

KANSAS FARMER

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ESTABLISHED IN 1863
\$1.00 A YEAR

KANSAS FARMER.

Established in 1863.

Published every Thursday by the
KANSAS FARMER CO., - - TOPEKA, KANSAS

E. B. COWGILL.....President
J. B. MCALPHE.....Vice President
D. C. NELLIS.....Secretary and Treasurer

SUBSCRIPTION PRICE: \$1.00 A YEAR

E. B. COWGILL.....Editor
I. D. GRAHAM.....Associate Editor
H. A. HEATH.....Advertising Manager

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



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Display advertising, 15 cents per line, agate (fourteen lines to the inch). Continuous orders, run of the paper, \$1.54 per inch per week.

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Address all orders:

KANSAS FARMER CO.
116 West Sixth Ave., Topeka, Kans.

At this writing the striking coal miners of Pennsylvania are considering the acceptance of the plan of arbitration brought about through the efforts of President Roosevelt. Work will probably be resumed in a few days. The findings of the arbitrators can scarcely be rejected by either side. Public opinion will almost compel acceptance.

The KANSAS FARMER was last week honored by the election of its advertising manager, Mr. H. A. Heath, to the presidency of the American Agricultural Press League. The next annual meeting of the league will be held at Cleveland, Ohio. Mr. Heath has been at the head of the advertising department of the KANSAS FARMER for more than twenty-one years and is recognized as an authority on making advertising profitable to the advertiser. Not infrequently when a patron proposed a plan of advertising not likely to bring the business fairly before the prospective customer, Mr. Heath has refused the order, it being against the policy of the KANSAS FARMER to take money unless there is a prospect of returning value received.

CONSIDERATIONS AS TO ALFALFA-SOWING.

The acreage sown to alfalfa during last August was much smaller than it ought to have been or would have been but for the scarcity of seed. The long wet spell covering the usual time of ripening alfalfa seed kept the plant growing instead of making seed. It also interfered with harvesting the little seed that was formed. So, too, the wet

weather interfered with farm work so as to make it nearly impossible to take time to prepare the land or to plant, even where seed was obtainable.

The question before many farmers new is whether to sow next spring, or to wait until August. Many have been successful with spring sowing on land free from weeds. A timothy or bluegrass sod, plowed this fall or winter or early next spring and thoroughly disked and planked or rolled, and harrowed, will probably produce a good stand of alfalfa if sown as early in the spring as will be safe from frost. A good stand has sometimes been secured on a well tended, clean cornfield.

As is well recognized by all alfalfa growers, the difficulty in securing a stand from spring sowing is owing to the inability of the young plants to compete with the weeds. Late summer sowing gives an opportunity to subdue the weeds before seeding and gives the plant the opportunity to become strong before frost. The frost, when it comes, cuts down such weeds as may have started, leaving the young alfalfa a clear field in which to grow until the ground freezes. Some farmers who have both soil and seed ready will not sow in the spring but will sow Siberian millet, about the middle of April for the latitude of Topeka, and after harvesting the millet will keep the soil disked and otherwise cultivated until August 15, and will sow on that day if possible. In any case they will sow as soon after August 15 as they can, but will not sow later than September 15.

The writer believes that the farmer who has a reasonably clean piece of ground that he can put into proper condition this fall will do well to sow at least a small area next spring. This will have a fair chance of making a stand if the mowing machine be used persistently, and will likely make considerable hay next season. But securing the stand is the principal object. Whatever is secured by spring sowing will not have to take chances later and will be a perpetual source of profit.

Let the sowing of alfalfa be persisted in until at least half of the cultivated area of every farm shall be yielding its four or five crops of this valuable feed every year.

PROMOTERS' COMBINATIONS.

Word has gone out to all the world that the farmer, especially the Western farmer, is prosperous and, therefore, possessed of much money. The main question in the mind of the schemer is how to secure the transfer of this money from the pocket or the bank account of the farmer to the possession of the said schemer. This being the age of combinations and trusts under various corporate names, the power of combinations being great, the profits of some combinations being enormous, and the compensations paid to successful promoters of combinations being attractive, what more seductive field for activity could be found than that of organizing farmers into combinations or trusts. In the estimation of the average schemer, the farmer is a guy who may be easily separated from his cash or other possessions. It has, therefore, come about that the very air is full of schemes for organizing farmers into all sorts of trusts. These frequently masquerade under the good old name "cooperation."

It is said that J. Pierpont Morgan received \$10,000,000 for organizing one of the several combinations which he has "financiered." Possibly he was in position to make it cheaper for those who

were going into this combination, to pay him this enormous sum, than to do without his services and his favor. Possibly this combination may serve the public as well as was done by its several constituents and at the same time pay its shareholders more money than they were before receiving besides paying Morgan his \$10,000,000. One thing is reasonably certain, and that is that Mr. Morgan got liberal compensation for his services. But the organization of every trust is made the occasion for issuing enormous amounts of paper shares and bonds which go in the financial world under the general name of "securities." In some cases these are held by the owners of the concerns which went into the "merger," but in most cases a part or all of them are sold, or are attempted to be sold, to the investing public. By these schemes the promoters secure their own interests whether the combination becomes a business success or failure.

Theoretically every combination ought to succeed on account of the advantages and economies possible to large operations. Many of them do not succeed in paying even moderate returns on their enormous capitalization. Some fail for lack of capable or of honest management. In either case the individual shareholder is helpless.

Not all, but some of the various schemes for organizing farmers are based on the same general plan as that above described. They are intended first of all to profit the promoters. There is no objection to this in itself, but there are the questions of competency, of honesty, and of feasibility of plans which must be looked into.

The KANSAS FARMER has recently received the prospectuses of several proposed farmers' combinations with requests to push them along, and with suggestions of commissions, advertising patronage, official positions in the concerns, etc. This is written to put farmers on their guard.

The home cooperative shipping association is generally a good thing. These shipping associations in Kansas can and do cooperate through the State association to the mutual advantage of themselves and their members. There may arise—there may now be in existence—a general or national association which will prove beneficial and safe, but the KANSAS FARMER has not been able to assure itself sufficiently on any of these large schemes to give them its endorsement.

THE PROPOSED CONSTITUTIONAL AMENDMENTS.

EDITOR KANSAS FARMER:—Please explain the constitutional amendments to be voted on at the next election, and oblige a host of voters.

Topeka, Kans. A. J. GILLESPIE.

One of the proposed amendments provides more liberal compensation for members of the legislature. As the constitution now is, a member of the legislature receives \$3 per day and mileage at fifteen cents per mile each way. Regular sessions are limited to fifty days and special sessions to thirty days each. The amendment provides compensation of \$500 for a regular session, \$5 per day for a special session, and mileage at three cents per mile. Special sessions are seldom called.

The other amendment pertains to the time of election of township and county officers. By act of the last legislature the election of county officers except

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the county commissioners was made to occur simultaneously with the election of State officers and congressmen. But section 3 of article 9 of the constitution provides three-year terms for the county commissioners, one to be elected each year. It was therefore impossible for the legislature to make the election of county commissioners conform to the biennial plan. Township officers' terms are for but one year according to the present constitution. This amendment lengthens the term of county commissioners to six years and provides for the election of one every two years. It lengthens the terms of township officers to two years. Annual elections are to be discontinued and all officers, State, county, and township, are to be elected on the Tuesday after the first Monday in each even-numbered year.

This last amendment is in the interest of economy and is not likely to impair the public service.

The first amendment here described is in line with the demand of everybody, especially those who get at the public treasury, for more pay. Nevertheless election to the legislature is sought by the best men in every county. This proposition can be proven by the candidates themselves, by all of their friends, and by the universal testimony of the partizan press. On the part of the State, then, the service could not be improved by increasing the pay. Men are not made more honest by more pay. If then the positions are so desirable as to be eagerly competed for by the best men and if the service is not to be improved, why should the pay be increased?

THE AMERICAN ROYAL SHOW.

For the American Royal Cattle and Swine Show to be held in Kansas City, October 20 to 25 inclusive, the railroads of Texas have made the unusual concession of a flat one-fare rate for the round trip, with a liberal time limit. This rate applies to the entire territory of the Southwestern Passenger Bureau which includes southeastern Kansas, and parts of Oklahoma and the Indian Territory. The rate from other points is one fare plus \$2 for the round trip.

Each day makes it more plain that this year's show will be far greater than any of its predecessors. Reports from the headquarters of the Hereford, Shorthorn, Galloway, and Aberdeen-Angus breeding associations are to the effect that the number of cattle entered for the show will be greater than for any cattle show ever held in this country. Secretary Thomas of the Hereford association says approximately 300 animals will be entered in the individual classes in the Hereford division, and as many more in the carload-lot classes. Eleven carload lots of Herefords had been entered up to October 1, and the time for receiving entries was extended to October 18 in order to accommodate a number of cattlemen who are waiting to see if they can get their animals in condition for the show. The Cady & Olmstead Jewelry Company of Kansas City has offered a special prize of a sterling silver cup valued at \$100 for the best four animals, either sex, the get of one sire, open to all breeds. This prize will bring out the finest lot of cattle ever seen in one ring.

It has been ten years since there was an exhibit of Angus cattle in this city. This year the Angus breeders are going to exert themselves, and W. C. McGavock, manager of the Angus division of the show, says that every prominent breeder of "doddies" in the United States will be represented. Among the animals entered will be the famous show heifer, Blackcap Judy, which sold last February for \$6,300, and which was undefeated until last week when a heifer recently imported from the herd of Lord Roseberry of England, won over her at the Illinois State Fair. The imported heifer was defeated for the championship by an American cow. The three animals will meet at Kansas City, and are sure to excite great interest.

The swine department of the show promises to be very successful. The number of entries of Berkshires, Poland-Chinas, and Duroc-Jerseys will be large.

The live-stock interests of Kansas City are preparing to make the visit of the breeders and stockmen to Kansas City during the American Royal Cattle and Swine Show pleasant as well as profitable. The Kansas City Live Stock Exchange and the Traders' Live Stock Exchange have jointly outlined a plan

for entertaining the visitors, which is at once unique and practical. The show will be held at the stock yards during the day time, the visitors having their nights to spend at the horse show, the theaters and other places of amusement. In addition to the band which will be on duty all day in the show tent, one of the best bands in the city has been engaged to give a daily free concert from 1 to 2 p. m. in front of the Live Stock Exchange Building. An office room on the first floor of the building is being fitted up as a bureau of information. It will be in charge of a force of young men thoroughly familiar with the city, and a corps of experienced messenger boys will be at the disposal of the visitors to act as guides. One of the features of this bureau of information will be a boarding house directory, where visitors may receive information, free of charge, regarding desirable rooms in boarding houses and private residences, together with rates and accommodations. In view of the fact that the hotels are likely to be crowded this week, this boarding house directory will be found of great value to strangers. It will be the business of the information bureau to furnish information on any subject desired regarding the city, places of interest, streets, street railways, running of trains, amusements, and the like. Visitors to the show are expected to freely avail themselves of it.

The stock yards company and the managements of the big packing houses are making especial arrangements for the entertainment of visitors during the show week. Every facility will be afforded strangers for seeing all there is to be seen. It is expected that the cattle and swine show and the horse show will bring out the biggest crowd of the year, and the city will exert itself to see that the visitors are well entertained.

RURAL ROUTE EXTENSION.

With the prosperity that has come to all classes in the strenuous times in which we live, the farmer has reaped a goodly share of the amenities of life. What with the rural free mail delivery, the rural telephones, and the rural trolley car system, the farmer has much of the advantages that have heretofore accrued only to the urban citizen, while he still retains all of the advantages afforded by rural life. The growth of the rural mail delivery system has been phenomenal and with its development have come improvements which have



SEVEN RURAL ROUTE WAGONS LEAVING THE CALDWELL POSTOFFICE.

rendered it vastly more useful. Formerly it was the custom of the post-office department to require a petition signed by a certain number of residents along the proposed route, before action would be taken toward the establishment of such a route. Now, however, the department has adopted a policy of sending out its special agents to certain designated counties, with instructions to route the county on what is known as the county system. The first experiment of this kind was made in McPherson County, Kans., under the direction of Col. H. M. Ormsby, who gave that county twenty-seven routes, to the satisfaction of its citizens and the envy of other counties. Later on he took Sumner County in charge, and platted the county with sixty-two routes which is said to be the most satisfactory effort of this kind that has been made. Through the kindness of Postmaster John W. Nyce, of Caldwell, we are enabled to give a picture of the seven mail wagons which daily leave his office to supply the patrons of the seven routes which were apportioned to him. It will be noticed that these mail wagons are uniform and handsome, and Postmaster Nyce undoubtedly has the satisfaction of knowing that he has one of the best-equipped rural route systems

of such vital importance in fattening that it is doubtful whether any hard and fast rule can be made to work fairly. However, the editor will be glad to hear from any who have had experience along the line suggested.

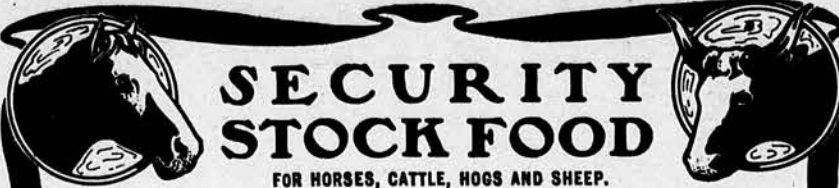
Treatment of Alkali Land.

PRESS BULLETIN NEW MEXICO COLLEGE OF AGRICULTURE.

The New Mexico Experiment Station at Mesilla Park has recently published two bulletins on alkali which should prove interesting to many people in the territory.

Bulletin 42, on alkali, aims to answer some of the principal questions as to the composition of alkali; differences between black and white alkali; source of alkali; why it tends to accumulate more rapidly in some places than in others; methods of preventing its accumulation; effects of manure on alkali land; various methods which have been tried for removing alkali from the soil and amount injurious to crops. At the end of the bulletin there is a list of publications bearing on the subject.

Bulletin 43, on drainage and flooding for the removal of alkali, discusses in detail an experiment which was begun near Roswell, N. M., for the purpose of



SECURITY STOCK FOOD

FOR HORSES, CATTLE, HOGS AND SHEEP.

Contains 42 feeds to the pound, to only 7 feeds of some others—a pound thus going six times as far as a pound of the others. Highly concentrated and perfectly pure. Greatest fattener known. Less feed required and better results obtained. **Costs only 8 cents a month to feed Hogs and Sheep, and 16 cents for Horses and Cattle.** Nature's own regulator. Every domestic animal benefitted by its use. Should be on every farm and ranch in the country. Try it and you will use no other. Money refunded if not all we claim for it.

SECURITY STOCK FOOD CO., MINNEAPOLIS, MINN.

in the United States. The KANSAS FARMER extends congratulations to the citizens of this favored county on the fact that they not only have the best rural mail system that has yet been inaugurated as well as on the fact that they will receive the weekly visits of the KANSAS FARMER more promptly and will have the papers delivered at their front gates.

LIVE STOCK INQUIRIES.

EDITOR KANSAS FARMER:—(1) At what age, if any, is a thoroughbred bull or heifer disqualified from registry?

(2) What is the generally accepted rule for the division of a beef fattened on shares? By this I mean the proportion to which each party interested is entitled.

L. C. WATERS.

Berryton, Shawnee County.

(1) Rule 8 of "Rules for Entry," in the American Shorthorn Record, is the only one that refers to an age limit. It says: "A fee of \$10 shall be charged for entering the pedigree of an animal over 4 years of age; provided, that only a fee of \$1 shall be charged to correct a material error or re-record the pedigree of a cow when additional produce is furnished."

There appears to be no age limit to absolutely prohibit registry. At the meeting of the directors held December 7, 1901, Rule 8 was amended making the age 3 years at which the \$10 fee shall be charged from and after January 1, 1903.

2. The editor is not conversant with the custom of fattening heaves on shares, indeed is not informed whether such custom prevails. The age, quality, and condition of the animals and the abundance or scarcity of feed are ele-

improving a piece of alkali land by this method, and at the same time of learning something of the cost of the method. The cost of drainage depends mainly on the depths of the drains and their distance apart; and both of these points have to be found by actual trial, because they vary considerably with different kinds and conditions of soil.

The results show that in that soil, a ditch less than three feet deep is practically of no value; and that an eight-foot ditch lowers the water to three feet or below, for a distance of about 300 feet on either side.

The flooding was found to wash out the salts more slowly than it was expected to do; but, ten floodings on the native salt grass sod were found to remove about one-seventh of the salt from the first two feet of soil. Covered drains are cheaper in the end than open ones, although their first cost is greater. The present cost of tile makes it probable that a combination of open and covered drains will be most satisfactory and economical. Such a combination of open and tile drains will probably cost from \$20 to \$30 per acre.

Any one interested can obtain a copy of these bulletins by addressing the Experiment Station, at Mesilla Park, N. M.

KANSAS FARMER'S NEW WALL ATLAS.

The KANSAS FARMER has arranged with the leading publisher of maps and atlases to prepare especially for us a new Wall Atlas, showing colored reference maps of Kansas, Oklahoma, Indian Territory, the United States, and the World with the 1900 census.

The size of our new Wall Atlas is 22 by 28 inches. The outside map shows the flags of the United States as well as the flags of all the nations. In addition thereto is given a list of tables, and exhibit of the products and their values of the United States and the World. One of the maps shows all States, Territories and possessions of the greater United States and facts as to their capitals and the first settlements and in relation to their general government, areas, population, and legislature.

The atlas also gives the growth of our country, showing the population of all towns by States, of 3,000 and over for the census years of 1880, 1890, and 1900.

This grand new census edition atlas also shows for every country on earth, the government, chief executive, area in square miles, population, capital and its population. This excellent educational work should be in every home. It sells for one dollar.

Every one of our old subscribers who will send us two new subscribers at 50 cents each for the remainder of the year, will receive a copy of this splendid new Wall Atlas postage prepaid.

Deafness Can Not Be Cured

By local applications, as they can not reach the diseased portion of the ear. There is only one way to cure Deafness, and that is by constitutional remedies. Deafness is caused by an inflamed condition of the mucous lining of the Eustachian Tube. When this tube gets inflamed you have a rumbling sound or imperfect hearing, and when it is entirely closed Deafness is the result, and unless the inflammation can be taken out and this tube restored to its normal condition, hearing will be destroyed forever; nine cases out of ten are caused by catarrh, which is nothing but an inflamed condition of the mucous surfaces.

We will give One Hundred Dollars for any case of Deafness (caused by catarrh) that can not be cured by Hall's Catarrh Cure. Send for circulars, free.

F. J. CHENEY & CO., Toledo, O.
Sold by Druggists, 75c.
Hall's Family Pills are the best.



\$15.65 WINDMILL

FOR \$15.65 we furnish the highest grade 8-FOOT Galvanized Steel Windmill made. FOR \$10.45 we furnish the highest grade 6-FOOT GALVANIZED STEEL TOWER made. FOR LOWEST PRICES EVER KNOWN on windmills and towers, all kinds and sizes, and most liberal prices offered ever heard of, write for FREE WINDMILL CATALOGUE. SEARS, ROEBUCK & CO., Chicago.

I Will Cure You of Rheumatism

Else No Money Is Wanted

After 2,000 experiments, I have learned how to cure Rheumatism. Not to turn bony joints into flesh again; that is impossible. But I can cure the disease always, at any stage, and forever.

I ask for no money. Simply write me a postal and I will send you an order on your nearest druggist for six bottles Dr. Shoop's Rheumatic Cure, for every druggist keeps it. Use it for a month and, if it succeeds, the cost is only \$5.50. If it fails, I will pay your druggist myself.

I have no samples, because any medicine that can affect Rheumatism quickly must be drugged to the verge of danger. I use no such drugs, and it is folly to take them. You must get the disease out of the blood.

My remedy does that, even in the most difficult, obstinate cases. No matter how impossible this seems to you, I know it and I take the risk. I have cured tens of thousands of cases in this way, and my records show that 39 out of 40 who get those six bottles pay gladly. I have learned that people in general are honest with a physician who cures them. That is all I ask. If I fail I don't expect a penny from you.

Simply write me a postal card or letter. I will send you my book about Rheumatism, and an order for the medicine. Take it for a month, as it won't harm you anyway. If it fails, it is free, and I leave the decision with you. Address Dr. Shoop, Box 529, Racine, Wis.

Mild cases, not chronic, are often cured by one or two bottles. At all druggists.

The Stock Interest.

Market Classes and Grades of Cattle with Suggestions for Interpreting Market Quotations.

From Bulletin No. 78, by Herbert W. Mumford, B. S., Professor of Animal Husbandry, College of Agriculture, and Chief in Animal Husbandry Illinois Agricultural Experiment Station.

(Continued from last week.)

BUTCHER STOCK.

Butcher stock, cutters and canners may be looked upon by cattle men of the Central West as by-products of the cattle-feeding industry. However carefully stockers and feeders are selected one is almost sure to get a few animals that do not fatten satisfactorily.

classes of cattle. Owing to their lack of quality they are seldom used as feeders.

The bulk of butcher stock is made up of fat cows, heifers, and bulls; they are graded as follows:

	Pounds.
Prime heifers.....	800-1200
Choice heifers.....	700-1000
Good heifers.....	700-1000
Medium heifers.....	600-900
Prime cows.....	
Choice cows.....	
Good cows.....	
Medium cows.....	
Common rough steers.....	800-1200
Choice bulls.....	
Good bulls.....	
Medium bulls.....	

PRIME HEIFERS.

The same conformation, quality, and condition are demanded in prime heifers that have already been noted as characteristic of prime steers.

heifers as to quality, condition, and conformation to grade as medium heifers than it does in steers to grade as medium steers. Such heifers seldom show much quality and invariably show a decided lack of flesh. The bulk of medium heifers like medium steers are light weight.

PRIME COWS.

This grade includes a very small number of strictly fancy, well bred cows in prime condition. Such cows are often taken for export. They are the only grade of cows on the market which are not open to criticism by buyers wanting fat cows; in other words they are practically above criticism as to conformation, quality, and condition. These cows are often used by packers for the same purposes for which they use steers.

cutters. Such cows are decidedly lacking in form, condition, and quality. They belong to the lowest grade of cows, the carcasses of which may all be used to sell over the block.

COMMON ROUGH STEERS.

Steers of this grade lack very noticeably in form, quality, and condition. Ideal beef form is not looked for in common rough steers. Whether a lack of quality or condition is more apparent depends upon market and crop conditions. Generally speaking a lack of quality is the more apparent.

CHOICE BULLS.

To be choice, bulls must possess quality of beef blood to a high degree and along with that quality should go fine finish. Comparatively few choice bulls reach the Chicago market and when they do, they are frequently bought for export. About one-third of the choice bulls are used for dressed beef. They must be entirely free from that roughness and coarseness which characterize so many aged bulls. The supply of choice bulls is made up largely of aged bulls.

GOOD BULLS.

Good bulls contain a high percentage of beef blood, or at any rate they carry the flesh and show the conformation which usually accompany well-bred beef bulls. They frequently lack both in quality and condition, but a decided lack of either may furnish sufficient reason for their being classed as good and not as choice bulls. Bulls of this class are often exported.

MEDIUM BULLS.

Medium bulls lack both condition and quality to a marked degree. They are usually thin fleshed, long legged, coarse fellows. They are too good to be classed either as Bologna bulls or canners and still inferior both as to quality and condition. This is the lowest grade of bulls used for block beef. The line between medium butcher bulls and Bologna bulls is not definitely drawn. It varies from time to time with the demand for butcher stock and Bologna bulls.

STAGS.

Stags are not included in the mar-

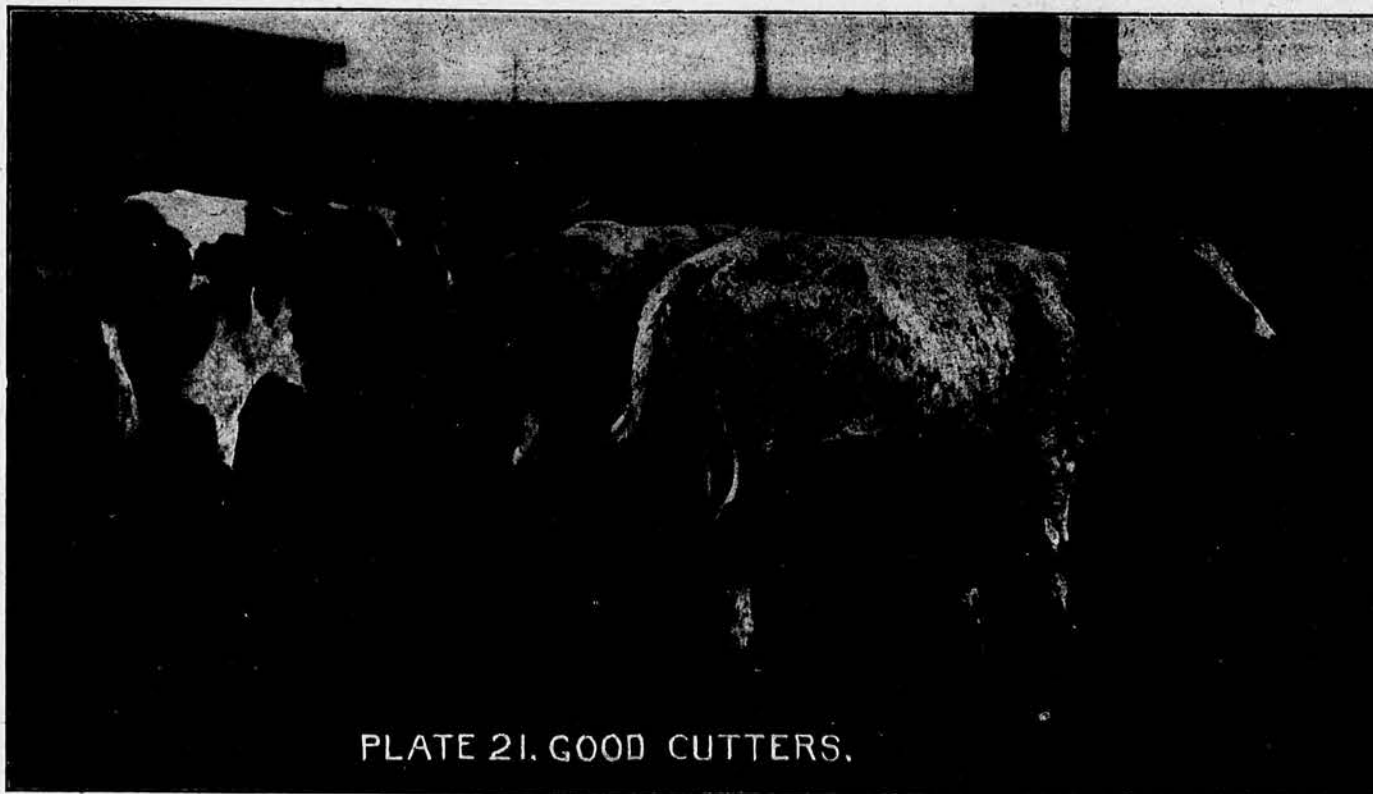


PLATE 21. GOOD CUTTERS.

These ultimately find their way to the local or Chicago market; in either case they would be classed as butcher stock.

Not all butcher stock, however, had an opportunity to become finished. Quite a large number of cattle of all grades as to weight and quality reach the market after having been only "warmed up," an expression that is applied to thinnish cattle that have been full-fed but a short time, during which time they have made such gains that they begin to show the effects of feeding. Such cattle are usually classed as butcher stock.

The line between the thinner steers belonging to the butcher stock class and fleshy stockers and feeders is not clearly defined. Whether a thin steer belongs to the butcher stock or the stockers and feeder class will depend largely upon the supply of cattle of the better grades although the quality of the offerings may have some influence upon the final disposition of such animals. If the supply of fat cattle is much short of the demand, buyers of cattle for slaughter are forced to take some of the thinner grades, that would ordinarily be classed as stockers and feeders. Then again when there is a liberal supply of fat cattle some rather well-fleshed lots sell as stockers and feeders. In the former case cattle of the thinner grades are slaughtered and prices are paid for them that feeders do not see their way clear to pay; while in the latter instance feeders are more liberal buyers owing to the moderate prices prevailing for such stock. The better the quality of the offerings the more apt they are to be used for further feeding. It should be borne in mind that the bulk of butcher stock is made up of cows and heifers.

In general, very few steers of good quality are ever classed as butcher stock. A steer of good or choice quality that is not fat enough to be classed as a beef steer is classed among the better grades of stockers and feeders. We find much better quality in butcher heifers than among butcher steers. Butcher stock then includes, so far as steers are concerned, only the poorer grades such as common rough steers that may be classed either as beef cattle, butcher stock, or stockers and feeders, the classification depending upon the supply and demand for the various

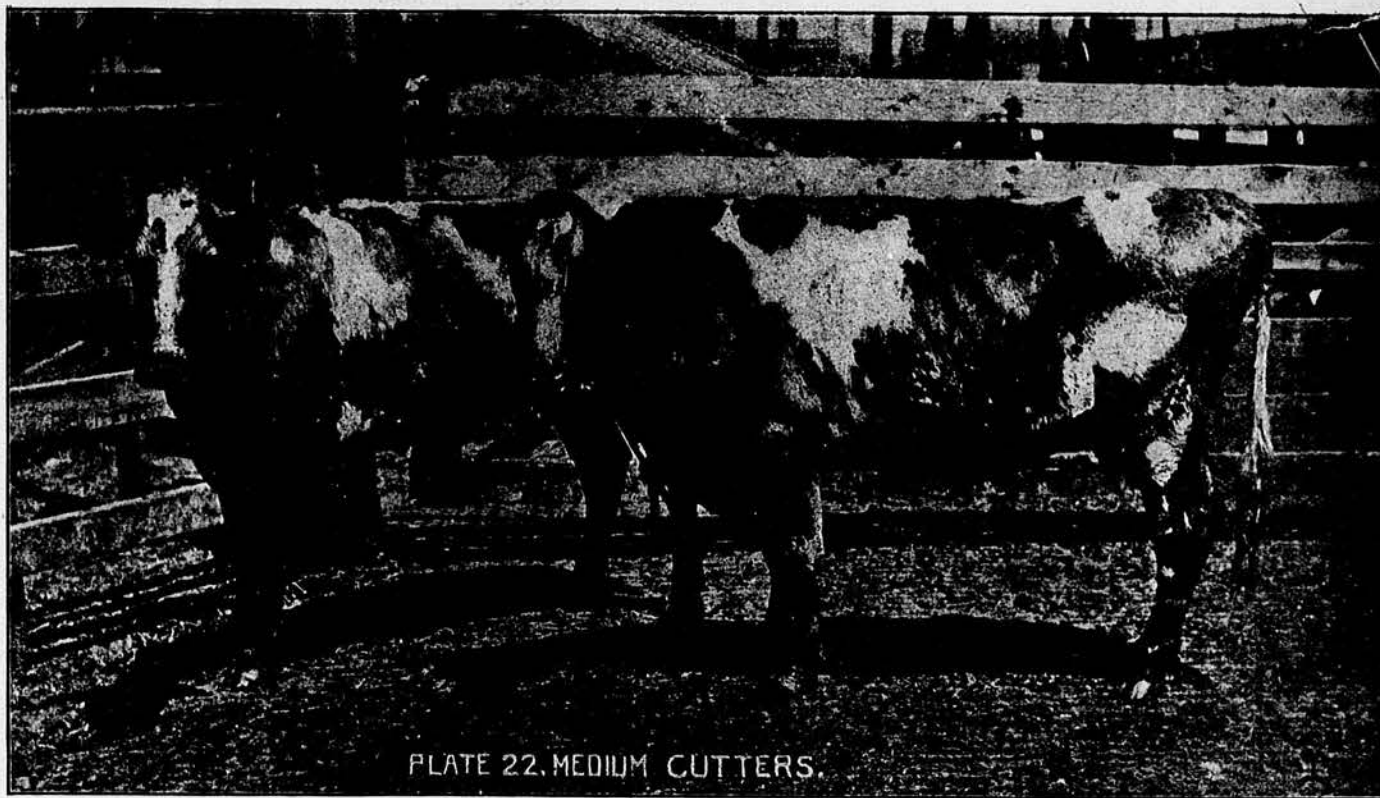


PLATE 22. MEDIUM CUTTERS.

CHOICE HEIFERS.

Choice heifers must possess quality, and condition to a marked degree although they lack the faultless quality and finish that characterize prime heifers. They are good enough to convert into the better grades of block beef. To secure the necessary quality to be classed in this grade they must show unmistakable evidence of carrying a high percentage of the blood of some one or more of the breeds of beef cattle.

GOOD HEIFERS.

Good heifers may and usually do lack both in condition and quality, although a heifer of choice quality might be classed as a good heifer simply because she was deficient in condition. Good heifers must have a conformation that indicates that they will dress out a good percentage of beef and fat.

MEDIUM HEIFERS.

As a usual thing it requires better

CHOICE COWS.

Cows of this grade must be in prime condition, but may lack some of the quality and breeding shown by prime cows; they are fit for export and on some markets sell for nearly as much as choice heifers. Frequently a few choice cows like choice heifers are shipped to market in the same car with steers and sell for a uniform price in which case they may be used for the same purposes.

GOOD COWS.

Good cows lack both in condition and quality. They are fat enough, however, to make carcass beef and possess a conformation which indicates that they are reasonably good killers. To bring an average market price they must, of course, be considerably better than the average butcher stock cows.

MEDIUM COWS.

Medium cows are sometimes called "beef cows" to distinguish them from

ket classification because relatively only a few are coming to market. In the few sent forward there is a great range of quality, condition, and weight. Some of the better grades are exported, while the most inferior offerings go for canners. Plate 28 shows a choice stag which went for export and would be good enough for the better grades of dressed beef.

CUTTERS AND CANNERS.

The impression prevails among those unfamiliar with the trade that only old, thin cows are classed as canners, and this inexperience naturally renders such unable to appreciate the variations that exist in the value of different individuals in the same class. The truth of the matter is that wretchedly thin fleshed bulls, steers and heifers as well as cows are included in this class. An attempt to become familiar with this branch of the cattle trade will quickly reveal the fact that like the buying and selling of other classes of cattle the buying

and selling of canners and cutters requires a thorough knowledge of this class of cattle and the purposes for which they are used. It is a mistake to assume that there is only one grade of canners and cutters for there are several and each is as distinctly different as are the grades of fat cattle. In an attempt to fix their value to the slaughterer, there is, perhaps no other class of cattle which presents such great difficulties to the novice as this one. The form or conformation of a cow counts

cannot of course be more than mentioned in a discussion of this nature. They are changes which are always noted in market reports. As a general guide it may be borne in mind that a scarcity of beef cattle of all grades forces packers to use cattle for cutting and block purposes that would ordinarily be used as canners. Good cutters might be classed as butcher stock when such cattle are in strong demand and the supply is limited.

an animal is a little too good to be classed and graded as a good cutter it would be classed as butcher stock and graded as medium. The grade of cattle, therefore, spoken of as good canners, is just a grade lower than medium or beef cows, heifers, and bulls. They lack the conformation and flesh which should prevail in such stock. The bulk of the offerings in this grade consist of farrow dairy cows that carry some flesh, but not enough to warrant an attempt to use all as carcass beef.

eligibility of an animal to the better grades of this class. Quality or beef breeding has little to do with it since the majority of canners and cutters are dairy bred stuff.

COMMON CUTTERS AND GOOD CANNERS.

Common cutters and good canners may be considered in the same grade, as they are between canners and cutters. The dividing line between the two is far from being definitely drawn. It is determined by the supply of and de-

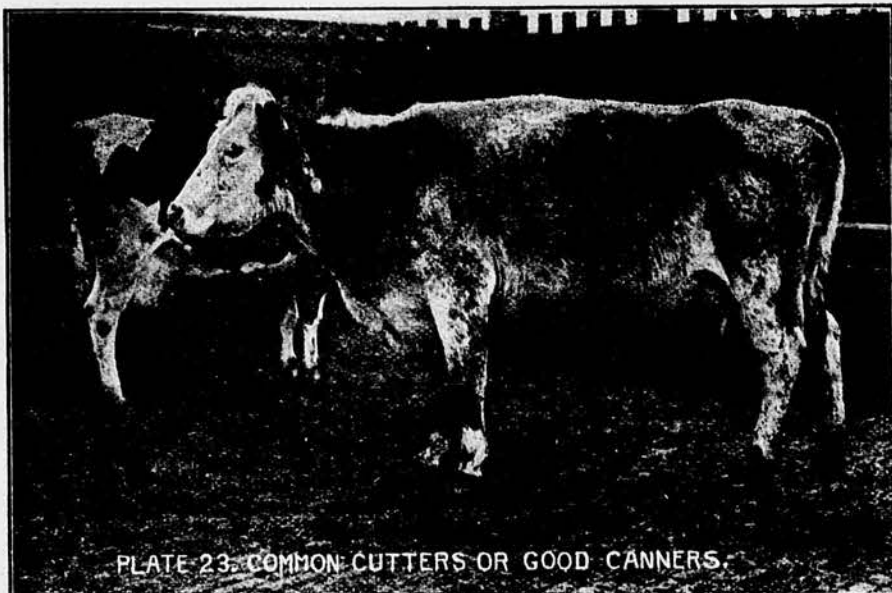


PLATE 23. COMMON CUTTERS OR GOOD CANNERS.



PLATE 25. INFERIOR CANNER COWS.

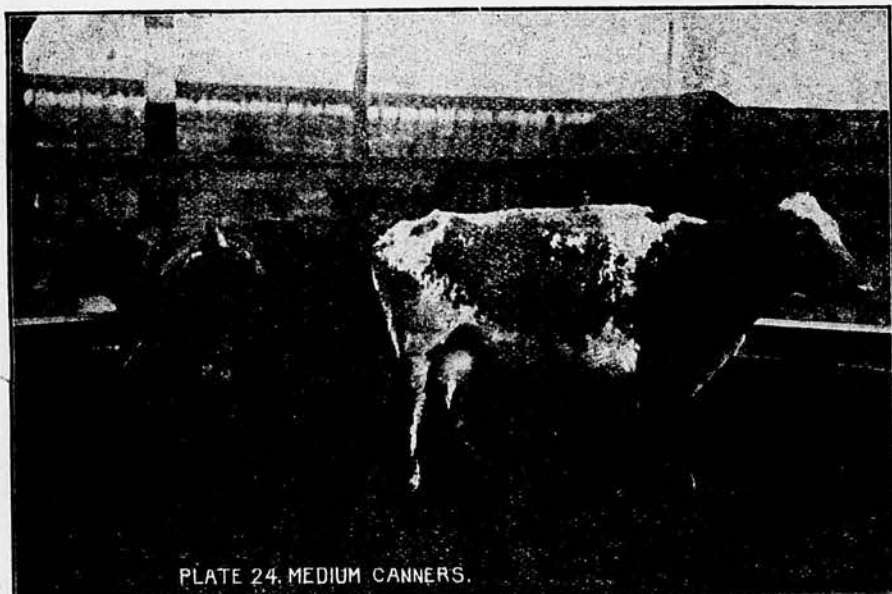


PLATE 24. MEDIUM CANNERS.

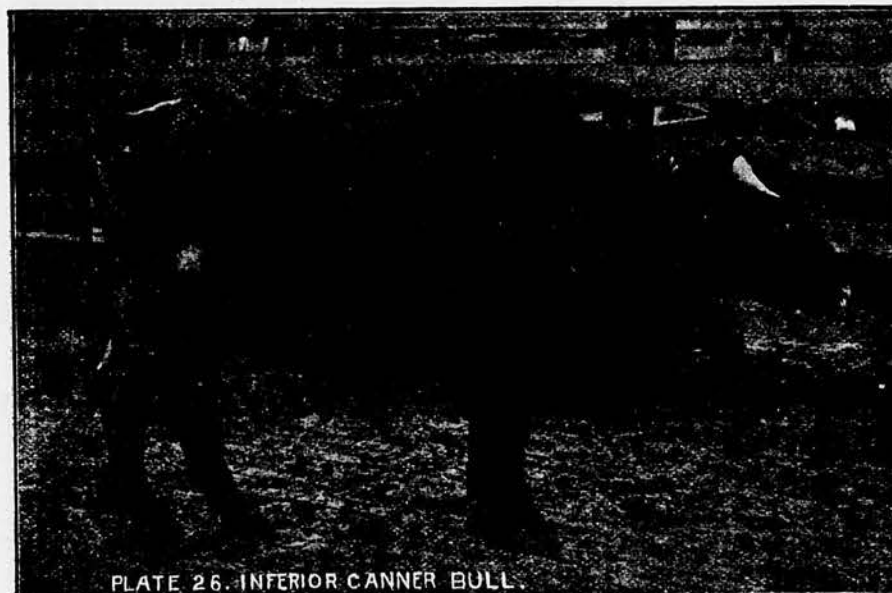


PLATE 26. INFERIOR CANNER BULL.

for more as indicating the value of the animal than it does in the better market classes and grades of cattle. When the significance of the fact is realized that some cows dress out 60 per cent of dressed beef while others dress only 35 per cent, the importance of a close study of this class of cattle by the buyer is appreciated, if he hopes to secure a profit from their slaughter.

Canners include thin cows, inferior steers, heifers, bulls, and stags, and in fact anything of a low, inferior grade that is too lacking in flesh to permit of even a part of the carcass being used for block purposes. Cutter include the better grades of the same general class. Cutters must carry sufficient flesh to permit of the loin or rib, or both being used for cutting or selling over the butcher's block. The class of canners and cutters and the grades within this class are more or less elastic and variable as are all market classes and the various grades within them. A thin cow, inferior steer, heifer or bull that might be classed as a cutter today may be classed as a canner tomorrow. Such radical changes of market conditions

The bulk of cattle classed as cutters and canners may be graded as follows:

Good cutters.....
Medium cutters.....
Common cutters and good canners...
Medium canners.....
Inferior canners.....
Bologna bulls.....

GOOD CUTTERS.

From the very nature of the cattle with which we are now concerned it can not be said that there is anything in the cutter line that is choice. When

MEDIUM CUTTERS.

Low grade, thin cattle may be classed as medium cutters simply because they do not have the conformation which indicates an ability to dress a relatively high percentage of carcass to live weight or they may be noticeably lacking in flesh.

The fact should be emphasized that it is the conformation indicating an ability to dress a high percentage together with the possession of a moderate amount of flesh that determines the

mand for such stock rather than the quality and condition of the offerings. It is believed that more can be learned from a careful study of the cut illustrating this grade than from any description that might be given.

MEDIUM CANNERS.

Market conditions seldom, if ever, vary enough so that medium canners would ever grade as cutters. The experienced buyer or salesman knows at a glance that such stock are canners and can never be looked upon as possessing flesh enough to be used for any other purpose. They are rough and angular and decidedly devoid of flesh.

INFERIOR CANNERS.

Inferior canners are honored by more significant names than any other class of cattle around the yards. Canners must be inferior to a marked degree to be so graded or to attract any particular attention from salesmen or buyers. If they are clearly of the inferior order they may be referred to as "Dairy maids," "Nellies," "Hat racks," or "Skins." Plates 25 and 26. The former shows inferior canner cows and the latter an inferior canner bull. The bull shown in Plate

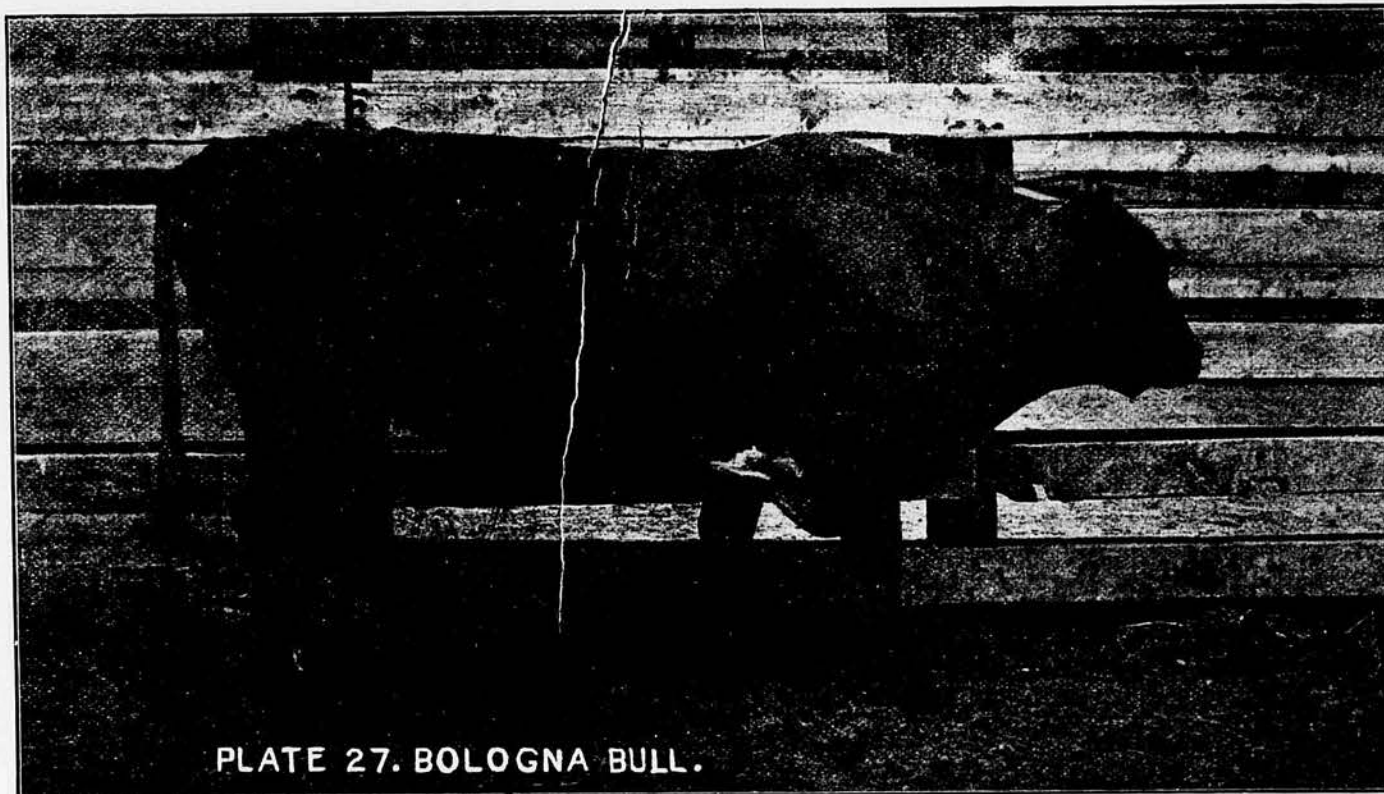


PLATE 27. BOLOGNA BULL.

26 sold on the Chicago market June 25, 1902, for a total of \$7.00.

BOLOGNA BULLS.

Bologna bulls are a grade lower than medium butcher bulls, notice of which has been made previously in this bulletin. They lack the flesh, and conformation so manifestly characteristic of well-conditioned beef-animals. In this class we find a somewhat wide range of quality, flesh, conformation, and weight. It includes all bulls between medium butcher, and canner bulls. A part of the loins and ribs of bologna bulls are used for block purposes, hence, they would grade as cutters rather than as canners.

(To be continued.)

International Live Stock Exposition.

The program committee of the International Live Stock Exposition to be

pens and inks. Textile fabrics and their dyes owe almost everything to chemical science. In nearly all the manufacturing arts, chemistry is the chief factor. In the agricultural arts it is the dominant science. In Kansas, chemistry has developed the deposits of coal, of oil and gas, of gypsum and building stones, and of materials for the manufacture of cement. Here in this university has been made a careful study of your mineral waters, which can not fail of bringing material profit to your people. The wonderful fertility of your fields has heretofore shown little need of chemical study, but you should not lose sight of the fact that the continued prosperity and advancement of agriculture must depend largely on chemical investigations. The conservation and increase of plant food, looking to an increasing yield of crops

become more productive and each step in advance is retained and becomes the base for further progress. We may confidently predict that the future years will see abundant food for the increasing millions of population. Life will have less of labor and more of leisure for study and recreation. In all the arts which will help in the amelioration of the conditions of existence, chemistry will enter as an important part.

The State builds well, therefore, in an endowment of the kind we celebrate today. As in astronomy we study the infinitely great, so in chemistry we investigate the infinitely small. We seek the very nature and origin of matter and thus come near to those first combinations of simple cells which condition the vital spark.

In the early history of the race, we find men dedicating fountains, and

Horse Owners! Use

GOMBAULT'S

Caustic Balsam



A Safe, Speedy, and Positive Cure
The safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar or blemish. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars.
THE LAWRENCE-WILLIAMS CO., Cleveland, O.

find the leaders of the people among the graduates of the universities, because if the universities are not remiss in their duties, their graduates will be better fitted for leadership. There is no talisman in a diploma. Only ability will count. We recognize the important contributions which all branches of learning will make to this equipment of the successful man of the coming years. In dedicating this building to chemical science, it has seemed only meet to point out some of the ways in which our science may aid in the work.

Exports Again Large.

The export figures for September are extremely encouraging. They are the largest ever shown for September, with the single exception of that month in the year 1900, and fall less than a half million dollars below the high water mark made in that year. The figures, as just presented by the Treasury Bureau of Statistics, show the total exports in September 1902 to be \$115,521,984, against \$106,989,926 in September 1901, and \$115,901,722 in September 1900, the highest figure ever shown by September exportations. Comparing present conditions with those of earlier years, the figures for September 1902 are 25 per cent in excess of those of September 1898, 50 per cent greater than those of September 1890, more than double those of September 1888, and nearly three times as great as those of September

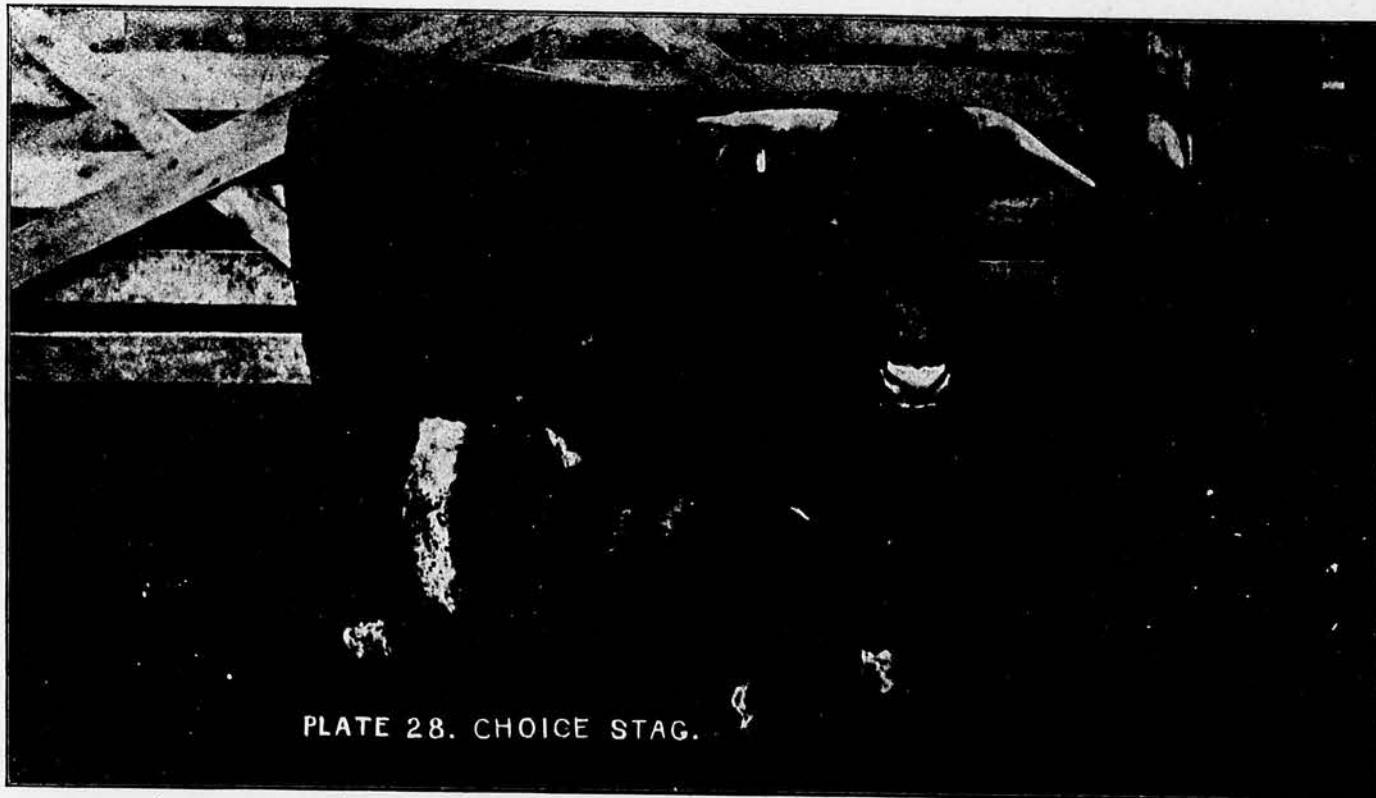


PLATE 28. CHOICE STAG.

held at Chicago November 29 to December 6, announce the following program for special events during the week of the grand exposition, which will no doubt prove of interest to intending visitors.

Monday, December 1, is designated as Agricultural College Students' day; Tuesday, December 2, Chicago Day; Wednesday, December 3, formal opening of the new building to be devoted to live stock and agriculture. It is hoped that M. J. J. Hill, president of the Great Northern Railway, will conduct the formal opening ceremonies, in which he will be assisted by the Governors of several States who have signified their intention of being present. Wednesday is also Governors' Day. Ten or twelve Governors have promised to attend. Thursday, December 4, is for railway men and the Live Stock Sanitary Board; Friday, December 5, Live Stock Association Day. A large number of National Live Stock Associations hold their annual meetings during the week in Chicago, so that a big meeting is expected. Saturday, December 6, in the forenoon, will be for school children, accompanied by teachers.

The program at judging and evening events will be published later.

Chemistry's Service to the Race.

Excerpts from address of Dr. H. W. Wiley, chemist U. S. Department of Agriculture, at the dedication of the new chemistry building at the Kansas State University.

Among the useful sciences none compares with chemistry in nearness to human needs and in ability to supply them. We have already seen what an important adjunct it is in the study of other sciences. Equally as potent is it in its relations to the useful arts. Many standards may be used in measuring the progress of a nation and its relative position in respect to other countries. Some would gauge its progress by its churches; some by its schools; some by the liberties of the people and some by the reverence paid its women. I have often said, to descend to more material things, that the most reliable rule with which to measure the progress of a people is the quantity of sugar and soap it consumes. Sugar and soap are only illustrations of what the chemical arts have done for man.

There is scarcely one into which chemistry does not enter. Iron and steel are chemical products; so are paper,



PLATE 29. FANCY SELECTED FEEDERS.

must condition any lasting agricultural prosperity. The demands on agriculture increase with each passing year, and science will show the way to make surely productive those areas which are now of little value because of deficient rainfall. Water is the chemical reagent which is most potent in crop production. The chemist and the physicist, with the help of the engineer, will show the way to its most economical utilization.

Chemistry will supply the mineral foods which the plant needs. In the early history of a new country we uniformly notice the rapid decrease in the fertility of the virgin soil. This is due to a system of farming little better than robbery. Its basic principle is to take from the soil everything possible and give nothing in return. Necessity finally puts an end to such practices and education provides the means for the inauguration of scientific agriculture. Then the exhausted fertility of the soil begins to return. The fields

groves, and temples to the worship of mythical deities. To-day we set apart churches, and schools, and libraries for the public good.

More than a liberal training, more than professional ability and technical skill are those attributes of the man which make him a source of help to the family, the community, the municipality and the State. Providence in the family, morality in the community, public spirit in the municipality and patriotism in the State are the real purposes of all training. To these ends the educated man must be a bread winner, of upright conduct, ready to give his services to the city and his life to the republic. He must know how to produce wealth. He must be acquainted with the needs of the community. He must understand the service he is to render to the municipality and have that enlightened patriotism which, while not separating from a political party, acts first of all for the good of the whole people. The future years will

1885. This seems to indicate that the downward tendency in the export trade caused by the corn crop failure of last year has reached its lowest point and that the reverse movement towards normal conditions has begun. Following the failure of the corn crop last year the exports tended steadily downward. Beginning with October 1901, in which the export figures were 145 million dollars, the movement was steadily downward until they reached 88 millions in July of the present year. In August the upward movement began, reaching 94 millions, and in September 115 millions, which is about 9 millions in excess of September of last year.

This decrease in exports, as is well known, was due to the corn crop failure of last year and to the low price of cotton; and while the new corn crop has not yet begun to make its appearance in the export figures of the Bureau of Statistics, the movement of the new cotton year has been active and is the principal cause of the upward trend in

the export figures. The cotton exports for September were 347 million pounds, valued at 30 million dollars. In round terms, against 200 million pounds valued at 16 million dollars in September of last year, and less than 200 million pounds valued at 20 million dollars in September of the preceding year, 1900. Even breadstuffs showed a decidedly upward tendency in the export movement during September, the total value of breadstuffs exported in September 1902 being 22 million dollars, against 12 millions in June, and 21 millions in September of last year.

The above figures relating to cotton and breadstuffs, it should be understood, are those of the preliminary statement of the Bureau of Statistics, but include 98 per cent of the entire export of the articles named, while the figures of the total exports of the month, although practically complete, are the preliminary figures and subject to the usual revision.

The following table shows the September exports in each year from 1888 to date:

September.	Total exports.
1888.....	\$ 51,334,584
1889.....	64,996,083
1890.....	68,693,137
1891.....	82,854,085
1892.....	62,908,483
1893.....	72,026,798
1894.....	58,798,675
1895.....	58,540,063
1896.....	85,131,092
1897.....	104,540,912
1898.....	90,645,387
1899.....	109,836,677
1900.....	115,301,722
1901.....	106,389,926
1902.....	115,521,984

Shorthorns at St. Joseph, Mo.

On Wednesday, Oct. 23, the South St. Joseph, Mo., stock yards will claim the attention of Shorthorn breeders and cattle men in general, the event being the combination sale of Shorthorn cattle, under the management of the well known Shorthorn expert and promoter, Mr. F. P. Healy, of Bedford, Iowa. Mr. Healy has selected St. Joseph as the place for holding this sale, because of its central location in the very best agricultural and live-stock growing districts, to be found in all the great Middle West, that is so renowned for her great diversified interests. In addition to this, St. Joseph is well equipped as a railroad point, and has a live-stock market that ranks fourth in the world's great markets, and is making rapid strides to still higher position along this line. The territory tributary to St. Joseph needs many hundreds more good cattle than it now possesses, and breeders and farmers in general are urgently requested not to pass this sale by lightly, as there will undoubtedly be bargains secured by those who attend. No fancy prices are expected, but good cattle will be offered to the end that buyers will not be disappointed when the test of time is applied to their purchases. The principal contributors to this sale will be Albert Johnson, Douglas, Neb.; O. P. Hendershot, Hebron, Neb.; D. S. Ryan, Leavenworth, Kan.; Alex. John & Son, Bedford, Iowa, and F. P. Healy, Bedford, Iowa. In all, about sixty head of cattle will be sold, consisting of sixteen bulls, balance young cows and heifers, representing some of the most noted families of the breed, a glance through the catalogue discloses the fact that there are such tribes as Miss Ramsden, Harriet, Rosabella 2d, Frantic, Young Mary, Perl, Young Phyllis, Arabella, Jubilee Gwynn, Zella, Ianthe, Belina, Lady Elizabeth, Cleopatra, Ruby, Rose of Sharon, Lovely 25th, and others. Of the bulls to be sold we call especial attention to Godoy's Hero, Lot 1, of catalogue. He is a red, 5-year-old, belongs to the Miss Ramsden family, was sired by the renowned Godoy, and his dam Aberdeen Lassie, was by Lord Constable, out of the Golden Rule cow Aberdeen Lass 2d. More desirable Scotch breeding than this, would indeed be difficult to find, and those in need of a herd header would do well to look after this one. Other bulls are Duke Phyllis 8th, from the herd of Mr. F. P. Healy; Don Scott, from the herd of Mr. D. S. Ryan, and Magenta 7th and Magenta 12th, from same herd; Advance Guard, from the herd of Mr. D. P. Rickabaugh, Sheridan, Mo.; Jubilee and Tecumseh, consigned from the herd of Albert Johnston; Winsome's Best, Winsome 9th, and Gay Sharon, from the herd of Messrs. Alex. John & Son; Howard A., from the herd of Mr. O. P. Willett, Lenox, Iowa; Village Boy and Thick Set, from the herd of Mr. M. S. Williams, Lone Star, Mo. Among the females to be sold we note that there are daughters of such Scotch-bred bulls as Double Lavender 4th, Imp. Chief Baron, Imp. Brunswick, Imp. Magenta, Scarlet Knight, Thistlewood, Chief Violet 4th, Son-sie Boy, Imp. Royal Victor, Velasco, Prince Victor, and Village King. The catalogue announcement is very concise and conveys just such information as those attending a sale would like to have and we give it here in full:

"Farmers and stockmen: We ask you to attend this sale believing you will find the cattle whose pedigrees are printed here to be profitable for you to buy; they are a nice, thrifty, young lot, and will be sold in good breeding condition and right from the pastures with the great abundance of all kinds of feed on hand, and the strong demand for the best beef, it surely is a good time to buy good cattle. The contributors to this sale have not picked out a lot of cattle they want to dispose of on account of old age or unfruitfulness but have listed as good as their herds contain.

"While we believe every animal we shall offer you is a breeder, no guarantee will be given as to future usefulness. Each owner will be present in the ring while his animals are being sold to answer any questions should you desire to ask any, and is responsible for any statements he may make regarding the same. We ask you to be with us on sale day and tell us what you think they are worth. With these few remarks we place this catalogue in your hands, and the cattle in the sale ring.

"A certified pedigree from the American Shorthorn Breeders' Association bearing the signature of the secretary and the seal

of the association will be furnished with each animal sold, except calves at foot, and sold with dam. For these we will furnish a certified pedigree eligible to record." Write Mr. F. P. Healy, Bedford, Iowa, for catalogue.

Chenault Todd's Sale.

On Tuesday, Oct. 23, at Ash Grove Farm, four miles east of Fayette, Howard County, Mo., Mr. Chenault Todd will hold a breeder's sale of Shorthorn cattle. When we say breeder's sale, we mean that of the fifty head catalogued, almost the entire lot are bred by Mr. Todd, hence it is a breeder's, not a speculator's sale. When the fact is taken into consideration that Mr. Todd has been continuously engaged in the breeding and improvement of his herd for thirty years, and intends to stay in the business, buyers may rely implicitly upon every statement made by Mr. Todd as being carried out to the letter. Mr. Todd has held several sales at Ash Grove, and with our knowledge of his herd extending over a period of several years, we unhesitatingly say that this offering is by far the best he has ever made. The cattle are all young and in thrifty farm condition, and can be depended upon to do the buyers, who may be lucky enough to get them, a world of good. A number of the cows will be sold with calves at foot and all of suitable age will be bred to one of the two herd bulls Sir Charming 122667 or Captain Lay-ender 175119. Sir Charming has been in use in the herd for several years and his impress can be plainly seen. Quite a number of the sale cattle are sired by Imp. Salamis, a pure Cruikshank of the Secret family, and his dam was Sweet Charity by Imp. Bandmaster. 2d dam Imp. Charity 3d by Macgregor. Captain Lavender had for sire Imp. Bunker, and for dam the Cruikshank Lavender cow, Lavender Flower 2d, by Imp. Craven Knight, 3d dam 6th Linwood Lavender, by Imp. Master of the Rolls. Both these bulls are intensely Scotch-bred, and their impress upon the Ash Grove herd has been very marked. The families at Ash Grove are Young Mary, Young Phyllis, and Rose of Sharon. Without going into detail on any particular animals where all are good, we recommend to those not yet in receipt of the catalogue to lose no time in writing for it. They should carefully study the breeding, and best of all plan to attend the sale.

A New Creamery Company.

The J. P. Baden Produce Co., of Winfield, Kans., the largest house of its kind in the United States, is installing a new creamery plant. They expect to make 30,000 pounds of extra separator creamery butter daily, next spring.

This concern handles eggs, poultry, butter, hides; and also manufactures forty tons of ice daily. Their storage building has a capacity of sixty cars of eggs, butter and poultry.

Their cream proposition will interest every person interested in dairy business. You are solicited to write them for full information relative to any branch of their business.

They are special agents for the Empire cream separator, and solicit correspondence relative to this popular and best cream separator. Their terms are in the reach of all.

This concern buys cream from any centrifugal cream separator, direct from the farmers, no drayage, no express charges, no charge for returning cans, and they pay for your cream every two weeks. They have no middle man which you are compelled to pay for hauling, you can do this yourself, and save two dollars every time you come to town. Nothing will pay you better than to give them a trial.

Myers' Third Annual.

J. W. Myers, of Galva, McPherson County, Kans., has out catalogues and sale bills announcing his third annual sale of registered Poland-China hogs and high-grade cattle, to be held at Klondike Farm. The offering will comprise ninety-four head of registered, pure-bred Poland-Chinas, mostly spring pigs, forty-five sired by his fine herd boar, Grand Corrector, a son of the \$2,500 Corrector. The sale also includes tried brood-sows, all bred or with pigs at side. The catalogue shows a very desirable line of breeding, and Mr. Myers assures the Kansas Farmer that the entire offering is the best lot individually that he ever offered. Buyers should not overlook this bargain sale of central Kansas.

Gossip About Stock.

The numerous inquirers for Duroc-Jersey hogs, should not overlook the first annual sale of forty head by Peter Blocher, Richland, Shawnee County, Kans.

An opportunity for buyers of Shorthorn cows and heifers will be the sale of Willow Branch Shorthorns, by Ferd T. Bates, Bates City, Mo., on Thursday, Oct. 30.

A public sale of Poland-Chinas, that should specially interest breeders, is the closing out sale of J. T. Robinson, of Bates City, Mo. This sale in particular has ten special attractions that will strongly appeal to the fraternity.

Shorthorn breeders should bear in mind the great sale advertised to take place at Centralia, Mo., on October 31. J. C. Hall, of Hallsville, Mo., and J. S. Brown, of Mexico, Mo., will at this sale offer sixty head of thoroughbred Shorthorns. A description of a portion of the animals to be sold was given in last week's Farmer.

One of the popular Poland-China annual events is the public sale held each year by James Mains, of Oskaloosa, Kans. His next sale will be held on Thursday, Oct. 30. Catalogues are now ready for distribution. There is no better, more useful or desirable breeding, at any sale in the country, that to be found at Mr. Mains' sale as advertised on page 1057.

Remember the public sale to be held at Windsor, Mo., Tuesday, Oct. 28, 1902, by Dr. J. F. Robinson, Nevada, Mo. This is the only sale advertised, convenient to Kansas, of Standard-bred stallions, brood mares and single and double drivers. In addition to the horses, there will be sold four registered Shorthorn and Polled Durham bulls, and about thirty head of polled cows, heifers, and calves.

C. J. Huggins, owner of Wamego herd of Poland-Chinas, in writing of his herd,

says that his September pigs are perfect beauties, and that the closest observer could find no fault in them. He has only five more boars for sale at \$15 each, and an equal number of fine gilts. Breeders who desire first-class stock to enrich their herds, will do well to write Mr. Huggins, at Wamego, Kans., or call on him and see his herd.

We desire to call special attention to Kirkpatrick's thirteenth sale of Poland-Chinas, to be held at Riverside farm, at Wolcott, Kans., on Saturday, Nov. 1, 1902. At which time sixty head of richest breeding and unsurpassed individuality will be offered, including young sows, fall boars and gilts, and spring pigs, of both sexes. Send at once for catalogue giving full information to Kirkpatrick & Son, Wolcott, Kans., and notice the announcement on page 1058 of this issue.

The great Berkshire swine sale of the year, is the Ridgeview farm sale of large English Berkshires, to be held at the farm by the owners, Manwaring Bros., Lawrence, Kans., on Friday, Nov. 7, 1902. The offering of 60 head includes 30 boars, 26 spring gilts and 4 bred-sows. The spring pigs have been reserved for this sale, many suitable for herd headers or foundation stock sired by Moonlight 55845 and High-clere Improver 58627. Send for catalogue and try to be present or send your bids to the auctioneer.

Notice the change in the advertisement of S. Y. Thornton, of Blackwater, Mo., in his announcement about Rosehill herd of Duroc-Jersey hogs. Mr. Thornton says: "I have selected twenty-five choice boars of last spring's farrow that I now offer for sale. They are good, lengthy, strong-boned fellows, out of old sows and big litters. They now weigh 150 to 200 pounds and have the vigor necessary for usefulness. I also have sixty-five gilts to breed for spring pigs that I will sell either open or will breed them. I also have some good pigs ready to wean and can supply them not akin. My herd now numbers 300, all ages."

We are in receipt of a bulletin from the Bureau of Animal Industry, which gives Geo. F. Thompson's report on the animal industry. Mr. Thompson is a citizen of Kansas, and was formerly connected with the Agricultural College at Manhattan. He is now in charge of the editorial work of the Bureau of Animal Industry, and has made a special study of the angora goat. This bulletin is beautifully illustrated by photo-engravings, and is well worth a place in the library of any progressive farmer or stockman. Address Bureau of Animal Industry, Department of Agriculture, Washington, D. C., for a copy of this valuable report.

L. F. Johnson & Sons, Rural Route No. 4, Geuda Springs, Kans., made quite a killing with their herd of Hereford cattle at the Cowley County fair. This herd is headed by Dick Turpin 81521, who was sired by Printer, out of Dixy Thornton 2nd. It will be remembered that Printer is the great sire that has brought such a reputation to the herd of W. W. Gray, Fayette, Mo., and that his progeny have always proved popular with buyers at the various Kansas City sales of whitefaces. Dick Turpin, in spite of his hard service this season, shows himself to be one of Printer's good sons, and the other members of the herd which accompanied him show well for the breed, though not fitted for the show ring.

Of Value to Horsemen.—Do you turn your horses out for the winter? If so, we want to call your attention to a very important matter. Horses which have been used steadily at work, either on the farm or road, have quite likely had some strains whereby lameness or enlargements have been caused. Or perhaps new life is needed to be infused into their legs. Gombault's Caustic Balsam applied as per directions, just as you are turning the horse out, will be of great benefit; and this is the time when it can be used very successfully. One great advantage in using this remedy is that after it is applied it needs no care or attention, but does its work well and at a time when the horse is having a rest. Of course it can be used with equal success while horses are in the stable, but many people in turning their horses out would use Caustic Balsam if they were reminded of it, and this article is given as a reminder.

We call especial attention to the great cattle sale, to be held at Homestead, Chase County, Kans., on Wednesday, October 29, by Jno. G. Howard. The offering consists of 65 head of cattle, 13 of which are the select lot of registered Shorthorns, 13 cows and heifers of best families and 2 bulls, one of which is the herd bull, Regulator 169179, bred by Jno. Morse, Chillicothe, Mo., sire Imp. Steward 96709, and out of Lady Rosedale 19 (Vol. 40). He is a splendid red bull and a good breeder. The registered females are all excellent, well-bred stuff. The balance of the offering, 50 head, includes 16 extra good cows, 9 heifers, 2 years old, 2 yearlings, 11 steers mostly 2-year-olds, and 12 calves. These are high grade cattle and are in excellent fix. Parties from a distance attending this sale can get off the Santa Fe at Clements, where a free hack will leave for the sale at 9 o'clock Tuesday morning. For further information consult advertisement on page 1058.

One of the curious things that the visitor at a fair encounters, is the different judgment passed upon the same animals in competition, by different experts who may be selected to tie the ribbons. One instance of this kind was shown in Mr. W. J. Snodgrass' experience in attendance upon the fair at El Dorado and Winfield. By a mistake in our report last week we showed Mr. Snodgrass as standing second in the yearling heifer class, when he should have been first on his lovely of Billbrook. This was a reversal from the decision at El Dorado but seemed to meet the approval of visitors at the ringside. His aged cow Fanny was not placed at El Dorado but won second at Winfield, which was considered by good judges her just due. It is a matter of pride to Mr. Snodgrass, and probably of satisfaction to the owner of Iowa Scotchman, to know that his heifer lovely of Billbrook stood first in class at the Cowley County Fair under the decision of so capable a judge as there officiated.

Breeders of Poland-Chinas, throughout the West, will note with special interest the new advertisement of Harry Evans, owner of the Sensation Herd of Poland-

HON. T. F. MADDEN

FORMER MAYOR OF ST. IGNAOE, MICHIGAN,

Relates an Experience Which, He Says Taught Him a Valuable Lesson.

"I have had an experience which taught me a valuable lesson," said the Hon. Thomas F. Madden, former mayor of St. Ignace, Mich., to a reporter the other day.

"It was while crossing the Gulf of Mexico," he continued, "in an attempt to recover my health, that the suggestion came to me. For twenty ears I had been a sufferer from indigestion. It tortured me. I could not eat a hearty meal and even the lightest food distressed me. I was treated by several very able physicians, but grew worse all the time. In fact, nothing helped me until I tried Dr. Williams' Pink Pills.

"Chronic indigestion had brought on a whole train of other troubles. I became nervous, suffered from violent headaches and biliousness, and I think I would have given every cent I possessed to find relief. But I became more miserable and finally in despair I determined to take a southern trip.

"On the steamer bound for Galveston I chanced to see Dr. Williams' Pink Pills for Pale People mentioned in a newspaper article. As soon as we landed I purchased a box of the pills and they gave me almost instantaneous relief. If it had not been for them I think I should have been starved to death. I grew constantly better and in a short time I was cured.

"It is now over a year since these pills cured me. My stomach is sound and my digestion is perfect. I can eat heartily of the richest food, my nerves are quiet, my blood good and I feel well and strong. I have been made a well man by Dr. Williams' Pink Pills for Pale People."

The Hon. Mr. Madden's address is St. Ignace, Mich., and he is willing to corroborate the statement given above. The power of Dr. Williams' Pink Pills for Pale People in the vast number of diseases due to impure blood or to derangements of the system, has been demonstrated in thousands of instances as remarkable as his. No one who is suffering can rightfully neglect this way to restore health.

Dr. Williams' Pink Pills for Pale People are sold by all dealers, or will be sent postpaid on receipt of price, 50 cents a box, or six boxes for \$2.50 (they are never sold in bulk or by the hundred), by addressing Dr. Williams Medicine Company, Schenectady, N. Y.

BALMOLINE The Corn-Husker's Friend
And Nature's Perfect Healing Salve
MAN OR BEAST.
Druggists or by mail. Trial box, 4c; 2 oz., 25c; 6 oz. 50c. Balmoline Mfg. Co., Sta. 8, Abile, Mo.

FLEMING'S LUMP JAW CURE
Trade Mark.
Easily and thoroughly cured. New, common-sense method. Not expensive. No cure, no pay. FREE. A practical, illustrated treatise on the above cure of Lump Jaw, free if you ask for Pamphlet No. 240. Fleming Bros., chemists, Union Stock Yards, Chicago, Ill.

LUMP JAW.
A positive and thorough cure easily accomplished. Latest scientific treatment, inexpensive and harmless. NO CURE, NO PAY. Our method fully explained on receipt of postal.
Chas. E. Bartlett, Columbus, Kans.

Improved Star Cooler Separator.
Only perfect Cream Separator made. Requires no water mixed with the milk. Easily cleaned and operated.
Best Sizes No. 1, 1 to 4 cows \$5.50 del'd. No. 2, 1 to 6 cows \$6.50 del'd. Only best material used. Inside made of xxx Tin, outside made of Galvanized Iron. Sweet milk can be drawn at any time without disturbing cream. Liberal discounts made to good agents. Manufactured by Lawrence-Bostwick Mfg. Co., Phelps, N. Y.

China hogs at Pleasanton, Kans., who proposes to close out his entire herd on account of having sold his farm. He has built up an enviable reputation as a breeder of first-class stock and has a large established trade by reason of his advertising in the Kansas Farmer. The closing out of his herd will give enterprising breeders a chance to buy splendid breeding stuff at sacrifice prices. Mr. Evans states that his crop of pigs is the very best he ever

raised. Recently he sold a young boar to I. L. Jones, Ardeola, Mo., located 150 miles south of St. Louis, and the buyer immediately sent an order for three gilts just as good. Mr. Evans will have ten head of Poland-Chinas in the American Royal Show and Sale in Kansas City, including his three great herd boars. Look up his ad on page 1054 and write for further particulars.

One of the men who carried off well-deserved honors from the prize ring at the Cedarvale and at the Cowley County fairs, was J. C. Gilkey, Maple City, Kans., whose card announcing choice O. I. C. swine for sale appears on page 1055. Mr. Gilkey is a breeder of experience and has tested several breeds of swine, with the conclusion that there is nothing that quite equals the Chester-Whites for size, rapid growth and productiveness. As will be seen in our report of the Cowley County fair, Mr. Gilkey was given first in every class he showed for and his herd boar, Eli 4049, also won first in class in the Cedarvale fair. Eli is by Snowball 2167, by Argentinum 1130. His dam is Lady May 2168, by Aluminum 1259. He was bred by Eli Sanborn. One of the choicest things shown in his exhibit at Winfield was a sow 6 months old and under 12, which he has decided to name Hands Off. She is by Senator 3481, by Silver Bill 11337. Her dam is Burris 1468, by Governor Bushnell. For smooth, even quality, perfection of type, and evident feeding and growing qualities, Mr. Gilkey's herd is one of the best that we have seen of this breed.

We take special pleasure in calling attention to the advertisement on page 1056 of Mr. Chas. Drennan, Blue Rapids, Kans., because of the choice quality of Herefords which he has to offer, and because of the fact that he is the largest contributor to the first annual sale of the Marshall Coun-

successor and will continue to win blue ribbons according to the example set him by Scott Junior. Mr. Snodgrass has just a few choice youngsters of this breeding for sale, and anyone who is looking for this quality of stock should get next to him at once.

Don't overlook the important sale advertised by Chenault Todd, Fayette, Mo., on October 28. Among the aged cows is Pearl Duchess 41, a very fine bred looking cow, broad and thick, of good finish, splendid front, with an ideal head, horn and countenance, Pearl Duchess 38th, 45th, and 46th, all forward in calf, make four as good cows of same family of Miss Severs by Reformer, as you will often find. They are all reds and choice individuals. Minnie of Ash Grove is a Renick Rose of Sharon, large and likely well along in calf, a good one to buy. 29th Ellah of Ash Grove, a splendid Young Mary, 3 years old, with two Scotch tops, well along in calf to Captain Lavender, a good one to start on. 26th and 28th Ellahs of Ash Grove are 3 and 4 years old; red cows with helper calves by side; they will do to look after. There are three other Renick Rose of Sharon cows of a useful sort, in fact you will not go amiss to buy any of these cows at a reasonable price. Among the 2-year-olds and yearlings are so many so much alike both in breeding and type, that it is hardly necessary to speak of them separately. They are certainly a splendid bunch of good ones; some real plums among them. There are five young Phyllis heifers, two reds and three roans, the foundation cow Minnie Logan by Airdrie Duke, brought from Kentucky at a cost of \$1,500. These heifers as individuals are in keeping with the old cow, show heifers. There are two red yearlings of the Renick Rose of Sharon sort, that will do to buy and keep. If you will only come to the sale you will find a rare opportunity to get

thirteen entries. While Mr. Lunt himself showed four of his get and got six prizes out of eight entries. There are few things finer in the breed. Do not forget the date of this sale which will be November 14, and do not forget that free lunch will be served and every facility for purchasers will be made that can be made.

Axline's Sale Average \$38.43.

The E. E. Axline sale held at Oak Grove, Mo., last Monday, the 20th inst., was a decided success, and 65 Poland-China pigs sold for \$2,498, a general average of \$38.43; 27 boars averaged \$38.16, and 38 sows and gilts averaged \$38.62.

The following is a complete list of purchasers: N. A. Smith, Ottumville, Mo.; C. S. Williams, North Enid, Okla.; John Costello, Buckner, Mo.; R. S. Davis, Appleton City, Mo.; Doss & Wash, St. Louis, Mo.; Geo. W. Null, Odessa, Mo.; Sensintaffer Bros., Brookfield, Mo.; W. E. Taggart, Hutchinson, Kans.; A. Griffith, Osawakee, Kans.; W. McAllister, Holton, Kans.; D. A. Cox, Woodbine, Iowa; John Francis & Son, New Lenox, Ill.; C. O. Hoag, Centerville, Kans.; E. L. Jameson, Onelda, Ill.; A. B. Mull, Iola, Kans.; Frank Zimmerman, Centerville, Mo.; W. M. Small, Lexington, Mo.; W. H. Perkins, Oak Grove, Mo.; W. O. Wayman, Odessa, Mo.; H. Punke, Neosho, Mo.; N. A. Smith, Ottumville, Mo.; J. Lee White, Palmyra, Mo.; S. W. Hudson, Buckner, Mo.; T. E. Lampoon, Big Rock, Ill.; Frank Hoover, Columbus, Kans.; C. D. Wells, Sedalia, Mo.; Frank Boyd, Sweet Springs, Mo.; J. D. Gates, Chariton, Mo.; A. C. Jitz, Columbus, Mo.; L. P. Fairfax, Ottumville, Mo.; C. B. Wells, Sedalia, Mo.; E. L. Smith, Oak Grove, Mo.; Jas Cox, Oak Grove, Mo.; A. H. White, Oak Grove, Mo.; Gus Aaron, Leavenworth, Kans.; J. W. Loftus, Bear Creek, Mo.; C. G. Mills,

YOUR HORSE LAME?

That's bad. Lameness is unprofitable either for use or sale. Don't have a lame horse.

Cure him with

Kendall's Spavin Cure,
the old reliable remedy for Spavins, Ring-bones, Splints, Curbs, etc., and all forms of Lameness.



It is the most successful remedy ever discovered, as it is certain in its effects and cures without a blister, as it does not blister.

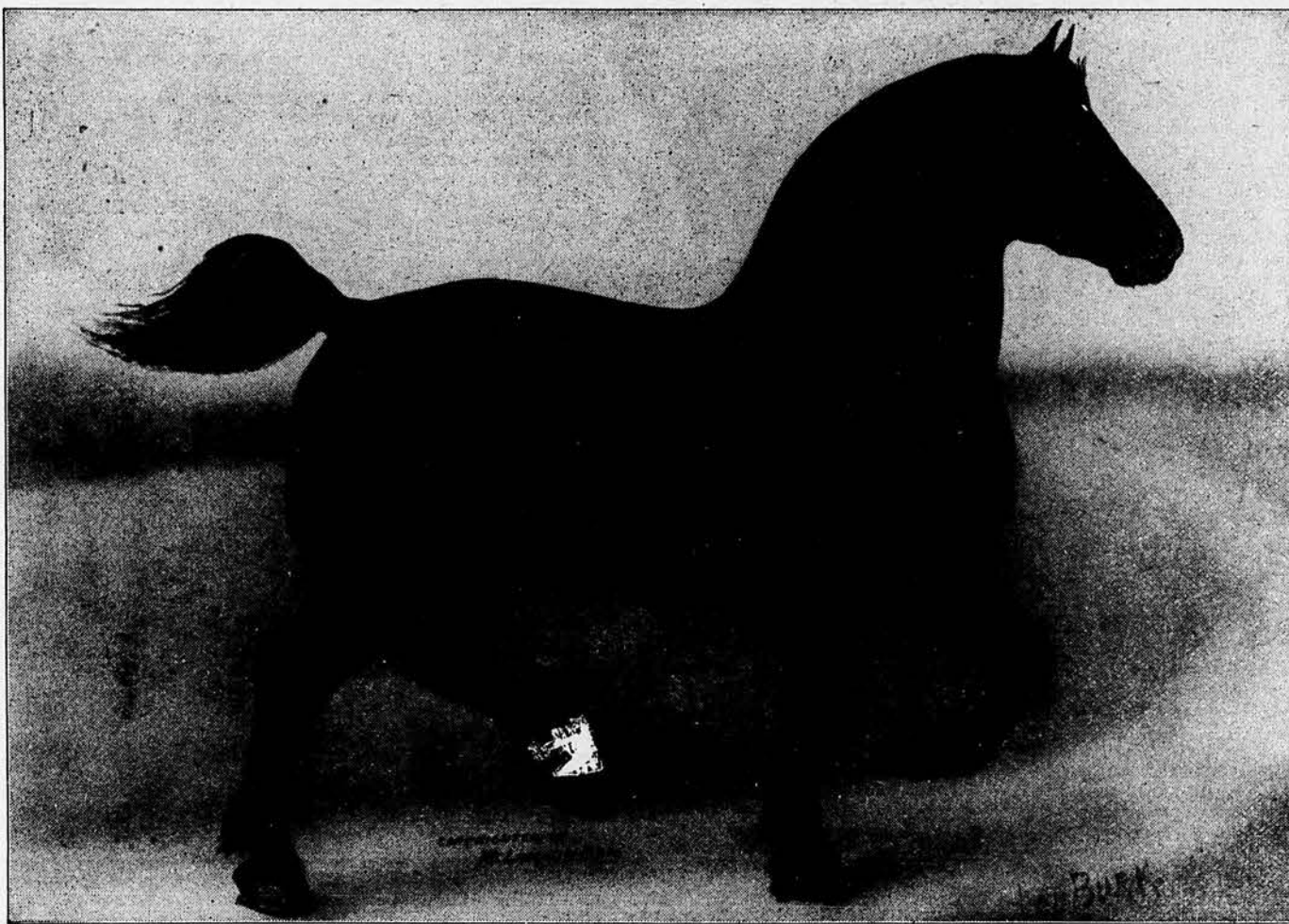
COMPLETE CURE WITH TWO BOTTLES.

Box \$1, Williamstown, N. J., Mar. 20, 1900.

Dr. B. J. Kendall Co., Dear Sirs:—I've used your Spavin Cure for a Spavin and cured it completely, and it did not take two bottles to do it. You may use my name as reference if you desire. Yours truly, J. O. A. STEELMAN.

Such endorsements as the above are a guarantee of merit. Price \$1; six for \$5. As a liniment for family use it has no equal. Ask your druggist for Kendall's Spavin Cure, also "A Treatise on the Horse," the book free, or address DR. B. J. KENDALL CO., ENOSBURG FALLS, VT.

cut. They are made in a great variety of heights and are made to fit any wagon.



IMPORTED PERCHERON STALLION MONTD'OR (45064) 29524.

Montd'Or is a draft horse of exceptional merit possessing great size and width, very heavy bone, and short legs. His breeding is of the very best to be found in France. He was one of the numerous prize-winners at the Ohio State Fair this year. The property of McLaughlin Brothers of Columbus, Ohio.

ty Hereford Breeders' Association, which will be held at Blue Rapids, on November 18 and 19. There is no place in Kansas, and it is doubtful if there is any place in the world, where so many really good Herefords are to be found in such small territory, as can be shown by the Marshall County Association. And when it is known that Mr. Drennan's herd is headed by Wild Tom and Archibald bulls, and that the Sunnyslope strains are strong throughout the herd, the fact that he has a few animals of this breeding for sale at private treaty in addition to the offering which he will make in the annual sale, will afford a good deal of pleasure to breeders who are searching for the best. Write to Mr. Drennan for pedigrees and prices and be sure that you will be satisfied.

W. J. Snodgrass, Gordon, Kans., has a bunch of Shorthorns with which he secures a goodly number of ribbons wherever he shows them. His herd is headed by Scott Junior 12422, by Scottish Emperor 110138, out of Ida 8th, by Banker 4th, tracing to Imp. Irene. Scottish Emperor is a son of Red Emperor 71419, and out of the Lord Glamis cow Clara Glamis, tracing to Imp. Columbia, by Lord Lancaster 20239. As shown in our report of the Butler and Cowley County fairs, this herd was well in the money in every class. In addition to the breeding shown above, Mr. Snodgrass is constantly on the alert to secure new blood of choice breeding for his herd. It will be remembered that at the H. O. Tudor sale last spring, he was the purchaser of two very choice animals. One a heifer called Lovely of Billbrook, by the great herd bull Iowa Scotchman, the other a choice young bull by Golden Lad, which he has included in his show herd and which served to attract considerable attention along with the other good things shown there. Scott Junior is a great bull, a splendid sire, and is now in fine condition. The young bull Golden Sharon promises to be a worthy

what you want as prices have generally been reasonable at public sales in these parts.

Harry E. Lunt, Burden, Kans., than whom no breeder of Poland-Chinas has made more rapid progress as a breeder, is offering some specially fine animals as shown by his sale advertisement on page 1057. One of the plums of the sale will be one of his chief herd boars. This is Sealy's Model, who is a splendid hog, with fine confirmation and a great record behind him as a sire. He has proved his worth as a show hog at quite a number of leading fairs, and has the satisfaction of having defeated the international winner. Another of the choice things of the sale is Eve's Graceful 64313, who is a very smooth large sow, standing on a splendid set of feet, with well rounded quarters, and an evenness from end to end that is exceptional. There are so many good things in this offering that it is rather difficult to pick out the most attractive. Two of the best of these, however, are out of Viola U. S. and out of Silva U. S., who are litter sisters to Nor's Perfection, the sweepstake sow who was sired by Ideal Corwin, that wonderful out-cross hog. These youngsters are sired by Sealy's Model and will undoubtedly prove a snap for any amount that will be bid on them. Another great thing to be found in this sale will be some gilts that are granddaughters of J. D. Marshall's undefeated sow, Fingers Off. As these gilts are sired by Bigprize Kellogg they promise to make show animals. Here in this bunch is found a granddaughter of Perfect I Know, a half sister of Model I Know, a daughter of Miles Look Me Over; a daughter of Broad-gauge Chief, the international prize winner, and a number of the get of Sealy's Model, together with a good contribution from the get of that great breeding hog Look No Farther. Mr. J. D. Marshall showed four of his get and won twelve prizes out of

Pleasant Hill, Mo.; A. C. Fitch, Columbus, Mo.; A. A. Rose, Holden, Mo.; F. M. Charlton, Buckner, Mo.; H. C. Snyder, Higginsville, Mo.; J. R. Young, Richards, Mo.

Hauling Corn Fodder.

With the biggest and perhaps the heaviest crop of fodder ever harvested, and with the fields cut up as they are by the unusual fall rains, farmers are puzzled as to how to take care of their fodder. In this emergency we want to call your attention to the broad wheel-



ed, low down, Handy Wagon made by the Electric Wheel Company, of Quincy, Ill. This wagon at all times is one of the most convenient and most useful articles a man could have on the farm. Is particularly useful in getting in the fodder and other late fall work. Most of our readers who have used this wagon are profuse in their praise of it. Some say they would not be without a Handy Wagon for three times what it cost. Those of our readers who do not feel that they wish to make the necessary outlay to buy one of these wagons at the present time may have a low down broad tired wagon by simply buying a set of the Electric Wheels such as are shown in the

The simple removing of the old high wheels and substituting a set of the Electric's makes a handy, convenient, low down wagon at a very small item of cost.

All the goods turned out by the Electric Wheel Company are made of the best material, and they are the kind of people we have talked so much about in the past. That is to say, they are wise enough to know that the way their success has been achieved is by making every buyer a loyal enthusiastic exponent of their goods.

We suggest that you get one of their free catalogues, and see if their proposition does not impress you as being a particularly good one at this time of year. Write for the catalogue to-day.

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The greatest and most successful Institute for Diseases of Men. Consultation free at office or by letter. BOOK printed in English, German and Swedish, explaining Health and Happiness sent sealed in plain envelope for four cents in stamps. All letters answered in plain envelope. Varies cured in five days. Call or address

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ST. JOSEPH, MO.

Horticulture.

Planting Fruit Trees.

A few years ago Mr. H. M. Stringfellow, of Lampasas, Texas, published his experience with a new method of planting fruit trees. His plan has been widely discussed and criticised. A few have tried it.

In a late number of the Practical Fruit Grower, Mr. Stringfellow reviews some of the experiments. In the same paper, some other experimenters state their results. The subject is an interesting one and some of the discussion is here reproduced.

COLONEL STRINGFELLOW EXPLAINS.

Referring to Mr. W. H. Ritter's successful experiment with crowbar holes and his inquiry as to heeling in root-pruned trees in the fall to callous for spring planting, I see no reason why they might not be planted in the fall where they are to stand. Fall setting is now being highly recommended in New York and ought to do well in Missouri. The only objection I see is that severe freezing of the ground after heavy rains and subsequent sudden thawing, might cause the trees to heave and break the connection between the soil and the stub roots. If such a thing happened it could be remedied by pressing the trees down firmly in spring and ramming, or a shovelful or two of long manure piled around and over the trees (if cut back to one foot which is best) might prevent freezing or at least a sudden thaw. I never tried the method suggested by Mr. Ritter, but think it practical if the trees were carried to the field in a bucket of water or damp moss to prevent the callous from drying out. However, such late starting of growth is very unusual.

I will say here that driven or crowbar holes in sod ground are nowhere mentioned or recommended in my book and form no part of the original "New Horticulture." When I moved to Lampasas and found a very elevated but level plateau, with valley all around, it struck me as a frost-proof location, so I bought it for a peach orchard, but it turned out to be so rocky that it could not be plowed. The idea of driven holes then occurred to me, but I had to use a steel rod and ten-pound sledge hammer, a crow-bar being too slow, as the buds were bursting on my 1,000 young June-budded trees. The holes being only one inch in diameter, of course could contain but a very small quantity of water, and as we had two years of continuous drouth from the time they were set (only eleven inches of rain the first year), the planting was a failure. The few trees that lived satisfied me that in a section with average, regular rainfall, sod planting, surface manuring and mulching could be practiced with success on rough land, or where it was not desired to utilize the land in crops. Mr. W. W. Durham of this State planted 1,000 trees when I did, and in sod, mulching thoroughly, and they have done finely, and the editor of the Rural New-Yorker has also had such marked success that he intends to plant 1,000 trees more this coming season. The method laid down in my book is to plow and harrow the ground, then plant with a large dibble or crowbar, or open small holes by inserting a spade and forcing it backward. This will allow the use of 2- or 3-year-old trees pruned back to several stubs an inch or so long. I intended the straight tap-root method, adopted by Mr. Ritter, to apply only to June-budded or small one-year-trees, four to six inches being enough of the straight tap to leave. Several short stubs should be left on older trees, as I have remarked above.

While I attach no value to "authority" there are many non-progressive, conservative people that do, so I send you a paper recently read by Prof. T. V. Munson, a very able man, a large orchardist and nurseryman, and a well-known authority on grapes, to encourage such people to experiment, and for the especial benefit of the timid scientists and professors of the State experiment stations, not one of which has endorsed close root-pruning except the progressive Georgia Station, which did so years ago, thus facilitating and cheapening the planting of orchards in that State until it now takes the lead

in peach culture. But, referring to Prof. Munson's article, of course I disagree with him on the useless expense of subsoiling, as shown by Mr. Ritter's experiment, and also deny the value of cultivation after the trees begin to bear, as demonstrated by my own experience, that of Mr. Hitching's of New York, and thousands of others over the country. While the sod and mulch is nature's method from start to finish, and the cheapest, still where the orchard must pay something to help the grower along, crops that can be worked may be grown for some years and the trees themselves well cultivated with benefit until they begin to bear. H. M. STRINGFELLOW. Lampasas, Tex.

[Following is Prof. Munson's paper on "Changes in Orchard and Vineyard Planting:"]

As to the preparation of the soil and planting, there are advocates of at least two almost diametrically opposite methods. The commonly practiced method, or at least advocated method, is to thoroughly and deeply, fifteen to twenty inches or more, pulverize the soil and in this set the plants with roots straightened in natural position and about the same depth as they grew in nursery, covering the roots with fine, mellow, rich soil, then firming down closely and then filling up with loose earth and over all placing a mulch of good rotten manure, if the land needs enriching.

The other method is not to disturb the natural soil with plow or spade, except to clear off the growth of grass, weeds, etc., where the tree or vine is to be set over a space of two feet or more across, then with a crowbar ram a hole as deep as the root of the tree from collar to taproot, and into this hole thrust the straight stub root with all the laterals cut away, then to ram down around it, with a ramrod for the purpose, rich soil as tightly as possible, and on top of the ground around to scatter a good coat of manure. This method bears the inventor's name, which I presume most of you recognize.

No extensive planting has been done in this crowbar method, I believe, excepting part of a large peach orchard in Georgia and smaller plats in an experimental sort of way in different regions, generally giving excellent results, especially in climates with moist atmosphere, and succeeding much better with some kinds of fruits than with others. The merit is chiefly claimed to lie in the plant or tree being pruned to a mere club, taking off all the little roots and nearly all the large lateral roots and all the top but a main stub a foot or two high, practically reducing the tree to a cutting, having some root formation to quickly start root formation again. The result, it is claimed, and this has been generally sustained in the test plantations, is that the new roots are few but deeply penetrating, and that in consequence the tree endures drouth better, and on the whole will be more vigorous and longer lived.

But as to pulverizing the soil or leaving it hard the testimony seems to be against the unbroken soil. So then on this point it seems safest to thoroughly prepare the soil by deep plowing and subsoiling and then to plant the stub-pruned trees and plants with a crowbar, firming the soil around by ramming around the tree with the crowbar, being careful not to bruise the bark, and to apply fertilizer on surface around trees, widening the belt as the tree gets size. Thorough shallow cultivation of soil among orchards and vineyards in bearing seem essential to best results.

So here is change No. 1, from full to little pruned roots to stub roots, the stubs being left longer on the larger trees set, but best to set young trees, never over one year in stone fruits nor over two years with apples, pears, etc. This appears hard on the whole root and tap theories, but no test has decided. This change, it seems, is to be credited to H. M. Stringfellow's persistent advocacy. It vastly lessens the expense of digging and filling holes and gives better, longer lived orchards and vineyards than to plant full rooted trees and vines. The change consists first in stub-pruning the plant and second by virtue of the shape of the stub-pruned plant or tree, of making and closing holes with a large flat crowbar instead of a spade, enabling a man to set several times as many trees per day with better results—experience of writer.

HAS TRIED THE STRINGFELLOW PLAN.

In the spring of 1895 I planted 1,500 Ben Davis apple trees, 500 of which were pruned to a straight whip, both root and branch, and set in holes made with a crowbar. There trees had been growing in the nursery row two years. The first year's growth had been cut off to the ground, making the tree a 1-year-old with a 2-year-old root, hence were

IT IS SOLVED

The question that has most agitated the ginner and compressors for years is that of a proper tie for cotton baling.

THE WIRE COTTON TIE

Has solved the problem. It combines strength and durability, ease and rapidity of application, and is adapted to any kind of press. These ties are made from very tough and expensive steel, manufactured especially for the purpose by the Illinois Wire Co., Chicago. There is absolutely no breakage and the wire never slips, hence more density. The wire is round, therefore does not cut the bagging or fiber of cotton. Write for circular and prices.

WILLIAM CHRISTIAN, Agent, 203½ Main Street, Houston, Texas.

KENTUCKY BLUE GRASS SEED.

For a Beautiful as well as a Most Profitable Pasture sow BLUE GRASS.

The genuine Kentucky seed is what you want, and from September until June is the proper time to sow. For pure seed of our own raising, and full particulars, write MT. AIRY SEED FARM, Paris, Kentucky.

J. G. PEPPARD

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PHOENIX NURSERY COMPANY,
1800 Park St., Bloomington, Illinois.

not so desirable for that kind of planting as a straight 1-year-old. The land on which they were planted was one of the Ozark flint hills, which had been cleared the year before and cultivated in corn. In some places the land was so hard and flinty that I could hardly make a hole with a heavy crowbar. No surface soil was placed in the holes. The hole was made just large enough to admit the roots; the tree was placed therein and the bar then driven down a few inches away as deep as the hole in which the tree was set. The top of the bar was then pulled away from the tree, which movement closed in the dirt around the lower end of the root very firmly. A movement back towards the tree closed the upper part of the hole. The bar was then withdrawn, the hole tamped and the work was done in less time than it takes to tell it.

Now for the result: Those set in crowbar holes did not make quite as much growth the first year as those set by the old plan, but they have outdone them every year since, and are now the best trees I have. They bore considerable fruit this year and last and promise well for the future. I would not set trees any other way. It saves labor, which is money, and it makes a better tree, which is also money.

I would say to those who would try the plan: Never put any surface soil or anything else in the hole. Be sure that the lower end of the hole is closed firmly around the root and the result will be satisfactory.

I would say further, however, that if the trees are long, straight whips, as 1-year trees often are when they come from the nursery (I would not set anything but 1-year-olds by the Stringfellow plan), I would cut them back at least half, and if you cut them back to the ground it will be all the better. Always set as near the same depth as they stood in the nursery as possible.

Seligman, Mo. H. M. WALLACE.

Seed Potatoes.

PRESS BULLETIN VERMONT EXPERIMENT STATION.

So far as known, the fungus which causes the common "rust" or late blight and rot of potatoes, lives over winter only in the potato tubers. It is of course possible that it may persist in a resting stage in the soil or the blighted vines or decayed tubers, but most persistent search has failed to discover this. If this belief is correct and the only place where the fungus lives through the winter is in the infected tubers, then the development of the disease each succeeding year is a direct result of the planting of some such infected tubers. All observations are in harmony with this explanation.

The unusually early and general development of the fungus the past summer is thus explained, for there was enough of the rot in the autumn of 1901 to cause the widespread infection of the tubers from which the seed of 1902 was selected. It follows that the still worse development of rot this season is prophetic of a disastrous occurrence of the disease in 1903, providing soil and weather conditions next summer are at all favorable.

The practical question is what can be done to lessen this danger? There is no method known of disinfecting such diseased seed. Surface washes are useless for the fungus is safely housed in the depths of the living potato tissue—and any known means of killing the fungus by chemicals will kill the potato also.

It has been suggested that heating

STARK TREES best by Test—77 YEARS
LARGEST NURSERY.
FRUIT BOOK free. We **PAY CASH**
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AGENTS WANTED TO SELL NURSERY STOCK. 40 per cent commission paid to good, competent men.
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Harlan P. Kelsey, Tremont Bldg. O, Boston, Mass

For information as to Fruit and Trucking Lands, Grazing Lands, Soil, and Climate in Virginia, North and South Carolina, Georgia, Alabama, and Florida, along the

ATLANTIC COAST LINE RAILROAD,

Write to
WILBUR MCCOY,
Agricultural and Immigration Agt., Jacksonville, Fla.

the seed potatoes six hours or longer at 108° F., or thereabouts, dry heat, would kill the fungus without injury to the potato. This has not been fully demonstrated and would not prove practical to most farmers in case it is reliable.

The Vermont Experiment Station authorities can recommend only two things as practical. The first is that unusual pains be taken this autumn to secure and preserve for next year's seed purposes, early planted potatoes grown on light, well-drained soil, which escaped the blight—or else those from fields so well sprayed as to be protected. The second is that next summer every potato-grower be prepared beforehand with spraying outfit and chemicals ready for prompt application of the Bordeaux mixture when needed. Even in so discouraging a season as the last one this remedy has proved perfectly effective when used promptly and thoroughly. In the well-sprayed fields at the Vermont Station at Burlington, a considerable portion of the vines were still green and growing on October 1, and preliminary diggings have shown practically no rot.

Acorns for Planting.

EDITOR KANSAS FARMER:—I want to know through your paper, when is the best time to plant acorns from oak trees. There are plenty of them this year, and they are good. I would like to have some of that kind of timber for windbreaks. If they should be planted in spring, how could they be kept in good condition till that time? G.
Montrose, Jewell County.

In Feller's Practical Forestry, page 27, we find the following:

"The seeds of a large proportion of deciduous trees may be preserved over winter by mixing them with clean, sharp, moist sand, and burying in the ground, covering only just enough to protect them from vermin and changes of the weather. A dry knoll or other well drained situation should be selected. Acorns, chestnuts, and hickory nuts and seeds of the later ripening maples, locusts, three-thorned acacia, yellow wood, and hundreds of other similar kinds will keep perfectly in this way, and be found in excellent condition in spring, when they may be sown, with or without the sand in which they have been stored."

Don't Accept a Substitute!

When you ask for Cascarets be sure you get the genuine Cascarets Candy Cathartic! Don't accept fraudulent substitutes, imitations or counterfeits! Genuine tablets stamped C. C. C. Never sold in bulk. All druggists, etc.

The University of Kansas.

The following circular concerning the University of Kansas contains much valuable information. It is sent out from the university and doubtless contains a correct statement of facts:

IT BELONGS TO KANSAS.

The University of Kansas belongs to the whole State, and every citizen should feel a proprietary interest in it, and take a corresponding interest in its welfare, and a pride in its success. It permits free education for the young men and women of the State who are qualified to take the work. It begins where the high school leaves off and carries the student into higher studies in whatever direction he may go. As a people's institution, it should be broader and more liberal than any other institution, and should lift its head above every educational institution in the State. It should be superior to all others in its equipment so that it may prove helpful to all the educational interests of Kansas. The students of the State University come from all the various occupations of life, from the common laborer to the retired banker and capitalist. They meet on a common level for in the institution there is no aristocracy.

ALL CALLINGS IN LIFE REPRESENTED.

Of the 1,233 students in attendance last year, the parents of 30 per cent of the number were farmers and stock-raisers; 15 per cent followed mercantile pursuits; 8 per cent were lawyers; 8 per cent were mechanics, artisans, and manufacturers; 4 per cent were bankers; 4 per cent were physicians; 4 per cent real estate dealers and loan agents; 3 per cent were engaged in rail-roading; 3 per cent were teachers; 2 per cent were druggists, and 2½ per cent were ministers. The remainder are distributed over about 60 occupations from the day laborer to the capitalist.

Of the students in the university last year only 19 per cent came from Lawrence and only 20 per cent came from Douglas County. A large number of these came from other counties to reside in Lawrence for school purposes. This makes the University of Kansas a State university and not a local institution. Other State universities and other institutions are more local. In Nebraska 23 per cent came from Lincoln and 32 per cent from Lancaster County; in the University of California 37 per cent of the students came from Alameda County and 56 per cent from adjacent cities and territory; other universities and colleges show a corresponding ratio of local students. Kansas University more nearly represents the whole State than any of these.

UNIVERSITY EDUCATION FOR ALL CLASSES.

The university is not an institution for the sons and daughters of the rich alone; but is for the hard-working, industrious people of the State as well. It is the place where every person of will and purpose may obtain an education free of tuition. Of the students in attendance in 1901-1902 about 40 per cent were self-supporting and 8 per cent were partially self-supporting. The institution is liberal in its terms of admission. While students who are regularly graduated from high schools of good standing are admitted in the regular courses free from examination, others of mature years above 21 years of age can enter special courses which they are prepared to take even though they have not had the regular high school preparation. In other words the doors of the university swing wide open to all who are prepared to take work in any line of education of their choice.

ADVANTAGES OFFERED.

Besides the advantages that appeal personally to every boy and girl in Kansas, the university should give a good legal education in order to raise the standard of the profession and improve the quality of justice in our courts; it should give a first-class medical education, to improve the practice in the community that epidemics and diseases may be prevented and the public health conserved; it should, through its schools of pharmacy place the drug business on which so much depends for sickness or health, in trained and skilled hands; through its school of engineering, it can furnish experts in the important industries of the State; it gives such education in the arts and sciences, as to develop and support the primary, grammar, and high schools and to stimulate the cause of education; as a leader in scientific investigation the university discovers valuable truth, which is essential to the well-being of the community; in providing for the study of history, civil government, and public law, the university prepares students for citizenship and public life, and through its instruction

in sociology and economics the student becomes familiar with the social and economic problems of the day, of finance and banking and of the management of public institutions; in providing for study of the fine arts it elevates the standard of taste and provides for culture among the people, indeed, the university reaches out into all departments of life, touching every industry and improving every quality of life. It has a real importance to every county in Kansas.

THE NEEDS OF THE UNIVERSITY.

In legislation there has been a tendency at times to assume that the University of Kansas belonged to the town of Lawrence, or to Douglas County, when in reality every citizen in the State has a proprietary right in it and should take an interest in its welfare and evince a just pride in its success. The 1,233 students in attendance at the university last year came from nearly every county in the State. Parents are sending their children to their home institution instead of sending them away because it costs less than half as much to educate them at home. The State should see to it that the youth of Kansas have just as good advantages at home as the most favored sons of Harvard and Yale have under the shadow of those old institutions.

As the school grows it needs larger appropriations for buildings, equipment and for current expenses but these need not be burdensome to a prosperous community, because the university population grows in proportion to the wealth of a community and not in direct proportion to the number of inhabitants. The State already has spent much money in the establishment of the foundations of a great university, but it should go on and build the superstructure in proportion to the wealth, dignity, and power of Kansas. There are now eleven buildings on Mt. Oread with apparatus representing an aggregate value of \$1,000,000. The university is about to enter a new era of prosperity and we expect to register 1,500 students during the current year.

Although the citizens of Kansas have spent much money in the foundation of the school, they can afford to spend more to efficiently work the plant that the youth of the land can be educated at home, and not spend hundreds of thousands in Eastern institutions. Compared with other State institutions of our neighboring States, Kansas has not been liberal with her university as the following tables will show. These tables were made in 1900 but the ratio of expenditure remains about the same.

COMPARISON OF COSTS OF MAINTENANCE.

The following table shows the annual cost to the State for each student in attendance and the endowment of each institution, the interest on which is used for current expenses, and therefore increases proportionately the annual cost per capita.

	Actual cost per capita to the State.	Endowment.
Ohio.....	\$144	\$ 552,617
Indiana.....	211	600,000
Michigan.....	154	742,000
Wisconsin.....	111	525,000
Minnesota.....	105	3,500,000
Illinois.....	105	475,000
Iowa.....	140	235,000
Missouri.....	165	1,235,000
Nebraska.....	98	175,000
Colorado.....	152	
California.....	121	11,000,000
Kansas.....	104	142,000

The following table shows the annual millage tax on the total valuation of the State which is provided for the support of the State university, and the amount received annually from the State through this tax and through special legislative appropriations:

	Annual millage tax on total State valuation.	Amount received annually from State
Ohio.....	1-10 mill	\$180,000
Indiana.....	1-15 mill	215,000
Michigan.....	1-10 mill	530,500
Wisconsin.....	none	268,000
Minnesota.....	23-100 mill	340,000
Illinois.....	none	235,000
Iowa (for buildings).....	1-10 mill	201,000
Missouri (collateral inheritance tax) (approx.).....	1-10 mill	200,000
Nebraska.....	1 mill	215,000
Colorado.....	1-5 mill	120,000
California.....	1-5 mill	240,000
Kansas.....	none	120,000

The University of Kansas received \$135,000 for each of the years 1901 and 1902 for current expenses, a sum entirely inadequate.

The following table shows the number of additions to the faculty during the past four years, and the total cost of buildings erected by the State during the past fifteen years. This table was prepared in 1900:

	Additions to faculty during last 4 years.	Buildings erected by the State in 15 yrs.
Ohio.....	42	\$767,000
Indiana.....	11	168,000
Michigan (in ten years).....	43	450,000
Wisconsin.....	39	778,000



School Girls

Young girls at this period of life, or their mothers, are earnestly invited to write Mrs. Pinkham for advice; all such letters are strictly confidential; she has guided in a motherly way hundreds of young women; and her advice is freely and cheerfully given.

School days are danger days for American girls.

Often physical collapse follows, and it takes years to recover the lost vitality. Sometimes it is never recovered.

Perhaps they are not over-careful about keeping their feet dry; through carelessness in this respect the monthly sickness is usually rendered very severe.

Then begin ailments which should be removed at once, or they will produce constant suffering. Headache, faintness, slight vertigo, pains in the back and loins, irregularity, loss of sleep and appetite, a tendency to avoid the society of others, are symptoms all indicating that woman's arch-enemy is at hand.

Lydia E. Pinkham's Vegetable Compound has helped many a young girl over this critical period. With it they have gone through their trials with courage and safety. With its proper use the young girl is safe from the peculiar dangers of school years and prepared for hearty womanhood.

A Young Chicago Girl "Studied Too Hard."

"DEAR MRS. PINKHAM:—I wish to thank you for the help and benefit I have received through the use of Lydia E. Pinkham's Vegetable Compound and Liver Pills. When I was about seventeen years old I suddenly seemed to lose my usual good health and vitality. Father said I studied too hard, but the doctor thought different and prescribed tonics, which I took by the quart without relief. Reading one day in the paper of Mrs. Pinkham's great cures, and finding the symptoms described answered mine, I decided I would give Lydia E. Pinkham's Vegetable Compound a trial. I did not say a word to the doctor; I bought it myself, and took it according to directions regularly for two months, and I found that I gradually improved, and that all pains left me, and I was my old self once more. — LILLIE E. SINCLAIR, 17 E. 22d St., Chicago Ill."



"Miss Pratt Unable to Attend School."

"DEAR MRS. PINKHAM:—I feel it my duty to tell all young women how much Lydia E. Pinkham's wonderful Vegetable Compound has done for me. I was completely run down, unable to attend school, and did not care for any kind of society, but now I feel like a new person, and have gained seven pounds of flesh in three months."

"I recommend it to all young women who suffer from female weakness." — MISS ALMA PRATT, Holly, Mich.

Lydia E. Pinkham's Vegetable Compound is the one sure remedy to be relied upon at this important period in a young girl's life.

\$5000 FORFEIT if we cannot forthwith produce the original letters and signatures of above testimonials, which will prove their absolute genuineness. Lydia E. Pinkham Medicine Co., Lynn, Mass.

the total cost of so many of these buildings as have been erected for each by the State (1900):

	Date of founding.	Number of buildings used for instruction.	Cost of buildings erected by the State.
Ohio.....	1870	15	\$ 778,000
Indiana.....	1820	8	1,082,300
Michigan.....	1837	19	1,882,000
Wisconsin.....	1848	22	1,084,500
Minnesota.....	1869	30	1,055,000
Illinois.....	1868	18	602,000
Iowa.....	1847	15	713,000
Missouri.....	1840	16	442,000
Nebraska.....	1869	15	200,000
Colorado.....	1877	9	
California.....	1868	13	
*Kansas.....	1866	8	300,000

*The University now has nine buildings for instruction including the library and the museum.

COMPARISON OF THE UNIVERSITY OF KANSAS WITH OTHER STATE UNIVERSITIES.

The following table shows the date of the founding of twelve State universities, the number of buildings used by each for purposes of instruction, and

The Young Folks.

Conducted by Ruth Cowgill.

GOOD-BY.

We say it for an hour or for years,
We say it smiling, say it choked with
tears;
We say it coldly, say it with a kiss;
And yet we have none other word than
this—

Good-by.

We have no dearer word for our heart's
friend.
To him who journeys to the world's far
end
And scars our soul with going, thus we say
As unto him who steps but o'er the way—
Good-by.

Allie to those we love and those we hate,
We say no more in parting. At life's gate,
To one who passes out beyond earth's
sight,
We cry as to the wanderer for a night—
Good-by.

—Grace Denio Litchfield.

Shakespeare in the Slums.

ALICE AUDLEY MAXWELL, IN SUCCESS.

In the center of the Russian Jewish district in New York City, which is situated on the lower East Side, there flourishes at least one instance of success in that atmosphere of poverty and many failures.

Two years ago, Gustave Hartman, a young schoolteacher, 19 years old, organized a literary club particularly for the study of Shakespeare—not so much as a foundation for style or correctness of speech, but as a preparation for the moral conflicts which begin, all too soon, to war in the untrained souls of the children of the slums. Those whom he sought to influence were mostly children of the uneducated poor who are credited with love of lawlessness and abhorrence toward restraint.

The tendency of those boys to spend every available moment on the street, too frequently in malicious mischief, confronted the young philanthropist as the most serious obstacle, especially as he designed his club meetings to take place every Saturday—the school holiday. He believed that, if their interest could be aroused in something substantial, marbles and mischief would play a secondary part in their lives. Every boy in his club is a hero-worshiper, and there were enough brave men in Shakespeare's works to interest them. Mr. Hartman selected a play, studied it with care, and announced to the boys that he would lecture on a certain day.

His first audience numbered just eighteen. The lecturer is magnetic and is an actor of some merit. Parts of the play he explained, and other parts he recited effectively. He emphasized the comparison of good and evil, and portrayed the humor, which pleased the boys. The next week they returned and brought their friends.

That was the beginning. In the course of a year, the club outgrew its quarters, for the membership increased to four hundred, and a large hall on Rivington Street was secured for the weekly meetings. Moreover, Gustave Hartman, now 21 years old, has established a separate class of six hundred girls. A thousand young minds, therefore, are brought under his control to a great extent, and his influence over these children, who range from 8 to 15 years of age, is remarkable. He commands their affection and respect. Expressions of approval, disdain, even tears, mark the progress of their interest and emotion.

Mr. Hartman does not seem to regard himself or his work as unusual. He is enthusiastic. His eyes brighten as he talks of his efforts and ambitions. Notwithstanding the fact that he teaches in a day and an evening school, and tutors in summer, he is anxious to develop his Shakespeare club into numerous classes throughout the city. The secret of his success lies in the fact that he understands human sympathy. Perhaps there are other young men, and young women, too, who, hearing of Gustave Hartman's undertaking, will be encouraged to strive in a similar field.

The Art of Lying.

To one just beginning to look about him and take observations of the world around him the most disheartening thing is the astonishing number of liars he meets. Generally, he concludes that all men are deceivers and honesty is not the fashion, assumes a fine cynicism and looks with scorn upon the simple-hearted fools who believe in their fellow men.

Later, he learns that, though the liars are numerous and mighty, the truth-tellers are more so, and he reverences and honors men the more for the brief eclipse of his faith in them.

Lying seems to me to be a fine art. There are many who attempt it and make a very bungling mess of it, and

there are a few who do it with a skill and elegance that are truly enchanting.

My very first observation of artists of this class was a very genius in his special line. He was a boy somewhat older than myself and he early showed signs of his peculiar talent. The story of his life, as pieced together from his own narratives, would make a tale of thrilling interest, worthy to rank with yellow-backed novels of the deepest dye.

Another gifted person along this line was a female who presided over our kitchen. She imposed upon our gullibility to an incredible extent, until she stuffed us, in fact, and when at last she compelled our reluctant disbelief by the terrible inaccuracy of her statements—and also the alarming increase of our grocery-bills, for her lying was not altogether merely verbal—she shamed us for our suspicions by her expression of injured innocence.

If she was possessed of any sense of humor—and I am sure she was—she must have gotten no end of entertainment during her brief experience in our kitchen.

Speaking of "stuffing" reminds me of a small girl I once knew, who successfully performed that operation. She lived with her grandmother, who had just met a great sorrow. The child, with the best intentions in the world, set out to cheer her up and began by telling her of the things she saw and heard in her daily walks to school. Observing that they had not so telling an effect as she desired, she began to season and garnish them from her imagination, and ere long, her tales were wonders of imaginative art. Her grandmother was a Methodist, and much interested in a revival at the time. The child observed this, and told tales of marvelous conversions she had brought about, and she told them with such an appearance of simplicity and sincerity that to doubt them was an impossibility. A circus came to town. This was an opportunity not to be neglected, and she regaled her grandmother's ears with accounts of what she saw, picturesquely decorated with choice bits from her imagination. For her, the monkeys talked and told wonderful tales of life in their native forests, the elephants lifted her in their trunks, and the bears stood on their heads for her benefit.

Liars are very entertaining personages—so long as you do not know that they are lying. As soon as you discover that, for some reason, their fascination ceases and you wish you had not to listen to them.

Chivalry, Ancient and Modern.

In the half-mythical days of early England when the island was a wilderness over-run by wild beasts, and ravaged by beastlike men, there arose an order, The Knights of the Round Table, whose purpose it was to purify the realm, to kill the beasts, and to drive out or subdue the heathen hordes. The head and inspiration of the band was King Arthur, kingly in purity and nobleness as in name. This was the vow he made them swear when they became his knights:

"To reverence the King, as if he were their conscience, and their conscience as their King,

To break the heathen and uphold the Christ,
To ride abroad redressing human wrongs,
To speak no slander, no, nor to listen to it,

To honor his own word as if his God's.
To live sweet lives in purest chastity,
To love one maiden only, cleave to her,
And worship her by years of noble deeds,
Until they won her."

The story rings with the blowing of trumpets, the meeting of spears, the crashing of armour and sweating of horses. All the romance of noble warfare, of honorable victory, of chivalrous devotion, thrills through its lines. Dragons are killed in bloody combat, women and children are rescued and protected by perilous feats of courage and daring.

The heroic spirit of that dashing age lives in the heart of every boy and man to this day. Men are as bold now as then, as loyal to right, as eager to protect the weak, as reverent of womanhood and age. There is a knighthood to-day, who reverence their conscience as their King, "men with strength and will to right the wronged, of power to lay the sodden heads of violence flat." And are there no monsters to try their spears upon, no foemen worthy of their steel? There are men and women whose lives are ground out of them by the pitiless heel of poverty, there are children whose little hands must feel the monster that would devour them; there are human creatures who must forfeit their very souls for existence. What is the tyrant that compels it? I do not know. Call it social conditions, call it capital,

call it greed, call it political corruption, call it what you please. But here certainly is a foe for the knight of to-day to be thinking about.

There is another dragon whose power reaches to the remotest district. The liquor traffic wrecks every home in its domain, it breaks fathers' and mothers' hearts, it darkens and blights children's lives, and tramples upon every holy thing. Could the knight of old meet a more brutal foe?

The boys of to-day are the men of tomorrow, and it were well that they begin to think about the battles they will fight, to sharpen their weapons and toughen their muscles, for it will be a bitter fight.

QUESTION BOX.

EDITOR QUESTION BOX: Will you please tell me if deer cast their horns every year, or only the velvet that grows on the horns. I have just returned from the mountains in Colorado, and they say the horns are cast every year. Please let me know through the KANSAS FARMER.

THOS. BROWN PALMER.

Clifton, Washington County.
ANSWER.—Your information is correct. It is the horns that are cast. This occurs every year, in February or March, according to the authority we consulted.

FOR THE LITTLE ONES

PEEP OF THE DAY.

Of all the brave little, bright little Hours,
There's one that is known to but few;
He has his full share of the sunshine and showers
The same as the rest of them do,
But, somehow or other, most children at play
Have not even seen jolly Peep of the Day.
And this is the reason: he's up and around
With just the first wink of the sun,
And quick as a flash, and with never a sound,
His work and his play are all done;
Yes, that's how it happens we miss little Peep—
The most of us then are abed and asleep.

He's certainly tiny; but see what he does—
He opens the workshops of day,
And sets the wheels going with never a buzz,
And never a moment's delay;
He winds up the clocks—then this bright little elf
Runs off to give place to the Morning itself.

—Frank Walcott Hutt.

When Melford Got Lost.

Melford had a funny time getting lost one night. He had started after the cows, all alone for the first time, and he was a very tiny boy, so he lost himself in the orchard, though it was only a little distance from the house. He wandered around and around and he was not much frightened, for he felt sure he would come out all right, somehow. But the sun sank low—he could see it through the trees dropping into its crimson bed—and the color faded from the sky; the little stars came out, one by one and peeped at him, and he grew tired. He sat down at the foot of an old apple-tree to rest and his head drooped, and he fell fast asleep. The cows wondered and wondered why no one came to drive them home, and finally they came wandering up from the pasture into the orchard. They were starting toward home, for they were hungry, and wanted to be milked.

Melford felt a warm breath on his cheek that awakened him and when he opened his eyes, there stood old Brindle, looking at him. He jumped up and looked about him. All the cows were

near, some standing quietly chewing their cud, some walking leisurely on. So he followed them, and after a while they all stopped and there was the gate! Melford looked up, and there right before him, was the barn. He was very, very glad, for then he was no longer lost. He opened the gate and followed the cows into the barn. His father said, "Why, Melford, we were just going to hunt for you, we thought you were lost." "I guess I was," said Melford. "But the cows found me." And he patted old Brindle and went in to bed.

FOR OVER SIXTY YEARS

An Old and Well-Tried Remedy. Mrs. Winslow's Soothing Syrup has been used for over Sixty Years by Millions of Mothers for their Children while Teething, with Perfect Success. It soothes the Child, softens the Gums, allays all Pain, cures Wind Colic, and is the best remedy for Diarrhoea. Sold by druggists in every part of the world. Be sure and ask for Mrs. Winslow's Soothing Syrup, and take no other kind.
Twenty-five Cents a Bottle.



Great school for the masses. Students enter at any time and select their own studies. Faculty of twenty members representing America's most famous Universities. Oldest and best-equipped independent Normal west of Chicago. Lowest rates. Secures positions for graduates. If you wish a standard education write to us if you have money or not. We will assist you. For free Catalogue, address, D. S. ROBBINS, Pres., STANBERRY, MISSOURI.

ON CREDIT.

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Century Steel Range, No. 80-A-18
Has six 6-inch lids, oven 17x21x12, splendid reservoir and warming closet, lined throughout with asbestos, burns anything, best bakers and roasters on Earth. Guaranteed 10 years. Weight 475 lbs. Only \$22.90. Terms \$8.00 cash, balance payable \$3.00 a month, no interest. Shipped immediately on receipt of \$8.00 cash payment. We trust honest people located in all parts of the World. Cash discount \$1.50 on Range. Freight averages \$1.25 for each 600 miles. Send for free catalogue, but this is the greatest bargain ever offered. We refer to Southern Illinois National Bank.

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Dept. 73 K East St. Louis, Ill.

START SOMETHING.

A Printing business, for instance. Our 85 press prints Cards, Envelopes, etc. Other sizes and prices. Easy to set type; full instructions. Send stamp for catalogue of presses, supplies and novelties and learn how to MAKE SOME EASY MONEY. MIDLAND SPECIALTY CO., 911 Charlotte St., Kansas City, Mo.



The Home Circle.

THE ORGAN GRINDER.

I'm ignorant of music, but still, in spite of that, I always drop a quarter in an organ-grinder's hat, I welcome on the pavement that old, familiar noise, Around which gaily gather all the little girls and boys; While solemn, sad and hungry stands, a-tourning at the crank, A nobleman from Europe, of attenuated rank.

The nobleman looks sad, but gives with organistic glee, A ballad of old Ireland, the jewel of the sea— "The most distracted country that we have ever seen; They're hangin' men and women there for wearin' of the green— For wearin' of the green, for wearin' of the green— They're hangin' men and women there for wearin' of the green." And then I think of those who went a-marching off with me, Who claimed a home in Ireland, the jewel of the sea; My comrades and my messmates, none braver or more true; Holding aloft the stars and stripes, a-wearin' of the blue. Alas! Far down in Dixie their many graves are seen; Beneath the grassy hillocks they are wearin' of the green. Immortal little island! No other land or clime Has placed more deathless heroes in the Pantheon of time.

Anon the noble Roman brings his music to a halt; There seems an indication of a neighboring revolt. He takes a change of venue of about a dozen feet. And enfilades the windows that are fronting on the street. Around him whirl the girls and boys, with animated glee. Once more he grinds; I recognize "Des Deutscher Companie."

"Der Deutscher Companie ish der beshtest companie!" The music bears me backward to the year of '63. I saw a German regiment step out from our brigade; It marched across a meadow where a hundred cannon played; Its bugles hurled defiance as it skirmished up a slope Amid a fire that gave no man the promise of a hope.

They fell like wheat; they came not back; at night no bugles played— There was no German regiment attached to our brigade.

The world has seen that valor, O land of song and vine! Since Hermann plucked the eagles from the ramparts of the Rhine. Down valor's lustrous colonnade is seen the marble throng— Thy warriors and thy scholars, O land of vine and song!

About this time the nobleman is asked to take a rest; The fires of indignation light his Romulistic breast. He stops the crank; he gazes up defiantly, yet mute. While from the second story there proceeds an ancient boot. With steady gaze he watches it, and, like a man of nerve, He accurately calculates its hyperbolic curve. He dodges it; he marches on; but soon this man of Rome Begins again to turn the crank—"Johnny comes marching home." "When Johnny comes marching home again, hurrah, hurrah! The women will sing, the men will shout, The boys and girls will all turn out; We'll all be gay when Johnny comes marching home."

And then I think of those again who went with me to war— They knew where they were going, and what they went there for; They felt that there was little left of present or of past, Of hope, of home, of future, if the die were wrongly cast. Fires smoldered at the firesides, when the nation called "To arms!" My comrades left the forests, the foundries, the farms; They fought the nation's battles, on the land and on the sea— Alas! alas! no millionaire to war went off with me. The merit of the country marched, and filled the Union's ranks— The money of the country marched and filled the English banks. At last, when all was over and Johnny ceased to roam, He came with bugles playing; the specie sneaked back home.

O outcast organ-grinder, thy simple ballads start The frenzy of the cyclone through the highlands of my heart. Some sneer thy ragged music, because to them there comes No bawling of the bugles, no raving of the drums. They hear no "boots and saddles" sounding in the midnight chill; They hear no angry cannon thunder up the rocky hill; They hear no canteens rattle; they see no muskets shine. As ranks sweep by in double-quick to brace the skirmish line.

Go play thy simple music, O friendless sport of fate. The ballads of the people are the bulwarks of the state. The bugles that hang dreaming now, like bats upon the wall, Remember well those choruses which rose above the call; And in unconscious musings, those battered bugles see The glories of the future in the centuries to be.

—Eugene F. Ware.

Success.

Text: Seest thou a man diligent in his business? He shall stand before kings; he shall not stand before mean men.—Proverbs xxii, 29.

How shall a young man succeed?

Don't dodge. I am not going to tell you "how I got my first thousand dollars." I am not going to deliver a lecture on morals or on turning church membership into cash.

The point is one which concerns every employer and every employee. It is the practical, ever-present problem of giving and getting intelligent service. It is the all-important problem of getting on in the world.

Not all of us can get rich. Not every one can be a Russell Sage, or a James J. Hill, or an Andrew Carnegie, but all of us can better our condition.

If we are office boys, we can be better office boys, and when promotion time comes we will take a step up.

If we are salesmen we can be real salesmen and our salaries will increase accordingly.

If we are farmers we can put our mind into our work and make it count in the returns.

That is what I mean by success.

Not very startling, is it? But only an employer knows how earnestly employers look for successful workers.

The head of one of the best houses in New York recently said to me: "The greatest trouble we have is to get intelligent junior clerks."

Every growing business has the same want. The trouble is to find some one worthy of promotion.

Business is too full of those who have "bad luck," and whose efforts are "not appreciated"—who are "not treated right." And most of them also "missed the boat," or "the clock was slow," "wasn't hired for that," or "was perfectly willing to do it if you had told me."

They don't care whether they are handling books or bricks, and handle either badly.

The joy of being interested in their work, for the sake of the work, is not theirs. The satisfaction of clean achievement—of doing the thing right for the sake of doing it right—is an unknown sensation.

They work for 6 o'clock and \$6.

They do not realize that the game of business is as interesting, and requires as much skill, as the game of billiards—and is more exhilarating, once one finds it out.

I know a carpenter—a friend of mine—who has absolutely declined to leave a job that I said was "good enough." He said: "I can't leave it that way. It isn't right, and I wouldn't be comfortable."

My friend is never out of a job.

I know a tailor who says: "No, you leave it another day. I can't let it go out like that." A pair of trousers is a work of art with that man, and he is able to charge the highest price in New York.

I know a young man who was a \$3-a-week office boy only a short time ago, but everything he did was done so well that many things were given him to do. All days and all hours looked alike to him, and the doing of his task promptly and right was what chiefly concerned him. Now he has a responsible position and is getting a little nearer the top every day.

I know a young farmer who a short time ago was working by the month. His employer wanted to retain him at away above the usual wages. But his use of his brains made him worth more to himself than any employer would pay. Beginning with his small savings he is on the road to wealth.

And I know many incompetents—most of them have dropped by the way. Incompetence is generally not due to a lack of brains or physical ability, but to laziness and vanity.

Competence is mainly a willingness to work and think.

Honesty has something to do with it—but no man who really thinks will be dishonest.

A good many people only think that they think. Others have thoughts that are warped—they do not think straight. They are handicapped by the idea that somebody is getting the best of them.

They waste time wallowing about the imaginary favoritism which advances some one else.

Too many do not know where they are going, and do not specially care.

They do not know whether or not they are profitable to their employer—and they do not specially care.

They do not study the business they are in—or any other business.

What shall they do to succeed?

First—Think. Second—Work.

That will get them to wherever they ought and deserve to go.

The young man should study to learn

THE WEAR OF RUBBER BOOTS AND SHOES DEPENDS UPON THE RUBBER IN THEM.

There is absolutely no wear in any of the other ingredients of which they are composed. Every time the quality of Rubber Boots and Shoes is reduced 10 per cent., the durability is reduced over 20 per cent. because there is only one way to cheapen them, and that is to leave out Rubber and put in its place other things that have no wearing quality whatever. This cheapening process has been steadily going on for the past 40 years.

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OF RUBBER BOOTS AND SHOES

are made of real rubber—and one pair of them will outwear two pairs of the standard first grades now on the market. Try a pair and be convinced. Made in Duck Boots, Duck rolled edge Overs for Socks, and Felt Boots and in Arctics and light rubber shoes. Insist on getting the BUCKSKIN BRAND. None genuine without the word BUCKSKIN on the top front of the legs of the boots and the bottoms of the shoes. If your dealer does not keep them write us and we will see that you get them either through some dealer in your town or from us direct. We will also send you a very interesting pamphlet profusely illustrated, which describes the making of Rubber Boots and Shoes from the gathering of the rubber to the finished goods.

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An actual test of a 2-inch strip cut from the sole of the Buckskin Boot. Note the elasticity and strength. Only the best Rubber will stand a test like this. Weight of boy and swing 110 lbs.

why his work should be done as he is told to do it.

He should not be content to know simply enough to twist the wheel of a copying press. He should know just how hard to twist it, and how long, and how wet to make the blotters to produce the cleanest copy of the letter. And he should learn why letters need to be copied.

That leads him to some other knowledge of his business.

Possibly he can suggest some simpler or safer way of handling the letters before or after copying.

That leads to a consideration of the filing system. That leads to thought of the letters received and their relation to the letters sent out.

That leads right into the heart of the business.

Is the young man a clerk in a wallpaper store? The facts about the wallpaper are interesting. Let him study them.

Years ago I asked a wallpaper clerk how wallpaper was made.

He said it was "made by machinery." Luminous thought! Six dollars a week was too much salary for that boy. The making of wallpaper is as interesting as a fairy story.

The acts and history of every business are entertainment par excellence, if they be considered as entertainment and not as labor.

The other day a wagon maker showed me a rack swung from his ceiling, where the air was driest. "That stuff has been seasoning for eight years that I know of and I don't know how long before. Some makers use kiln-dried stuff, but kiln-drying takes the life out of it." He told me many other things—all entertaining, all instructive, all good "talking points" for a salesman to know.

Does the grocery clerk who scoops out a pound of coffee know or care where it comes from, how it was roasted, what makes it good, bad, or indifferent?

It's a hundred to one he does not—and the one is the one who earns and gets a promotion—who succeeds.

Every item in a grocery stock, or a hardware shop, or a clothing store, has a story of vital interest, and a knowledge of that story will help a young man to succeed.

Let him know the goods he is handling and the work he is doing. Let him study the goods and the work. Let him think how the handling may be simplified and the work made more effective, and let him submit his suggestions in writing to his employer or to the head of his department.

Does the farm hand study the prob-

lems of crop production, of rotation, of fertilization, and of feeding? If so he will not long remain a farm hand but will surely travel the road to a place among our independent farmers.

The main thing is that he shall be more interested in his work than in his neckwear—that he shall care less for his appearance than for what he accomplishes—that he shall understand once and always that honest, straightforward, continuous, earnest, and fairly intelligent work will win every time in spite of the trusts and all other obstacles.—Charles Austin Bates, in the Implement Trade Journal.

Labor Savers.

Mop sticks are cheap and two mops make the cleaning day much less tiresome. One is used in the water to do the scrubbing and the other is used dry to wipe up the floor. We read about it in "Good Housekeeping," tried it once, and will never do it any other way henceforth.

A very little borax water, added to the suds in which flannels are washed, will remove the dirt in less time and with less labor. A small amount of powdered borax, placed in a jar and kept covered with water, will last for a number of months and be found convenient for many purposes.

When a dish is to be washed in which mush, or some other sticky substance has been cooked, a great deal of time will be saved by placing a little hot water in the utensil, covering closely and placing on the stove. The steam loosens the food so that it can be washed off readily.

We have found that it was very convenient to have a few English walnuts in the store room. They are especially good added to a plain loaf cake and give it a decided "company" air, as well as making it much richer and better. They combine readily with odds and ends of vegetables and meat in making a nice salad. MARY WAUGH SMITH.

Seattle, Wash.

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Agricultural Matters.

Points Worthy of Consideration.

EDITOR KANSAS FARMER:—In the article "Something More About Alfalfa" in the KANSAS FARMER of Sept. 25, two errors occur. It says, "On Oct. 2, it was seeded to alfalfa by sowing broadcast twenty-six pounds to the acre." It should have said twenty pounds to the acre. The other was, "I have one field of alfalfa that is two years old." It is twelve years old. Last year, owing to the severe drouth and to excessive pasturing, this field only yielded one fair-sized stack before Oct. 1. I found cattle and horses pasturing on it when I arrived at the ranch. As soon as I was in possession I turned them all out and fastened up the gate, with the result that, by the aid of a good rain about that time, we cut in November five or six tons and this year we have seven large stacks, and on part of it another crop yet to cut.

Since coming to Kansas this year I have been strongly impressed with the idea that there should be organized in the State a "Kansas Farmers Protective Association." It should be an organization that has a branch in every township, and an agent employed by the association at every railroad station to superintend the sales of all the stack, and grain sold by the farmers living near that station and to purchase the farm tools, seed, grain, groceries, dry goods, and other things they have to buy. The most of the buyers of farm products now are the agents or employees of consumers of those products, instead of the producers, and they are all working more for the benefit of consumers than they are for the producers.

To illustrate: A farmer who raises wheat has it thrashed, and wanting it converted into cash engages his neighbors to help him haul it to the depot and there finds a local buyer who wants it as cheap as he can get it and buys it according to a test weight per bushel. The wheat is drawn to market in an open double or treble box wagon and jolted along from two to twenty miles. When he starts from his farm his wagon box is a little more than level full, but by the time he arrives at the station it lacks from one to two inches of being full. It has shaken down and packed together. If he was to fill the box of his wagon as full as it was when he started it would weigh one, two or three bushels more than it will when it is sold. The buyer has a little half peck weighing measure which he sets down upon the top of the load and with his hands carefully dips in enough wheat to fill his measure, levels it off and weighs it, with all the air in it he can get. It tests from fifty-five to fifty-nine pounds to the bushel instead of sixty to sixty-five pounds, while if the buyer had shaken the wheat down in his weighing bucket, anything like as much as the farmer's load was shaken down, it would test sixty pounds to the bushel, and he only gets 50 cents a bushel, instead of 56 cents as he would have gotten if given a correct test. Advantage therefore, is taken of the farmer both in the weight and price per bushel. You will find this sort of dealing going on all over the State, while if the farmers had buyers of their own members, they

would get full weight and price. This custom also applies in a little different way to cattle and other products sold by weight. The farmers of Kansas lose millions of dollars that would be saved if they had agents of their own to sell and buy the products they produce and consume. Again, such an organization as I suggest would prove of inestimable value in the course of a generation.

The railroad companies should build a grain elevator at every station at which a load of grain of any kind could be dumped out in three or four minutes, instead of requiring the farmer to wait three or more hours for a chance to unload by shoveling his grain into a freight car, as they now have to do, at most stations. Time is money to the farmer as well as to the banker or manufacturer. A word to the wise is sufficient.

Dr. E. P. MILLER.

41 W. 26 St., New York, N. Y.

The Crop Officially.

The monthly report of the statistician of the Department of Agriculture shows the average condition of corn on October 1 to have been 79.6, as compared with 84.3 last month, 52.1 on October 1, 1901, 78.2 at the corresponding date in 1900, and 77.7 the mean of the October averages of the last ten years.

The following table shows for the principal States the averages of condition on October 1, the corresponding averages one month ago and one year ago and the mean of the corresponding averages for the last ten years:

States.	This month.	Last month.	Oct. 1, 1901.	Oct. 1, 1900.	10-yr. av. '90.
Illinois.....	94	94	51	91	81
Iowa.....	76	91	59	100	82
Kansas.....	87	91	21	52	62
Nebraska.....	88	101	35	73	64
Missouri.....	104	102	31	84	79
Texas.....	38	37	46	72	76
Indiana.....	97	99	51	98	82
Ohio.....	88	93	63	95	83
South Dakota.....	53	78	69	90	77
Oklahoma.....	79	80	20	72	..
Wisconsin.....	67	88	71	100	84
Pennsylvania.....	86	90	93	75	83
Minnesota.....	62	89	76	98	87
Michigan.....	67	70	90	98	82

The preliminary estimate of the average yield per acre of spring wheat is 14.4 bushels, subject to revision when the final wheat estimate is made. The estimate averages of yield per acre in the States having 100,000 acres or upwards in spring wheat are as follows:

Minnesota, 13.0; Nebraska, 13.90; Colorado, 17.4; North Dakota, 15.7; Washington, 21.0; Kansas, 10.9; South Dakota, 12.4; Oregon, 19.1; Utah, 24.2; Iowa, 12.0; Wisconsin, 17.8; Idaho, 23.1. The average quality of spring wheat is 87.7.

The preliminary estimate of the average yield per acre of oats is 34.5 bushels, as compared with 25.1 bushels on October 1, 1901, 29.6 at the corresponding date in 1900, and 26.8 bushels the mean of the October estimates for the past ten years. The present estimate of yield per acre is the largest ever reported by the Department of Agriculture.

The following table shows, for the principal States, the averages of yield per acre as estimated on October 1, the corresponding averages one year ago, the corresponding averages in 1900, and the mean of the corresponding averages for the last ten years:

States.	This month.	Oct. 1, 1901.	Oct. 1, 1900.	10-year average.
Illinois.....	37.7	28.2	38.0	30.3
Iowa.....	30.4	29.8	34.0	30.9
Wisconsin.....	39.9	29.1	32.0	32.0
Minnesota.....	39.0	32.1	25.0	31.1
Nebraska.....	34.6	19.8	22.0	23.4
Indiana.....	35.4	28.6	33.0	29.0
New York.....	40.0	21.6	28.0	27.5
Pennsylvania.....	37.0	18.9	31.0	26.8
Ohio.....	41.1	31.5	38.0	30.8
Michigan.....	39.7	29.0	37.0	29.0

The average for quality is 88.7, against 83.7 last year, and 89.2 in 1900. The preliminary estimate of yield per acre of barley is 29 bushels, against 24.7 bushels on October 1, 1901, 20.4 at the corresponding date in 1900, and 23.3, the mean of October averages of the last ten years.

The average for quality is 87.3, against 89.2 last year and 82.1 in 1900.

The preliminary estimate of the yield per acre of rye is 17 bushels, as compared with 15.1 bushels on October 1, 1901, 15.1 bushels at the corresponding date in 1900, and 14.4 bushels, the mean of October averages of the last ten years. The average for quality is 91.8, against 89.4 last year and 92 in 1900.

The average condition of potatoes on October 1 was 82.5, against 89.1 last month, 54 on October 1, 1901, 74.4 at the corresponding date in 1900 and 71.6 the mean average of the last ten years.

As to the condition of sweet potatoes, Tennessee reports 1 point, North Carolina 2, and South Carolina and Virginia 5 points above their respective ten-year averages, while Georgia reports 3 points, Texas 4, New Jersey 6, Florida 1, Florida 5, North Carolina 8, Alabama 19 points below such average.

As to the condition of rice, Texas re-

ports 11 points above and South Carolina 1, Florida 5, North Carolina 8, Alabama 12, Mississippi 17, and Louisiana 23 points below their respective averages for the last eight years, while the condition in Georgia is the same as such average.

As to the condition of apples, North Carolina reports 8 points, Illinois 9, Missouri 10, Pennsylvania 11, Maine 12, New York 15, Iowa 16, and Michigan 27 points above, and Ohio 2, Indiana 3, Virginia 9, Tennessee 11, Kentucky 19 and Kansas 21 points below the mean of their October averages for the last seven years.

Corn Fodder to Take the Place of Timothy.

PROF. H. J. WATERS, MISSOURI.

Perhaps the most stupendous waste occurring on the American farm is that of the corn fodder crop. Something like 90,000,000 tons of corn fodder are annually produced on the 80 to 90 million acres normally planted to corn in the United States. In the corn belt of the Middle West, where above 75 per cent of all the corn of the country is grown, there is a prodigious and profitable waste of this food stuff. In this same section valuable land is annually used for the production of roughness, such as timothy, millet, sorghum, etc., while acres of corn fodder are allowed to go to waste.

In Missouri it is safe to estimate that something like 7,000,000 tons of corn fodder are grown in the average year. Certainly three and a half million tons, or one-half of all that is produced, is wasted. The average hay crop of the State is scarcely more than 3,000,000 tons, and is estimated to be worth on the farm over \$20,000,000. Yet a large proportion of this hay is timothy, a material that supplies the same class of nutrients for stock that is found in corn fodder. The question, therefore, as to whether this fodder can be used as a substitute for any considerable amount of hay, is especially important to every grain-grower and stockman in the Middle West, even in this year of abundant harvests.

THE FEEDING VALUE OF FODDER.

Careful experiments show that more than one-third of all the digestible material contained in the entire corn plant is found in the fodder and that less than two-thirds is concentrated in the grain. Clearly no one is justified in permitting the waste of one-third of the crop that he has been at the pains of growing.

It has been further shown that a ton of corn fodder contains practically the same number of pounds of digestible material as does a ton of timothy. It does not follow, however, that as an exclusive ration for stock it is as valuable as timothy, ton for ton, since it is not so palatable and not so completely eaten, and that the stock will not eat enough of it to make profitable gains.

The Missouri Experiment Station has been studying this problem during the last seven years with a view to ascertaining the best method of treating corn fodder and the best combinations with other foods in order to increase its feeding value.

These experiments clearly show that yearling steers may be wintered on whole fodder, from which all the ears were carefully removed, without grain or other food, and neither gain nor lose in weight. That similar steers when fed all the bright timothy hay they would eat, and without grain, will make a slight gain. More pounds of fodder than of timothy were necessary to winter cattle of this class. The coarser portions of this stalk, amounting usually to between 30 and 40 per cent of the whole weight of the fodder, were refused by the cattle. All things considered, it is safe to say that when fed alone, a ton of corn fodder has something like half the feeding value of timothy hay. That it is not good business policy, however, to winter cattle in this way in the ordinary season will be accepted without argument.

COMBINING FODDER WITH CLOVER.

Our most important and striking results have been obtained from combining the fodder with clover so as to supply the muscle-making material in which the fodder is so notably deficient. That it is easy to so increase the feeding value of fodder in this way, and that it will fully equal timothy when fed alone, is clearly shown by our experiments. These experiments were made with large coarse fodder, which was allowed to stand in the field until required for feeding, and was fed whole

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and without any special treatment. It is this large, coarse material that is mainly wasted, and the results of these experiments will therefore be directly applicable to the ordinary conditions of the State.

With 2-year-old cattle on full feed, the results of two years' work show that a bushel of corn, when fed in connection with equal parts corn fodder and clover hay, will make more gain than when fed in connection with good timothy hay.

With yearling cattle fed on roughness exclusively, practically twice as much gain was made with equal parts corn fodder and clover hay as with timothy. In other words, the cattle having timothy hay alone gained 123 pounds during the experiment, while another bunch on corn fodder and clover gained 234 pounds.

Three years' work with yearling cattle, in which a small quantity of shelled corn was given in addition to all the roughness they would eat, shows that from 30 to 70 per cent more gain was made from the combination of corn, corn fodder, and clover hay, than from corn and timothy hay, the amount of corn consumed being exactly the same, and the amount of roughness eaten not essentially different.

CORN FODDER AND TIMOTHY EQUAL IN VALUE.

Considering the results of all of our experiments, and making full allowance for the fodder that remains uneaten, that is, the coarse stalks, the inevitable conclusion is that a combination of corn fodder and clover hay is fully equal to timothy hay, whether fed without grain, with a small allowance of grain, on half feed or on full feed, and whether with yearlings or aged cattle. In other words, the farmer can by this means make the whole coarse fodder produced in the Middle West, serve every purpose in cattle-feeding for which timothy is now used. Under these circumstances it is fair to say that timothy and corn fodder have essentially the same feeding values. It is needless to say that these experiments point out the way for a large saving and for a large increase in the net returns from the corn crop. The annual fodder crop of the United States would on this basis represent to the farmer a valuation something like three-fourths of a billion dollars. Missouri's fodder crop would under these circumstances bring the feeder something over \$40,000,000 a year. All of this may be done without changing our system of farming, except to grow more clover, cow-peas or alfalfa to combine with our fodder, and reduce the area now devoted to timothy. There would also be a further profit in this change, since the clovers build up the soil, while timothy impoverishes it. Under this system vastly larger returns will be obtained from the farms at the same time that the land is improved.

Select Seed-Corn.

EDITOR KANSAS FARMER:—I want to tell my brother farmers my way of selecting seed-corn, which is considered by many as but little better than going to the crib in the spring for it. I save my seed when husking, have a box fastened to the side or end of wagon box, one that will hold three pecks or a bushel is large enough. I have practiced this for twenty-five years. I have a large kind of white corn that I have carefully selected each year for eighteen years. When I first got it, there was occasionally an ear with a pink-colored cob, so I commenced to save all fine ears with pink cobs. The result is now, and has been for several years,

(Talk No. 14.)

Too Late.

If you lose your watch or your ring or your pocketbook there is a chance of its being recovered. If not you can replace them. It is not that way with your eye sight. If that is lost it is lost forever. You can not obtain a duplicate. Every symptom of eyestrain is a warning from nature that you are doing your eyes a permanent injury. Every time that you read until your head aches you are making your condition just that much worse. If your eyes tire easily they need attention. Forcing them to work without help will positively break them down. By using glasses now you will keep your eyes strong and well. If you wait too long you will have to wear glasses every minute and even then your vision will be unsatisfactory. A stitch in time saves nine.

My exclusive attention is given to fitting glasses.

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that nine-tenths of it has pink cobs. That much in favor of selection. Every farmer has or ought to have his ideal corn. Mine is a large ear that tapers but little from the butt to the point, deep or long grains, uniform size from end to end, and half as thick as long. Now, brother farmers, I have not succeeded in fixing this type or ideal corn in eighteen years; but I have very near it. I have produced a very large early corn, a wonderful drouth resister, a corn that will attract attention wherever seen. The year 1901 was a scorcher, yet my corn averaged over forty bushels per acre of good quality. That is what most farmers call luck. I hauled some of this corn to a miller. He said he had milled in Illinois, Iowa, and Missouri, but my corn was the most uniform and even in size and length that he had ever seen. Feeders of cattle do not like it, as the cob is very large and hard. I gave a brother 68 ears of it that I had selected for seed. They weighed 72 pounds, at planting time. I have a friend that has 100 acres of corn raised from seed I let him have this spring. He thinks it will average 100 bushels per acre. I don't, though I have not yet seen it. I have raised over eighty bushels, and have known it to make over sixty-five bushels per acre, on sixty acres of land at that. I have tried from one to three other varieties each year for eighteen years; but found none so good as what I already had. There is better corn, if I knew where it was. I have no seed for sale in large or small quantities. Eight or ten bushels is as much as I can get from forty acres. The better the quality, the harder I am to please. Brother farmer, select from what you have, or get from some one in your locality and breed up. It will pay and pay well. Don't be afraid of a large cob. If the grains are long and the corn is reasonably early, do not get discouraged. When a bad year comes save the best you can get. Do not send off for some other variety. At least plant some of what you have. Select your ideal from what you save this winter or fall and plant it. That will help you to fix your type. You will be astonished at what fine seed you will have for spring planting, if you save the best you have. FARMER.

Pomona, Franklin County.

A Corn-Judging School.

The Iowa Agricultural College announces a corn-judging school for January 5-17. The announcement invites every farmer in Iowa to attend and to bring samples of corn and other farm seeds. They will prove of interest to our farmers and will be of the greatest value to the students and instructors in the corn school.

One very best samples of all the leading varieties of corn from the greatest breeders of this and other States will be on exhibition, and will be used in the corn-judging classes. This immense collection of choice corn will afford an unusual opportunity to compare the different varieties and study their characteristics.

The best known and most successful live-stock breeders and corn growers of Iowa will attend and thus will be presented an opportunity to meet these men and confer with them on live farm topics.

Regular classes in corn-judging will be held every day. All who desire to do so may enter these classes and make a systematic study of corn with the revised score card. Those wishing to become expert corn judges, qualified to judge corn at county fairs and expositions will have an opportunity at this corn school to prepare themselves for the work. An examination will be held at the close of the school and corn judging certificates will be issued to those who prove themselves proficient corn judges. Liberal cash premiums will be awarded those who excel in corn judging. Each farmer is invited to bring ten ears of his corn and come prepared to stay the entire two weeks. Important and interesting points regarding the selecting, storing, and breeding of seed-corn will be presented by prominent seed-corn breeders of Iowa and by others.

SCORE CARD FOR CORN.

Following in the Iowa Agricultural College score card for corn:

1. Trueness to type or breed characteristics..... 10
The ten ears of the sample should possess similar or like characteristics and should be true to the variety which they represent.
2. Shape of ear..... 5
The shape of the ear should conform to variety type, tapering slightly from butt to tip, but approaching the cylindrical.
3. Color—
a. Grain..... 5
b. Cob..... 5
Color of grain should be true to variety and free from mixture.
White corn should have white cobs, yellow corn red cobs.

4. Market condition..... 5
The ears should be sound, firm, well-matured and free from mold, rot, or insect injuries.
5. Tips..... 10
The tips of the ears should not be too tapering and should be well filled with regular, uniform kernels.
6. Butts..... 10
The rows of kernels should extend in regular order over the butt, leaving a deep depression when the shank is removed. Open and swelled butts are objectionable.
7. Kernels—
a. Uniformity of..... 5
b. Shape of..... 5
The kernels should be uniform in shape, size, and color and true to the variety type. The kernels should be so shaped that their edges touch from tip to crown.
8. Length of ear..... 10
The ear should be from 9 to 10 inches in length.
9. Circumference of ear..... 5
The ear should be from 7 to 7.5 inches in circumference.
10. Space—
a. Furrow between rows..... 5
b. Space between kernels at cob..... 5
The furrow between the rows of kernels should be small.
Space between kernels near the cob is very objectionable.
Kernels near the cob is very objectionable.
11. Proportion of corn to cob..... 15
The proportion of corn to cob is determined by weight. Depth of kernel, size of cob and maturity all affect the proportion.

Total..... 100

RULES TO BE USED IN JUDGING.

1. Length of ear.—The deficiency and excess in length of all ears not conforming to the standard, shall be added together, and for every inch thus obtained a cut of one point shall be made.
2. Circumference of ear.—The deficiency and excess in circumference of all ears not conforming to the standard, shall be added together and for every two inches thus obtained, a cut of one point shall be made. Measure the circumference at one-third the distance from the butt to the tip of the ear.
3. Proportion of corn to cob.—Per cent of corn should be from 86 to 87.—In determining the proportion of corn to cob, weigh and shell every alternate ear in the exhibit. Weigh the cobs and subtract from weight of ears, giving the weight of corn. Divide the weight of corn by total weight of ears, which will give the per cent of corn. For each per cent short of standard, a one and one-half point cut shall be made.
4. In judging corn, a red cob in white corn, or a white cob in yellow corn shall be cut five points. For one or two mixed kernels a cut of one-fourth point; for four or more mixed kernels, a cut of one-half point shall be made. Kernels missing from the ear shall be counted as a mixed. Difference in shade of color, as light or dark red, white or cream color must be scored according to variety characteristics.
5. Each exhibit shall consist of ten ears of corn.

An Old Soldier's Notes on His Trip to Washington and the Encampment.

My wife and myself left Topeka, Kansas, Thursday, November 2, at 4 p. m. via C. R. I. & P. Railroad to Chicago, and via B. & O. to Washington, to attend the thirty-sixth annual G. A. R. encampment. Arrived Saturday night at midnight, eight hours behind time. Our adjutant general, W. W. Dennison, and his good wife had secured good accommodations for us at the Oxford Hotel. Sabbath morning and evening we attended services at the Memorial Lutheran Church, Dr. Butler pastor. For over fifty years this faithful minister of Christ has been doing a great and good work at the Nation's capital. He was one of President Lincoln's faithful friends and advisers, and has been chaplain of both houses of Congress. While the doctors administered medicines to the many thousand soldiers in the Washington hospitals during the war, he administered spiritual consolation. He has been a most useful man to the church and Nation.

Monday, the 6th, we visited the National Library building, one of the finest finished buildings in America. We also visited the National Capitol and the Treasury department. Tuesday, the 7th, took a steamer for Mount Vernon, the home of Washington. It is one of the most beautiful places I have ever seen. Went through the old mansion and other buildings and viewed through the iron grating the marble coffins of President Washington and his wife. In the afternoon we visited Arlington, where rest the remains of many of our great generals and admirals, also 11,915 of our patriot officers and soldiers. One monument near the center contains 2,111 of the unknown dead, there to rest until their comrades shall all have slept to awake with them in answer to the last great roll call.

Wednesday, the 8th, we joined in the grand march with the Kansas veterans and were proud to be one of their number. The sunflower badge and the sunflower umbrella, commanded the atten-



The Old Reliable Anti-Friction Four-Burr Mogul Mills

No gearing; no friction. Thousands in use. Four-horse mill grinds 60 to 80 bushels per hour; two-horse mill grinds 30 to 50 bushels per hour. We make a full line of FRED MILLS, best ever sold, including the famous Iowa Grinder No. 2 for \$12.50. Send for free Catalogue.

Manufactured and sold by the IOWA GRINDER and STEAMER WORKS, Waterloo, Iowa.

Furniture

The Largest and Most Complete Stock of
Furniture, Carpets, and Stoves in
Kansas at the Lowest Prices.

We Sell the Celebrated Buck Stoves and
Ranges

FREIGHT PAID TO ANY POINT IN KANSAS.

EMAHIZER & MILLS

Successors to GEO. W. MOFFETT,
533 Kansas Avenue, Topeka, Kans.

tion and received the greatest applause of anything in the line of march, from the more than ten times ten thousand spectators that lined the line of march. The Kansas headquarters was visited by thousands of sight-seers, while other headquarters were scarcely visited at all. The sidewalks in front of the Oxford Hotel were not wide enough to accommodate the visitors, and the travelling public. The crowds were so great, that the part of the street adjacent to the sidewalks had to be utilized. The Kansas fruits and vegetables on exhibition were exceedingly good and displayed to the very best advantage.

Thursday, the 9th, at 11 a. m., we started to Hagerstown, Md., to visit my wife's relatives. We arrived at 2 p. m. We were most kindly and cordially entertained. I spent part of my time with Mrs. Wingert and her two daughters and four sons—all single and over 21 years of age. She was the only sister of my dear old friends, Lewis P. Firey, John S. Firey, and Dr. Wm. Firey, who lived in Topeka, and the last two died in Topeka, and all three now rest in the silent city of the dead nine miles west of Hagerstown. I have often been very kindly entertained by certain members of a family, but here by every member of the family. They live on the old homestead where they have lived for half a century.

I visited their large table factory 350 feet by 50 feet and four stories high. Everything is most systematically arranged and runs like clock-work. A railroad track along sides the full length of the building. The material is taken from the cars near one end of the factory, and the finished product loaded in the cars near the other end. They turn out from 200 to 250 extension tables per day and ship them in car lots over most of the States, and export some to foreign shores. The prosperity of the town comes from her many factories.

Left Hagerstown, October 15, at 1 p. m., and arrived in Topeka Friday, October 17, at 1 p. m.

J. B. McAFEE.

The inauguration of the new president of the Kansas State University was made a notable event by the addresses delivered upon the occasion. These addresses show that a progressive spirit is abroad in the educational as well as in the industrial world. President Strong's address shows him to be a broad-minded man. He goes to the head of an institution whose faculty contains remarkable men. A great development of the university is to be expected.

W. E. Skinner, general manager of the International Live Stock Exposition, to be held at Chicago, Union Stock Yards, Nov. 29 to Dec. 6, 1902, asks the KANSAS FARMER to announce that entries for the third International Live Stock Exposition close positively Octo-

THE ELWELL KITCHEN CABINET



Contains three tin-lined Flour Chests; Kneading Board; Bread and Meat Cutting Boards; fine tin Spice Boxes; six Small Drawers; two Large Drawers; one Cupboard and seven shelves; 2 feet 2 inches wide, 25 inches deep, and 6 feet 6 inches high, a little less floor space than a kitchen table. Ask your Furniture Dealer for a descriptive circular or write for one to the MINNEAPOLIS FURNITURE CO. Minneapolis, Minn.

ber 15, and that all entries must be in by that time in order to properly perfect the work that follows.

The great stock show at Kansas City is going on this week. The KANSAS FARMER has a strong force on the ground and will next week present the best report of the show that well-qualified men can write.

Apple Pomace for Cows.

The experience of four years with apple pomace silage at the Vermont station, using over twenty cows, is a unit in affirming the nearly equivalent—if not, indeed, quite equivalent—feeding values of apple pomace and corn silage. No undesirable results whatsoever have followed its use. Cows continuously and heartily fed have not shrunk, but on the contrary have held up their milk flows remarkably well. Neither does the milk nor the butter seem injured in any respect. A satisfactory ration used by the station has been hay, silage (one-third corn silage and two-thirds apple pomace silage by weight) and from 4 to 8 pounds grain, the latter varying according to age, stage of lactation, etc. Fifteen pounds of pomace per cow has been fed daily with entire satisfaction. Inasmuch, however, as reports of severe shrinkage occurring coincident with the use of apple pomace are current, care and watchfulness are advised in feeding it at the outset.

Apple pomace needs no special care in ensiling. If leveled from time to time as put into the silo and left to itself uncovered and unweighted it does well.

THE SHARPLES

TUBULAR DAIRY SEPARATOR
Is guaranteed to yield the farmer a 5 per cent greater profit on his investment than any other cream separator. Our book No. 166 explains why.
Sharpley Co., P. M. Sharpley,
Chicago, Ill., West Chester, Pa.



In the Dairy.

Conducted by Ed. H. Webster, Professor of Dairy Husbandry, Kansas Experiment Station, Manhattan, Kans., to whom all correspondence with this department should be addressed.

It is to be regretted by the dairy interests of the State that Prof. Otis could not continue as editor of this page; but all will be glad that he is given the privilege of entering a larger field of usefulness to the Kansas farmers. In the position of professor of animal husbandry he will not altogether forget the scrub cow and the skim milk calf. True he will have to give considerable time to developing the other live-stock interests but while he is lying awake nights figuring on the profits of baby beef, cheap pork and feathered friends laying three hundred eggs per year, he will bless the day he learned how to make the scrub give down her milk, that these same pigs and chickens might have the best in the land, and on the morning will doff his hat to the skim-milk calves that are destined to break the record in the feed lot.

When he is surrounded by a crowd of beef farmers who are keeping a cow a year to raise a \$20.00 calf, he will not forget that that \$20.00 calf ate \$40.00 of butter fat to grease its sides and make it look happy as it was taken from the cow when the frosty mornings come and made to rustle on corn stalks and prairie hay.

But why enumerate these things! All who know Prof. Otis's love for the live stock on our farms, knows that the interest of no class will suffer, but that all will be accounted as worthy of a place, and that none will be so accounted unless they are the best of their type and handled by the most intelligent care.

The enthusiasm which has characterized his work as a dairymen will go into his new work. Fortunate are those interests which come under his thought and direction.

Speaking of the cows giving down their milk, we have been wondering the last few days what is the matter with them. Pastures are in seemingly fine shape the country over, and yet the dairy papers are talking of milk famines and high priced butter this winter. Numerous complaints come in of cows drying up more rapidly this year than common. Milk receipts at the creameries prove this to be a fact. We have been thinking of these pastures and have been over a few of them, and were surprised at the abundance of feed at this time of the year. Are we not apt to overestimate the falling off because it has come some weeks later than in past years? Last year the shrinkage in milk began in July and August, and ordinarily it does not come so late as this year. Then again the pastures are not what they seem. The season has been productive of a rank growth of grass, full of sap and coarse in structure. The actual feeding value is not there as in drier seasons. There is not so much nourishment, pound for pound, in the grass eaten, and the actual milk flow does not come up to the ideal we had set up as about the right thing.

This seeming abundant supply of pasture has fooled us and the shrinkage has taken us by surprise. When we should have been getting the cows gradually onto a dry ration we have not done so. It is too late now to stop this loss already felt, but dairymen should take every precaution to stop any further shrinkage. It is very much harder to bring a cow up to normal milk flow after a sharp shrinkage than it is to begin early and head off the shrinkage.

Every indication is for high butter prices this winter. To quote the Chicago Dairy Produce, "The butter markets of the entire world are in shape for a sharp upward turn some day. Consumption is going on at a tremendous rate, and when production shortens up, as it will very shortly with the advent of colder weather, there is going to be 'something doing' that will startle the oldest inhabitant. Conditions this year are almost without precedent in butter, and some interesting developments may be expected inside of ninety days." The market is steadily advancing. It will be a foolish policy to stint the cow on her feed this winter. Make her do her best. Stop the shrinkage. Convert every pound of feed your cows will

stand into butter-fat. Liberal feeding always pays—this winter it will doubly pay.
E. H. W.

The Kansas Dairy School.

Dairy instruction for the winter of 1903 at the Kansas State Agricultural College, will begin January 6 and extend twelve weeks, ending March 27. These will be twelve weeks of strenuous work for the student. The days will be packed full of the gathering of information from textbook and class, and enforcing the truths thus learned by the work in the laboratory, creamery, cheese factory, and dairy barns.

The dairy circulars sent out in the past have always stated that instruction would be given along two lines, viz., farm dairying and butter cheese making. Owing to a number of reasons the work has never been given in farm dairying in such a way as to make a distinctive course.

The completion of the new dairy barn, the building of a 100-ton silo, and the addition to the dairy herd of a number of pure-bred stock of the leading dairy breeds, make it possible to give a farm dairy course this winter.

The line of instruction will be as follows:

FARM DAIRYING.

Class Work.

	Hours per week.
Agriculture and crop-production, one-half term.....	5
Breeds and breeding of dairy animals one-half term.....	5
Feeds and feeding and milk-production.....	5
Farm book-keeping, one-half term.....	5
Private butter and cheese making, one-half term.....	5
Diseases of dairy animals, one-half term.....	5
Dairy bacteriology, one-half term.....	5

Industrial work.

Testing milk and cream.....	20
Hand-separating and butter-making..	20
Feeding and care of milk.....	20

DAIRY MANUFACTURES.

Class Work.

Agriculture and crop-production, one-half term.....	5
Breeds and breeding of dairy animals, one-half term.....	5
Feeds and feeding and milk-production.....	5
Butter-making or cheese-making, one-half term.....	5
Dairy book-keeping, one-half term.....	5
Creamery and station management, one-half term.....	5
Dairy bacteriology, one-half term.....	5

Industrial work.

Testing milk and its products.....	20
Boiler and engine work.....	20
Butter-making or cheese-making.....	20

The class work consists of one hour's recitation on each topic indicated, per day. The preparation for the recitation hour must be made outside of the class time, in laboratory, work room and at the room of the student.

The industrial work is the actual practice work in the various departments.

The students in farm-dairying go into the testing laboratories and work out the various problems in testing, repeating the work until they are expert along that line. They use the different makes of hand separators, test them for the quantity and quality of the work they do; handle the cream for making butter as it should be handled on the farm. In feeding and care of milk the student goes to the barn and does the actual feeding and all work connected with it. The milk is taken to the dairy room, aerated, cooled, and separated, and prepared for delivery to the creamery.

All of this work is made just as practical as possible and is discussed in class room in such a manner that all phases and sides are brought out, developed to their fullest extent. The students do the work. They learn by doing.

In the dairy manufactures course, the work is no less thorough. The students receive and separate the milk, ripen the cream, make the butter, and prepare it for shipment. They make the cheese and maintain the proper temperatures and moisture for its curing.

We want to call the attention of the young men to the opportunity there is offered to all who are determined to excel in either of the above lines of work. There are hundreds of young men starting out to farm for themselves every year who live in dairy communities and will become patrons of some creamery or cheese factory. Many of them will jog along in the old beaten track not knowing that there is, within their reach, on their own farm a field of opportunity the extent of which is almost unlimited. The average cow producing milk of the creamery makes something less than \$2 per month, and yet there are many dairymen who are making from \$5 to \$6 per month. Here is a difference that is worth the while looking up. To many men, skim milk is worth about as little as so much water; but to some it is worth from 30 to 40 cents per hundred, for feeding calves and pigs.

Many farmers will sell their feed this

year for about one-half to one-third of last year's values; and yet the same feed given to a good dairy cow will bring last year's prices or better. Think of these things. The dairy short-course will help you to solve the differences. The creameries of Kansas are constantly wanting good men and are paying good wages for such. The dairy school will put you in line for this kind of work.

The cost of attending is not great. It need not be over \$45 to \$50 for the three months for board and room and books.

Study over this matter a little and come with us. We will do you good.

Combining the Scales and Babcock Test.

PHILIP LEISER.

A man can soon ascertain, with very small amount of labor and time, just what each individual cow is producing by the means of the scale and Babcock test. These two should always be used together, as one used alone would be merely a delusion. This can be proven by the following fact: Zargola and Zacona, two of the cows of the scrub herd owned by the Kansas State Agricultural College, gave milk that contained nearly the same per cent of butter-fat, while the difference in the yield of the better-fat for one year was 226 pounds. If the milk of these cows had been tested only and not weighed, the supposition would have been that the two cows were about equal in the production of better-fat. On the other hand, let us consider the use of the scale without the Babcock test. We will take for example two cows, a Holstein giving 8,000 pounds of milk per annum, and a Jersey giving 6,000 pounds per annum. At first sight

DE LAVAL

CREAM SEPARATORS

For twenty years the World's Standard
Send for free catalogue.
The De Laval Separator Co., 74 Cortlandt St., N.Y.

We would naturally think that the Holstein cow was the more profitable, but when we consider the fat test and find that the milk given by the Holstein tests 3 per cent butter-fat, while the milk given by the Jersey tests 4.5 per cent, we find that the Jersey produces the most butter-fat. So by combining the use of the scale and Babcock test we can know exactly what each cow is producing, and thereby be able to cull out the unprofitable ones.



BUTTER MAKERS

make better butter and more butter by using the
KNEELAND OMEGA CREAM SEPARATOR
simple, cheap, efficient. Easily cleaned. Free from repairs. Guaranteed to suit or money back. Send for Free book, "Good Butter and How to Make It." The Kneeland Omega Creamery Co., 28 Concord St., Lansing, Mich.

FARMERS

who wish to better their conditions are advised to write for a descriptive pamphlet and map of Maryland, which is being sent out free of charge by

THE STATE BUREAU OF IMMIGRATION OF MARYLAND.

Address:

Mr. H. Badenhop, Secretary,
Merchants Nat'l Bank Bldg., Baltimore, Md.

The J. P. Baden Produce Co.

Winfield, Kansas.

We will bind ourselves to buy your cream for five years on our present offer and give you the privilege of stopping at any time you desire. We will pay for Butter-fat in cream as shown by the Babcock test, on basis of quotation of Extra Separator Creamery Butter in New York, as follows:

How Does This Proposition Impress You?

We will bind ourselves to buy your cream for five years on our present offer and give you the privilege of stopping at any time you desire. We will pay for Butter-fat in cream as shown by the Babcock test, on basis of quotation of Extra Separator Creamery Butter in New York, as follows:

New York Quotations Generally One Cent Higher than Elgin.
Within 150 miles of Winfield... 2¢ less | From 200 to 250 miles... 1 3/4¢ less
From 150 to 200 miles... 1 3/4¢ less | From 250 to 300 miles... 1 1/4¢ less

Mark your cans, deliver to your express agent, we do the rest. We will pay all express charges and return cans free of charge.

We want your Cream; but you can stop shipping at any time it suits your interest, or convenience. If you send us only one can a month, we will thank you and use you right. When you commence doing business with us once you will have no reason to quit. Our manner of doing business, and our attractive inducements are bound to please. The enormous business which we have established, and which is increasing every day in the face of strong competition, is evidence that we have the very best outlet and procure the highest market values for our finished products. This of course enables us to pay you more money for your cream and produce than others. Write us or call on us for further information.

THE J. P. BADEN PRODUCE CO., Winfield, Kans.

Are you milking any cows?
Are you hauling milk to a skimming station?
Are you making butter?
Are you patronizing a cheese factory?
Are you perfectly satisfied with your present market?
Did you get as much in August as we paid?
Are you getting as much now as we pay?
Do you want all you can get?
Are you within 500 miles of St. Joe?
Are you hunting the best market in the West?

Write to the "Pioneers" of the system that pays the highest price.

BLUE VALLEY CREAMERY CO.
ST. JOSEPH MISSOURI.



Davis Cream Separator Co.

BEST IN THE WORLD
EASIEST CLEANED
MOST DURABLE
CLOSEST SKIMMER

CATALOGUES

Davis Cream Separator Co.,
54 to 64 N. CLINTON ST., - CHICAGO, ILL.

Save time and freight by ordering from

PIONEER IMPLEMENT CO.,
COUNCIL BLUFFS, IA.

The Poultry Yard.

The Production of Winter Eggs.

A writer in the Nor-West Farmer, of Manitoba, presents the following lively views of the egg business:

The forehanded man, or woman, is always the envy of his more shiftless neighbors. The forehanded man anticipates and provides; the shiftless contemplates anticipation and continues contemplating. He is always "going to" but seldom does—until too late. He is going to have winter eggs, and gets them—about April.

W. R. Graham, of the Ontario Agricultural College, is authority for the statement that eggs cost about 5 cents per dozen to produce when the feed has to be bought, and with eggs retailing at from 35 to 50 cents per dozen there should be money in their production for somebody. Nobody is in a better position to get this money than the Manitoba farmer.

How can it be done?

Given a fair poultry house, a flock of birds, mostly pullets, and none over two years old, it should be no difficult matter. But one fundamental truth must be borne in mind—You can not get something for nothing. I remember a farmer a few years back that was going to raise poultry wholesale. He had nests in boxes all over the stable, all over his house, sheds—everywhere. Later chicks were running about by the dozens and hundreds. They got no feed from him, no care, no attention. All they had to do was to grow. A little later they started dying off, and I was asked the reason. I told him starvation and lice, and was laughed at. The mortality increased, and later I was appealed to again, with similar results.

When his birds should have been three months old he had seven left. As he was more reasonable then, I broke one of his nest boxes in which the hen and flock spent the night and showed him one of the causes of his troubles. He got what he asked for. Fed nothing, worked nothing, got nothing. He don't keep any hens now, don't even farm now.

I don't care if it is poultry, pigs, garden truck, field crops, cattle or horses, you have got to put something in to get something out.

Let us get back to winter eggs. With a house your fowls are ready for you to provide them the materials to start business. Remember, they are cooped up from November till March, and everything must be provided. An abundance of water—warm water is preferable—and plenty of grit. If you find buying grit is expensive, coarse gravel is a fair substitute, or a block of granite from the prairie or a piece of limestone and a stone hammer will produce a fair supply—but it sometimes makes one think—quick and hard.

Another absolute necessity is plenty of scratching material. Plenty, mind; four inches is good, fourteen inches deep is better. Straw and hay, the shorter the better. Let the hens scratch for every grain they eat.

Give the birds a change occasionally. They will relish a warm mash for breakfast, or at noon once in a while, and it will do them good. Vegetables, too, must be provided every day, and a cabbage or split turnip, mangle or beet hung so that they have to jump three or four inches to peck is as great a treat to them as cranberry sauce and its accompaniment is to us about Thanksgiving time.

Another highly appreciated change is from wheat to oats (heavy) and barley, a few peas or beans, spelt and corn. The scraps from the table, of course, are always welcome and turned to good account.

Do not imagine from the above that you must feed your birds to over-fatness. You must use discretion, and if at any time you notice a bird lazy that should be scratching, find out the cause. If fat, reduce the ration in that pen. Over-fatness will show itself in many ways in a pen.

There is another factor in the production of winter eggs I have purposely omitted. With the preceding foods you can get eggs right through the winter, but with another food your supply will be doubled—green cut bone. If any poultryman ever makes a fortune green cut bone will play no inconsiderable part. The average fed is one-half ounce per day per hen. She will leave wheat, corn, anything and everything for green cut bone.

Where eggs are wanted a bone cutter is a necessity. Enough bones can be obtained in the winter to supply a very large flock and with little labor will constitute the cheapest and most nutritious food for the production of eggs and the maintenance of vitality in the flock.

Hen Beats the Cow.

The following calculation was furnished the Ottawa Valley Journal by J. W. Meldrum, manager of the Ottawa (Canada) Produce Co., Ltd.:

The following comparison will, no doubt, prove interesting to farmers who make a specialty of dairying:

An average cow cost, say.....	\$40.00
She will earn on an average for 12 months, say.....	40.00
She will yield a calf which estimate at, say.....	5.00

Gross revenue from cow.....\$45.00
It costs \$25.00 to raise a cow. To feed a cow costs on an average \$20.00 per annum. One acre will hardly be sufficient for a cow to graze upon. A cow must have stabling. A cow has to be milked, and then the milk has to be driven to the factory, which means labor and expense.

Now, let us see what nearly the same value in poultry will earn. Assume average hen costs 30c., therefore 100 hens at 30c.....\$30.00
Many hens lay 15½ doz. eggs each per season, say average will be 8 doz.; 800 doz. eggs at 10c. bring 80.00
One hundred doz. will hatch out an average of 700 chickens worth, say.....105.00
Gross revenue from hens, four times greater than from cows.

One to one and a half bushels of corn or wheat will feed a hen for twelve months. One acre will be sufficient for 75 to 100 hens for a run.

Plymouth Rock pullets hatched in April will lay more than if hatched in May. Profits will be one and a half times greater. A lean-to house will cost very little, and if whitewashed every week or so will avoid trouble from lice. Two years is old enough for any hen. A dozen eggs should weigh at the least one and a half pounds, and a large brown egg is in demand in Great Britain in preference to a white egg, which is a fact worth noting.

Artificial Incubation.

EDITOR KANSAS FARMER:—There are several dozen plausible theories about temperature, moisture and ventilation in incubators. Writers persist in discovering new things along these lines. Nevertheless, 103 degrees of heat is 103, and the temperature does not seem to be a debatable question as all agree.

I would like to ask the thousands of readers of poultry literature, if they ever saw a live thing or a dead thing get too much air; or, to go farther, did they ever know of anything (out of water) to get too much pure air? Did they ever exclude the air from a living thing, animal or vegetable life, to improve its health? Did they ever realize what a serious thing for life it would be to not have air?

Draughts of air are not good for people, poultry or eggs. Draughts of air are a different thing from plenty pure mild circulating air. This is the ventilation question and all admit its correctness.

The moisture question is hardly a question at all. Why should we apply moisture when it is admitted by all of us that the egg contains nearly 80 per cent moisture and must get rid of the most of it to hatch?

An egg during incubation shrinks in size and in weight. It is getting rid of its moisture. The brainless hen hatches eggs most any old way, and why should we smart people turn such a simple operation to pages of long headed science?

All there is to it is to keep the eggs at the right temperature; give plenty of pure, natural air, and to mock the hen in turning and airing the eggs. When we do this we succeed; when we chase rainbows of the theorist, we get into deep water.

Mr. Editor, this is a short-cut way of getting at this great question. Will it do?
M. M. JOHNSON.

Shipping Dressed Turkeys.

In shipping dressed poultry there are some essentials to be considered. The prospective city buyer may not know a dry picked fowl from the scalded one, but the commission merchant does. Now, the fowl should be killed by inserting a knife in the roof of the mouth thereby penetrating the brain. Hang the bird up by the feet to bleed out. When this has stopped, dip hastily in hot water, then at once in cold water and pick. This process hardens the flesh and makes them easy to pick. The packing boxes should be lined with white paper and fowls laid in, alternating head and feet; that is, if ten birds constitute a row, have five heads point one way and five the other. In this way they fit snugly. Some dealers like a ruffle of paper added at the knee. Lay a piece of paper over this layer and proceed to fill the box, not crowding, but



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It throws all the light straight ahead 200 or 300 feet, far enough to warn you of any approaching danger. Like all "Dietz" Lamps or Lanterns, it gives a clear, white light. Neither dampness nor wind can affect it, and it can never shake out from driving. It makes night driving perfectly safe. Write for catalog and special offer on this lamp.
R. E. Dietz Company, 95 Lighthouse St., New York.
Established 1840.

fitting snugly. The best paper to use can be obtained very cheaply at any newspaper office, and is such as is used in printing. This paper is absorbent also. This may sound like a good deal of bother, but will repay you many times over. Then, too, you will always find the commission men want your stock. Boxes are to be preferred to barrels because the goods can be displayed to better advantage. This method of packing holds good in all kinds of poultry.—Turkey Culture.

Post Check Currency.


No such simple, safe and inexpensive method of mail remittances has ever been devised, and its advantages to the masses of the people are so many and so great that the only wonder is that there should be any opposition to the plan. Postmaster General Payne favors the scheme, as does also Auditor Castle of the Treasury department. The utility and simplicity of the post check has appealed to nearly everybody who has given the scheme any thought. It has the endorsement of financial experts and of business men who are dependent on the mails for the receipt or dispatch of money, particularly in small sums, to a considerable extent. It ought to impress Congress favorably, for it is in the interest of the people. Such being the case, Congress ought not to pay too much heed to those who are opposing the introduction of this form of money on no more worthy grounds than that it will give them a little more work and trouble. The pending bill is clearly one in the interest of the masses, and the indications are that its adoption cannot ultimately be prevented.—Exchange.

POULTRY BREEDERS' DIRECTORY.

PURE Single Comb Brown Leghorn cockerels, 75 cents each, or 7 for \$4. f. o. b. here. F. P. Flower, Wakefield, Kans.

ROSE COMB WHITE LEGHORNS—Fine cockerels for sale. Embodied geese for sale—\$5 per trio. Mrs. Winnie Chambers, Onaga, Kans.

I HAVE some very fine pedigreed Scotch Collie pups for immediate shipment. I also have some extra fine B. P. Rock hens and young cockerels will sell at a bargain if taken soon, as I need the room. Can furnish pairs, trios or pens headed by a male no kin to hens or pullets.
W. B. WILLIAMS, Stella, Neb.



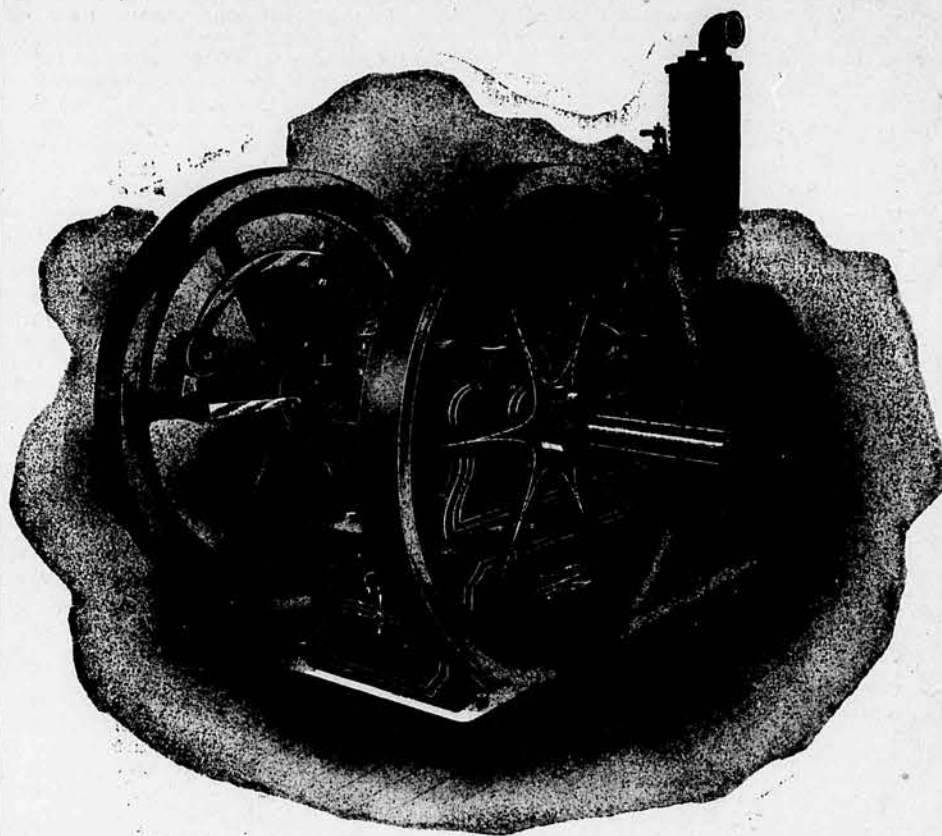
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hence the strain is great on the engine at the time of the impulse, and it must be made heavy to withstand it. As the Dempster has an impulse for each revolution, the engine need not be so heavy as others, and is yet more durable. The noise is reduced by the relief drum, and the exhaust is free, with no valves to get out of order. The piston rod does not reach into the explosion chamber, and hence never gets heated. An eccentric on the main shaft operates the electric igniter, which can be set to operate at any point of the stroke. This adjustment can be made after the engine is started. This power is steady and reliable as that of a steam engine. It has but few parts and they are all readily accessible, and it is very much cheaper both in cost and maintenance. See the advertisement of the Dempster Mill Mfg. Co., on page 1051 and write them for anything you want, with the assurance that it will be cheaper and better than you can get elsewhere.

Grange Department.

"For the good of our order, our country, and mankind."

Conducted by E. W. Westgate, Master Kansas State Grange, Manhattan, Kans., to whom all correspondence for this department should be addressed. News from Kansas Granges is especially solicited.

NATIONAL GRANGE.

Master..... Aaron Jones, South Bend, Ind.
Lecturer..... N. J. Bachelder, Concord, N. H.
Secretary..... John Trimble, 514 F St., Washington, D. C.

KANSAS STATE GRANGE.

Master..... E. W. Westgate, Manhattan.
Lecturer..... A. P. Reardon, McLouth.
Secretary..... Geo. Black, Olathe.

As Others See Us.

It is well sometimes to see ourselves as others see us. Prof. John D. Quackenbush, of New York, at the great farmers' meeting at Hampton Beach, N. H., gave his impressions of the Grange from the point of view of an outside observer. He spoke in part as follows:

I may be regarded as speaking impartially and dispassionately when I ask your attention to four lines of Grange influence that have forcibly impressed me as an outside observer. Permit me to consider briefly.

1. The Grange is an educator.
2. The Grange as a spiritualizing agency.
3. The Grange as a promoter of fraternal feeling.
2. The Grange as a believer in the rights of women.

Education literally means "drawing out"—calling into action latent efficiency, intellectual and moral and spiritual. The Grange so interprets it, and gives essential shape to this conception in the instruction it offers to its members. Intellectual education implies the symmetrical development of the mental faculties—reason, judgment, imagination—and the gradual storing of the mind with serviceable as contrasted with merely ornamental knowledge. When the Spartan king Agesilaus was asked what a child should be instructed in, he replied: "Teach him what will be useful to him when he becomes a man." The Grange acts upon this principle, keeping sight also of the moral element in education, and strengthening its members against that combination of appetite and opportunity which constitutes temptation. It believes that there is no soul in which God is not, that in every character there lies imbedded virgin gold which may be found for the seeking and wrought into exquisite shapes. A conspicuous purpose of the Grange is therefore practical character-building—education along lines of manliness, inspiration to high resolve and nobler endeavor. It provides as well for literary and aesthetic culture, without which in some degree the farmer's character must remain ill-rounded. It gives lessons in the art of graceful living, and emphasizes the beautiful as well as the worthy thing to do. It recognizes the imagination as a refining and moralizing instrumentality, and bids Patrons of Husbandry find in beauty the companion of their waking thoughts, the angel of their dreams, realizing that sensitiveness to the aesthetic thrill equivalents susceptibility to the deepest and sweetest experiences of human life. With all this, while educating in intellectual discernment and power, the Grange seeks to awaken a spirit of aspiration and achievement. The key-note of its teaching is progress—eager, enlightened progress—progress in intelligence, knowledge and charity, without sacrifice of Christian sentiment or Christian principle. It is the friend that makes the man do what he can. It preaches the gospel of self help. It urges each member to use the efficiency within him, and shows him how to do it. It concedes the fact that the human soul delights in a realization of its own power, and responds sublimely to whatever factor, in harmony with St. Paul, holds up before its vision that spiritual potency conferred on it by God as the means of accomplishing lofty purpose, as the way of escape from temptation. The doctrine of the utter hopelessness of man, which is harped on so persistently by certain creeds and which has for centuries unsouled the Christian, is taught neither by Jesus nor Paul. God does not turn out mere sale-work; he does not create souls without good in them, with power in themselves to help themselves—a mistaken philosophy which every blade of grass controverts, every sun, every diatom. The Grange in alignment with this principle labors to create a maximum efficiency in the human machine, and to evoke in each of its members that intellectual courage which clearly discerns and that moral courage which grandly sustains. And this is optimism at its climax, the making the man acquainted with his own best self. And so the Grange must be

ideally all spirit and life—"the spirit that is ever struggling to express and realize itself in higher forms, that promises to the human race far more than it has as yet accomplished."

The Grange recognizes also the spiritual nature of man, and thus the true oneness of the human and divine nature, man in God's image. As the handmaid of religion, it inculcates a higher realization of truth and a nobler conception of duty. It is a training school in which the soul is prepared for ascent, under Christian inspiration, to the summits of its being, where man recognizes himself as the miracle of miracles; knows himself in his three-fold nature, animal, rational and spiritual; and sets a value on himself as possessed of special aptitude for a higher than mere terrestrial life.

Thirdly, the Grange fosters mutual understanding and cooperation; concerted action for common protection and advancement; and a good will among its members that intuitively prefers arbitration to litigation as a means of settling differences. Thus it stimulates a love of the visible brother which roots itself in a deeper love of God. My observation leads me to believe that Grange influence inhibits the spirit of self-righteousness, for invidious distinction, of inordinate self-gratification which blinds our eyes to the right of others to be happy, of all readiness to listen to malicious insinuations, of all pleasure in receiving and retelling scandals. It operates somewhat in the line of Ruskin's appeal: "Do justice to your brother, whether you love him or not, and you will come to love him." I believe its altruism to be a religion of giving as opposed to getting.

Finally, the Grange interprets the status of woman in harmony with the teaching of the Gospel. In common with the Savior, it regards and treats her as the equal of man. Jesus accounted woman as much an individual as man, as much a unit in church and home and nation. Woman in the Gospel system is made the equal of man in every question of privilege; endowed by her Maker with power to choose her own course of action, with the right to the same consideration as a social and intellectual unit, to the same educational advantages, to the same opportunities of making a livelihood, to the same compensation for equally good work. I say it reverently, if Jesus Christ had walked among men in this democratic age, He would, I believe, have given more positive expression to a tenet that is deeply imbedded in His divine philosophy, even universal suffrage at the polls of the nations—suffrage that does not exclude superior intellect and taxed property interests form their right to representation in the legislative chamber simply because in the province of God they happen to be the endowments of woman. The Grange here is in accord with Christian teaching; for it importunes us to believe that each one of us, without regard to sex, is a self-conscious unit, capable of self-examination, self-criticism, self-consistency, cast in the image of the Mind Infinite, trammelled by no limitation to its development, with no horizon to the evolution of its deathless power. Assuredly, when we come to think of it, the natural force that has for generations been wasted in America is women; and we have cause for rejoicing that at the beginning of this twentieth century, it has come to be recognized that no nation can be truly great in which the rights of women are not upheld, and her refined intellect is not respected as a directing agency and an impelling power. In its appreciation of the capacity and the sphere of woman, the Grange reflects the spirit of the Christ, and, thank God, the spirit of the times.

In, then, that it educates along lines intellectual, aesthetic, moral, and spiritual, and educates practically, in that it brings its members close together in the bonds of friendship and brotherly love; in that it acknowledges so emphatically the worth and majesty of true womanhood; in that it pronounces the secret of that ideal training which makes a heaven of home to be the combination and cooperation of a manly, intelligent, unselfish, chivalric fatherhood, and a gentle, self-denying, patient, dignified motherhood, in any through a heaven-founded and heaven-blessed marriage union; in that it is anti-materialistic in its influence, and fearlessly proclaims its allegiance to a Supreme Being whom we can all implicitly trust and unreservedly love—I, as an outside disinterested student of its methods of the men and women whom it transforms, of the men and women who support it and believe in it, can, with high-minded sincerity, point you to the Grange as an instrumentality second only to the Christian church and in full

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harmony with that church for the expansion of human minds and the ennoblement of human characters.

Granges Organized During the Last Two Years.

EDITOR KANSAS FARMER:—Herewith is a statement of new granges organized and granges reorganized from October 1, 1901, to September 30, 1902, both inclusive:

California.....	5	New Jersey.....	1
Colorado.....	1	New York.....	23
Illinois.....	1	Ohio.....	23
Indiana.....	9	Oregon.....	19
Iowa.....	2	Pennsylvania.....	16
Kansas.....	4	South Carolina.....	3
Maine.....	23	Texas.....	1
Maryland.....	8	Vermont.....	7
Massachusetts.....	1	Washington.....	10
Michigan.....	90		
Minnesota.....	3	Total.....	256
New Hampshire.....	6		

Granges organized from October 1, 1900, to September 30, 1901..... 193

Granges reorganized from October 1, 1900, to September 30, 1901:

Delaware.....	3	New Jersey.....	2
Illinois.....	1	Ohio.....	7
Indiana.....	2	Oregon.....	4
Kansas.....	4	Pennsylvania.....	5
Kentucky.....	6	South Carolina.....	2
Maine.....	11	Texas.....	2
Massachusetts.....	3	West Virginia.....	17
Michigan.....	14	Wisconsin.....	1
Minnesota.....	1		
Missouri.....	1	Total.....	86

Granges reorganized from October 1, 1900, to September 30, 1901..... 63

The above is a proud record for the members of the order to contemplate, and yet it does not give the whole story. The membership of the order has very largely increased. During the current grange year, ending September 30, there has not been reported even one grange as dead or dormant, while eighty-six granges have been reorganized.

JOHN TRIMBLE,
Secretary National Grange.
Washington, D. C., October 1, 1902.

Grange Attendance.

Whenever the Grange meetings are made centers of interest there will be a good attendance. So plan to develop features of interest. If you know of any latent talent among your members, and every grange has some, go after them. If they can sing or play any kind of musical instrument, or read or speak or write, whatever it may be, solicit them personally to prepare something in that line for the next grange meeting. Make them promise; don't take "no" for an answer. And in this matter do not overlook your own abilities. Do whatever you can do best. Arrange some discussions upon subjects in which the most influential, but sometimes most indifferent members, are sure to be interested. Prepare a paper upon it yourself if need be and if there is no prospect of creating a discussion any other way advance some proposition that you know to be contrary to the facts in the case, or at least to the generally accepted notions. Some one is sure to take exceptions to it and the ball will soon be rolling.—A. T. Buxton, Lecturer Oregon State Grange.

The National Grange.

Washington, D. C., October 6, 1902.


In accordance with the provisions of its constitution and the resolution adopted at the session of 1901, the thirty-sixth session of the National Grange of the Patrons of Husbandry will be held in the city of Lansing, Michigan, commencing on "the first Wednesday after the second Monday in November" (12th), 1902, at 11 o'clock a. m.

Accommodations for the National Grange have been secured at the Hotel Downy (as headquarters), at the rate of \$2 per day each, for one week or more, including heat and light.

By order of Executive Committee,
JOHN TRIMBLE,
Secretary National Grange.

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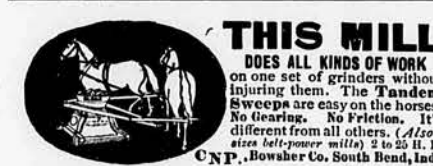
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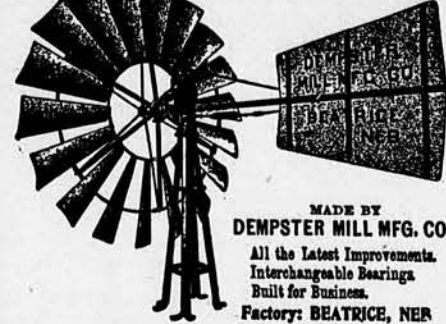
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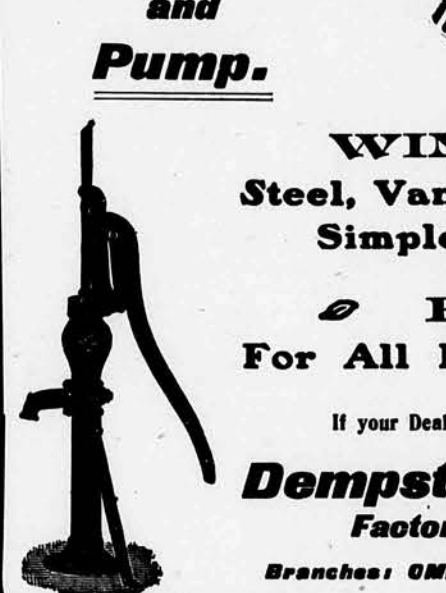
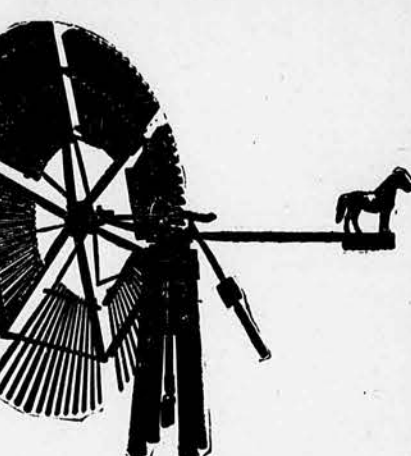
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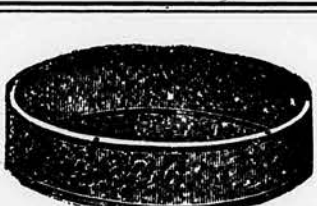
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THREE MONTHS' FREE TRIAL For Free Sewing Machine Catalogue, the most wonderful price offerings ever made, our liberal terms, pay after received offer and THREE MONTHS' FREE TRIAL PLAN, cut this ad out and mail to SEARS, ROEBUCK & CO., CHICAGO, ILL.

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from factory to consumer at Wholesale Prices. Guaranteed to be the Best. Our 6-foot diameter, 2 foot high, 14 barrels capacity, \$11.55. 7-foot diameter, 2 foot high, 30 barrels capacity, \$14.70. 8-foot diameter, 2 foot high, 24 barrels capacity, \$16.80. Free on board cars Kansas City, Mo. We have the largest factory in the West, and we manufacture a complete line of Galvanized Steel Tanks. Write for our free illustrated Catalogue.

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**"FOLLOW THE FLAG."****5 DAILY TRAINS 5****Kansas City****.....TO St. Louis**

FINEST EQUIPMENT. SMOOTH TRACK. NO DUST.

The Wabash passes through Forest Park, sight of the World's Fair Grounds in full view of all the magnificent buildings now being erected. The only line that does it.

Wabash Fast Mail No. 8, leaving Kansas City 6.15 p. m., saves a day's travel to Eastern points.

Wabash Ticket Office, 9th and Delaware Sts., Kansas City.

WHEN WRITING ADVERTISERS MENTION KANSAS FARMER.

The Apiary.

Conducted by A. H. Duff, Larned, Kans., to whom all inquiries concerning this department should be addressed.

Decoy Hives.

EDITOR KANSAS FARMER:—Seeing an article in your bee department about decoy hives, by A. J. Saltzman, of Burrton, Kans., I thought I would give you my experience on the same line. I have been using decoy hives for years past, and find it very profitable. I saw the suggestion in the KANSAS FARMER several years ago. Last year I lost all my swarms but one from the drouth. This spring I put up a lot of decoy hives along the creek, among the trees, about the first of May. Some had combs in them, and others were without. I succeeded in capturing thirteen swarms. They all hived themselves without any bother looking after them. One trouble in placing them with much comb in the hives is that they are apt to be frequented by the ants before the bees find them. They do not require a high elevation, but just a few feet. I put one hive above the other in some instances, and both were occupied. The last rainy day the first of the month, I went around with my spring wagon and gathered them all in, and moved them into winter quarters. Some of my hives required two men to lift them. I think I have honey enough to last me a year and have some to sell.

Your article on dividing bees is good. I have very poor eyesight and can hardly find a queen when I divide. I see that the new hive has a queen cell, and move the old hive away, and place the new hive where the old one stands. I have been very successful that way. I find that two of my decoy hives have dwindled down weak, I suppose on account of losing their queens. As long as we give attention to raising alfalfa, there is no excuse for being without honey.

JOHN W. WILSON.

Talmo, Republic County.

The best material you can use in your decoy hives to catch swarms, is comb foundation. Wire the foundation in the frames securely, and your stray swarms will then have as good chance to receive the benefits of the latest system of management as any. The ants will not bother the foundation comb, as it is the sweetness of the old comb which contains more or less of particles of honey that attracts them, and this the foundation is entirely clear of.

I judge the best system of using hives for this purpose, is to use only a single story, and we can thus fill all the frames with foundation comb, and wire them in so that the heat will not melt them down in the hive. It would be best to shade the hives a little if possible, as new swarms like shade after taking up a new location. The hives may thus be fixed up, and both lid and bottom be nailed securely, so that intruders could not get in the hives. Your success has been good, and you have secured \$75 or \$80 worth of bees, \$50 at least would be the lowest estimate that could be put on them. Any one thus at but little expense may be more or less successful in a locality where many bees are kept.

Uniting Colonies.

EDITOR KANSAS FARMER:—I contemplate doubling up my hives of bees, and am uncertain both as to advisability and method. I have ten hives, all in fairly good condition, and probably well stocked with stores for winter, but I desire fewer colonies; prefer concentrated work and a smaller field. Kindly say if this course is to be commended, and describe process of combining somewhat in detail.

J. A. SMITH.

Lincoln, Lincoln County.

One would infer from your letter that you have more colonies of bees than you wish to keep, and you wish to reduce the number just as quickly and cheaply as possible, and do not care to "monkey" very long when doing the work with them. Well, we will give you the short method. Just take five of the hives and set them, each one on top of the other at dark in the evening. This will make you five colonies good and strong and with plenty of honey to winter them, and allow them to thus winter in the two stories. We suppose, of course, that you have the standard frame hives so they are used in the regular order of two-story hives. If your ten colonies are all good and strong, with thirty or forty pounds of honey in each one, they would winter perhaps as well just as they are and you would have ten instead of five in spring. It would be best in this case to sell off a number of them if you have sale for them.

In uniting colonies of bees, the expert would select the finest queens to leave in the hives, and destroy the others, as one of the queens will surely kill the other when united thus. To be more careful, he would also cage the queen of the two divisions for a few days so that her safety may be secured, as strange bees sometimes attack the queen, and in some cases the bees will quarrel and many will be killed. But in uniting bees thus, I have had but very small losses. When uniting bees, never do the work during the day time, but at dark in the evening.

Brain Markets.

Conducted by James Butler, Secretary of the Farmers' Co-operative Grain and Live Stock Association.

"The human race is divided into two classes,—those who go ahead and do something, and those who sit still and say, why wasn't it done the other way." Oliver W. Holmes.

Advocate Larger Investments.

It is entirely too costly to place ten dollar shares of stock where each individual or company takes only one share. If the maximum limit to any one person, firm, company or association were three thousand dollars, and stock were permitted to vote up to that amount, it would be very much easier to place the stock of our association, and would enable us to carry into execution our plans, and add materially to the usefulness of the association, and to secure for its members the many benefits to be derived from the execution of the original plan.

Safeguards can easily be adopted that will prevent its absorption by the few, by legally limiting proxy votes in the by-laws. We have no fear that farmers will not be able to hold and control the association. They will always hold the great majority of the stock. To assume that they will not, is to confess that they are not competent to manage and control such an organization. We have the absolute confidence that they have the ability to and will manage the association work successfully, if they adhere to the well defined policy that governs other business corporations.

If a man is the promoter of a scheme that makes him a million dollars, society and the public refer to him as an example of intelligence, and credit him with being a great business man and financier. If he promotes a scheme that saves a million dollars for any class of citizens or the public, little attention is paid to him. Yet he is the greater, grander, nobler, man of the two.

"The force of a State is in proportion to its population; population in proportion to plenty; plenty in proportion to tillage; tillage in proportion to personal and immediate interest, that is, to the spirit of property. Whence it follows that the nearer the cultivator approach-



The Topeka Business College

Large School. Reasonable Rates. Good Positions. Catalogue Free. Address L. H. Strickler, Topeka, Kans.

es the passive condition of a mercenary, the less industry and activity are to be expected from him; and on the other hand the nearer he is to a free and entire proprietor, the more extension he gives to his own forces, to the produce of his lands, and the general prosperity of the State."

The above paragraph was written more than a hundred and ten years ago, by C. F. Volney. It is an axiom of truth that will live forever. The lasting prosperity of any State or nation will depend upon its adherence to the above truths. Every cooperator should study the above paragraph, should cut it out and commit it to memory; then work over for its application in the administration of government.

If you believe that a line elevator system, owned and operated by farmers and those whose interests are closely allied with grain growing, would prove beneficial to such industries, you should talk it to your neighbors, write it to your friends, help the movement in every way you can, and induce others to action in their own interest.

Farmers should never let up nor look backward until there is a farmers' co-operative elevator in operation at every good grain station in Kansas, Oklahoma, and Nebraska.

We should have thirty thousand co-operative members in our association in Kansas before the close of the year 1903. It is our firm belief that we will get them.

Wing Fire Proof Paint.

One of the interesting features of the St. Louis fair this year, that attracted universal attention, was the demonstration and test made by the officers of the Wing Fire Proof Paint Co., who gave a continuous performance for the entertainment and edification of those interested in a ready-mixed paint that is guaranteed fire and weather proof, as per their advertisement on page 1053. A test outside of the grounds, near Nelson Morris & Co.'s packing house was another victory of the paint company, as it demonstrated beyond a doubt that it was exactly what the company claimed for it—fire proof. At both places where the tests were made a number of planks from a pile of common pine

lumber were taken and built in the shape of a shed, which was painted by a disinterested party with the Wing Fire Proof Paint, giving it a coat of white on the under side and a coat of red on the outside. Then a lot of paper, shavings and kindling wood was placed under the structure. Five gallons of coal oil was then placed upon the wood and a match applied. After twenty minutes burning, when the kindling had burned out, the structure was removed and found to be perfectly sound. The boards were merely charred slightly. Some shingles were then painted on all sides with the paint and thrown into a like fire and allowed to remain ten minutes, then taken out, and when examined were found to be in good condition, charred a very little bit. The universal verdict of every one was that the paint is certainly fire proof.

Used Successfully for Five Years.

Slanesville, W. Va., August 20, 1902. Dr. B. J. Kendall Co., Enosburg Falls, Vt. Gentlemen:—Please find enclosed a two-cent stamp for which send me one copy of your "Treatise on the Hog and His Diseases." I have used your Spavin Cure for the past five years. I can heartily recommend it as the best I have ever used, in fact I do not believe there is any better made for any and all lameness in a horse, as I have used it for almost everything. It is equally as good for man, for I have tried it. Very truly yours, T. D. BLOOM.

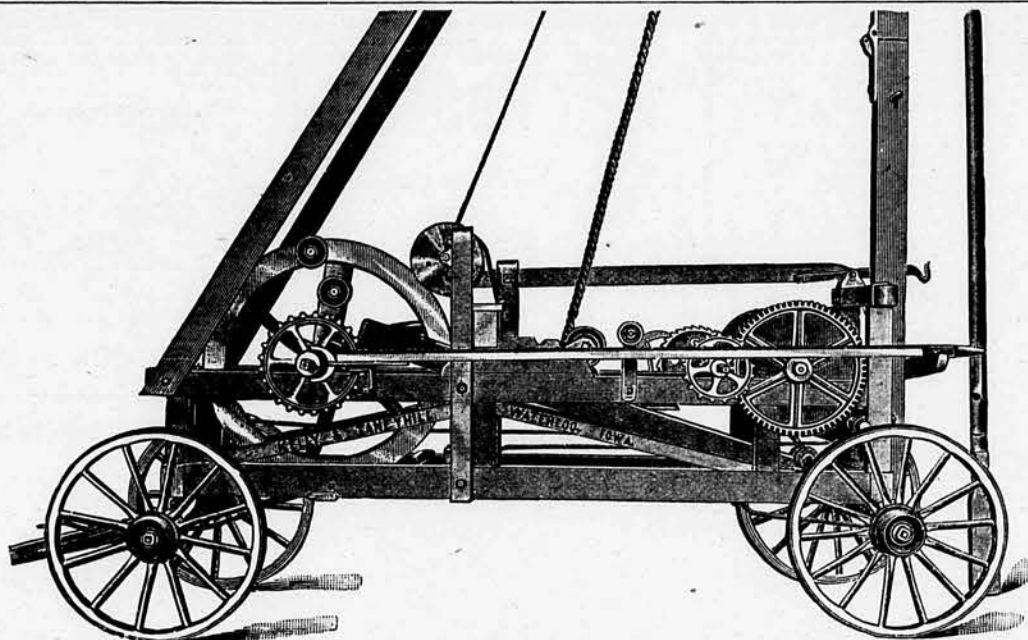
No. 15 Only \$6.70

\$4.60 Guaranteed Oak, No. 11

for coal, wood and lignite, larger sized Oaks and Ranges, Cooks and Heaters in all styles at factory prices, save you nearly one half, stoves shipped subject to examination at your depot on receipt of \$1. if not exactly as represented and satisfactory your money refunded.

CATALOGUE FREE.

\$4.60 Empire Stove Manufacturing Co. Minneapolis, Minn., and Box 752, Kansas City, Mo.



Making Wells.

In the operation of a farm nothing is more important than the water supply, and those who have provided themselves with deep wells with pumps of large capacity are particularly fortunate both in dry seasons like last year, when the shallow wells failed, or in wet seasons such as this, when the shallow wells are full of surface water of dangerous character. The deep well of inexhaustible supply adds materially to the value of the farm. But to sink deep wells good machinery is necessary, and they were scarcely to be classed as practical till modern well drilling machinery was devised. In this, as in every other line of machinery, necessity may justly be said to have brought forth invention: first came an auger, in its time good for making wells. But rock was encountered and the old time drill, complex, unhandy and hard of operation, was developed. But like

every other line of machinery it has undergone many changes and improvements till it is now a comparatively simple machine. It will be understood by everyone familiar with well drilling operations that the following are the points to be accomplished in drilling: First, to give the tools a sufficient drop to cut any substance encountered, and to vary that drop as the formations vary; second, to pump out the slush in the simplest and easiest manner possible; third, to have machinery constructed with strength and durability, which combines simplicity, ease of operation, and perfect control by the driller while standing at the tools. We believe the cut run on this page, showing the last improved "Climax" Drill, as manufactured by the Kelley & Taneyhill Co., of Waterloo, Iowa, has every desirable feature. There is but one gear and pinion on the entire machine. The large wheel on the front end has heavy rollers

on steel bearings, which strike a steel plate on the lever and reduce friction to the minimum. The length of strokes is varied by moving the swivel clevis, holding the sheave through which the rope runs, up and down on the treadle. The tools are raised by shifting the clutch chain wheel on the main shaft and the slush bucket is operated by a friction chain wheel. Every operation of this machine is controlled by the driller standing at the tools, by means means of four levers. The machine is a model of simplicity, strength, and durability. It is built in ten sizes and can be fitted with pumps for jetting and whirler for revolving processes if desired. The Kelley & Taneyhill Company are thoroughly reliable and are the oldest manufacturers of well machinery; they make machines for all kinds of drilling and to any desired depth. We advise those interested to write them for catalogue and prices.

THE MARKETS.

Kansas City Live Stock Markets.

Kansas City, Mo., October 20, 1902.

The run of cattle here the past week was fair at 67,000 head, compared with 63,300 the previous week and 68,000 a year ago. Western stockers and culling cows formed the major portion of the offerings. Good corn-fed beefs were scarce and prices advanced 15¢ to 25¢ under this stimulus. Top cattle were marketed by John M. Egon, of Overbrook, Kans. They averaged 1,324 pounds and brought \$7.10. Buyers want good cattle and are still willing to pay \$6.07 for the desirable kinds. These prices show up well with those current a year ago. Native cows were in moderate supply during the week and best grades sold well. Offerings of Western range cows were liberal, but packers took the good ones with fair readiness and all but common stock sold steady. Mean, boney Western cows bring \$1.50 to \$1.75, and the better kinds \$2.50 to \$3.

The stocker market showed a little better clearance this week, all but the trashy kinds being moved with some freedom. The general tendency of prices was downward, however, and cheaper kinds closed 10¢ to 20¢ lower. Milch cows are in request at a range of \$25 to \$60. Choice veal calves are bringing \$5.50 to \$6, but stock calves are selling dull, and 20¢ to 30¢ lower than a week ago.

The hog trade was well supplied locally, but other points were not so fortunate. Receipts here showed an increase of 75 per cent over those of a year ago. Contrary to expectations the market showed a substantial advance during the week. This was caused principally by lighter receipts at Chicago, which overbalanced the larger local run. The week opened with best heavies selling at \$7.10 and closed with the bulk at \$7.12 to \$7.20. The range of prices was close all week. Good quality light hogs, 175 to 200 pounds, are still in favor with the packers, but the fat porkers are the best sellers at present. In spite of the advance in prices this week, traders generally hold that the market will continue its downward course.

The record in sheep receipts was broken here last week, the total supply aggregating 57,300 head, a number 8,000 in excess of the previous high-water mark which was for the week ending April 24, 1897. Chicago showed a big falling off in receipts compared with a year ago and Omaha's run was half that of the preceding week. This stimulated trade and an advance of 15¢ to 25¢ was had in lambs. A bunch of natives was marketed by Webb, of Missouri City, Mo., for \$5.25, the highest price of the season. Western yearlings sold up to \$3.70. Feeders buyers throughout Kansas and Missouri got into the game during the week and bought more freely than they had done of late. It looks as if feeding sheep have now reached the low point of the season.

Horses advanced \$5 to \$10 during the week on account of moderate receipts and a brisk demand from the East, and a fair one from the South. Farmers would do well to get their horses fat before sending them to market, however, as the fat grades command premiums over the off-flesh kinds.

The egg market held steady all week even in the face of warmer weather. Kansas and Missouri stock is now quoted at 17½¢. Eggs are retailing at 20¢ to 25¢ per dozen. Spring chickens weakened once more and are down to 8½¢. Broilers command 11½¢; roosters 20¢ to 25¢; ducks 8¢, and turkey hens 9½¢.

H. A. POWELL.

St. Joseph Live Stock Markets.

South St. Joseph, Mo., October 20, 1902.

Beef steers were in moderate proportion with no choice finished corn beefs included and warmed-up and short-fed natives and Western grassers the rule. The demand was strong and prices advanced 10¢ to 15¢. Quarantine steers were in good supply and values gained 15¢ to 20¢, with the Stonebraker steers at \$4.22½. Native cows and heifers were in moderate quota and Texas and Westerns in heavy majority. Outside of the canners, which sold steady, all other grades advanced 10¢ to 15¢. Southern grades sold on a firm basis. Stockers and feeders were in reduced supply and the good grades of both Westerns and natives appreciated 15¢ to 25¢ in value, but the commoner kinds sold slowly at barely steady values. The movement was good to the country.

Owing to light supplies of hogs early in the week prices made good advances, but under increased marketing later on the gain was wiped out and the week closed prices somewhat lower. The bulk of the offerings ran to good medium and heavies, with pigs far under the needs of the packers. Prices to-day ranged from \$7.12½ to \$7.17½ with the bulk selling at \$7.05 to \$7.10.

Receipts of sheep last week were of fairly good numbers with the usual heavy proportion of Western range lambs and sheep, principally lambs, on sale. The demand was strong from all the killers and the keen competition for supplies caused lamb prices to gain 15¢ to 25¢ and sheep to appreciate 10¢ to 15¢ in price. To-day Idaho lambs are up to \$5.25. Idaho wethers and yearlings mixed at \$3.90, and Idaho ewes at \$3.40. Last week at the close good but not choice native lambs brought \$5.40.

Frasius' Market Review.

Topeka, Kans., October 20, 1902.

As predicted, the wheat markets are gradually gaining in strength, notwithstanding the enormous primary receipts in the Northwest which run about 20 per cent larger than a year ago. But the exports of late have been very large. They were again well up near the five and a half million mark for the week just closed, and were 63,427,000 millions for the first three months of the crop year. The question now arises, can this be kept up with a crop (as reported by Government) of 627,764,000 bushels?

Let us analyze the situation as the writer sees it.

CREDIT.

Crop 1902 as estimated by Government.....627,764,000
In farmers' hands July 1, 1902,
(Government estimate).....52,440,000
In visible supply July 1, 1902.....19,760,000

Total wheat.....699,964,000

DEBIT.

Per capita consumption as estimated by statisticians 5½ bushels for 80,000,000 people.....420,000,000
For seed.....60,000,000

Unfit for bread (to be used for feed) on account damage by elements this year.....75,000,000
Exported July 1 to October 1, three months.....63,427,000

Avallabel October 1 for export.....618,427,000

Our exports for the three months, July 1 to October 1, have averaged over 21,000,000 bushels per month. If this rate keeps up, it can be figured out very readily that our exportable surplus will be gone by the first of March, 1903, and much higher prices must prevail at some future time during this crop year. The wonderful large crops in Europe we read so much about in the early part of the summer have, it is asserted also, been damaged by the elements to such an extent, that much of it has been made unfit for bread. The present demand for wheat from Europe would corroborate this assertion. Anyhow, the demand for "good" wheat from mills both in this country and Europe is strong and continuous.

There has also been quite a boom in corn, especially in the December option in Chicago, which has advanced over 14¢ per bushel since the damage by frost during the early part of September became apparent. The crop, however, is large and while the quality has been impaired, there is no question that corn will sell much lower during the latter part of the winter.

Markets for grain closed as follows:
Chicago.—No. 2 red wheat, 75¢; No. 2 hard wheat 72¢; No. 2 corn, 59¢ to 60¢; No. 2 oats, 30¢.

Kansas City.—No. 2 red wheat, 67½¢ to 68½¢; No. 2 hard wheat, 70¢ to 71¢; No. 3 hard wheat, 69¢; No. 4 hard wheat, 62¢ to 64¢; No. 2 white corn, 58½¢; No. 2 mixed corn, 54¢; No. 2 oats, 31¢ to 32¢.

PILES

Fistula, Fissure, all Rectal Diseases radically cured in a few weeks without the knife, cutting, ligature, or caustics, and without pain or detention from business. Particulars of our treatment and sample mailed free.

Mr. M. McCoy, Gogonac, Kans., Captain Company A, Fifteenth Indiana Infantry, writes: "Hermit Remedy Company, Dear Sirs:—I have doctored for piles since the Civil War—thirty-six years—and am now glad to report that after using your treatment for a few weeks I am completely cured. I believe you can cure any one, for a man could not be in a much worse condition than I was and live, and I am duly grateful to you. Respectfully,

"M. MCCOY."

We have hundreds of similar testimonials of cures in desperate cases from grateful patients who have tried many cure-alls, doctors' treatments, and different methods of operation without relief.

Ninety per cent of the people we treat come to us from one telling the other. You can have a trial sample mailed free by writing us full particulars of your case. Address, HERMIT REMEDY COMPANY, Suite 736, Adams Express Building, Chicago, Ill.

Special Want Column.

"Wanted," "For Sale," "For Exchange," and small or special advertisements for short time will be inserted in this column, without display for 10 cents per line of seven words or less, per week. Initials or a number counted as one word. Cash with the order. It will pay. Try it.

CATTLE.

FOR SALE—Registered Red Polled bull, dark red, weight 1,650 pounds, \$75. F. P. Evans, Mont Ida, Anderson Co., Kans.

FOR SALE—My herd bull, Baron Knight 134946, got by Gallant Knight 124468, four years old, dark red, weight 2,200 pounds, also four Scotch topped bulls from eight to twelve months old; all red. I also have a few cows and heifers for sale, and a fine lot of Light Brahma cockerels. J. P. Engle, Alden, Rice Co., Kans.

FOR SALE—2 double standard Polled Durham bulls and 3 Shorthorn bulls. A. L. West, Garnett, Kans.

FOR SALE—Guernsey bulls from best registered stock. J. W. Perkins, 423 Altman Building, Kansas City, Mo.

FIVE HEREFORD BULLS FOR SALE—Never used in a herd, they are in fine fix, at a bargain for cow men. O. L. Thistler, Chapman, Kans.

FOR SALE—Six good Shorthorn bulls, four of them straight Cruickshanks; prices reasonable; now is your chance to get a good individual. H. W. McAfee, Topeka, Kans.

FERRETS.

300 FERRETS FOR SALE. Farnsworth Bros., Elk Falls, Kans.

8000 FERRETS Trained ferrets, they will clean your place of rats, and drive rabbits from burrows. Pure-blooded and finest working strain in America. Send for wholesale list and book guide to care and working. S. & L. Farnsworth, New London, Ohio.

SHEEP.

FOR SALE—1,200 good Rambouillet ewes and wethers, 1 to 5 years old, cheap. Write or come and see us. Butts Brothers, Cleveland, Kingman Co., Kans.

FOR SALE—Nine (9) choice Shropshire rams, all registered, 6 to 8 months old. Anderson & Findlay, R. R. 2, Iola, Allen Co., Kans.

WANTED—A few registered Cotswold ewes; yearlings or 2-year-olds. A. L. Bushnell, Mound Valley, Kans.

SHEEP FOR SALE—Ten extra choice Shropshire rams and 15 ewes, all eligible for registry. Inspection and correspondence invited. C. S. Harrington, Valley Center, Kans.

FOR SALE—Registered Shropshire rams and young ewes of choice quality and the best of breeding. E. S. Kirkpatrick & Son, Wellsville, Kans.

AMERICAN MERINOS—Modern, smooth. Entire flock sheared in May; 21 pounds average. A few rams for sale at a reasonable figure. L. C. Walbridge, Russell, Kans.

THE L. A. ALLEN Cattle Commission Co. L. A. ALLEN } Salesmen.
JAMES R. HAWPE }
25 YEARS IN THE CATTLE TRADE
SELL CATTLE ON COMMISSION
And Fill Orders for Stockers and Feeders. Market Price Guaranteed.
Office, 267-268-269 Second Floor Exchange Bldg. OVER INERSTATE NATIONAL BANK.
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References—Inter-State National Bank and Cattlemen Generally.

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The Only Absolutely Fire and Weather Paints in the World.
Will Stand in Any Climate. Ready Mixed. Guaranteed. Write for Estimates and Testimonials from Heaviest Users.
WING FIRE-PROOF PAINT CO., ST. LOUIS, MO

\$25.00 To California

and to Prescott, Phoenix, and many other points in Arizona.

On sale daily during September and October.

Liberal stopovers in California permitted on these tickets.

Tourist sleepers and free chair cars daily.

Personally conducted excursions tri-weekly.

If dissatisfied with your present condition why not investigate the splendid advantages offered in California.

Santa Fe

T. L. KING, Ticket Agent, Depot.
or **T. M. JAMES, JR., 530 North Kansas Ave.**

FARMS AND RANCHES.

FARM FOR SALE—350 acres adjoining town of Bushong, Lyon County, Kansas. 110 acres in cultivation, 150 in pasture balance hay land; can be cultivated, new 4-room house, large stone barn, small orchard, stone corral, an abundance of water, good school, and railroad depot within quarter of a mile. Inquire of owner. J. C. Hume, R. R. No. 3, Council Grove, Kas.

FOR SALE—160 acres, two miles east of postoffice, Salina, Kansas. Best stock and dairy farm, about 50 acres bottom, 12 acres orchard, rest truck patches and pastures; good 11-room house, cow and horse barn, milk house, well, and 2 cisterns. Price \$6,000. Also 160 acres cornering with above, good corn, wheat, or alfalfa land, 8-acre peach orchard, 4-room house, barn, 2 wells, all fenced, about half in cultivation, rest in pasture. Will sell to close estate. Price \$5,000. Catherine E. Anderson, Admix., Drawer N., Zion City, Ill.

FOR SALE—160 acres fine pasture land in Wabaunsee County, 2 miles from Halifax, good grass and never-failing water. H. R. Rice, Tecumseh, Kans.

FOR SALE—160-acre farm, extra good corn, wheat, and grass land, good improvements. A. E. Cornet, Rural Route 4, Lawrence, Kans.

FOR SALE—Good alfalfa, corn, and wheat land in the banner stock county of Kansas. Write the Verdigris Valley Land Company, Quincy, Greenwood Co., Kans.

SWINE.

TEN HEAD Duroc-Jersey males, old enough for use, and we believe good enough to head any herd in the United States. M. H. Alberty, Cherokee, Kans.

CHOICE BERKSHIRE BOARS for sale—4, 6, and 11 months old, all eligible for registry. Write for prices and breeding. G. D. Willems, Inman, Kans.

PUBLIC SALE at Topeka, Dec. 11, 1902. V. B. Howey of Topeka, will sell 60 head of pure-bred Poland-China and Duroc-Jersey swine. A number of Jersey cattle and Shire-bred mares and horses.

A BARGAIN—Three fall Poland-China boars, 40 spring pigs; popular breeding, extra feet, legs, hams, backs heads, and ears, slick, straight, black coats. G. W. Harman, Ridge, Kans.

TRY THE Kaw Valley Herd of Poland-Chinas for your breeding stock this season, pairs and trios not akin, where you do not have to mortgage your farm to buy a good one. M. F. Tatman, Rossville, Kans.

HORSES AND MULES.

PROSPECT FARM—CLYDESDALE STALLIONS, SHORTHORN CATTLE AND POLAND CHINA HOGS. Write for prices of finest animals in Kansas. H. W. McAfee, Topeka, Kansas.

SEEDS AND PLANTS.

FOR SALE, ALFALFA SEED—A limited amount of orders filled promptly. Correspondence and orders solicited. O'Laughlin & Weber, Lakin, Kans.

MISCELLANEOUS.

AT A BARGAIN—One and one-half horse power gasoline engine, cheapest known power for farm and shop use. Strictly new, never taken out of shipping case. Price and circulars on application. N. O. Waymire, Garfield, Kans.

FARM HELP WANTED—Man and wife to work on farm. No. 1 chance for right parties. References required. Mrs. Sarah F. Harris, three miles west of Leocompton, Kans.

FOR SALE—Guaranteed Formula for best horse, cattle, sheep, and swine conditioner and health producer and preserver. Money refunded if not satisfied. \$1.00 per copy for individual use. County rights for sale. E. S. Shockey, 274 Live Stock Exchange, Kansas City, Mo.

FOR SALE CHEAP—Pedigreed Scotch Collie pups. W. H. Richards, V. S., Emporia, Kans.

WOOL WANTED—Will pay highest market price for wool. Sacks for sale. Topeka Woolen Mill Co., Oakland, Kans.

PATENTS.

J. A. ROSEN, Patent Attorney, 418 Kansas Avenue, Topeka, Kansas

FARM LAND.

In stock, fruit, and grain farms I have the best bargains in the world.—Western Michigan—Famous fruit belt, peaches, plums, pears, apples, cherries. Excellent corn land. Clover and grass. Water the best. Better climate than in Kansas; government reports prove it. Unimproved, \$10 to \$12 an acre. Finely improved, \$25 to \$45. First-class markets, schools, churches, railroads, and towns abundant. Every up-to-date advantage. Write for list and book that tells all about it. Easy terms. S. V. R. HAYES
Michigan Trust Bldg., Grand Rapids, Michigan

Agents Wanted

Good agents can get exclusive territory for easy selling Washing Machines, Windmill Regulators, and other good sellers. Send 2c in stamps for descriptive circulars and particulars. BULLER MFG. CO., 1,000 Hickory Street, KANSAS CITY, MO.

FOR SALE IN THE OZARKS

Cheap homes, fruit farms, and stock ranches. For booklet address Geo. T. Meador, Cabool, Texas Co., Mo.

GINSENG. DELAY. This is the time to plant. DON'T delay. Gardens at Houston, Mo. Address BARNARD BROS., 3211 E. 12th St., Kansas City, Mo.

The Stray List

For Week Ending October 23.

Finney County—M. A. Schneider, Clerk.

COW—Taken up by J. M. Dunn, (P. O. Garden City), September 21, 1902, one red cow, 3 years old, branded on right shoulder.

Breeders' Directory.**DUROC-JERSEY SWINE.**

D. TROTT ABILENE, KANS., famous Duroc-Jerseys and Poland-Chinas

Registered Stock, DUROC-JERSEYS, contains breeders of the leading strains.
N. B. SAWYER, - - Cherryvale, Kansas

DUROC-JERSEYS
DUROC-JERSEYS FOR SALE—20 fall and winter gilts, 125 spring pigs that are up to date. Prices reasonable. Newton Bros., Whiting, Kans.

M. H. ALBERTY, - - Cherokee, Kansas

DUROC-JERSEYS.

100 head for this year's trade; all eligible to record.

ROCKDALE HERD OF REGISTERED DUROC-JERSEY SWINE.

J. F. CHANDLER, Frankfort, Kansas.

MAPLE AVENUE HERD DUROC-JERSEYS.
J. U. HOWE, Wichita, Kansas, Farm 2 miles west of city on Maple Avenue

FAIRVIEW HERD DUROC-JERSEYS
One hundred and twenty Duroc-Jersey pigs, all to be reserved for sale, October 23, 1902.
J. B. DAVIS, FAIRVIEW, BROWN CO., KANS.

WALNUT HILL HERD DUROC-JERSEY SWINE.
H. A. J. COPPINS, County Clerk, Eldorado, Kans
Stock of both sexes for sale.

MAY'S DUROC-JERSEYS.
Higgin's Hero 11889 at head of herd. Choice spring pigs of both sexes for sale.
Wm. A. MAY, Blue Hill, Nebraska.

STANDARD HERD OF Registered Duroc-Jerseys
PETER BLOCHER, Richland, Shawnee Co., Kans.
Herd headed by Big Joe 7363. Over 100 head reserved for sale on the farm, November 3.

ROSE HILL HERD OF DUROC-JERSEY HOGS
A choice lot of boars ready for service, and gilts ready to breed. Also August pigs now ready to wean. All from large, prolific old sows.
S. Y. THORNTON, Blackwater, Missouri.

Golden Rod Herd of Prize-winning Duroc - Jerseys
Van's Perfection 11571, sweepstakes boar at all State Fairs of 1902, at head. Both fall and spring pigs of both sexes and of his get for sale.
GILBERT VAN PATTEN, Sutton, Neb.

POLAND-CHINA SWINE.

V. B. HOWEY, R. F. D. 5, Topeka, Kas
BREEDER AND SHIPPER OF
POLAND-CHINA HOGS, JERSEY CATTLE,
S. L. WYANDOTTE CHICKENS. Eggs in season

Dietrich & Spaulding, Richmond, Kans.
FOR SALE: 20 boars ready for service; sows bred or open. 100 spring pigs.
Our POLAND-CHINAS are at the Top.

VERDIGRIS VALLEY HERD OF POLAND-CHINAS

FOR SALE: Six 8 and 10 months old boars, every one a show boar and as good as I ever bought to use in my herd. Also 150 spring pigs that are immense.
E. E. WAIT, Altoona, Kans.

SHADY LANE STOOK FARM

HARRY E. LUNT, Proprietor, Burden, Cowley Co., Kans.

A few choicely bred Poland-China Boars for sale, some choice open gilts and bred sows.
A Public Sale of Poland-China Hogs will be held November 14, 1902.

SHADY BROOK STOOK FARM POLAND-CHINAS

I keep constantly on hand all sizes and ages of high-class Poland China pigs. Quality high, prices low. Write for description and price to

H. W. CHENEY, NORTH TOPEKA, KANSAS.

FIRE SALE OF POLAND-CHINAS

On August 25 fire destroyed my barn with all feed and machinery. I must have money to rebuild at once. For the next 30 days my entire crop of spring pigs goes at one half price. Write me for prices and breeding. I can sell you a bargain.

EMMET McGREW, Kossuth, Linn Co., Kans.

Pleasant Hill Herd of PURE-BRED POLAND-CHINAS.

Blood of Corwin, Chief Tecumseh 2d, Chief I Know, Hadley's Chief, Ideal T. S., and others of like quality. Klondyke 23796 at head of herd. A few choice spring gilts for sale. Write for prices.

T. B. PITCHER & SON, Rural Route No. 1, Topeka, Kans.

POLAND-CHINA SWINE.

FOR SALE Poland-China Hogs, Helstein-Friesian Cattle; either sex. Best strains represented. H. N. Holderman, Rural Route 2, Girard, Kans.

Kansas Herd of Poland-Chinas

Has some extra fine gilts bred; also some fall boars. Will sell Sen. I Know, he by Perfect I Know. Address—

F. P. MAGUIRE, Hutchinson, Kansas.

THOROUGHbred

Poland-China Hogs.

Special price for next 20 days on 10 bred gilts, to farrow in April and May; they weigh from 200 to 275 pounds, and most of them are bred to Black Perfection 27182, the best breeder I ever owned. Also 20 fall pigs, and 4 boars large enough for service. 100 head in herd. Write for anything you want in Poland-China hogs.

JOHN BOLLIN, R. F. D. No. 5, Leavenworth, Kans.

PECAN HERD OF POLAND-CHINAS

Having sold our farm here, we will make close prices on our

Poland-China BOARS AND GILTS

Have a very fine lot to select from. Sired by Model Tecumseh, J. L. Best, and U. S. Wilkes.

J. N. WOODS & SONS, OTTAWA, KAS.

WAMEGO HERD

—OF—

POLAND-CHINAS

With Black Tecumseh 25116 at head, he by Big Tecumseh 24429, a grand individual, and sire of large, strong, growthy fellows, nearly perfect in color, coat, and markings. Large M. B. turkeys and B. F. chickens for sale. Correspond with me at Wamego, Kansas, Pottawatomie County. C. J. HUGGINS.

KNOLLWOOD FARM HERD

B LUE BLOODED
IG BONED
ROAD BACKED
ERKSHIRES . .

A few fancy young boars ready for service. Orders booked for spring pigs.
E. W. Melville, Eudora, Kansas.

PRAIRIE DALE HERD OF POLAND-CHINAS

150 choice spring pigs, sired by five first-class boars, for sale; a son of Chief Tecumseh 3d at head of herd. Parties wishing to visit herd will be met at Abilene, if notice be given. Farm 2½ miles northeast of Abilene.

C. M. GARVER & SON,
R. F. D. No. 1, Abilene, Kansas.

Closing Out Everything. SENSATION HERD

Big-boned Poland-Chinas

Nine splendid sows with litters, 17 splendid sows unbred, 8 spring boars, 16 spring gilts. The blood of Corwin, Sensation, Chief Tecumseh, Chief Perfection 2d, Wilkes, Black U. S., and Missouri's Black Chief, all represented by perfect individuals. Bargains going here. Will also sell my Shorthorn bull, Aberdeen Knight 165297; good enough to head any herd.

HARRY EVANS, Pleasanton, Kansas.

CHOICEST STRAINS

—OF—

Poland-China Hogs.

400 head in herd. Fashionably bred sows and gilts bred to Broad Guage Chief 25733, first prize winner International Show 1900, and Simply O. K. 24290, first prize winner Missouri State Fair 1901. 200 winter and spring pigs in special offer. Bargains in Registered Stallions and Mammoth Jacks. Also SHORTHORN AND POLLED DURHAM CATTLE.

SNYDER BROS., Winfield, Kas.

POLAND-CHINA PIGS.

Sired by Black Missouri Chief 25785 [the magnificent son of the \$1,000 Missouri's Black Chief, the sweepstakes State Fair winner in 1899, also brother to the international winner at Chicago in 1901], a boar of enormous size, six feet from ears to root of tail, 700 pounds, in his twenty-five month old breeding form, perfect in proportions, unexcelled show coat and finish, stamping his likeness on all his pigs, and for which I have refused \$500. Pigs \$10 each. Show pigs, \$25 each. All from sows of the very best of breeding, costing large sums of money. His fall gilts, safe in pig to Front Perfection 2d, the proud and stylish \$500 son of the great sweepstakes winner, \$30 each. The pigs from the mating will have pedigrees as rich as brains and money can get; all the sweepstakes State Fair winning boars from 1892 to 1901 represented. Such a combination of nine of the great sweepstakes boars, selling as high as \$5,100, and eight of the most sensational sows the world has ever seen, selling as high as \$4,000, is no accident, but the result of years of great study and enormous expense. The very acme of fancy breeding, as the analyzed pedigrees will show, Pacific and American Express.

J. CLARENCE NORTON,

Moran, Allen Co., Kansas

POLAND-CHINA SWINE.

High-Class Poland-China Hogs

Jno J. Marshall, Walton, Harvey Co., Kans

Breeds large-sized and growthy hogs with good bone and fine finish and style.

CHESTER WHITE SWINE.

D. L. BUTTON, North Topeka, Kas
BREEDER OF
IMPROVED CHESTER WHITES
Stock For Sale.
Farm is two miles northwest of Reform School.

THE CRESCENT HERD

O. I. C. } The World's Best Swine.

Hero 13588 (11761) at head, assisted by Teddy R. 13463. Choice spring pigs as good as grows, for sale. Only first-class shipped.

JOHN W. ROAT & CO.,
CENTRAL CITY, NEBRASKA.

CHAMPION HERD OF ..IMPROVED..

Chester White Swine

Perfection 11705, sweepstakes boar, 1901, and Pan America 11943, first prize, New York State Fair, first, Michigan State Fair, and first in class at Pan-American Exposition, at head of the herd. The champion herd, Nebraska State Fair, 1902.

Choice spring pigs of both sexes for sale.

BLODGETT BROS.,
BEATRICE, NEB.

BERKSHIRE SWINE.

YOU ARE INVITED TO OUR
PUBLIC SALE, NOV. 7, 1902.
—OF—

LARGE ENGLISH BERKSHIRES
MANWARING BROS., Lawrence, Kansas

HILLSDALE HERD OF PURE-BRED BERKSHIRES

Prize-winners in 1901 and 1902. Hillsdale Champion 58841, assisted by Teal's Favorite at head. Spring pigs of both sexes for sale.

THOS. TEAL & SON, Ulica, Van Buren Co., Iowa

HIGH-BRED BERKSHIRES

Of the Leading Families

Herd numbers 150 head. All classes of stock for sale. Satisfaction guaranteed. Shipping station, Poio, on C., M. & St. P. R. R. Write for prices and full particulars.

D. T. MAYES, Knoxville, Mo.

EAST LYNN HERD OF LARGE ENGLISH BERKSHIRES.

Herd headed by Premier 4th 55577 assisted by Rutgers Judge 2d 61106.

ONLY THE BEST.

Imp. Elma Lady 4th 44683, the highest priced Berkshire ever sold in Kansas City, is in our herd and there are others like her. Inspection invited six days in the week.

WILL H. RHODES, Tampa, Marion Co., Kans

CATTLE.

COBURN HERD OF RED POLLED CATTLE.
Herd now numbers 115 head. Young bulls for sale.
Geo. Greenmiller & Son, Centropolis, Franklin Co., Kans.

D. P. NORTON'S Breeder of Pure Bred SHORTHORNS
Dunlap, Morris Co., Kans. SHORTHORN CATTLE
Herd Bull, Imported British Lion 133692. Young stock for sale.

North Elm Creek Herd Pure-bred Shorthorns and Poland-Chinas

Scotch-topped Young Mary females with 9th Knight of Elmwood 161507 at head. Call on, or write, W. J. Smith, Oketo, Kas.

SUNFLOWER HERD OF

Scotch and Scotch-topped
SHORTHORN CATTLE
and **POLAND-CHINA SWINE**

Two Scotch bulls in service. Representative stock for sale. Address Andrew Pringle, Eskridge, Wabawsee County, Kansas.

CATTLE.

HEREFORDS FOR SALE.

Having sold the most of my herd, I have left for sale 5 fine yearling bulls. Write me for particulars. I will sell them cheap. E. S. Cowee, R. R. 2, Burlingame, Kas

ENGLISH RED POLLED CATTLE—Pure-bred Young Stock For Sale. Your orders solicited. Address L. K. HASELTINE, DORCHESTER, GREEN CO., MO. Mention this paper when writing.

MEADOW BROOK SHORTHORNS—Ten fine young bulls for sale—all red. Red Laird, by Laird of Linwood, at head of herd.

F. C. KINGSLEY,
Dever, Shawnee County, Kansas.

Aberdeen-Angus. EVERGREEN STOCK FARM.

Have 15 registered bulls—7 to 21 months old, sired by Niel of Lakeside 25545; also registered cows and heifers, highly bred. Will sell in lots to suit. Call or address GEO. DRUMMOND, Elmdale, Chase County, Kansas

CLOVER CLIFF FARM

REGISTERED GALLOWAY CATTLE.

Also German Coach, Saddle, and trotting-bred horses. World's Fair prize Oldenburg Coach stallion Habbo, and the saddle stallion Rosewood, a 16-hand 1,100-pound son of Montrose in service. Visitors always welcome. Address—BLACKSHEER BROTHERS, Elmdale, Chase County, Kansas.

SHORTHORN HERD FOR SALE.

Consisting of nine 1 and 2 year old bulls, fifty cows from 2 to 10 years old, and twenty-five calves by the side. The get of Royal Bates 123675. Biggest Shorthorn Bull in Kansas. Cows bred to Captain of Mayflower, Red Rover, or Royal Bates. Everything in good shape. Call or address, Louis Hothan, Carbonale, Kans.

WAYSIDE HERD OF REGISTERED HEREFORDS.

"ANXIETY WILTONS."

Printer 66634, a son of Beau Brummel 51817; March On 14th 106676, a son of March On 78035; Good Sign 140387, a son of Printer 66634, are the bulls in service. Some excellent young things—both sexes—for sale. Keep your eye on South Omaha, January 22 and 23 W. W. GRAY, Fayette, Mo.

GLENWOOD HERDS

Shorthorns headed by Victor of Wildwood, by Golden Victor, he by Baron Victor. Late herd bull Gloster 187952. Polands headed by Glenwood Chief Again. For sale choice young bulls; also females. Prices right. Choice fall boars and gilts cheap. Visitors invited. Correspondence solicited. Address

C. S. NEVIUS, Chiles, Miami Co., Kans.

40 miles south of K. C., on main line of Mo. Pac. R. R.

E. H. WHITE, Estherville, Iowa.

IMPORTER AND BREEDER OF
GALLOWAY CATTLE

Herd Foundation Stock A Specialty.

A few choice Females and 14 Bulls for sale. Inspection or Correspondence invited.

CHAMPION GALLOWAYS

...FOR 1902...

Up-to-date Galloway Cattle, All Ages, For Sale.

Personal Inspection or Correspondence solicited by C. N. MOODY, Breeder, ATLANTA, MISSOURI.

...CHOICE... POLLED DURHAMS FOR SALE.

Herd headed by Young Emperor, 690 Polled Durham Herd Book, and 128130 S. H. Herd Book, which I also offer for sale. Also double standard young bulls, and good grade cows, bulls and heifers for sale.

Inspection invited. C. M. ALBRIGHT, GLOBE, DOUGLAS COUNTY, KANSAS. Postoffice address, R. F. D. No. 2, Overbrook, Kans.

JAMES A. FUNKHOUSER

PLATTSBURG, MO., BREEDER OF

HIGH-CLASS HEREFORDS

BULLS IN SERVICE: Heslod 2d 40679, March On 6th 96587, Heslod 85th 116352, Onward 2d 116599.

MOORE'S HOG REMEDY
The Original Hog Dip.

Used on Outside and Inside of Hogs
Kills lice and fever germs, removes worms, cures mange, canker and cough; aids digestion, promotes healthy growth, and Prevents Disease, at Small Cost.

At dealers in Sealed Cans Only. Useful book with illustration of Dip Tank FREE. Address

MOORE C. & M. CO. L 1501 Genesee St. Kansas City, Mo.

CATTLE.

ABBOTTSFORD STOCK FARM OF SHORTHORNS.

For sale, after August 15, the herd bull, Imp. Beauty's Heir 145125; also 30 high grade cows and heifers, good milkers. D. Ballantyne & Sons, Herington, Kans.

MAPLE LEAF HERD OF THOROUGHbred

Shorthorn Cattle, and Poland-China Swine.
Farm is 2 miles south of Rock Island depot.
JAMES A. WATKINS, Whiting, Kans.

SHORTHORN BULLS.

FOR SALE: Registered and high-grade Shorthorns of Cruickshank breeding. No better bulls anywhere. Bargains for quick buyers. Address
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MODEL BLUE GRASS FARM. HEREFORDS.

Stock for sale.
OVERTON HARRIS, Harris, Mo.

ESKDALE HERD OF ABERDEEN-ANGUS CATTLE

YOUNG STOCK FOR SALE.
JAMES FRATER, Fredonia, Wilson Co., Kas.

Registered Herefords.

THOS. EVANS, Breeder,
Hartford, Lyon County, Kansas.
Special Offerings: Young cows and heifers, and few bulls for sale.

SCOTCH-TOPPED SHORTHORN CATTLE.

FASHIONABLE
POLAND-CHINA SWINE.

REGISTERED BULLS FOR SALE.
L. A. WEAD, Carbondale, Kansas

Walnut Valley Stock Farm

Breeders of Scotch and Scotch-topped
SHORTHORNS.

The prize-winning bull, Scott Junior 124223 at head of herd. Choice young bulls and heifers for sale.

W. J. Snodgrass, Gordon, Butler Co., Kas

THE SUNFLOWER HERD PURE-BRED

Angus Cattle

Herd headed by Hale Lad 30645. Herd numbers 250 head, the largest herd bred by owner in America. Stock for sale. Address
PARRISH & MILLER, Hudson, Stafford Co., Kans

HESIOD HEREFORDS.

Highest class females with Hesiod 16th 56466, and Copyright 90079 at head of herd.

CHOICE YOUNG BULLS

Including two show animals for sale.

WESLEY SLOAN, Wellsville, Kansas.

Plainview Stock Farm

BREEDERS OF
HESIOD HEREFORDS

Hesiod 54th 81362 at head. A few choice bulls and cows of his get for sale at very reasonable price.
J. A. LARSON, Everest, Kans.

ALLENDALE HERD OF

Aberdeen-Angus Cattle

The Oldest and Largest in the United States
Splendid recently imported bulls at head of herd. Registered animals on hand for sale at reasonable prices at all times. Inspect herd at Allendale, near Iola and La Harpe; address, Thos. J. Anderson, Manager, Iola, Allen Co., Kans., R. R. 2, or—
ANDERSON & FINDLAY, Prop's, Lake Forest, Ill

Vinewood Herd of Registered

SHORTHORNS.

Armor Bearer and Lavender King cows with American Royal prize-winner Orange Lad 171599 and Lavender Gloster 169056 in service. Advance Guard and Lavender King yearling bulls for sale.

D. K. KELLERMAN & SON, Mound City, Linn Co., Kas

Scotch Shorthorns

...SALE ENTRIES...

Kansas City, October 23-24, 1902.

Imp. Lord Cowslip 160616, bred by Wm. Duthie; Prince of Collynie 163202; Emeline and Lucerne, Vol. 49, P. 795. These are Show Cattle of choice Scotch breeding. Also some young Scotch bulls at private sale.

HANNA & CO., HOWARD, KANS.

CATTLE.

A. BURGARDNER & SON, Holton, Kansas, Breeders of RED POLLED CATTLE

A herd bull and a few young ones for sale.

RED POLLED CATTLE.

CHAS. FOSTER & SON, Foster, Butler Co., Kas.

FOR SALE—A few calves, also Prize-winning Light Brahma Chickens. Call, write or telephone.

Beulah-land Red Polled Cattle

The Dual Purpose breed. For Sale—Four bulls from 3 months to 3 years old, females all ages; rare individuals backed by England's choicest strains. Poland Chinas, choice and cheap. WILKIE BLAIR, GIRARD, KANSAS, R. F. D. No. 1.

GREENDALE RANCH.

BREEDERS OF
PRIZE-WINNING

SHORTHORN CATTLE, BERKSHIRE SWINE, and SHROPSHIRE SHEEP.

Great constitution and lung capacity gained in high altitudes. A few select young swine and sheep for sale.
ED. GREEN, MORRISON, COLO.

Gallant Knight Bulls.

...Ready for Service...

We are letting these go at low prices to make room for our new crop, which is large. Calves by our Imp. Tillycain, assistant herd bull, are now old enough to sell. We have long distant phone connections with 150 towns in Kansas. Nearest railroad point, Valencia, on the Rock Island. Visitors always welcome. See our show herd at Western State Fairs.
T. K. TOMSON & SONS, Dover Shawnee County, Kans.

A Herd of Red Polled Cattle For Sale.

Headed by Falstaff 3d, the champion of the breed. The show herd has been the leading winner at all the Western State Fairs this year. Address the owner and breeder.
J. H. CROWDER & SON, Bethany, Illinois.

BILL BROOK BREEDING FARM

Shorthorn Cattle and Angora Goats.

Herd bull Iowa Scotchman 2nd 138687. Write for what you want. Address,
H. O. TUDOR, Holton, Kansas.

Rocky Hill Shorthorns and Saddle Horses

Sempstress Valentine 157771 and Mayor 129229 at head of herd. Young animals reserved for annual sale at Wellington, Kans., November 22. Larkin's Duluth and Kansas King at head of Saddle Horse Herd.

J. F. TRUE & SON, Perry, Kans. Railroad Station, Newman, Kans.

70 Registered Herefords

For Sale—70 Young Cows and Heifers, bred to the great herd-bull, Beau Gondolus 133227—sire, Beau Brummel 51817; dam, Gwendoline 10th 71732. For particulars address,
J. A. CARPENTER, Carbondale, Kans.

The N. MANROSE Shorthorns

RURAL ROUTE NO. 5, OTTAWA, KANS.

Glitspur's Knight 171591 at head of herd. Young bulls ready for service for sale.

H. R. LITTLE, HOPE, DICKINSON CO., KANS.,

Breeds Only the Best, Pure-Bred

SHORTHORN CATTLE

Herd numbers 135, headed by ROYAL CROWN, 125698, a pure Cruickshank, assisted by Sharen Lavender 143002. FOR SALE JUST NOW—16 BULLS of serviceable age, and 12 Bull Calves. Farm is 1 1/2 miles from town. Can ship on Mo. Pac., R. I., or Santa Fe. Foundation stock selected from three of the great herds of Ohio.

CLOVER BLOSSOM SHORTHORNS

Herd headed by the Cruickshank bulls

Imp. Nonpareil Victor 132573
Sire of the champion calf and junior champion bull of 1900

Grand Victor 115752
himself a show bull and sire of prize-winners

FEMALES are Scotch, both imported and home-bred, pure Bates, and balance 8 to 6 Scotch-tops.

Stock for sale.

GEO. BOTHWELL, Nettleton, Caldwell Co., Mo.

On Burlington Railroad.

CATTLE.

Printer Herefords

Herd headed by DICK TURPIN 81531, a son of the great Printer. Choice young breeding animals of both sexes for sale.

L. F. Johnson
R. F. D. No. 4. Genda Springs, Kansas.

HAZFORD HEREFORDS

Herd headed by the young show bull, Protocol 2d 91715, assisted by Major Beau Real 71621 a nephew of Wild Tom. Females largely the get of Bernadotte 2d 71634. A few choice young bulls for sale.

Robt. H. Hazlett, Eldorado, Kans

Maple City Breeding Farm

Breeders of Choice Strains of Registered

O. I. C. SWINE AND GALLOWAY CATTLE.

The prize-winning boar, Ell 4049, at head of herd. The best in Chester Whites for sale in select young boars and gilts. J. S. GILKEY, Maple City, Cowley County, Kansas

HORSES AND MULES.

HENRY AVERY & SON,
BREEDERS OF

PURE PERCHERONS.

The largest herd of Percheron horses in the west and the best bred herd in America. A choice collection of young stallions and mares always on hand. Prices consistent with quality. Address, or come and see, at Wakefield, Clay County, Kansas.

PERCHERON HORSES, and ABERDEEN-ANGUS CATTLE.

GARRETT HURST, Breeder, Zyba, SUMNER COUNTY, KANSAS. Young stock for sale of either sex. All registered.



FOR SALE!

20 Jacks and Jennets consisting of four 2-year-old Jacks and three suckling colts, and thirteen well-bred Jennets. Will close the entire lot at a bargain to the buyer. Address
W. S. Wells, Platte City, Mo.

Prospect Farm.



H. W. McAFEE, Topeka, Kansas,

Breeder of

OLYDESDALE HORSES, AND SHORTHORN CATTLE.

For Sale—25 Clydesdales, including 3 registered stallions of serviceable age, and 13 mares. Inspection and correspondence invited.

Cheyenne Valley Stock Farm.



F. H. Schrepel, Ellinwood, Kans.,

—Breeder of—

PERCHERON HORSES, AND POLAND-CHINA HOGS

For Sale—Twelve young stallions and a few mares. Inspection and correspondence invited.

When writing advertisers please mention Kansas Farmer.

SHEEP.

FORTY THOROUGHbred CHEVIOT SHEEP BOTH EWES AND RAMS.

Also Several D. S. Polled Durham Bulls.

Address A. E. BURLEIGH, Knox City, Knox Co., Mo

ANOKA FLOCKS.

Cotswolds and Rambouillets. Foundation for flocks a specialty. Correspondence and inspection invited.

GEO. HARDING & SON, Waukesha, Wis.

McFADDEN BROS.

WEST LIBERTY, IOWA.

Breeders of PRIZE-WINNING

Shropshire Sheep.

Choice lot of rams and ewes—both Canadian and home bred—for sale. Can supply car lots. Write for our low prices.

..GEORGE ALLEN..

Importer and Breeder of SHROPSHIRE SHEEP and SHORTHORN CATTLE.

For Sale—100 Rams and 100 Ewes. Greatest winner of any Shropshire breeder in America. Address
ALLERTON, VERMILION CO., ILL.

Acclimated Merinos

300 Rams, 400 Ewes, Rambouillets, Franco-Merinos, and Merinos big and smooth. Will sell them right
E. D. KING, Burlington, Kas

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Sable, sable and white and sable black and white. All out of high pedigreed stock.

The sire of some of these pups is a great grandson of Southport Perfection, the finest dog in the world, for which J. Pierpont Morgan, paid \$8,500. Another sire is a grandson of Sefton Hero also owned by J. Pierpont Morgan. Prices \$5, \$10 and \$15. Write your wants quick.
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GLENDAL SOHRTHORNS.Imp. Price Lively 165880 and Scotland's Charm 127264
IN SERVICEYoung Bulls, Cows, and Heifer for sale at all times.
O. F. WOLF & SON, Ottawa, Kans.**Sale of Sedgwick County Shorthorns**

AT THE RIVERSIDE BARN IN WICHITA, KANS., SATURDAY AFTERNOON, NOV. 1, 1902,

WM. H. RANSON will sell to the highest bidder, 24 head of high-class Sedgwick County bred and raised SHORTHORNS. The offering will consist of 9 young bulls and 15 head of bred cows and heifers. For further particulars, address

Wm. H. RANSON, North Wichita, Kansas.**SILVER CREEK SHORTHORNS.**

The Scotch bull, Gwendoline's Prince 139913, in service. Also the imported Scotch Missie bull, Aylesbury Duke. 100 head of the best Scotch, Bates, and American families. High-class Duroc-Jersey Swine For Sale.

J. F. Stodder, Burden, Cowley Co., Kas.**AMERICA'S LEADING HORSE IMPORTERS**

Our French Coach and Percheron stallions won every first prize at the Iowa State Fair, Ohio State Fair, Kansas State Fair, and Central South Dakota State Fair. Where all draft breeds came into competition in the above shows our Percherons won sweepstakes.

We imported Every Percheron stallion winning first prize at the Concours Regional, the Great Annual Show of France, and the show of the Societe Hippique Percheronne at Mortagne, excepting one 2-year-old stallion.

Our prices are the lowest consistent with economic management but not to the sacrifice of quality. Our profit on each horse can be less because we import the largest number.

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IMPORTER AND BREEDER OF**German Hanoverian and Oldenburg Coach Horses**

In order to make room for stallions, will sell 30 mares from 1 to 3 years old, at a bargain. Telephone 292.

Best Terms and Long Time Given Responsible Parties

Take Washington Park Car to the Farm.

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Stallions of all ages for sale. Both imported and home bred. Prize-winners both in Europe and America.

**Draft Stallions****Percherons, Shires, Belgians.****60 Head to Select From All Imported by Us and Guaranteed....**

\$1,000 buys a good one from us this fall. It pays you to buy one now as you get him cheaper and keep out competition. Don't pay a big price for a horse, but come and see ours and get a good one for less money than a small importer can possibly sell for. Our stables are across the road east of the Burlington Depot.

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IMPORTERS AND BREEDERS, TOWANDA, BUTLER CO., KANS.

Largest Herd in the State. CASINO (45462) 27880 at head of herd. Prize-winner at last National Show of France. Highest priced stallion imported from France to America, in 1901. Inspection invited.....

200--Poland-China Brood Sows--200**AND 10 YOUNG MALE POLAND-CHINA PIGS****For Sale at the College Barns, St. Marys, Kans**

Inspection of this stock is invited, and the herd is guaranteed free from disease.

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Rapids; J. H. Whiting, Frank-
fort; B. M. Winter, Irving.**First Annual Sale at Blue Rapids, November 18 and 19, 1902****JOHN DRENNAN, BLUE RAPIDS, KANSAS, BREEDER OF****..Registered Herefords..**

Herd numbers over 100 head. Sires in service are Lomond Grove 71084 and Bright Light 81616. Largest contributor to Marshall County Hereford Association Sale in November. Will make very low prices on some nice yearling bulls for fall delivery.

CHARLES DRENNAN, Manager.**Capital Bluff Stock Farm.****PURE-BRED****HEREFORDS.**

Bachelors 81587, bred by Guggell & Simpson, at head of herd. Write for prices now. Contributor to Annual Sale Marshall County Hereford Association.

I. D. YARRICK, Blue Rapids, Kansas.**Wild Tom Herefords.****SUNNY SLOPE TOM 14th AT HEAD.**

Contributor to Annual Sale Marshall County Hereford Association.

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Imported Alberta 2d blood. Boatman 56011 at head of herd. A few excellent, young bulls for sale. Contributor to Marshall Co. Hereford Ass'n Annual Sale. E. E. WOODMAN, VERMILLION, KANSAS.

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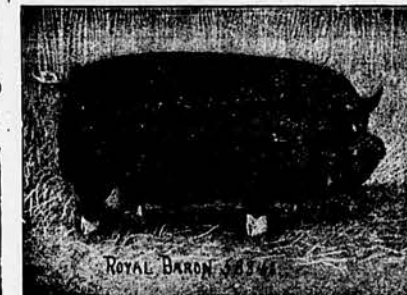
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Herd headed by Ottawa Chief 28289. Choice young pigs, sired by Tecumseh H. and Sweepstakes, for sale. Quality the best. Prices right. J. R. KILLOUGH & SONS, R. R. No. 6, Ottawa, Kans.

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FOR SALE—12 Berkshire boars and 20 bred sows and gilts, 20 Poland-China boars, and 50 bred sows and gilts

**THE WILLOWDALE BERKSHIRES.**

ROYAL BARON 58846, the Greatest Show Boar in the World, at head of herd. Home of the Winners. Young Stock of All Ages For Sale. See my exhibit at the American Royal Swine Show at Kansas City, Mo., October 20-25, 1902.

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Young Stock For Sale. Inspection or Correspondence Invited.

SCOTT & MARCH**BREEDERS OF PURE BRED****HEREFORDS.****BELTON, CASS COUNTY, MO.**

BULLS in service, HESIOD 29th 66904, Imp. RODERICK 80155, MONITOR 58275, EXPAN- SION 98462, FRISCOE 98474, FULTON ALAMO 11th 88781.

25 miles south of Kansas City on Frisco; Ft. Scott & Memphis; and K. C., P. & G. Railroads

**Pearl Shorthorns.****YOUNG BULLS FOR SALE**

sired by the Cruickshank bulls Es- stie 119915, and Baron Ury 2d 124979, ranging in age from 8 months to 2 years.

Inspection Invited**C. W. TAYLOR, Pearl, Dickinson Co., Kans.**

50--SHORTHORNS--50

AT AUCTION!

From the Ash Grove Herd, at Fayette, Mo., October 28, 1902

34 COWS AND HEIFERS AND 16 BULLS

Of this offering, 15 are cows of which 6 are three, others from 4 to 6 years, 8 twos and 11 yearlings. The aged cows have all raised calves in the last year and are bred again to the Cruickshank bulls, Sir Charming 122667 and Captain Lavender 176119, some of them with calves at side, and others well along in calf. All the twos and yearling old enough will be bred to Captain Lavender, some of them forward in calf. The bulls are a good, useful lot, some choice ones among them; 10 are about a year old, 6 from 16 to 20 months. In making this offering we have gone into our best and taken things that we had intended to keep in the herd, as we desired to make this the best offering of our life's work of thirty years as a Shorthorn breeder. Taking them all together they are an attractive lot of young and useful cattle. A business lot. All except three bred by myself from such families as Renick, Rose of Sharon, Young Phyllis, Young Mary, and Miss Severs, of the best of breeding, purchased from breeders of good reputation. Our aim has been individual merit and choicest breeding. A glance at the announcement page of catalogue will show the character of bulls I have used.

Free conveyance from Fayette to arm for parties from a distance. Special rates at Hotel Howard. Send for catalogue. Lunch at 12 o'clock. Sale at 1 p. m. sharp. Fayette is on M. K. & T. R. R., 30 miles south of Hannibal; 26 miles south of Moberly, the crossing of the Wabash; 17 miles south of Higbee, crossing of C. & A. R. R.; and 49 miles north of Sedalia, crossing of the Missouri Pacific R. R. Address,

Col. R. E. Edmonson, Auctioneers. CHENAULT TODD, Fayette, Mo.
Jas. W. Sparks,
R. L. Harriman,

PUBLIC SALE!

AT WINDSOR, MO.,

TUESDAY, OCTOBER 28, 1902.

Standard-bred Stallions, Brood Mares, Colts
Fillies, Single and Double Drivers, etc.,

By Walnut Boy 2:11 1-4, Bandello 2:18, etc., 1 registered imported Clydesdale and 1 Coach Stallion, 3 finely bred Jacks, 30 young mules, 4 registered Shorthorn and 1 Polled Durham Bull, about 60 head of Polled Cows, Heifers, and Calves. Send for Catalogue to

Dr. J. F. ROBINSON,

Col. Bob Harriman, Col. Sam Kidd, Auctioneers. NEVADA, MO.

FIRST ANNUAL SALE.

40 Pure-bred Duroc-Jersey Hogs 40

TO BE HELD AT FARM, NEAR RICHLAND, KANS.

ON MONDAY, NOVEMBER 3, 1902.

The offering includes the best I have ever raised. Spring pigs, boars, and gilts, fall and winter sows; also 4 matured sows, several with pigs at side. My great herd boar, Big Joe 7363, sire of the spring pigs, will be included in sale.



My hogs are solid colors, with good bone and great length, breadth, and thickness.

Sale at 10 a. m. Parties attending the sale will find free conveyance at either Richland or Carbondale.

Catalogues now ready.

Address PETER BLOCHER, Richland, Shawnee Co., Kansas.

Col. J. W. Sparks, Auctioneer.

Willow Branch Shorthorns

THE PROPERTY OF

...FERD T. BATES...

55 head of Cows, Heifers, and Calves, also the 2-year-old Herd Bull, Julius Pride 159492, will be closed out at Public Auction, at Odessa, Mo., on

Thursday, October 30, 1902

Catalogues on application.

COL. J. L. WELLS, Auctioneer. W. B. BUFORD, Assistant.

FERD T. BATES, P. O., Bates City, Mo.

Great Sale of Standard-bred Stallions, Mares, and Colts.

At Athletic Park, Arkansas City, Kans., Saturday, October 25, 1902.

Blood of George Wilkes, Electioneer, Ashland Wilkes, Gambrel, Onward, Wilkesdorf. A splendid offering of gilt-edged, prize-winning, money-making, Standard-bred Stallions, Mares, and Colts, including Wardwood 24382. Sale will begin 10 o'clock a. m. Address

SAMUEL FARMER, Arkansas City, Kans.,

Or ISAAC WOOD, Winfield, Kans.

Col. Lase Berger, Auctioneer.

COMBINATION PUBLIC SALE

...OF...

60 Poland-China Hogs 60

THURSDAY, NOVEMBER 6, 1902,

At Gus Aaron's farm, 2 miles south of Kickapoo, and 5 miles northwest of Leavenworth, Kansas.

The offering consists of sows with litters, yearling sows, serviceable boars, and March and April pigs. We have the greatest variety of breeding we have ever offered, sired by Missouri's Black Chief, Proud Perfection, Corwin's Improver, Black Perfection, Chief Combination, Star Perfection, and other good boars.

Send for Catalogue to either.....

JOHN BOLLIN,
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Harry E. Lunt's Third Annual Sale

...OF...

Poland-Chinas!

AT SHADY LANE STOCK FARM,

Near Burden, Cowley County, Kansas, on

Friday, November 14, 1902.

Consisting of over 60 head of richly bred things, sired by such noted boars as Search Light, Sealy's Model, Look No Farther, Ideal Corwin, Perfect I Know, Corrector, Broadguage Chief, Null's Chief, Hanna's Chief, Tecumseh, Miles 'Look Me Over, Big Price, Kellogue, Chief I Know, and others. Write for free catalogue. Send bids to auctioneers in my care.

HARRY E. LUNT,

JAS. W. SPARKS, LAFE BERGER, Auctioneers. BURDEN, KANS.

THIRTEENTH ANNUAL

Grand Poland-China Sale!

THURSDAY, OCTOBER 30, 1902.

At my farm, two and one-half miles southeast of Oskaloosa, Kansas.

A grand lot of as royal blood as is known to the breed. In the offering will be 5 yearling boars that will make herd headers, 10 proven sows with pigs at side or to farrow soon, 40 spring pigs of both sexes, sired by the great boar, L's Perfection 2d 27576; he is equal in breeding to his illustrious sire, L's Perfection, the sire of Corrector, and out of sows of the most noted strains of the breed. It has always been the place for bargains. This offering is the tops of my herd and will include plenty of show stock. Send bids to Auctioneer, J. N. Harshberger, in my care. Send for catalogues.

JAMES MAINS, Oskaloosa, Kansas.

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COMBINATION SALE OF SHORTHORN CATTLE

At the Stock Yards, South St. Joseph, Mo., at 1 O'clock P. M.,

ON WEDNESDAY, OCTOBER 29, 1902

Numbering About 60 Head

Representing many of the best and most noted families of the breed, consisting of cows with calves at foot, a very select lot of 1- and 2-year-old heifers, bred to Scotch bulls, and an extra good lot of 1- and 2-year-old bulls, also the noted Scotch bull, Godoy's Hero 130962. These cattle are selections from the herds of.....

Albert Johnston, Douglas, Nebr.; D. S. Ryan, Leavenworth, Kans.; M. S. Williams, Lone Star, Mo.; O. P. Hendershot, Hebron, Nebr.; Alex John & Son, Bedford, Iowa; F. P. Healy, Bedford, Iowa.

Auctioneers: Col. J. W. Sparks, Col. M. W. Harding, Col. J. S. Hanshaw, Col. H. S. Duncan.

Address F. P. HEALY, Manager, BEDFORD, IOWA.

KIRKPATRICK'S 13TH SALE

...OF...

POLAND-CHINAS

AT RIVERSIDE FARM
SATURDAY, NOV. 1, 1902.

SIXTY HEAD

Of richest breeding and individuality unsurpassed. There will be young Sows, fall Boars and Gilts, and spring Pigs of both sexes. All out of daughters of famous boars and sired by Kansas Perfection by Chief Perfection 2d, Hadley U. S. by Hadley Jr., Lover—the Chicago International winner, Klever's Model, Perfection Chief 2d, and A.'s Chief. .. Send for Catalogue giving full information. Send bids to either Auctioneer, by mail to Wolcott; by telegraph to Connor, Kans., in care of Kirkpatrick. Trolley cars every hour from Kansas City and Leavenworth stop at farm gate.

Col. J. W. Sparks, Col. J. N. Harshberger, Auctioneers.

Kirkpatrick & Son, - - Wolcott, Kansas.

A GREAT CATTLE SALE.

15 Registered Shorthorns

50 High-grade Shorthorns



AT PUBLIC SALE
Tuesday, October 29, 1902



The sale will be held at Homestead, Chase County, on our farm, situated 17 miles southwest of Cottonwood Falls 12 miles southeast of Clements, and 6 miles northwest of Matfield Green.

Free hack leaves Clements on the Santa Fe at 9 a. m. day of sale.

The Registered Shorthorns offered consists of 2 bulls and 11 cows and heifers, including the famous Scotch herd bull, Regulator 159179.

The Grade stock comprise 16 extra good cows, 9 heifers 2 years old, 9 steers 2 years old, 2 yearling steers, 2 yearling heifers, and 12 calves.

TERMS OF SALE—All sums of \$10 and under, cash; over \$10, a credit of 12 months' time will be given; approved bankable paper bearing interest at 7 per cent will be required; 5 per cent off for cash. For further information, address

JOHN G. HOWARD, Homestead, Chase Co., Kans.

Col. J. N. Harshberger, Auctioneer.

RIDGEVIEW FARM SALE

....OF....

LARGE ENGLISH

BERKSHIRES

NOVEMBER 7, 1902.

60 HEAD-- 29 Boars of Spring Farrow, 1 Yearling Boar, 26 Gilts of Spring Farrow, 4 Bred Sows and Gilts

The only Berkshire sale in Kansas this year. Stock reserved especially for sale, of most approved breeding, sired by Moonlight 55843, Ridgeview Columbia 55844, and Highclere Improver 58627, and out of sows by the best sires in the Berkshire world. .. Send for Catalogue.

Sale opens at 11 a. m. Free conveyance from Lawrence to farm on day of sale

MANWARING BROS., R. R. No. 1 LAWRENCE, KANS.

Auctioneers: Col. J. N. Harshberger, Lawrence, Kans.
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