUPS AND YOUNG dogs from the best blood in Scotland and America now for sale. All of my brood bitches and stud dogs are registered; well trained and natural workers, Emporia Kennels, Emporia, Kan. W. H. Richard.

CATTLE

JERSEY CATTLE, COLLIES, POLAND Chinas and White Wyandottes; Scotch col-lle pupples for sale, females. U. A. Gore, Seward, Kan.

60 JERSEY COWS COMING FRESH for winter milkers: must sell 30 head. Come quick and get first choice. O. M. Himelberger, 307 Polk St., Topeka, Kan.

RED POLLED BULLS FOR SALE—6 o 10 months old. Also, Duroc Jersey gilts. Ill stock registered. Come and see them. W. Poulton, Medora, Kan.

HOLSTEINS FOR SALE.—HAVING SOLD my farm I will sell at private sale all of my registered Holstein cows and heifers, also my herd bull and three bull calves from 3 to 12 months old. Prices very reasonable. John Sumner, Lane, Kan.

FOR SALE—ENTIRE HERD OF NINE-teen Shorthorn females and the double-standard Polled Durham herd bull, Scottish Baron 321097 (X6521) Cheap for quick sale. Am changing location and must sell. Tomson, Babst and Gifford breeding. Jo-seph Baxter, phone Richland Exchange, Te-cumseh, Kan.

HORSES AND MULES.

SHETLAND PONIES - WRITE FOR rice list. Chas. Clemmons, Coffeyville,

FOR SALE—ONE GOOD REGISTERED Percheron stallion, 4 years old next spring; good jack and several young registered Shorthorn bulls. C. Casement, Sedan, Kan.

HOGS.

DUROC JERSEY HOGS, ALL AGES; also two herd boars. Correspondence solicited. Lawrence Kinsella, Caseyville, Ill.

MODEL BERKSHIRES, DIRECT DEscendants of World's Fair prize winners. Ask for list of satisfied customers. Have some classy, perfectly marked, 150 to 250-pound boars, short, wide heads, good feet, long bodies. Price (for 30 days only), \$22.00. Harry Bilson, Eureka, Kan.

THOROUGHBRED POLAND CHINA boars, 100 to 200 lbs., long bodied, growthy, big bone, cheap. A. P. Wright, Valley Center, Kan.

MISCELLANEOUS.

LEAF TOBACCO FOR SALE—SEND stamps for samples. W. L. Parks, Adams, Tenn., R. 1.

MONTGOMERY WARD & CO.—DO YOU order from them? Write me first for money saving order blanks. J. M. Brown, No. 1616 Baltimore St., Muskogee, Okla.

WANTED—\$12,000 STOCK OF GENERAL merchandise for good farm near here. Price \$17,000; mortgage, \$4,000. A. W. Bremeyer, McPherson, Kan.

WANTED—500 FAMILIES TO BUY \$50 candy course, \$2.00; learn how to make fine candy. Everything explained. Satisfaction guaranteed or money back. J. W. Embree, Manhattan, Kan.

WANTED—TO BUY, YOUNG, WELL broken Shetland pony, safe for small chil-iren. Give age, full description and lowest ash price. Address, Box 368, Topeka, Kan.

FOR TRADE—A NEW CREAMERY damp a good business in a large town, for farm or city property. Also a hotel at Pierceville, Kan., to trade for Western Kansas land. W. J. Trousdale, Newton,

HEDGE POSTS.

FOR SALE-25,000 hedge posts. H. W. Porth, Winfield, Kan.

VIOLINS.

STRADIVARIUS VIOLIN FOR SALE— Excellent sweet tone. Miss Bertha G. Mardis, Route 5, Rosedale, Kan.

E. R. BOYNTON HAY CO. KANSAS City, Mo. Hay receivers and shippers. Try us. HAY.

SHROPSHIRE SHEEP.

VALLEY VIEW SHROPSHIRES. BRED yearling ewes, ram and ewe lambs. Highest quality and priced to sell. E. P. Gifford, Beloit, Kan.

AUTOMOBILES.

AUTOMOBILES.

AUTOMOBILE BUYERS, ATTENTION—Are you interested in a second-hand automobile or second-hand tires and accessories? We have arranged with reputable dealers to list with us all second-hand cars, casings, tubes and everything pertaining to the automobile. There are a great number of bargains in Kansas City of you knew where to find them, and with this arrangement we are able to furnish you a list of over 100 cars of every well-known make; also all makes and sizes of casings and tubes. We have no connections with any second-hand house. Your deals will be direct with reliable dealers. Our inspection is very thorough and our report covering cars, tires and accessories very complete. Write us, telling just what you want. A repaired tire would do for that car. Automobile Clearing House, 1524 Grand Avenue, Kansas City, Mo.

BUSINESS OPPORTUNITIES.

TEXAS LAND EXPOSITION AND Northern Settlers' Convention, Houston, Tex., January 15 to 28, 1912. Homeseekers and investors should not miss this opportunity to visit Texas and see the south's first great land show. Lowest railroad rates ever offered from all sections of the United States. Elighteen lines into Houston. More than 1,000 exhibits of farm products and machinery. Many notable speakers on program. Exposition open day and night. Full particulars about Texas and Texas lands and opportunities on request. Texas Land Exposition, Publicity Dept., Houston, Tex.

THE STRAY LIST

W. S. PLUMMER, COUNTY CLERK, Pottawatomie County. Taken up—By James Caffery, Fostoria, Kan., one 4-year-old red, brockled-face steer. Marks, —āāX on left side. Appraised value, \$55.00.

W. S. PLUMMER, COUNTY CLERK, Pottawatomie County. Taken up—By J. O. Jackson, Garrison, Kan., one black mare mule about two years old; no marks. Appraised value, \$75.00. Was taken in on the first day of November, 1911. Can be found on the J. O. Jackson farm.

JOHN E. BARRETT, COUNTY CLERK, Yoodson County. Taken up—One 2-year-id steer, weight 800 pounds, red, underbit nd slit in both ears. Appraised value \$35. aken up on the 15th day of July, 1911, by J. Tind, Yates Center, Kan.

W. E. NEAL, COUNTY CLERK, NEOSHO County, Kan. Taken up by J. C. Ray, Thayer, Kan., R. F. D. No. 1, Nov. 14, 1911—One dark brown mare, weight about 1,200 pounds, white star in face, bad wire cut on left front foot, 15 to 18 years old. Can be found at the above address. Appraised value, \$15.

GOOD HOME FARM, 200 a., near R. R. town, 120 in wheat, nice level land, fair improvements, 7-room house, large barn, abundance soft water, some alfalfa. A bargain. Write Moore Land Co., Kingman, Kan.

WILL EXCHANGE.

100-acre, newly improved farm, 5 miles from Ransom, all tillable but 5 acres; 60 acres now in cultivation. Five churches at Ransom, including Catholic. Price, \$5,000; inc., \$1,000, runs three years. Will trade for town property.

V. E. WEST, Ransom, Kan. SCOTCH COLLIES - BARRED ROCK COCKERELS.

The choicest pedigreed stock. Also, 300 Barred Rock cockerels. Catalog free. Mrs. Florence B. Ziller, Hlawatha, Kan.

FIELD NOTES.

John W. Waddill's Horses.

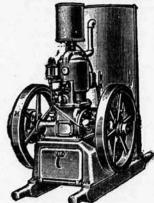
John W. Waddill's Horses.

The card of John W. Waddill, owner of Pioneer Stock Farm at Brashear, Mo., commences in this issue of Kansas Farmer. This year Mr. Waddill is offering an extra fine string of Percheron, Belgian and German Coach stallions and mares. During the past few years Mr. Waddill has built up an enviable reputation as a breeder and importer of high-class horses, and his offering this year of imported and home-bred stallions and mares will add to the reputation of Pioneer Stock Farm. Among the lot of fine stallions offered, we find Instar, the splendid 3-year-old Percheron that was second at St. Joseph this year; Rogey, a 2-year-old Percheron; Rittmeister 2nd, a 2-year-old German Coach; Uhlan, the first prize German Coch stallion at St. Joseph this year; Wassaha, a 4-year-old Coach horse; Imprudent, a 3-year-old Percheron and a prize winner at St. Joseph this year, all of them outstanding good stallions and a number of others that make the Pioneer Farm offering one of the best that breeders will find this year. A feature of Pioneer Farm horses is that they always make good. They are sold on a guarantee that is backed by a reputation for fair dealing on the part of Mr. Waddell that has contributed largely to his success in the business. Breeders or farmers wanting high-class horses will be interested in this fine string. Write Mr. Waddill for description of stock. His description of any animal in his barns will be show stock to visitors. Please mention Kansas Farmer when writing.

Kerosene Engines.

Cheap power has done fully as much to aid the progress of twentieth century farm life as any other one thing. The successful kerosene engine has proven itself of inestimable value on many thousands of farm homes during the past few years.

The engine known as the "Middleditch" is built in all sizes from 2-horsepower upfor all kinds of farm use. One great advantage it has over the ordinary gasoline engines is that, while it will operate on gasoline as well as any other engine, it can be run on common kerosene (often known



as coal oil) with even better results, at much less cost. In addition to this the fact that it is extremely simple and easy to start has created a great demand for this type

of engine.

The Middleditch Engine Company several years ago built the first engine of this type ever put on the market. They have since manufactured more kerosene engines of this kind than all other engine companies companies.

manufactured more kerosene engines combined.

They have just placed their new 1912 model on the market. It has every modern improvement and is exciting much admiration all over the country. They are now offering these at specially low introductory prices and are sending them out on a thirty days' absolute and unconditional trial. They ask no payment whatever, unless the purchaser is fully satisfied. This in itself shows that these engines must be giving a good account of themselves.

For further information and new complete catalog write the Middleditch Engine Co., 73 Meldrum Ave., Detroit, Mich.

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BARGAINS AND LANDS

HERE ARE SOME REAL FARM SNAPS

89—A good farm of 150 acres, 3 miles from Clyde, 2-story frame dwelling, and barn, good outbuildings; farm land undulating, of good quality and in fine state of cultivation. Iif sold within 30 days will take \$70 per

in fine state of cultivation. He some watches of buildings, both of which acre.

No. 124—Fine 320 acres, comprising two distinct sets of buildings, both of which make up the appointments for each 160 acres, this being now owned and occupied by one person. Both sets of improvements are in good condition. This is all excellent creek bottom land, in high state of cultivation. Creek runs through farm, furnishing an abundance of timber and water; on the south line of Republic county, 5 miles from Clyde. Price on this farm, if sold soon, \$27,000.

No. 133—Splendid 320 acres, in Ottawa cocunty 5 miles from Solomon; 200 acres in cultivation, 90 acres in wheat, good pasture, running water and good well and windmill; good build-ings. All land fenced and cross-fenced, and good orchard. Some alfalfa. All tillable except 5 acres. Mostly level land. This is a splendid all-purpose farm. Price, \$67.50 per acre.

CLYDE LAND COMPANY, CLYDE, KANSAS

FORT PIERCE FARMS

Indian River County Saint Lucie County Florida

When the disagreeable cold weather sweeps over Kansas this winter you will wish you were in a moderate climate, where you can raise two crops a year. No irrigation, plenty of rainfall. The land sells for \$40 per acre, one-fourth down and the balance as the land earns it. Our special car leaves Kansas City the first and third Tuesday of each month. Come and go with us on the next trip. Write for further information.

BURNS & ROBERTS, Topeka, Kansas 106 W. 5th,

A FINE ALFALFA FARM.

160 acres, 3 miles from Medicine Lodge, Barber Co., Kan.; all bottom land, 150 acres in cultivation, 40 acres of alfalfa, 50 acres in wheat, all fenced and cross-fenced, 80 acres fenced with woven wire, 4-room house, in good repair, fine cement barn for 12 horses, large mow, granary, cribs and othe routbuildings; well of good water, windmill, two cisterns, family orchard, 1 mile from school. The soil is a rich chocolate loam, with a sandy, clay subsoil; only 7 to 15 feet to water. The 40 acres of alfalfa makes a net profit of about \$50 per acre a year.

This farm is one of the very best alfalfa farms on the famous Medicine river bottoms

The price of this splendid farm for quick sale is \$75 per acre.

902 Schweiter Building. W. L. FARQUHARSON, Wichita, Kansas.

MONEY in Western land. Live agents wanted. Write Walter & Walter, Syracuse,

1000 - - FARMS - - 1000 Everywhere for Exchange. Get our fair plan of making trades all over the United States. Graham Bros., Eldorado, Kan.

100 FARMS

improved and unimproved, at bargains.
Desirably located.
THOS. DARCEY,
Real Estate and Insurance, Offerle, Kan.

IDEAL BARGAINS

Arkansas river bottom; 80 acres, dark, sandy loam, 15 ft. to water, 4-room house, barn, mill, young orchard; 44mi. of Wichia. Price, \$100 per acre. City property, small tracts, farms and ranches for sale or trade. IDEAL REALTY CO., 311 East Douglas, Wichita, Kans.

DO YOU WANT TO SELL YOUR FARM?

Write me, giving description, and I will send you, free, details of my plan for finding a buyer quickly.

E. L. GARVER,

Box 142, Topeka, Kansas.

A Sure Road to Wealth.

n the rain belt, 50 miles from Colorado Springs, extra good alfalfa land. Get a good trop of seed and hay every year. Never fails, Good water and the healthiest place on earth. No irrigation. \$20 per acre. Come and see us about it. Nichols-Cockell Realty Co., 529 Kansas Ave., Topeka, Kan.

FOR EXCHANGE

For Western Kansas or Eastern Colo-tado land, \$2500 stock, \$3,000 hardware and \$4,000 real estate business. The land sust be clear and of about equal value. 100-acre Anderson county alfalfa farm for tock of about \$6,000 general merchandise.

NEAL - BOWMAN LAND CO.



INDIAN

50,000

Acres of rich black corn land in EASTERN OK-LAHOMA for sale, trade

or rent. Write ALLEN & HART, Owners, 808 Commerce Bldg., Kansas City, Mo. and Claremore, Okla.

Agents Wanted. FOR - SALE - QUICK

A No. 1 78½-acre second bottom farm; soil black loam, no gumbo, no overflow; 60 acres under cultivation, all can be cultivated; 6 acres alfalfa; 10 acres wild meadiw; 17 acres hos-tight pasture; small orthard and an assortment of small fruits; acros hos-tight pasture; small orthard and an assortment of small fruits; acros you colder; bar 20x34 with cattle shed attached; two good henhouses with ½-acre yard; granity, smokehouse, two tool sheds, good wellind 150-bbl. cistern; ½ mile to graded shool, 1½ mile to church; about 30 miles west and a little south of Kansas City, 9 miles southeast of Lawrence, 3½ miles from Eudora. Clear, and title perfect. Price, 15,000. Will sell tools and stock also if the surface wants same. Address Leroy N. Wallawernee, Kan.

LAND IN FORD COUNTY and the Southwest at \$4 per acre up. Wheat lands a specialty.

BROWN & VERNON, Dodge City, Kansas.

FOR SALE OR EXCHANGE—Farms and ranches at prices ranging from \$10 to \$40 per acre; send for our dry-weather cutprice list.

SPERRY & OLSON, Hill City, Kan.

BARGAIN.

Improved 160 acres, 90 cultivated, balance pasture, 2 miles town, good water. Price, \$5,600; \$1,200 cash, balance terms. All kinds and sizes. In corn, wheat, alfalfa belts. Write for free list.

W. G. STUDEBAKER, Salina, Kan.

BUTLER, HARVEY AND SEDGWICK BARGAINS—Come and buy this fine fruit farm, 80 a., 3 mi. from town, all tillable, 14 a. pasture, alfalfa, fair improvement, 3 a. small fruit, 1,500 fruit trees, only \$5,500; terms. Special inducement for cash. Exchanges of all kinds. Write for particulars. Eberhard & Mellor, Whitewater, Kan.

GOOD FARMS.

GOOD FARMS.

Our printed list offers over 225 good farms located near Topeka and adjacent territory. Any size from 40 acres up. Prices range from \$25 an acre up. We also have a choice list of suburban tracts. If you are in the market for a farm or suburban tract get our list. It is yours for the asking.

TOPEKA REAL ESTATE CO.,
532 Kansas Avenue.

GREENWOOD COUNTY NURSERY.

We have for fall and spring delivery a general line of nursery stock. Apple, crab apple, pear, cherry, plum, peach, apricot, quince, grapes, berry plants, catalpa and black locust. A certificate of nursery inspection with each shipment.

J. W. HINSHAW.

Eureka, Kansas.

EIGHTY-ACRE TRACTS.

We have four good 80-acre improved farms on which prices have been reduced for a quick sale. These farms are all improved, well situated, and worth more than is being asked for them.
Write us for full description of them.
Free list and Kansas map.
THOMPSON & VAN METER,
Whitewater, Kan.

THE BEST TOWN TO LIVE IN.

If you would like to live in the most beautiful city in the West, with unsurpassed education, 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 seddress the SECRETARY of the COMMERCIAL CLUB, Topeka, Kansas.

BIG BARGAIN.

Direct from owner; excellent stock farm; 560 a., one-half tillable; fine bluestem meadow and pasture; good soil; extra large stock and hay barn, built of stone; good room house; abundance of fine water; fair orchard; 3 mi. to railroad; 6 mi. to county seat; 1 mi. to school and church; R. F. D.; good roads; fine settlement; must sacrifice at \$30 per acre; will carry part. Address

LOCK BOX 807, Fredonia, Kansas.

TWO MARSHALL COUNTY BARGAINS.

120 a., all Blue river bottom, ¼ mi. to
town. 90 a. in corn, 13 a. alfalfa, bal. pasture and timber, 4-room house, good barns,
cribs, hen houses, etc., well and mill. \$130
land for \$110 per a. Terms on \$2,500; bal.
cash. Owner going to Texas.

520 a. stock farm, 300 a. in cult., 30 a.
alfalfa and clover, creek through farm, fair
improvements, 4 ml. from Waterville and 4
mi. from Blue Rapids. Price \$36 per a. A
mortgage on it of \$9,000; bal. cash.
E. F. DEWEY, Agent,
Blue Rapids, Kan.

BUY OR TRADE with us. Write for free list. Bersie Agency, El Dorado, Kan.

WHAT have you to trade for lands or city property? Hale, Coffeyville, Kan.

IMP, and unimp, land in western Kansas. W. G. Ruth, Scott City, Kansas.

ESTABLISHED 1885.-Write for free list, Park H. Thornton, Real Estate Dealer, Celdwater, Comanche Co., Kansas.

160 A.,96 IN CULT.; 20 alfalfa, rest pasture; 4½ ml, from town; exchange for general mass. J. A. KASPAREK, Belleville, Kan.

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

JEWELL CO., KANSAS—160 a. 4 miles from town, 120 cult., 40 a. pasture. Price \$8,000. J. A. Cole, Esbon, Kansas.

WANTED — Hardware, implements merchandise for Washington Co. land. We make all kinds of exchanges. Write Us. Box 53, Morrowville, Kan.

FOR SALE OR TRADE—Properties of all kinds. Lands \$15 to \$75 per acre. 40 years' residence. W. H. Kaltenbach, Toronto, Woodson Co., Kansas.

EASTERN KANSAS BARGAINS. Improved stock and grain farms; \$
\$65 per acre; write for list, free.

J. E. CALVERT, Garnett, Kan.

FOR EXCHANGE—Town of Manning, in Scott County, store building, two warehouses, four-room cottage and 40 acres of the town site. Address M. W. CAVE, Salina, Kan.

WRITE WHIPP & CO., Concordia, Cloud county, Kan., for list of

KIOWA.—3,160 acre up-to-date Ranch, no drawbacks to location, quality, water and improvements. Without flaw. Price \$15 per acre. Write Griffin Bros., Kiowa, Kans.

WILL BUY OR TRADE
Your western Kansas land if priced right.
Can match you on any kind of a good deal.
W. A. Layton, the Land Man, 413 N. E. Bidg.
Topeka, Kan.

THORNHILL & CONNOR EXCHANGE, Land to trade for merchandise and mer-chandise for land or anything worth money. No inflated prices. Hutchinson,

IMP. 160 A. ALFALFA LAND—3 ml. Independence, Kan., \$60 per a., to trade for land or city property. Foster Bros., Independence, Kan.

INDIAN LANDS FOR SALE.

300 choice farms for sale. N. E. Okla-homa. Low prices, easy terms, perfect title. Agents wanted. E. T. TETER & CO., Nowata, Okla.

WHAT HAVE YOU TO TRADE?
Tell me what you have to trade, and I will find you something to match it up.
Give good description and price, location and so forth, with first letter.
HOWARD, THE LAND MAN,
105 N. Main, Wichita, Kan.

GREENWOOD COUNTY FARMS and well-grassed stock ranches, in the corn, clover and bluegrass county, for sale at low prices on liberal terms. Write for full in-formation.

J. G. SMITH, Hamilton, Kansas.

A CHOICE 240 acres; nicely improved. smooth prairie soil; well drained; 6 miles from Nevada (pop. 10,000); 2 miles from Milo. The best farm for grain and stock, or for feeding, in the county. Fine spring water, good wells. Price, \$60 per acre. Terms easy. Write me at Nevada, Mo., Route 3. S. C. L. BEWICK.

100—CHOICE DICKINSON AND CLAY CO. FARMS—100

80 acres 3 miles from town, 70 a. under plow, alfalfa land, 20 pasture and meadow, 5 room house, good well, barn and other buildings. \$200°C cash; rest to suit; 25 a. wheat included, Write for list. J. J. Bishop, Wakefield, Kan. Wakefield, Kan.

EASTERN KANSAS FARM BARGAIN.
Eighty acres, 4½ miles from Osage City,
Kan.; 50 acres under cultivation, 2 acres
orchard and grove, balance native grass
pasture and meadow; farm all fenced and
cross fenced, all smooth land, 4-room house
and summer kitchen, good cellar, barn for 6
horses with loft, cow barn, corn crib, hen
houses, hog and cattle sheds, good water,
R. F. D. and phone. Price, \$4,000. No trade.
J. C. Rapp & Co., Osage City, Kansas.

FINE STOCK AND GRAIN FARM.

One of the best farms in eastern Kansas; highly improved; large buildings; six miles southwest of Topeka; macadam road; touches station of proposed railroad. Drouth did not affect this farm. Exceptional low price for settlement of estate. 360 acres at \$90 per acre. Takes \$20,000 to handle. John W. Harrison, Exceutor, 614 New England Bidg., Topeka, Kan.

800 ACRES IMPROVED.

40 acres in alfalfa, 120 acres alfalfa land, shallow water, 40 acres slightly rough, all the balance the very finest kind of farming land, 8 mi. from town; two sections leased state land goes with this. This is a great big snap at \$12.50 per acre. No trades considered.

CARL M. COOK, Limon, Colo.

AN IDEAL GRAIN AND STOCK FARM
FOR SALE.

400 acres, Sedgwick County, Kansas. All
fenced and cross fenced with hedge and
some wire. Running water, two wells of
splendid water 16 feet to water; 230 acres
under cultivation, balance pasture, meadow,
orchard and lots; 22 acres alfalfa, smooth
clean land, one-half bottom; good 6-room
house; good barn 36x40; granary with driveway and shed additions; double corn crib,
shingle roof; hog sheds; scales; wind mill
and other buildings; telephone and R. F. D.
Terms to suit purchaser. A good farm priced
right for someone.
Clyde McGrew et al., Owners, Benton, Kan. Clyde McGrew et al., Owners, Benton, Kan.

\$15 GIVEN AWAY In order to locate field corn, Kafir corn and wheat in the United States and the Canadas, I will give \$5.00 in cash for the three largest and best kernels of field corn; \$5.00 for the ten largest and best kernels of Kafir corn, and \$5.00 for the ten largest and best kernels of wheat. Three of the leading citizens of Palms, California, have agreed to judge the samples received, and the money has been placed in the hands of S. C. Perrine, editor of the local paper, "The Palms News," who will pay it to the winners as announced by the judges, and winners' names will be published in this paper. All samples must reach us not later than February 1, 1912, and be accompanied with statement of number of bushels of seed from which sample was secured, available for purchase, Adress all communications to J. J. Haisch, Falms, Los Angeles County, California.

LOOK HERE 2 good 160, all smooth, fair imp., fine location, Terms. Write for list.

SEVENS & WATTS, Williamsburg, Kan.

NO. 65—280 ACRES, adjoining Coldwater, 200 in wheat, ½ goes, second bottom land fine for alfalfa, full set improvements. For quick sale \$45 per acre. Easy terms on half. TAYLOR & BRATCHER, Coldwater, Kan.

STAFFORD COUNTY, KANSAS, One of the best farming sections in the state; write me for descriptions and full particulars about some of the fine farms I have for sale in this section; good crops all the time, A. L. McMILLAN, Stafford, Kansas,

Farms, Ranches and City Property for sale or exchange. Merchandise stocks a specialty. Some fine ranches. Some fine small tracts near Wichita. Let us know your wants. Putney & Dunn, 318 E. Douglas, Wichita,

A WILSON COUNTY BARGAIN.

a William County Barbara.

160 acres, 5½ miles to Fredonia, all tillable, good soil, nice, gently rolling land; good 7-room house, ,large barn, fine neighborhood. An extra good bargain at \$35 per acre. Write for land list.

M. T. SPONG, Fredonia, Kan.

GRASS AND PLOW LAND FN BUTLER CO.
1,800 acres grass land, smooth, \$25; 320
acre improved farms, smooth, \$46; 160
acre improved farm, smooth, \$40; 80 acre
improved farm, smooth, \$40; 80 acre
improved farm, with all the tools, six horses,
10 cows, 14 hogs, 300 chickens, crop, \$6,500.
chickens, crop, \$6,500.
GUSS SCHIMPFF, Burns, Kan.

ACT QUICKLY FOR THIS.

Farm of 240 a., 7 ml. from city, all fenced and cross-fenced, 90 a. in cult., 50 a. hog-tight, bal. native grass meadow and pastures. Fine 2-story house, good barn, feed lots, cribs, etc.; large bearing orchard; plenty of good water; half ml. to school, good road to town. Easy terms. \$30 per a. Fine bargain. Write quicks.

W. A. NELSON,
Fall River, Kan.

80 ACRES OF TIMBER LAND n Scott county, Ark. The timber will cut around 3,000 feet to the acre. This land is 2½ miles south of Hon. Ark., and 5 miles northwest of Waldron, Ark. About 60 acres of this will make the best of orchard land. This county took first prize at the St. Louis fair for the best apples. Price, \$500.

McNAMEE REAL ESTATE AND INVESTMENT CO.,
Topeka, Kan. 225 New England Bldg.

BARGAINS. 100 a. improved

WHY NOT OWN YOUR OWN HOME? You can do so in eastern Colorado, where good land is still cheap, and where crops are raised every year. I can sell you good soil at \$10 to \$15 per acre that will produce 25 to 40 bushels of wheat, corn, oats, barley and potatoes; also, make large yields per acre. Write me for particulars.

FRANK VANDERHOOF,
Otis, Colo.

WORTH MORE MONEY.

a. 160 a., 2½ miles from country seat, 85 a. in cultivation, 5 a. orchard, 2 a. grove, 6 a. timber, 60 a. pasture, 20 a. alfalfa, some bottom land; good well, cistern and spring; never been out of water; plenty fruit of all kinds; good 6 room house, good barn 32x40; new 100 ton, silo and plenty of other improvements; on rural route and telephone. Price, \$6,200 until Christmas.

JOHN CAPPER, Lyndon, Kan.

GOVERNMENT FARMS, FREE.

GOVERNMENT FARMS, FREE.

Official 100-page book, FREE GOVERNMENT LAND, describes every acre in every
county in United States; contains township
and section plats, Maps, Tables and Charts
showing inches rainfall annually, elevation
above sea level by counties, homestead and
other government land laws, tells how and
where to get government land without living
on it; United States Patent, Application
Blanks, all about government irrigated
farms and necessary information to procure
government land. Price 25 cents, postpaid.
Address Homeseeker Pub. Co., St. Paul,
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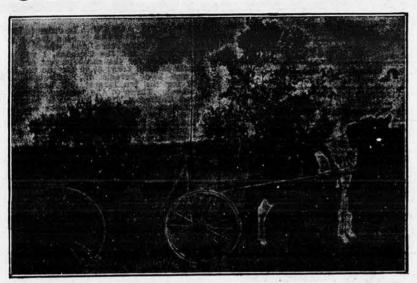
GOOD FARM, WELL IMPROVED, WELL

220 acres of all good land, 50 acres pasture, 20 acres meadow, 10 acres fine catalpa
trees, some alfalfa, balance in a high state
of cultivation, all fenced and cross-fenced,
nice orchard, fine shade in front yard, good,
large barn, large granary and corn crib
combined, and wagon and implement barn,
located 2 miles from a good railroad town
with electric lights and waterworks, fine
churches and schools, and 34 miles from
Wichita. Price, \$18,000. Terms.

EDWIN TAYLOR REALTY CO.,
107 S. Main St., Wichita, Kan.

Decemb

Christmas For The Children



Keep the doctors away by getting a Shetland pony for them for Xmas. We have 18 head of cracker jacks to select from, from 2 to 5 years old. Have them in both spotted and solid colors. Address or call on

JOHN S. TOUGH, BISMARK GROVE, LAWRENCE, KAN.

EXCURSION

To the Lower Rio Grande Valley of Texas, Where Men are Gettins RICH on Our Small IRRIGATED FARMS.

Have you ever figured on making a trip into the Gulf Coast country of Texas. If so, now is your opportunity, as we show it all to you at no greater cost than going to any specified point. Visiting Houston, Galveston, Corpus Christi, Brownsville, the Rio Grande Valley and Matamoros; Old Mexico.

Why farming has "roven such a great success in the Lower Rio Grande Valley is because there are a combination of conditions not found together elsewhere in the United States. A healthy, invigorating climate, deposit soll and abundance of river water for irrigation. Mexican labor at \$2½c a day, without board; largest variety of crops and best of shipping facilities. Even the indifferent farmers may net \$2,000.00 or more on 40 acres of our irrigated land.

As we operate our own private railroad

As we operate our own private railroad cars we are in a position to quote you a very cheap rate from your locality, that includes round trip transportation, berth, lodging, meals and all side trips. Our excursions leave Kansas City the first and third Tuesdays of each month, via Frisco R. E. line. Write us today for our free illustrated booklet and other information.

STAR LAND COMPANY

204 WEST NINTH STREET, KANSAS CITY, MO.

Feeding the Work Horse. (Continued from page 5.)

THE CLOVER LEAF VALLEY JACK FARM

will sell at private sale until Feb. 1, 1912, any animal in its private herd of 75 head of Mammoth Jacks and Jennets, composed of the combined breeding of Superior Mammoth, Limestone Mammoth, Orphan Boy, Mammoth J. Dr. McCord and Barytone Mammoth, the greatest prize winning jacks of the world. I sold some jacks of the world. I sold some breeding last year at common jack prices; can do even better this. Catalog for my 1912 public sale, ready Feb. 1, 1912. Write for it. Written guarantee with every jack sold. Barns in town.

G. C. ROAN, Prop. La Plata, Macon Co. Mo.

FENCE POST PROFITS

You can have a big crop ready in four years if you plant
CATALPA SPECIOSA

now. The profit will be \$100 to \$150. Some Kansas farmers are getting that right now.

Catalpa Speciosa makes the best posts. Longest lasting in the ground, so bring highest prices. No other good wood grows so fast. But you must get genuine Catalpa—not the common "scrub" kind.

CATALPA BOOK FREE.

Send for it. It tells some wonderful facts. It took 20 years to write it. You can read it in an hour. You wouldn't take \$5 to give up the information you get out of it, after reading it carefully.
You can make thousands of dollars by acting on its information, just as others are now doing.
We are the largest growers of pure, genuine Catalpa Speciosa in the world. Let us give you the cold facts and figures to prove that you can make sure money with Catalpa right on your farm. No special equipment or tedious care necessary to do it. Write us at once.

WINFIELD NURSERY CO.

WINFIELD NURSERY CO., Winfield, Kan.

thy) ear corn was practically as effi-cient, pound for pound, as oats.

A mixture of alfalfa and prairie hay instead of clover and timothy would give even better results with ear corn than was obtained at the Ohio station. These results have been corroborated by other experiment stations, as well as by hundreds of practical feeders. The Paris Omnibus Company, employing nearly 10,000 horses, saved from \$20 to \$30 per head per year by substituting corn for a large portion of cats formerly. a large portion of oats formerly used as the grain portion of the ration for their cab horses, and the horses did their work just as well and kept in better

The best results in feeding corn to horses are obtained by combining it with some feed of a comparatively high pro-tein content, such as bran, oil meal, cot-tonseed meal, alfalfa or clover.

condition.

While barley is fed extensively in some sections of the country, and has a feeding value slightly less than oats at the present market value, it cannot be considered an economical grain to feed the Kansas horse.

Kafir corn as a grain has been fed very successfully to horses in many parts of the country. It contains a smaller per cent of digestible nutrients four-fifths the value of corn, pound for pound, as a horse feed. While it is a less valuable feed than corn, it is quoted less valuable feed than corn, it is quoted about one-third higher on the market. In the western part of the state where it is a surer and larger crop, it may be substituted for corn with good results, if properly fed. Kafir corn should always be ground when used as a horse feed, and it should be mixed with bran, aboved here or something to make a chopped hay or something to make a lighter mass and thus prevent impac-

tion. Bran is one of the best feeds available for horse feeding, and because of our immense wheat crop it is usually comparatively cheap. It is rich in protein and is especially valuable as a supplement to other grains.

Besides its value as a food, it contains a mildly laxative element and aids wonderfully in keeping up the tone of the

whole system. Shorts contain about the same digestible nutrients as bran, but because of its physical properties it is not as desirable a horse feed as bran; still it has been fed in the Dakotas with fair results.

While there have been some reports of unsatisfactory results from the use of oil meal as a portion of a horse's ration, I am inclined to think these have been due to injudicious feeding, for the opinion of horse feeders in general seems to be that there is no more healthful feed for a horse than oil meal if properly fed. The use of not more than onehalf to one and one-half pounds per day is recommended. It contains a rich sup-ply of protein, it seems to stimulate di-gestion, and contains a mildly laxative oil which prevents constipation and other digestive disturbances. Horses fed oil meal usually show excellent condition as indicated by the sleek, oily coat of hair and pliable skin. This feed in the cake form is slightly cheaper, more palatable, and in it there is less chance for adulteration.

Cottonseed meal is one of the richest of all feeds in protein and fat, and at the same time one of the cheapest sources of these nutrients, but until recent years it has not been used very extensively as a horse feed. As in the case of oil meal it must be fed in limited amounts; two pounds per day seems to be about the maximum amount for a horse of ordinary size to insure the best results, although in some cases mules have been fed as much as six pounds per day with no injurious effects. It does not have a laxative effect upon the animal eating it, and for this reason it is possibly a trifle better summer feed for horses at hard work than oil meal. In some cases it is necessary to feed some bran in a ration containing cottonseed meal to overcome a slight tendency to cause constipation.

Some horses do not like cottonseed meal at first, and must be taught to eat it. This is best done by mixing small amounts in the grain feed and gradually increasing the amount until the horse has become used to it. The following results were obtained at the Iowa Experiment Station in feeding ail meal and periment Station in feeding oil meal and cottonseed meal to work horses:

1. Cottonseed meal to work horses:
1. Cottonseed meal gave somewhat better results on the whole than oil meal. The ration containing cottonseed meal was fully as palatable and as efficient in maintaining the health and weight of the horses; it was less laxative and a little charge.

little cheaper.
2. With corn at 50 cents per bushel, and oats at 40 cents per bushel, oil meal had a value of fully \$60 per ton for feeding work horses, with cottonseed meal worth a trifle more. At the usual prices of these feeds their use resulted in a substantial lowering of the cost of

maintaining the horses.

A saving of from 5 per cent to 25 per cent of the former daily cost of feeding horses has been made since cottonseed meal has been added to the daily ration of the work horses of several experiment stations, and many large plantations of the south.

Molasses is a concentrate that is being fed very extensively to the work horses and mules of the south, where it is pro-duced very cheaply and in special cases it might be fed here to advantage, es-

pecially to horses with poor teeth.

There are two kinds of molasses used as a horse feed, cane molasses (commonly called black strap), and beet molasses. Cane molasses is very rich in digestible carbohydrates, palatable, wholesome, easily digested, and, contrary to the common idea, it does not have a laxative effect. As much as ten pounds, or nearly a gallon, has been fed daily to each animal. It is especially well adapted for horses at hard work, and even at comparatively high prices small amounts may be fed with excellent re-sults to horses doing extremely hard work, such as some of the drafters in

our cities have to do.

The Louisiana Experiment Station, collecting data from forty-seven sugar plantations, found a saving of from 10 to 50 per cent after molasses had been incorporated into the horses' rations, and the frequency of digestive disturbances were greatly lessened.

Beet molasses does not contain as high a per cent of digestible nutrients as cane a per cent of digestible nutrients as cane molasses, and must be fed in limited amounts because of its laxative effect, which is due to a high content of alkaline mineral salts. Molasses is often used in preparing horses for sale or shows, but feeding large amounts to breeding animals seems to induce sterility, especially with stalling. Molasses ity, especially with stallions. Molasses may be fed in troughs, mixed with grain or diluted with water and sprinkled over

There are other concentrates that have

FARMERS ENCYCLOPEDIC ALMANAC

Contains a vast store of de-FREE tailed information on almost very farm and home subject. Weather forecast, historical events, cooking recipes, entertainments, special pages for women and children, concrete construction, alfalfa, care of farm animals, remedies, poison anti-dotes, etc. Remember it is free. Write today for a copy. Ask for edition 50. Postal will do.

THE STUDEBAKER CORPORATION, South Bend, Ind.

some importance in feeding horses in some parts of the country, but not under Kansas conditions, so they will be omit-

Of the hays grown in Kansas, prairie hay is used most extensively. The prairie hay crop of Kansas in 1908 was 1,-145,643 tons, as compared with 1,429,119 tons of all the other hays, including alfalfa, clover, timothy, bluegrass, orchard grass, etc. While the total yield of tim-othy hay in Kansas is small compared with the other hay crops, I shall mention it first because of the fact that in so many parts of the country it is considered as the standard for feeding horses, but as in the case of oats there are other feeds that may be substituted for timothy with equally as satisfactory results and much more economically. Good Kansas prairie hay contains practically the same amounts of discipling the same amounts of disc tically the same amounts of digestible tically the same amounts of digestible nutrients as timothy hay, and experiments have shown that prairie hay and timothy hay of the same quality have practically the same feeding value, and as timothy hay usually sells on the market for 30 to 35 per cent more than prairie hay, the latter is the more economical to feed when both are available.

Clover hay does not have the importance as a roughage in Kansas that it has in some states, because it is grown in only a limited portion of the state. It is generally very much disliked by horsemen, principally because it is al-ways more or less dusty. If it can be handled in such a manner as to present handled in such a manner as to prevent its being so dusty a small portion might be combined with prairie hay, timothy, or cane hay for work horses. Limited amounts of bright clover hay free from dust and mold make a very good feed for colts and brood mares.

FIELD NOTES.

G. C. Roan's Jacks.

The card of G. C. Roan of La Plate, Mo., commences in this issue of Kansas Farmer.

Mr. Roan now has a herd of 75 jacks and jennets and they are, without a doubt, the best lot he has ever offered. Twenty-five jennets are included in the present offering, and all of them are in foal to the great Barytone Mammoth, the highest priced jack ever purchased in the United States. These jennets are from the herd of James Houchin of Sedalia, Mo., who purchased Barytone Mammoth, paying \$3,030 for him. Individually, the jacks now offered by Mr. Roan are the best he has ever owned. A number of them were stred by the great Dr. McCord and one of them now weighs 1,100 pounds and is the sire of more prize winning mule colts than any other jack in North Missouri. He also has some of the best jacks that ever came out of Tennesses and a number from the Limestone Mammoth and Mammoth J. C. herds. The jacks range from 2 to 6 years of age and every one of them is well broken. The most of the younger jacks were bred by Mr. Roan and have been raised and broke right. Mr. Roan will soon announce a spring sale of jacks, and will have catalogs ready for distribution February 1, 1912. After catalogs are ready, no stock will be sold at private sale. See Mr. Roan's card on another page, and bear in mind that every jack is sold under a written guarantee, and Mr. Roan is proud of the fact that he has never sold a jack that did not give entire satisfaction. When writing Mr. Roan, please mention Mansas Farmer.

Parmer.

Percherons, Shires, Belgians.

Beginning this week, the Watson, Woods Bros. & Kelly ad will continue on our horse pages throughout the winter. This firm of importers are well known throughout the United States and Canada, and especially so in Kansas. This journal has carried a good share of their advertising for many years. The firm's advertising, together with an established reputation for fair dealing, has made Kansas their best state next to Nebraska in point of sales. Mr. Kelly told the writer that the firm sold more horses than during any other year in its history and that their business was very satisfactory to themselves and their patrons. Mr. Watson was in peka with their exhibit during the State Fair and pronounced the Kansas competition in the Percheron classes as being stronger than at the Nebraska State Fair. Mr. Watson said this was due to the fact that the Kansas show was largely a farmer show and that every farmer who had good horses brought them out in competition with the big breeders and importers. Since the Kansas State Fair Mr. Watson has spent his life in the horse business, and has judged in the greatest horse shows held on this continent. This year Watson, Woods Bros. & Kelly made the State Fair circuit and this week they are showing at the International Live Stock Show at Chicago. When in Lincoln the writer went out to the barns with Dan Kelly, and the head hostler, Hirry Burkett, with his helpers, put on a fine horse show for us, showing out in the open, Percherons, Shires and Belgians, many of evenical the champion Percheron. Saliston was held on this continent of the champion Shire, saliston of the heavy, drafty type of 2- nat fine horse show for us, showing out in the open, Percherons, Shires and Belgians, many of which had won ribons at the state fairs, including the champion Percheron. Saliston was the very saliston was and fair treatment.

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J. C. ROBISON'S THIRTEENTH ANNUAL SALE OF SIXTY



DAUGHTERS OF CASINO AND STATE FAIR CHAMPIONS.

Registered Percheron Stallions Mares and Colts

AT THE

Whitewater Falls
Stock Farm
TOWANDA, KANSAS

This sale will include more mature Stallions and Mares, either sired by Casino or bred to him, than have ever been included in any of the former sales. Part of my 1911 show herd, including the Grand Champion Mare, RUTH, and her yearling Stallion will be listed for this sale.

TWENTY STALLIONS, FORTY MARES, PRIZE WINNERS, PROVEN BREEDERS, SONS AND DAUGHTERS OF WORLD'S FAIR WINNERS.

Sale will be held at SALE PAVILION on the FARM,

THURSDAY, DEC. 28, 1911

Send for catalogue to

J. C. ROBISON, Box E, TOWANDA, KANSAS

AUCTIONEERS-HARRIMAN, SNYDER, ARNOLD, SEELEY.

100 Registered Herefords At Auction Dispersion Sale 100



AT FARM NEAR ALTA VISTA, KANSAS

Tuesday, Dec. 19th, 1911

The offering is one of the best of the season and will include about 40 Double Standard Poll Herefords, including the Poll Herd Bull, Poll Dandy, and 10 young bulls. The remainder choice females, among them a number of outstanding good cows and heifers. The remainder of the offering consists of 22 cows with calves at foot or bred, 16 yearling heifers, 9 spring heifer calves and 8 young bulls. The offering, taken as a whole, is an extra good one. The herd was established nearly 30 years ago with stock from the very best herds, and no culls have ever remained in the herd for breeding stock. The Poll stock was purchased from the best eastern herds, and are among my best cattle. All of the cattle are young. Last spring I sold off a carload of my oldest cows. The herd is rich in the blood of Anxiety 4th and other sires that have made the breed famous. I have sold my farm, and these cattle will be sold without reserve. Write for catalog. Free transportation to and from farm. Sale starts promptly at 10 a. m.

John W. Naylor, Alta Vista, Ks.

Auctioneer-Col. L. R. Brady.

Poland Bred Sow Sale

50 HEAD OF BRED SOWS AND GILTS 50

Sale to be Held at St. John, Kansas Saturday, Dec. 16, 1911

I am selling some of my best brood sows, such as



Opal, by Meddler 2nd, a litter sisters to Meddler Chief, grand champion Kansas State Fair, 1909; Sallie Meddler, by Med-



Sallie Meddler, by Meddler, dam Lady May, by
Chief Perf. 2nd; 1 On the Spot sow, dam by Spellbinder;
1 boar by Meddler's Sunshine; 14 spring yearling gilts by On the Spot and Gem's Spell and out of my herd sows; five have litters by their sides; 10 fall yearling gilts by Gem's Spell, Gem's Thickset, On the Spot and One Price; 7 fall boars by the same sires; 5 spring boars by Short Grass.

Most all the sows and gilts will be bred to King Darkness, our herd boar, for spring litters. This will be an opportunity that comes only once in a lifetime, and we ask farmers and breeders to come and get some of this good seed. Catalogs are ready to mail out. Sale held right in town and everything sold on an absolute guarantee. Come and spend a day with us. O. W. Devine will represent Kansas Farmer. Any bid sent to him will be handled with care. For catalog write

E. J. Manderscheid

ST. JOHN, KANSAS.

Auctioneers: Col. John S. Snyder, P. J. McCormick.

HORSES AND MULES

DR. W. H. RICHARDS Importer of DRAFT HORSES

Importation arrived September 10, 1911. I have selected them

personally, and have the pick of Belgium and France's 2- and 3-year-olds. All were selected for good breeding, soundness, bone and in-dividuality. All good colors and will make ton horses. Every horse absolutely guaranteed. Anyone looking for a first-class STALLION at very REASONABLE price should come and see them before buying. Barns Four Blocks from Santa Fe Depot.

EMPORIA, KANSAS.



JACKS AND JENNETS

20 large Jacks from
2 to 7 years old.
25 head extra good
Jennets priced right.
Come and see me.
PHIL WALKER,
Moline, Elk Co., Kansas



30 Head of Percherons, Belgians, Road Horses and Jacks.

Winners of first and second prizes at Kansas State Fair, 1911. Sale barn right in town. My prices are right. Write or come and see me. C. F. COOPER, Partridge, Kan.

IMPORTED AND HOME-BRED PERCHERONS. BIG JACKS AND

JENNETS. Priced to sell. Come and see us. Farm 4 miles from Raymond or Chase. Write J. P. & M. H. MALONE, Chase, Rice Co., Kan.

JACKS and JENNETS

Six large jacks, from 2 to 5 years old, 3 extra good jack colts, 14 head of extra good jennets, 1 Clyde stallion, 1 German Coach stallion, 1 registered saddle stallion. For quick sale, this stock will be priced worth the money. Will sell the lot or singly. Will consider a trade. Write us.

YATES BROS., Faucett, Mo.



Al. E. Smith Stock Farm Black mammoth Jacks and Jennets, Percheron Horses.

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.

BIG HIGH CLASS JACKS

W. T. Trotter, Mt. Ayr, Iowa—Breeder of big, high class jacks. If you want a big, well-broke, high-class jack, write me. I have 10 head of extra good ones for sale. All sired by my famous herd jack, Keno. All are black with white points. They are an extra fine lot.

W. T. TROTTE

Mt. Ayr, Iowa.

PERCHERON HORSES.

M. I. Ayres, Shenandoah, 'Iowa, importer and breeder of high-class Percheron horses. Our offering at this time includes 20 head of outstanding good young stallions—a string of youngsters that will interest breeders who want the best. Come and inspect our offering if you want a high-class stallion. We have them.

M. L. AYRES,

Shenandoah, Iowa.

PERCHERONS, SHIRES, BELGIANS.
Prospective buyers should see our 60 head
of big, heavy-boned, drafty stallions and
mares. Two importations this fall. We
have a fine lot of American-bred Percherons that will suit, both in quality and
price. All stock registered and guaranteed
fully. Come to the barns or write.
SKOOG, REED & DECOW,
Holdrege, Neb.

REGISTERED HORSES O. K. BARNS, SAVANNAH, MO.,

W. E. Price, Proprietor. Dealer in registered horses. Three very fine stallions to SELL AT ONCE. Also the best stud colt in the state. Write for description of stock. I can suit you.

FAIRVIEW STOCK FARM.

25 Mammoth Jacks, from weanlings to 8
years old. Largest breeding herd in the west.
Herd headed by Pharoah No. 2491, Grand
Champion of Tennessee in 1910.
H. T. HINEMAN,
Dighton, Lane County, Kan.

RIVERSIDE Stock Farm

Percherons and jacks for sale. We have a fine lot of registered Percheron colts coming two and three years old. A few large black jacks and three registered standard-bred stallions, four to six years old. Pedigrees and breeding guaranteed. O. L. THISLER & SONS, Chapman, Kan.

Best imported Horses One thousand each. Homebred registered draft stallions—\$250 to \$650 at my stable doors. A. LATIMER WILSON, Creston, Ia.

Home-bred Draft Stallions \$250 to \$600 imported stal lions—your choice, \$1,000. F. L. Stream, Creston, Iowa.

C. J. WINGER, POLO, MO.
Breeder of high-class, dual purpose Shorthorns. One yearling bull and 17 cows of breeding age, for sale. Some with calves by side. A milking herd that tests high, with beef qualities. C. J. WINGER, Polo, Mo.

PERCHERON HORSES, HOLSTEIN-FRIE-SIAN CATTLE, Up-to-date Poland China hogs, Write your wants. H. N. HOLDEMAN, Meade, Kans.

4 REGISTERED PERCHERON STALLIONS. Won 1st and 2nd at Topeka for Percheron Stallions, any age, bred and owned by ex-hibitor. Won same at American Royal. Also best American-bred Percheron Stallion at

J. G. ARBUTHNOT, Cuba, Kansas.

DISPERSION SALE. I offer at private treaty my entire herd of Poland Chinas, young boars, tried sows and gilts, open or bred to Giant Monarch, the king of big type boars. Some great ones at a bargain. Write.

W. C. Milligan, Clay Center, Kansas.

GALLOWAY CATTLE

FORT LARNED RANCH

REGISTERED GALLOWAYS
for sale. Fifteen choice registered bulls 10 to 20 months old. E. E. FRIZELL, Larned, Kansas.

JERSEY CATTLE

I AM OFFERING a few young bulls, some of Oxford's Masterpiece, a son of Oxford Lad; Oxford's Brigadier, a son of Gamboge Knight; Merry Maiden's Golden Lad, a son of Merry Maiden's third son; and Eurybia's Exile. I have but a few of these calves that are ready for service. Will sell them reasonably while they last. Write for prices and particulars. W. N. Banks, Independence, Kan.

COMFORT'S REGISTERED JERSEY
CATTLE.
Carry the blood of the most noted sires.
For quick sale, nine choice buils, nearly ali
of serviceable age, including two by Imp.
Oakland's Sultan, a prize winner on the
Island. Others by Gold Boy's Guenon's Lad.
Out of high producing dams. Nice colors
and good individuals. Write for price and
descriptions. F. W. COMFORT, Westmoreland, Kan.

FOR QUICK SALE—A seven-weeks-old Jersey bull calf, solid color. Nice individual, sired by Oomeris Eminent 85865 and out of Decanter's Queen 227573, a choice cow of combination breeding. Price, \$40. Recorded and transferred free.

Johnson & Nordstrom, Clay Center, Kansas.

7—CHOICE JERSEY BULLS—7
from 4 weeks to 12 months, sired by a son
of the noted Sultanas Jersey Lad and out of
excellent dams. HENRY E. WYATT, Falls

SHORTHORN CATTLE

Pearl Shorthorns

40 BULLS, 8 to 20 months old; straight Scotch and Scotch topped—mostly red. Can spare a few females, same breeding. C. W. Taylor, Enterprise, Kan. R. R. Station, Pearl, on Rock Island.

GREENDALE SHORTHORNS.

Double Champion (by Choice Goods) at head of herd. Six good red bulls from 16 to 25 months old for sale cheap to get the room for winter. Also, have a select bunch of calves.

ED GREEN, Florence, Kansas.

WILLIAMS & SON'S SHORTHORNS. Herd headed by Scottish Gloster 236978 and Harry 243633, a grandson of Choice Good and Russilla. Young stock of both sexes for sale.

WILLIAMS & SON,

GLEN HALL SHORT HORN HERD Jeaded by Choice Prince, by Prince of Tebe Lawn and out of Good Lassie by Choice Goods. 5 choice red bulls in age from 10 to 14 months. Herd header, Prospects. months. Herd header, Prospects.

JOHN O'KANE, Blue Rapids, Kan.

A. M. Walker, Laclede, Mo.—Breeder of high-class Percheron horses. A number of young stallions and young mares for sale; also mares in foal. All registered stock Write me for prices. Inspection of stock in-vited. A. M. WALKER, Laclede, Mo.

TENNEHOLM SHORTHORN CATTLE—Bred for beef and milk; breeding as good as the best; of Scotch and Bates lines. We use them as dairy cows and find them very profitable. A few young bulls and some females for sale, Write E. S. Myers, Chanute, Knnsas.

ALFALFASHOR THORNS

Young stock for sale. Seven choice bulls, 6 to 15 months. Some helfers.

JOHN REGIER, R. 1, Whitewater, Kansas.

SCOTCH SHORTHORN BULLS

Twenty head of high-class Scotch and Scotch topped bulls for sale; yearlings and 2-year-olds; all bred right and good individuals; also herd bull Victoria Prince Second 288026—a herd bull with a record as a breeder; all will be sold; worth the money and descriptions of stock guaranteed.

GEO. A. ROBINSON. Prescott Ia.

DUAL - PURPOSE - SHORTHORN - CATTLE

Evergreen Home Farms, Lathrop, Mo., J. H. Walker, Prop.—Breeder of dual purpose Shorthorn cattle, Oxford Down sheep, Berkshire hogs and Burbon Red turkeys. Breeding stock for sale at all times. Prompt attention to mail orders. Write us for milk and butter records of our Shorthorn herd.

J. H. WALKER, Lathrop, Mo.

GANZDALE HERD PURE-BRED HOLSTEIN

GANZDALE HERD PURE-BRED HOLSTEIN COWS AND HEIFERS FOR SALE.

To move them quickly we will, quality considered, price them right. We must reduce our herd. We also have a few extra choice quality bull calves for sale, sired by that premier sire, Pietje Count. Several of his sons from large producing dams at prices very cheap. CASPAR A. GANTZ, King City, Mo.

HOLSTEIN CATTLE

100—HOLSTEINS—100 I HAVE FOR SALE 100 HEAD OF HIGH grade Holsteins, consisting of two and three-year-old springers, a few fresh now; also a few cows and young buils. This is a first-class bunch of young cattle, well marked and very uniform in quality. A large per cent of them will freshen in 30 days. Will sell one or all. Special price on car lots. None reserved. IRA ROMIG, Station B. Topeka, Kan.

31 LBS.—BUTTER—31 LBS. The four nearest dams of our two herd bulls average 31 lbs. butter, 614 lbs. milk in seven days' official record. No other farm in the west owns two bulls of such high record ancestry. We are offering some very choice cows and heifers bred to these great bulls. Also bull calves sired by them, many of them out of high record cows. Write us, let us tell you more about this great herd. WOODLAWN FARM, Sterling, III.

FIFTY— Sunflower Herd Holsteins—FIFTY \$50.00 will buy a choice bull for next spring service. Also a few young service bulls at attractive prices. I want to sell my bull crop in next 60 days. A few choice cows in calf to my 30-1b. herd bull for sale. F. J. SEARLE, Oskaloosa, Kansas.

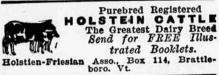
M. B. MOORE & CO., CAMERON, MO., M. B. MOORE & CO., CAMBROT, 183, breeders of Holstein Freislan cattle. Five head of high-class cows for sale, also young stock, both sexes. Herd headed by Sir Johanna Colantha Fayne 42146, assisted by Sir Karmdyke Imperial 53683.

WOODCREST HOLSTEIN HERD.
Registered bulls for sale. Dams A. R. O.
or of A. R. O. breeding. On Rock Island, 30
miles east of St. Joseph, ½ mile from station. Inspection of herd invited.
S. W. COOKE & SON, Maysville, Mo.

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

Rock Brook Hoisteins

20 bulls ready for service at \$75 to \$100. Bull calves \$40 to \$75. Pedigreed and tu-ROCK BROOK FARMS. Station B., Omaha, Neb.



HOLSTEINS FOR SALE,
Some very choice young bulls for sale,
mostly sired by Prince Ormsby, now owned
by Nebraska Agricultural College, His dams
on both sides for four generations average

20 lbs.; he has 30-lb. sisters.

J. P. MAST, Scranton, Kansas.

RED POLLED CATTLE

FOSTER'S RED POLLS. Choice buils and helfers priced reasonable. C. E. FOSTER, R. R. 4. Elderade, Kan.

RED POLLED CATTLE

The only dual purpose cattle and the most profitable for the farmer. Choice bulls for

U. E. HUBBLE, Stockton, Kan.

RED POLLED BULL FOR SALE—Major 21577, calved Feb. 15, 1910, sired by Bowman 21576, dam Molly 21705. Both sire and dam are from the best beef, as well as the best milk producing herds of the breed, and Major is an A-1 individual. Will offer him during October for \$100. Also have a few choice O. I. C. hogs for sale. MILTON PENNOCK, Route 4, Delphos, Kan.

AULD BROS. RED POLL CATTLE. Herd numbers 50, headed by Prince, a ton bull in condition; 10 choice young bulls and a few cows and heifers for sale; farm one mile from town.

AULD BROS.,

Frankfort, Kan.

RED POLLED CATTLE.

The champion beef and milk producer of the age; bred and for sale by the undersigned. Write for prices or come and see the red beauties.

J. B. RESER, BIGELOW, KAN.

ANGUS CATTLE

BIG SPRING ANGUS CATTLE.

Jasper Auldridge & Son. Pattonsburg, Mo.,
Proprietors
Breeders of pure bred Angus cattle and Duroc Jersey hogs.

Breeding Stock for Sale.

ANGUS CATTE Allendale Farm, Savannah, Me.
W. A. Holt, Prop.
Breeder of pure bred Angus cattle—a few choice young bills for sale. Prompt answer to inquiries.

HEREFORD CATTLE

MODERN HEREFORDS **HERD BULLS**

BEAU BRUMMEL 10th 167719. BEAU BEAUTY 192235. CALDO 2d 260444.

Hazford Place Eldorado, Kan. ROBT. H. HAZLETT.

POLLED DURHAM CATTLE

Roan Hero the International Champion and BELVEDERE X2712-195058

Son of the \$1.500 Grand Victor X1635
150355 heads my herd of Double Standard
Polled Durhams. A few extra good, blocky,
thick-fleshed young bulls for sale. Inspection invited. Farm adjoins town, D. C. VAN NICE, Richland, Kansas,

DUROC JERSEYS

DUROC JERSEYS

200-CHOICE DUROC JERSEY SPRING PIGS AT ALFALFA FARM-200 Sired by 14 different boars. Dams are of best breeding. PEARL H. PAGETT, Beloit, Kansas.

DUROC BOARS—Fine individuals, cherry red, straight hair, elegant head and ears and nice conformation; 150 to 200 lbs., by Bell's Chief. Dams by Frank's Prince by King of Cois. II; 500 to 700-lb. sows. Ohio Chief breeding. \$25 to \$30 until December 10.

S. S. Smith, Clay Center, Kan.

ELDER'S HIGHLAND DUROCS.
GOLDEN RULE DUROC HERD; Dreamland Col., the best Col. boar in the west, in service, assisted by J. C.'s Defender, by the noted Defender; 100 choice spring pigs for sale in pairs or trios not related; bedland Col., the best Col for sale in pairs or trios not related; bed-rock prices. LEON CARTER, Asherville, Kan.

THOMPSON BROS., Garrison, Kan.
Headed by G. C.'s Col, and F. E.'s Col.
Sows contain the blood of Ohio Chief and
Crimson Wonder. Stock always for sale
FRANK ELDER.
Green. Kan.

Marsh Creek DUROCS Boars all sold, gilts reserved for my Jan-uary 27 sale. R. P. WELLS, Formoso, Kan.

DUROC JERSEY SPRING BOARS Up-to-date breeding, plenty of quality and good colors. Priced for quick sale. W. H. SALES, Simpson, Kan.

SUNNY DELL FARM.

Choice Duroc boars by Budy K. 4th. A good pair of registered Holstein cattle. Hereford cattle, any age or sex. Prices reasonable. Write—

T. I. WOODALL,

Fall River, Kan.

25—DUROC JERSEY BOARS—25
Sired by Ohio Col., grand champion of
Kansas, 1910. Chiefs Orion by Ohio Chief,
third prize aged boar Kansas, 1909. Blue
Valley Chief, by the \$4000 Valley Chief, out
of sows of the very best breeding. Priced
to sell. We have pleased others, we can
please you.

25-DUROC JERSEY SPRING BOARS-25 By such sires are King to Be and G.'ss Col. out of the greatest sows of the breed. Also two fall boars sired by Neb. Wonder, and a few spring glits. Will not hold fall sale. GRANT CHAPIN, Greene, Kan.

100 DUROC JERSEY PIGS PRIVATELY. Richly bred boars and gilts in pairs not related at prices to move them. O. A. TILLER, Pawnee City, Neb.

MORTON'S DUROCS

A few choice spring Duroc gilts for sale. From the best blood lines in Ohio, \$20 to \$30 if sold at once. Morton & Curtis, Fletcher, O.

Ramsey's Mill Creek Valley Durocs

Choice April boars. Send for pedigree and JOHN RAMSEY, Ft. Scott, Ks.

POLAND CHINAS

December 9, 1911.

FESENMEYER'S A WON Eight litters fall pigs, sired by A Wonder gilts. Ten spring gilts. Gritters and Allbrook A Wonder spring and fall gilts bred to the great private treaty. A great offering of A Wonder H. FESENMEYER, CLASSICAL STREET, CLASSICAL S

DEAN'S MASTODON POL A number of 300-lb. fall boars now ready. To 8¼-inch bone. To move quick, will sell at from gilts and boars, will weigh 200 lbs. A number of fryou want to save express. Offering sired by CLARENCE DEAN, Weston, Mo. Phone, Dearborn

Highview Breeding Farm

The largest registered herd of Spotted Poland C pigs Sept. 1. 200 good ones that will be sold in tike the kind of our forefathers.

H. L. FAL

BIG HADLEY, BIG HUTCH AND EXPANSION BLOOD

Predominate in my herd. Herd boars: Hutch Jr. by Big Hutch and King Hadley 2d by Big Hadley. Among sows are Grannetta, litter sister to Bell Metal; Pan Princess, weight 725 lbs.; Moille S., 750 lbs., and Bess Corwin, the dam of Expansion See, the biggest boar ever owned in the West. 90 choice pigs farrowed to date. Visitors always welcome,

C. W. JONES, Solomon, Kansas.

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Longview Poland Chinas

Herd boar young Mastiff. The first and grand champion at Topeka, Kansas, State Fair, 1910. A few choice spring boars and gilts for sale, all large type. Priced reasonable and guaranteed. D. M. GREGG, Harrisonville, Mo.

BIG TYPE POLAND CHINA BOARS

20 choice individuals, sired by Bell Expand. Same number of gilts. Will also sell Bell Expand cheap. 12 choice Shorthorn bulls and a few cows and heifers, S. B. AMCOATS, Clay Center, Kan.

NOTICE

Thirty big type Poland China boars for ale. Sired by King Elmo and Hartman's Hadley Prop. J. J. HARTMAN,

MOONEY CREEK POLAND CHINA HERD.
The biggest of the big. Wonder and
Mastadon strains. Herd headed by Big Osborne. Pigs raised under natural conditions
and no overfed. I have bought seed stock
from the best herds in Iowa and have new
breeding for Kansas. Write for information
about the kind I breed. Visitors always welcome.

JOHN W. NOLL, Winchester, Kans.

MADISON CREEK POLAND CHINAS.

Twenty choice spring boars of strictly big type. Low prices in order to make room for fall pigs. J. L. GRIFFITHS, Biley, Kan.

FOR SALE.

20 choice Poland China summer and fall boars. The big, smooth kind. Priced to sell quick. Herd headed by Grandeur and Blain's Wonder Son.

Blain's Wonder ALTON,
Erie, Kansas.

**EYSTEAD'S BIG-TYPE POLANDS LEAD 75 choice early farrowed pigs to select from; the blood of Hutch, Commander and other big sires; sows selected from many leading herds. A. R. REYSTEAD, Mankato, Kan.

10 - Poland China Spring Boars - 10

11 fall yearling gilts, 6 tried sows for sale. Good, smooth, heavy boned individuals.
A. L. ALBRIGHT,
Waterville, Kan.

LAMBERT'S CORRECT TYPE POLANDS.
Ten ribbons at Topeka State Fair. The
big, smooth kind. Pigs or bred sows for
JOSIAS LAMBERT,
Smith Center, Kan.

CURRY'S BIG BONED POLANDS.

Headed by M.'s Giant Wonder by Price
Wonder, dam by Orange Chief. Sows of
Expansion and Hadley breeding. Choice
boars and gits for sale. JOHN T. CURRY,
Winchester, Kan.

GRANER HAS A FEW CHOICE BRED sows for sale to farrow latter part in Sept. and first in Oct. Also two yearling herd boars, Colossus Boy 56709 and Col. Thomas 57055.

WILLFOUNG'S POLAND CHINAS LEAD. 100 spring pigs ready to ship. Either sex, nairs not related. Prices reasonable and quality first class. Breed both big and me-

J. D. WILLFOUNG, Zeandale, Riley County, Kansas.

GREEN LAWN HERD
Big-boned Poland Chinas; herd headed by
Big Spot, Major B, Hadley; a choice lot of
spring pigs for sale out of large, mature
sows; write us what you want or come and A. J. ERHART & SONS. Adrian. Mo.

BIG POLAND CHINA BOAR.
For sale, cheap, Tulon Prince, a noted E. KLEIN, Zeandale, Riley Co., Kan.

HOPPE'S BIG TYPE QUALITY POLANDS
The best of the big-type breeding; fed
for best results; sale at Falls City, Neb.,
October 28th.
W. V. HOPPE,
Stells, Neb.

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POLAND CHINAS

POLAND CHINAS

FESENMEYER'S A WONDER OFFERING.

Eight litters fall pigs, sired by A Wonder. Will book orders for both boars and gilts. Ten spring gilts. Gritters and Allbrook breeding, bred to A Wonder. Fifteen A Wonder spring and fall gilts bred to the great young boar, Big Joe. All for sale at private treaty. A great offering of A Wonder pigs. Description of stock guaranteed. H. FESENMEYER, CLARINDA, IOWA.

DEAN'S MASTODON POLAND CHINAS.

A number of \$00-lb. fall boars now ready. They are the big, mellow kind, with 7% o 8%-inch bone. To move quick, will sell at from \$30 to \$35. Also an extra lot of spring gilts and boars, will weigh 200 lbs. A number of herd headers. Can sell you young pigs if you want to save express. Offering sired by Mastodon Price and Columbia Wonder. CLARENCE DEAN, Weston, Mo. Phone, Dearborn, Mo. R. R. Station, New Market, Mo.

Highview Breeding Farm

The largest registered herd of Spotted Poland Chinas on earth. Have sold 120 spring pigs Sept. 1. 200 good ones that will be sold in the next 90 days. Write at once if you like the kind of our forefathers.

H. L. FAULENER, Box K, JAMESPORT, MO.

BIG HADLEY, BIG HUTCH AND EXPAN-SION BLOOD

Predominate in my herd. Herd boars:
Hutch Jr. by Big Hutch and King Hadley
2d by Big Hadley. Among sows are Granretta, litter sister to Bell Metal: Pan Princess, weight 725 lbs.; Moille S., 750 lbs., and
Bess Corwin, the dam of Expansion See, the
biggest boar ever owned in the West. 90
choice pigs farrowed to date. Visitors always welcome.

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Herd boar young Mastiff. The first and grand champion at Topeka, Kansas, State Fair, 1910. A few choice spring boars and gilts for sale, all large type. Priced reasonable and guaranteed. D. M. GREGG, Harrisonville, Mo.

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S. B. AMCOATS, Clay Center, Kan.

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Thirty big type Poland China boars for sale. Sired by King Elmo and Hartman's Hadley Prop.
J. J. HARTMAN,
Elmo. Kansas.

MOONEY CREEK POLAND CHINA HERD.
The biggest of the big, Wonder and
Mastadon strains. Herd headed by Big Osborne, Pigs raised under natural conditions
and no overfed. I have bought seed stock
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about the kind I breed. Visitors always wel-

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Twenty choice spring boars of strictly big type. Low prices in order to make room for fall pigs. J. L. GRIFFITHS, Riley, Kan.

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20 choice Poland China summer and fall boars. The big, smooth kind. Priced to sell quick. Herd headed by Grandeur and Blain's Wonder Son.

Blain's Wonder Son.

Erle, Kansas.

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11 fall yearling gilts, 6 tried sows for sale.

Good, smooth, heavy boned individuals.

A. ALBRIGHT,

Waterville, Kan.

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Ten ribbons at Topeka State Fair. The
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JOSIAS LAMBERT,
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Headed by M.'s Giant Wonder by Price
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H. C. GRANER, Lancaster, Kansas

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J. D. WILLFOUNG, Zeandale, Riley County, Kansas.

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For sale, cheap, Tulon Prince, a noted big boar. L. E. KLEIN, Zeandale, Biley Co., Kan.

HOPPE'S BIG TYPE QUALITY POLANDS
The best of the big-type breeding; fed
for best results; sale at Falls City, Neb.,
October 28th.

W. V. HOPPE,
Stella, Neb.

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At Head,

BLUE VALLEY EXPANSION

54414. A Grand Individual, With Massive Bone

and Length. L. C. WALBRIDGE,

Russell - - - Kansas.

VINECROFT POLAND CHINAS

Bred for quality and size. Address, ALVIN LONG, Lyons, Kan.

BRED GILTS \$25 to \$30 EACH.

20 fall gilts, big and smooth. Big type. Good time to start herd. Write quick, F. D. YOUNG, Winchester, Kans.

WALNUT GROVE FARM POLAND CHINAS.—For quick sale, choice of 2 tried boars, litter brothers sired by Grand Look and out of Expansion dam. JAS. ARKELL, Junction City, Kan.

ANDERSON'S BIG TYPE POLANDS.

Headed by Clay Jumbo 54925, one of the best and biggest boars in Kansas; sows of equal merit; 70 good spring pige to choose from. Write quick, J. W. ANDERSON. Leonardville. Kan.

LIMESTONE FARMS

breeds Shropshires, Big Poland Chinas, Buff Orpingtons, S. C. Brown Leghorns, Indian Runner ducks and Chinese geese. Choice cockerels for sale worth the money. M. GOTTSWILER, Clarksdale, Mo.

MAMMOTH HADLEY POLAND CHINAS.
60 choice spring pigs sired by Mammoth
Hadley and Grand Model, two as good sires
as can be found in the west; dams of pigs
carry the blood of nearly all big sires.
GEO. W. SMITH,
Burchard, Neb.

HARTER'S BIG KIND POLAND CHINAS.

Westmoreland, Kansas.

POLANDS.

Fuller Brothers' prize Polands. Grand champion sow, Sedalia, 1911, and other prize winners in herd. Storm Center, sire of champion sow, and Big Tecumseh, at head of herd. We also breed Hereford cattle and Scotch Collies. FULLER BROS., Humphreys, Mo.

W. Z. BAKER, LARGE TYPE POLAND CHINAS

A few choice boars, bred sows and glits for sale, bred to King Hadley, John Ex. and John Long 2nd. Prices right. W. Z. BAKER, Rich Hill, Mo.

HAMPSHIRE HOGS HAMPSHIRE thoroughbreds from prized

stock, fine sows and glits exceptionally cheap. Duroc Jersey out of the best blood possible. Brood sows and glits, also some exceptionally good male hogs. All registered. Priced to sell. The Springdale Stock

HILLWOOD STOCK FARM High Class Hampshires—Herd Headed by the lelebrated boar Erlanger 1039, High class young loars for sale. Will also sell Erlanger,

J. Q. EDWARDS, Platte City, Mo.

HAMPSHIRES

AS LONG AS THEY LAST.

Spring boars, \$22. Fall yearlings, \$27. Gilts, same prices.
Sired by sons of State Fair champions.

WOODLAWN FARM, Sterling, Ill.

LAWSON'S HAMPSHIRES.

Am closing out herd. Have some extra good herd headers and sows. Also, a fine lot of weanling pigs, from \$15 to \$20. Can furnish pair no kin.

G. S. LAWSON, Ravenwood, Mo.

OHIO IMPROVED CHESTERS

SUNNY SIDE O. I. C.

One hundred choice spring and fall pigs. Can furnish pairs not related, best of breeding. Sired by Jackson Chief 2d, Ken Garnett

FINE PRINTING FOR REASONABLE prices. Catalogs, circulars, letter heads. Everything in the printing line. Write for eamples and prices, Western Printing Co., 625 Jackson St., Topeka, Kan.

2d and Bode's Model. Priced right. W. H. LYNCH, Reading Kan., Box 36.

Headed by Mogul's Monarch, Hadley, and other good sires. breeding stock always for sale. J. H. HABTER,

A FEW Guernsey bulls for sale; butter-fat record 668 to 714 lbs. per year; prices reasonable. Frederick Houghton, Roxbury, McPherson Co., Kansas. GUERNSEYS.

For Sale—High-grade Guernsey bull and heifer caives. "Materna" strain. MRS. HELEN DONNELLY, Manitowec, Wis.

GUERNSEY CATTLE

BERKSHIRES

RENO BERKSHIRES.

For sale, 2 boars and 4 gilts. September yearlings. Gilts sold bred or open. Price \$30. All sired by the grand champion at Kansas State Fair, 1910. 15 spring boars and 15 spring gilts, priced reasonable. Write at once. T. E. Clarke, Medora, Kan.

RERESHIRE HOGS. Guaranteed choice breeding stock of very fashionable lines. Either sex. Pigs, \$15; of breeding age, \$25; very extra choice, best quality, \$35. Registered. Crated f. o. b. R. J. LINSCOTT, Holton, Kan.

SHROPSHIRE SHEEP

Potterman's Shropshire Flock

Headed by Imported Ram Inglewood Juvenile 08566 R sired by Reynold—Dam Buttar's Dreamer a number of fine yearling Rams for sale—Breeding Stock for Sale at all times. Address

Joseph Potterman, Clarksdale; Mo.

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How would you like to be one of them and make from \$10 to \$100 per day We paid \$300 for our 1911 96page illustrated catalog. You can have one by writing us a postal today. MISSOURI AUCTION SCHOOL (largets in world,) W. B. Carpenter, President., Trenton, Mo., Kansas City, and Oklahoma City.



FOR THE BEST RESULTS

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FRANK J. ZAUN, independence, Kan.

C. F. BEARD

Live Stock Auctioneer, Parsons, Kan. Continually selling for the best breeders of several states. Write, wire or telephone. Home phone 2702.

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MANKATO, KANSAS.
Livestock Auctioneer. Big Horse and other
Stock Sales a specialty. Terms reasonable.
Special service to breeders.

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Oketo, Kan., will make pure bred stock or farm sales anywhere in Kansas or adjoining states; 15 years experience; best of refer-ences furnished. Write or phone for dates.

T. E. DEEM, AUCTIONEER

Auction sales of pedigreed stock made everywhere. Write me about your sale. I have an open date for you. Address, Cameron, Mo.

LAFE BURGER, Live Stock Auctioneer, Wellington, Kansss—15 years of success in selling pure bred live stock.

W.C. CURPHEY Salina, Kansaa LIVE STOCK AUCTIONEER Write, phone or wire me for dates,

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Live stock and farm sales auctioneer; blocand ring work solicited. Belleville, Kan.

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Real Estate Auctioneer. Will cry sales in any state; terms reasonable; write for plan.

THOS. DARCEY

Real Estate and Live Stock Auctioneer. Eighteen Years' Experience. Offerle, Kan.

FIELD NOTES.

Thisler's Percherens and Jacks.
O. L. Thisler & Sons, the well known breeders of Chapman, Dickinson County, Kansas, start a card in this issue of Kansas Farmer. They offer for sale a very attractive bunch of young Percheron stallions. Also some large black jacks and Standard bred trotting stallions. All of this stock is young and fully guaranteed. When writing kindly mention Kansas Farmer.

The Largest Jack Farm.
L. M. Monsess & Sons. owners of the dmestone Valley Farm at Smithton, Mo., vrite; "We have bought the great Barnes

KANSAS FARMER STOCK ENIFE.



Reduced Size.

This is the handlest and best stock knife on the market. Buffalo horn handle, German silver inlaid. Large scimiter blade, hoof blade and smaller pen blade. Brass lined. A beauty and fully guaranteed. Would cost \$1.00 to \$1.25 in any retail store. Sent prepaid to any subscriber of Kansas Farmer for only 65 cents. Given free to any old or new subscriber sending \$1.00 for a year's subscription and 15 cents extra for shipping.

KANSAS FARMER Toucks. Here

KANSAS FARMER, Topeka, Kan.

& Cain herd of show jacks and jennets, 20 head in number, which showed two years and were never defeated. This purchase includes the great and undefeated jack High Ball and all the jack stock of the Barnes & Cain herd. Had Mr. Barnes lived this herd would not have been sold. They had bought of the best in Missouri and Kentucky. Since this great herd has been added to Limestone Valley herd we have double the size of any herd in the United States, and the quality of our jacks and Jennets is excelled by none."

Wells Writes.

Mr. R. P. Wells, Duroc Jersey breeder, of Formoso, Kan., writes that results from the card which he is carrying in Kansas Farmer have been very satisfactory. He has received lots of inquiries and made some good sales. Mr. Wells asks us to say that he is all sold out on boars, and will reserve all his glits for his January 27 sale.

Kramer Buys Jersey Bull.

Kramer Buys Jersey Bull.

Chester Thomas, proprietor of one of the best small herds of registered Jersey cattle to be found anywhere, reports the sale of a very choice young bull to D. A. Eramer, of Washington, Kan. The calf was sired by Mr. Thomas' herd bull, Silverine's Lorne by Silverine's Lad. The dam of calf was one of Mr. Thomas' best producing cows. Mr. Kramer is slowly but surely getting together a very choice collection of Jerseys.

John W. Shuck & Sons, of Ionia, and Mr. Schuck's son, Dana D., of Burr Oak, Kan., have joined forces and will hold a big Durco Jersey bred sow sale at Burr Oak, Kan., on February 17. The offering will be a mighty good one and should attract buyers from different parts of the country. File your application early for catalog.

W. Z. Baker's Pelands.

With this issue W. Z. Baker, of Rich Hill, Mo., starts a card. Mr. Baker purchased, a short time ago, the entire herd of Poland Chinas owned by Charles Z. Baker, of Butler, Mo. This was one of the good herds of Missouri, and the herd boars used in this herd have but few equals. King Hadley is one of the good sons of Big Hadley and a show hog in any company. John Ex. is one of the good breeding boars used in the Baker herd last year, and John Long 2nd by John Long is the boar that always sires good ones. With this trio of good boars and the class of sows that Mr. Baker has to breed them on, there is a bright future and assured success in store for Mr. Baker. In this issue he is offering a few choice boars and a few bred sows and gilts of strictly large type breeding and large, heavy boned individuals. Write for prices and full descriptions. Kindly mention Kansas Farmer.

The Miller & Nevinger Percheron Sale.
On account of the very stormy weather the Percheron sale of S. J. Miller and L. A. Novinger & Sons at Kirksville, Mo., November 28, was only fairly well attended and the general average for the very fine offering was not as high as it should have been for high-class Percherons. The offering catalogued sold for an average of \$225. Imported Coliberte at \$600 was the high-priced mare and Consigne at \$760 was the high-priced stallion, and this horse came to Kansas, as did another of the high-priced ones. The principal buyers were as follows: W. F. Crawford, Greencastle, Mo., \$600; C. R. Porter, Novelty, Mo., \$310; G. E. Triplett, Knox City, Mo., \$465; M. F. Cox, Pattonsburg, Mo., \$230; J. A. Lewis, Stahl, Mo., \$446; J. R. Strang, White Hall, Ill., \$390; W. F. Crawford \$450; George Locklin, Kirksville, Mo., \$450; W. F. Crawford, \$220; Thomas White, Edina, Mo., \$310; Robert Locklin, Kirksville, Mo., \$250; J. R. Strang, \$225; B. F. Hardin, Moberly, Mo., \$320; J. R. Strang, \$355; J. L. Smith, Newman, Kan, \$760; C. F. Cooper, Nickerson, Kan, \$500.

Profit in Poultry Culture.

Profit in Poultry Culture.

What should be done to persuade a lot of cantankerous, non-productive hens to settle right down to business and pay a profit over their keeps? Well, we could mention several things that would help, but the cornerstone of the structure—the keystone of the arch is just simply good digestion on the part of the hen. Does that sound far-fetched or foolish? Think a moment. You give your hens a certain amount of food each day. If a large part is wasted because of non-assimiliation, it doesn't make eggs—that's sure. If digestion is strong, and the greater proportion of the food is assimilated; then the hen has egg materials in abundance—that's equally sure. So, when you look at it calmly, there's a great deal of wisdom in strengthening the digestion of your hens. This being now admitted, the question of "how" comes naturally to the fore. And it is an easy question to answer. Dr. Hess Poultry Pan-a-ce-a is composed of natural tonic elements which act directly upon the digestive organs of the hen. It creates appetite and strength to properly dispose of a great quantity of food. It does this without leaving the fowl liable to ultimate breakdown from continued heavy feeding. It follows, therefore, as a natural consequence, that hens getting Dr. Hess Poultry Pan-a-ce-a (small quantities only) in their ration, become prolific layers, because the ovaries are constantly supplied with eggbuilding elements. It follows, also, from the same premise, that Hess-fed hens pay, and that Hess-fed chickens grow, and the heaves the come rich. All of which proves that the theoretical hen man may become a practical hen man if he will.

Lamer's Percheron Sale

SALINA, KANSAS

I will sell at Public Auction in my Sale Stables, at Salina, Kan., on Wednesday, December 20, sixty (60) head of Imported and Home-grown Percheron and French Draft Mares and Stallions, consisting of

32 Mares, 2 to 5 years old; 3 Mares "yearlings;" 11 Mare foals; 3 Horse Colts; 6 Stallions, 2 years old; 4 Stallions, "Yearlings;" 1 Belgian Mare.

The above stock is large and growthy, with as much weight, bone, style, action and conformation as you could ask for.

If you are in the market for a first-class Stallion or Mare—the kind to start the foundation for a family of horses and you will always like-don't miss this sale. Each and every one of this consignment was carefully selected by me, and I can assure you that you will not be disappointed after seeing this stock.

SALE DECEMBER, 20th WRITE FOR CATALOGUE C. W. LAMER, Salina, Kansas

P. S.—On Thursday, December 21, I will sell 200 head of horses, consisting of work horses, mares and southerners.



J. C. Robison TOWANDA, KANS.

13th Annual Sale of Percheron Stallions and Mares. 60 Head

December 28, 1911. Ask for Catalogue

WILEY'S STALLIONS



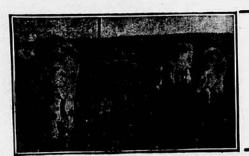
Imported and Home Bred Percherons, Belgians and Shires. All Percherons are Registered in the Percheron Society of America.

-Head STALLIONS AND MARES-50

Including an unusual variety from which to select. All we ask is a chance to show the goods. You'll say the price is right, and buy. Write today.

L. R. WILEY, EMPORIA, KAN.

Breeding Farm, Elmdale, Kan. Sale Barns, Emporia, Kan.



SAY!

Do you know that fortunes are being made in Registered Jerseys? A bull raised in Missouri sold not long ago for \$10,000. Let me sell you a bull calf from my pure-bred prize winners to build up your herd. I have them from \$50 up. References: Joplin National Bank or any business man in Joplin. DR. D. R. HILL, Joplin, Mo.

PERCHERON STALLIONS AND MARES

Bishop Brothers have 25 big boned stallions that weight 1,700 to 2,100 pounds that they can and will sell for less money than any firm in the business, quality considered. Write us what you want.

BISHOP BROS., TOWANDA, KAN.

ancomminantemente de la comminantementa de la comminante de la comminante de la comminante de la comminante de Dispersion Sale Aberdeen Angus



AT MY FARM, ADJOINING

HIGHLAND. KANSAS,

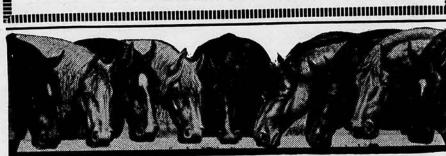
Tuesday, December 19 5 Bulls, 37 Gows and Heifers

There is no question but what this is the most select lot of cattle ever sold west of the Missouri river. This herd has been a money maker ever sold west of the Missouri river. This herd has been a money maker for thirty years. Prior to this sale, a majority of the animals in the herd have been priceless. The most valuable families are represented. There are Blackbirds, closely related to the World's Fair champion; Trojan Ericas, that are equal to anything that ever crossed the Atlantic ocean; Queen Mothers, that have few equals and no superiors; Heatherblooms, that are bred in the purple. The bulls are herd headers, of the top notcher class, and any of them will sire the market topping steer. The herd bull, Duke Bloom 3d 134689, should be inspected by anyone in the market for a tried sire. He promises to be one of the greatest bulls the breed has ever known. The 37 cows and heifers will be found pleasing to the eye, and good, honest workers. Many of the cows have calves at foot, and have been rebred. If you are in the market for good cattle that wear the stamp of approval, and have made good, come to this sale. You will sure find them. Send for catalog, mentioning Kansas Farmer. Address

T. J. McGREARY, Highland, Kas.

Col. Silas Igo, Auctioneer. M. A. Judy, West Lebanon, Ind., Sales Manager.

Highland is 30 Miles Northwest of St. Joseph, Mo., on the St. Joseph and Grand Island Railroad.



We Import the Best Bred Stallions Europe Cant Produce

Our Percheron, Shire and Belgian stallions are strong and massive, with great quality, tyle and conformation—with splendid color and dispositions.

They are selected with an eye single to the wants of the most critical American buyers. They are stallions that will go into any mmunity and command the best mares. command the men who are the best pay and who take the best care of their stock. Our contract of guarantee is as good as a government bond. Our prices are reasonable.

Send for big illustrated catalog and book containing letters from hundreds of satisfied customers.

As Watson, Woods Bros. & Kelly Co., Box 34, Lincoln, Nebr.



40 STALLIONS AND MARES.

My barn is full of good Percheron, Belgian and Shire Stal-lions. Priced to sell. I mean business. Come and look them over. If you want good horses, we can deal. My prices are from \$400 to \$1,000. Come and see me before you buy. Then be your own judge. Barn right in town.

Joseph M. Nolan, Paola, Kan.

Priced to sell—from yearlings to three-year-olds. All dark colors, heavy bone and large size; plenty of quality. The best of breeding. All registered in Percheron Society of America. Come and see me.

J. W. BARNHART, BUTLER, MO.



PERCHERON, BELGIAN, GERMAN COACH STALLIONS AND MARES. Imported and home-bred. Will sell our 1911 champion and other rize winners. Write or come. I make good. Mention this paper. PIONEER STOCK. FARM, J. W. Waddill, Prop., BRASHEAR, MO.

FIELD NOTES.

Riley County Land Auction.

How would you like to own an improved 80 or 160 acres located within 20 miles of the Kansas Agricultural College? This is possible if you will only take the trouble to investigate. Mr. Edward Kieninger, of

Riley, Kansas, will sell at public auction Thursday, December 14, two eighties, one vell improved and one without improvements. A public road separates them and you can buy one or both at your own price, on very easy terms. Write him for full formation. These farms are ideal for diversified farming and dairying. Mention this paper when writins.

FIELD NOTES

FIELD MEN.

Wayne Devine......Topeka, Kan. Jesse R. Johnson.....Clay Center, Kan. W. J. Cody......Topeka, Kan.

PURE BRED STOCK SALES.

Percherons.

Jan. 23-26—Breeders' Sale Co., Bloomington, Ill., C. W. Hurt, Arrowsmith, Ill., Manager.
Feb. 6-7.—H. G. McMillen & Sons, Rock Rapids, Ia.

Jacks and Jennets.

March 5-L. M. Monsees & Sons, Smithton,

Mo.

Aberdeen-Angus. Dec. 19—T. J. McCreary, Highland, Kan.

Herefords. Feb. 27-28—Jones Bros., Council Grove, Kan.

Feb. 7-8.—H. C. Glissman, Station B., Omaha, Neb.

Feb. 17-F. W. Comfort, Westmoreland,

Poland Chinas.

Jan. 2.—Robert I. Young, St. Joseph, Mo
Jan. 4.—Ben. Bell, Beattle, Kan,
Jan. 5.—H. B. Walter, Effingham, Kan.

Jan. 4.—Ben. Bell, Beattle, Kan.
Jan. 5.—H. B. Walter, Effingham. Kan.
Iowa.
Jan. G.—Lee Gross, Nodoway, Mo.
Jan. 17—A. R. Enos, Ramona, Kan.
Jan. 23—T. J. Melsner, Sabetha. Kan.
Jan. 24—A. L. Allbright, N. E. Copeland,
Waterville, Kan.
Jan. 24—James G. Long, Harlan, Ia.
Jan. 24—A. L. Albright, Waterville, Kan.
Jan. 25—J. H. Hamilton & Son, Guide Rock,
Neb.
Jan. 27—A. C. Lobaugh, Washington, Kan.
Jan. 29—R. M. Bunnell, Atchison, Kan.
Feb. 1—W. B. Wallace, Bunceton, Mo.
Feb. 2—Bert Harriman, Pilot Grove, Mo.
Feb. 5—J. L. Griffiths, Riley, Kan.
Feb. 6—Thompson Bros., Marysville, Kan.
Feb. 6—H. C. Graner, Lancaster, Kan.
Feb. 7—G. M. Hull & Bean, Barnett, Kan.
Feb. 7—G. M. Hull & Bean, Barnett, Kan.
Feb. 7—Albert Smith & Sons, Superior,
Neb.

Feb. 7—Albert Shirth.

Neb.
Neb.
Neb.
Teb. 8—T. J. Charles, Republic, Kan.
Feb. 9.—S. N. Hodgson, Parker, Kan.
Feb. 10—C. S. Nevius, Chiles, Kan.
Feb. 12—Oak Hill Stock Farm, Esbon, Kan.
Feb. 14.—H. L. Faulkner, Jamesport, Mo.
Feb. 14—George Wedd & Son, Spring Hill,
Kan.

Feb. 14.—H. L. Faulkner, Jamesport, Mo. Feb. 14.—George Wedd & Son, Spring Hill, Kan.
Feb. 15.—Dr. John Gildow & Sons, James-Feb. 15.—Horton & Hale, DeKalb, Mo. Feb. 15.—Ira C. Kyle & Son, Mankato, Kan. Feb. 16.—J. H. Harter, Westmoreland, Kan. Feb. 17.—Euler Bros., Gault, Mo. Feb. 17.—Ernest W. Beery, Shambaugh, Ia. Feb. 20.—E. Logan, Beloit, Kan. Feb. 20.—E. H. San, Beloit, Kan. Feb. 21.—W. A. Prewett, Asherville, Kan. Feb. 22.—C. W. Jones, Solomon, Kan. Feb. 22.—A. J. Erhart, Adrian, Mo. Feb. 22.—J. J. Hartman, Elmo, Kan. Feb. 24.—C. H. Pilcher, Glasco, Kan.; sale at Concordia, Kan. Feb. 27., 1912.—L. R. McClarnon, Bradyville. port, Mo. March 2.—F. W. Barber, Franklin, Neb. March 6.—T. M. Willson, Lebanon, Kan.

Duroc Jesseys.

20.—Horton & Hale, DeKalb, Mo.
25—J. R. Blackshire, Elmdale, Kan.
27—R. P. Wells, Formoso, Kan.
31—W. E. Monasmith, Formosa, Kan.
1—Geo, Phillippi, Lebanon, Kan.
2-Rinehart & Son, Smith Center, Kan.
3—W. C. Whitney, Agra, Kan.
7, 1912—Frank Elder, Green, Kan.
8—Samuelson Bros., Cleburn.
9—Samuelson Bros., Blaine.
12.—J. O. Hunt, Marysville, Kan.
14.—Edward Fuhrman & Sons, Oren. Mo.

Peb. 15.—Grant Chapin, Green, Kan.
Peb. 14.—I. O. Hunt, Marysville, Kan.
Peb. 14.—Edward Fuhrman & Sons, Oregon, Mo.
Peb. 15.—Grant Chapin, Green. Kan.
Peb. 15.—Grant Chapin, Green. Kan.
Peb. 27.—W. T. Fitch, Minneapolis, Kan.
Peb. 28.—Leon Carter, Asherville, Kan.
Peb. 29.—J. W. Wohlford, Waterville, Kan.

Shetland Ponies.
What could be more appropriate for a Christmas gift to the kiddles than a Shetland pony? Mr. John S. Tough, Lawrence, Kan., has a fine bunch of them for sale, and the prices are right. Look at his advertisement in another column and see what he says about it. When you write, please mention Kansas Farmer,

Scotch Collies and Barred Rocks.

This week we start advertising for Mrs. Belle Ziller of Hiawatha, Kan. Mrs. Ziller as for sale about a dozen very choice pediated Scotch Collie pupples that are real andies; also, over 300 choice Barred Plynouth Rock cockerels. This stock is first-lass and will be priced very reasonable, onsidering quality. Write for catalog, giving full information. Please mention Kan-

Bred Sows for Private Sale.

John T. Curry, Poland China breeder of inchester, Kan., and owner of the big and instanding boar, M's Giant Wonder by Price conder, has for sale a few extra good tried was bred to this great boar. Mr. Curry or more than he can well care for, and fiver these at very reasonable prices. Servone of them has proved herself to be good breeder and will be fully guaraned. Write for description and prices, mending Kansas Farmer.

Linscott's Berkshires.
R. J. Linscott, owner of the Rosalpha Jerseys at Holton, Kan., is also a breeder of Berkshires. His new advertising card in this week's issue makes offer of some of these Black Robin Hood and Premier Longfellow Berkshires for sale at very reasonable brices. They have the qualities of their famous ancestors, and among them are some very choice individuals. Write Mr. Linscott as to your wants, and please mention Kan-Sas Farmer. sas Farmer.

With this issue J. W. Barnhart of Butler, Mo., starts a card for his Percherons. Mr. Barnhart has now on hand a well bred lot young stallions. They are large and well developed and priced very reasonable for dirst-class horses. Mr. Barnhart raises about 25 to 30 young studs each year, and can price them from 3 years up to 5 years

SALES NEXT WEEK

Tuesday, December 12 Percheron Horses, L. W. Sloan, Moran, Kansas.

Thursday, December 14

Eighty-Acre Farm, Edward Kieninger, Riley, Kansas.

Poland China Bred Sows, E. J. Manderscheid, St. John, Saturday, December 16 Kansas.

pay. Please look up the advertisement on another page and write your wants. Kindly mention Kansas Farmer when writing.

Naylor's Polled Hereford Sale.

Naylor's Polled Hereford Sale.

An event that should interest cattlemen will be the big Hereford dispersion sale to be held at Alta Vista, Kan., December 19. About 100 head are to be sold, nearly half of which are Polled Herefords. The herd is an exceptionally well bred one and one of the oldest and strongest in central Kansas. Included will be a string of very choice young bulls, a part of which are Double Standard and the Double Standard herd bull, Polled Dandy. The sale will begin at 10 a. m. promptly. Write for full information, mentioning Kansas Farmer.

One Thousand Acre Land Auction.

One Thousand Acre Land Auction.

Kansas people, especially renters, should be interested in the advertisement of Mr. G. Wertman, of Washington, Kan. On December 20, Mr. Wertman will sell seven farms at auction to the highest bidder. These farms range in size from 74 acres up to 160 acres. All of them are a part of a tract close to the county seat, and nearly all of them are improved. Good soil and water, mail service and telephone, and the most liberal terms possible. Write for catalog giving description of each farm, terms, etc.

McCreary Angus Dispersion.

McCreary Angus Dispersion.

The famous herd of pure-bred Aberdeen-Angus cattle which, for the past 30 years has been a money maker for T. J. Mc-Creary, of Highland, Kan., will be dispersed at public sale on December 19, 1911. There will be five bulls and 37 cows and helfers of the very best Blackbird, Trojan Erica and Heatherbloom families. Many of these animals are closely related to the World's Fair champions, and heretofore would not be priced at any figure. Many of the cows have calves at foot and are rebred. The herd bull is Duke Bloom 3d 134689, and he should be sought after by some one who wants a very high-class herd header that has been thoroughly tried. This will be the most important offering of Angus cattle to be made in the west this season and no man who wants cattle of this sort can afford to be absent from the sale. Ask Mr. McCreary for a catalog, and mention Kansas Farmer when you write, please.

Bill Galloway's New Idea.

Bill Galloway's New Idea.

A representative of this paper recently had the pleasure of attending one of the most unique reunions ever held in this country. The occasion was the opening, November 15, of the Galloway Agricultural Club, and we believe that a little description of the building and what it stands for will be interesting news to our readers. At the big club "housewarming" the other night, more than 125 of Bill's friends among the farm paper editors and publishers all over the country sat down to enjoy his hospitality at an old-fashioned farm dinner. Speeches were made and stories told about the wonderful growth of the Galloway business—how, in less than 10 years, beginning with a few hundred dollars and his big idea of saving farmers money, Bill Galloway has built up a mammoth plant, turning out yearly millions of dollars' worth of farm implements, sold direct from factory-to-farm at one small profit. Now, this splendid Agricultural Club Building, just completed at a cost of \$65,000, was built by Bill Galloway for the comfort and convenience of farmers

New Trapping Laws.

The wide variation in trapping laws in various states makes it quite necessary for the trapper and farmer to be in close touch with game legislation at all times. The old saying that "ignorance of the law excuses no man" has caused regret in the heart of many only when it has been too late. As a rule, the professional trapper makes it his business to become acquainted with all laws regarding hunting and trapping, but there are many farmers and amateur trappers who are not as familiar with game laws as they should be. These people will be glad to learn of a book which is now being distributed free by F. C. Taylor & Co., of St. Louis, Mo., the world's greatest fur house. This book gives game laws of every state in the Union and Canada. It also tells how and when to trap, what baits to use for various animals, and reveals some trapping secrets which have always been carefully guarded by trappers in the past. We suggest that those of our readers who are interested in hunting or trapping send for a copy of the book.

Roelofson's Percheron Sale.

Roelofson's Percheron Sale.

Roelofson's Percheron Sale.

The sale of Percheron and Standard-bred horses held by J. F. Roelofson at Maryville, Mo., November 29, was well attended, and the 38 head sold brought an average of \$344. This included the foals offered. The following is a list of Percheron buyers and the principal buyers of the Standard-bred horses offered:

PERCHERON STALLIONS.

1—Van Taur, 2 years, Lewis Miller, Graham, Mo., \$500.

2—Vendor, 1 year, E. A. Bailey, Elmo, Mo., \$600.

3—Josephus, 1 year, E. D. Parker, Cawood, Mo., \$260.

4—Hinsdale (foal), H. F. Renshaw, Armour, S. D., \$200.

5—Benton (foal), A. D. Hutchinson, New Hampton, Mo., \$150.

6—Huron (foal), H. F. Renshaw, \$225.

PERCHERON MARES.

17—Josephine, 11 years, A. D. Hutchinson, New Hampton, Mo., \$256.

18—Tessa, 4 years, A. Walter, Burlington Junction, Mo., \$370.

19—Madelline, 5 years old, W. M. Golding, Maryville, Mo., \$450.

20—Gusta, 8 years old, J. L. Parker, Denison, Kan., \$400.

21—Arretta and stallion foal, 3 years, R. H. Ware, Burlington Junction, Mo., \$350.

22—Marie, 2 years, H. C. Devault, Elmo, Mo., \$375.

23—Mae, 2 years, A. Walter, \$450.

24—Ulah, 1 year, H. H. McClurg, Picker-

22—Marie, 2 years, H. C. Devault, Elmo, Mo., \$375.
23—Mae, 2 years, A. Walter, \$450.
24—Ulah, 1 year, H. H. McClurg, Pickering, Mo., \$300.
25—Black Queen, 1 year, Peter Meyers, Maryville, Mo., \$255.
26—Mola, 1 year, George McMurray, Maryville, Mo., \$225.
27—Frances, 2 years, A. Walter, \$380.
28—Blanch B., 6 years, H. F. Renshaw, Armour, S. D., \$300.
28 '\$-Filly foal, W. A. Ware, Barnard, Mo., \$150.
43—Gaillante, 9 years, Joseph Duncan, Osborn, Mo., \$345.

Mo., \$150.

43—Gaillante, 9 years, Joseph Duncan, Osborn, Mo., \$345.

STANDARD-BRED MARES.

29—Maryville Girl, 6 years, E. F. Caldwell, Burlington Junction, Mo., \$195.

32—Country Girl, 5 years, E. F. Caldwell, Burlington Junction, Mo., \$195.

36—Lady Wiles, 4 years, Charles Roach, Bedison, Mo., \$130.

37—Miss Pratt, 2 years, R. W. Ambrose, Clyde, Mo., \$115.

38—Miss Norma, 1 year, R. W. Ambrose, \$30.



visiting his big factories at Waterloo. The building itself is 65 feet wide by 200 feet deep and is completely equipped throughout. It has the largest dining room in the state of lowa, a large sample room displaying the entire line of goods made at the great Galloway factories, a magnificent club room furnished with easy chairs, writing materials, papers, magazines, etc., where farmer guests can lounge around, smoke, talk and visit with the Galloway people who are assigned to entertain them. A number of finely furnished guest rooms have been provided for those staying over night. All these conveniences are absolutely free to Bill Galloway's farmer friends, who are invited to visit Waterloo as his guests at any time. The club building is also arranged for the welfare of the hundreds of Galloway employes, who can eat their meals there, if desired, and spend a few hours of pleasant rest and recreation between working times. All the dairy products used in this great setablishment are supplied from Bill Galloway's own farm just outside of Waterloo, where he keeps a large herd of the finest Holstein and Ayrshire cattle and raises chickens by the hundreds to supply eggs and poultry for the club table. Bill Galloway extends a cordial invitation to our readers to visit Waterloo and look through his enormous factories and enjoy the splendid meals and other enjoyable features of the new Agricultural Club. If your visit is half as interesting and profitable of the dealers of the new Agricultural Club. If your visit is half as interesting and profitable or the dealers of the new Agricultural Club. If your visit is half as interesting and profitable or the dealers of the new Agricultural Club. If your visit is half as interesting and profitable or the dealers of the new Agricultural Club. through his enormous factories and enjoy the splendid meals and other enjoyable features of the new Agricultural Club. If your visit is half as interesting and profita-ble as the day we recently spent in Water-loo, it will be indeed well worth the trip.

Fine Book for Stock Owners.

Fine Book for Stock Owners.

Every stock owner feels the need of a reliable authority which he can consult on the diseases of his animals. Just such a work is now published by the Dr. David Roberts Veterinary Company, Waukesha, Wis., and it can be had simply by writing the company for it.

The book is written by Dr. Roberts himself. The mention of this fact at once gives character to the work. Former state veterinarian of Wisconsin, live stock specialist, official veterinarian at big stock shows, Dr. Roberts is recognized as perhaps the greatest authority on the subjects he treats of anyone in the country.

The title of the book is the "Practical Home Veterinarian." It consists of 184 large pages, bound in cloth, and is such a permanent reference work as farmers and stockmen will want to preserve. Arrangements have been made for its free distribution at leading drug stores. All that is necessary is simply to call for it. If you should not find it at your drug store, you may procure a copy direct by enclosing 10 cents postage and addressing the Dr. David Roberts Veterinary Company at Waukesha, Wis.

An Auctioneer that Made Good.

In every business and in every walk of live some succeed and some fall. Almost everyone is sorry for the failures and glad for the successes. Especially are we interested in a successful man who has carned his success by hard work and just methods. There is an element of sentiment in busi-

ness and the sternest man of affairs notes with pleasure that some young fellow has risen steadily and occupies a commanding position in the work or profession which he has chosen. If the man that has rises is still big enough to know that he is still only one of the boys his success is doubly valuable and his work and achievements will always be a source of delight to his friends and acquaintances, and his power in his work will continue to grow more effective because of faith and friendships based on confidence. Col. Frank Zaun, of Independence, Mo., is one of the fellows that has risen steadily and gained the confidence of the public. Not alone because of his ability to turn pure-bred stock into cash, but he never forgets that men are brothers and the lessons of honesty and fairness learned as a boy have never been forgotten by him. Col. Zaun is on the payroll of many of the best breeders in America. He has made his own way in the profession of his own choosing and stands today in the front row of big auctioneers of this country.

C. J. Winger's Bual Purpose Shorthorns.

C. J. Winger's Bual Purpose Shorthorns.

The card of C. J. Winger, of Polo, Mo, will be found in this issue of Kansas Farmer. Mr. Winger is a successful breeder of dual purpose Shorthorns, and has an offering at this time that will interest breeders and farmers wanting dual purpose cattle. While the cows offered for sale by Mr. Winger are of the blocky, beefy type, a carefully kept record shows a milking herd with a high test. A test of six head showed an average of 4½ per cent butter fat and one cow of this herd has a record of 6 per cent. The cows offered are Rosebuds, Rose of Sharons and Ianthas. A part of this offering was sired by Barnton Victor 4th, bred by W. T. Clay; others by Forest Victor, a show bull, bred by N. H. Gentry, and a few by Lavender's Laddis, sired by Wonder's Last, and bred by George Bothwell. All of the cows offered are young, and they are a high-class lot. Mr. Winger will price them worth the money, andthis is an opportunity for some one to get a herd of dual purpose Shorthorns that will be a paying proposition from the start.

andthis is an opportunity for some one to get a herd of dual purpose Shorthorns that will be a paying proposition from the start.

J. C. Robison's Percheron Sale at Towanda,

The thirteenth annual sale of 60 registered Percheron stallons and mares from the Whitewater Falls Stock Farm will be held as usual on the farm near Towanda, Butler County, Kansas, on December 28, 1911. The sale this year will include 20 stallions and 40 mares. All are registered in the Percheron Society of America, and are without doubt the grandest lot that have ever been offered from this most noted of all Percheron breeding plants in the west. The stallions are almost all ready for immediate service, several weighing a ton and over now, and some have proved themselves excellent breeders. Among those consigned are several sons of the World's Fair winner Casino, who has done ten years service on this farm and proven himself a sire without equal. One of the best of his get is the coming 2-year-old stallion Isador, winner of the first prize in class at the recent Hutchisson State Fair. There are others by Casino the same age that are almost his equal. If anyone in need of a herd sire could not find something to his liking in this sale, he certainly would be very hard to suit. There are more of the get of Casino included in this sale than has ever been sold in any of the former sales. Parties looking for stallions with age enough for good hard service can certainly film dwhat they want here. Among these are the great sires Bosquet II., Pedro, Chassseur, Abner and Reparteur. Among the younger ones that have proven themselves prize winners are the 3-year-old Blande, a prize winner at Topeka and Hutchinson this year. The grand champion prize at Hutchinson this year. The grand champion mare Ruth, by Casino, will be sold in this sale with the coming 2-year-old black stallion sired by Gales, and whose dam was Ruth, both being awarded the grand champion prize at Hutchinson. Another provides with the sale weighing from 1,800 to the control of the s

HIDES AND FUR MARKET.

HIDES AND FUR MARKET.

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HIDES—Salt cured No. 1, 13½c; No. 2, 12½c; side brands, over 40 lbs., per lb., 11½c flat; side brands, under 40 lbs., 10½c flat; bulls and stags, No. 1, 10½c; No. 2, 9¾c; glue hides, 7c flat; horse hides, No. 1, \$3.00 @3.50; No. 2, \$2.200@2.50; tallow, No. 1, 6c; No. 2, 5c; sheep pelts, 35@85c. Green uncured. Hides, 1½c less than same grade cured. Green half cured, ¾c less than cured. Green half cured, ¾c less than cured. Green half cured, ¾c less than same \$7ade cured. Green half cur

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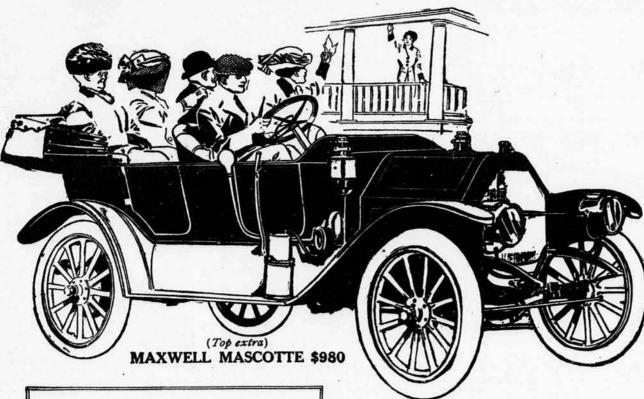
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