

KANSAS FARMER

Volume XLVI. Number 14

TOPEKA, KANSAS, APRIL 2, 1908

Established 1863. \$1 a Year

CHANGES AT THE AGRICULTURAL COLLEGE.

The resignation of President E. R. Nichols of the Agricultural College adds another chapter to an interesting and varied history, the details of which can not be given here.

Elected by the regents after protracted consideration of other candidates, the president was not long in discovering some diversity of views as to the purposes of the Agricultural College and the work which should be given leading consideration. THE KANSAS FARMER had occasion to criticise strongly some of the positions taken by the college management. Out of the much discussion in the public prints and elsewhere some modification of policies appeared to proceed. These in a measure satisfied the demand for greater prominence of the agricultural and live-stock features of both the courses of study and the work of the experiment station. The acquisition of Prof. A. M. TenEyck, whose untiring en-

thusiasm in the work of the agronomy department challenged the admiration not only of the students in the college but of the people of the entire State, and the employment of Prof. R. J. Kinzer as head of the animal husbandry department, who at once made his work the equal of any, were long steps in the right direction. To the outside observer the reforms instituted and the enlargement of the work appeared to satisfy the demands, but the feeling of dissatisfaction and unrest remained within the institution and among those friends who felt that it failed of its highest purpose.

Offsetting all criticism, however, the great growth of the institution in attendance and in equipment challenged the administration and gratified the pride of Kansas, so that the vacation of the presidency at the suggestion of the regents came as a surprise.

Greater still was the surprise at the resignation of Prof. Henrietta W. Calvin, head of the domestic science



A native Kansas tree on a Kansas school grounds, showing what can be accomplished. (See page 424.)

Courtesy of State Superintendent.

Principal Contents of This Week's Paper.

Agricultural College, changes at the.....	417
Alfalfa, ad astra per.....	419
Arbor Day—1908.....	424
Boone, Indian fighter, Daniel.....	429
Butter doesn't come, why the.....	433
Cattle trade, the trend of the.....	420
Club department.....	431
Corn Exposition Commissioner, the National.....	418
Dog, an April fool.....	430
Drunkenness worse than drunkenness, reaction from.....	428
Fair at Topeka, for a big.....	418
Farmers' Advocate.....	418
Farms assessed above their actual value in money.....	418
Grass.....	428
"Green bug" to date, experiments with and knowledge of the.....	425

Inheritance.....	418
Jerseys or Holsteins.....	432
Jones, Jim (poem).....	429
Lumber, native.....	424
Mammy's Little Honey Bee (poem).....	430
Mutual Improvement Club, Ladies'.....	431
Neosho Valley floods.....	419
Pension.....	418
Poultry notes.....	434
Red cedar seed.....	418
Score cards, official.....	421
Stallion accounts.....	418
Sunshine (poem).....	428
Taxing pedigrees.....	418
White rabbits.....	434
Wife's consent, selling property without the.....	418



KANSAS FARMER.

Established in 1868.

Published every Thursday by
THE KANSAS FARMER COMPANY
(Incorporated, January 1906).
Topeka, Kansas

SUBSCRIPTION PRICE: \$1.00 A YEAR

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

OFFICERS.

President.....E. B. COWGILL
Vice President.....I. D. GRAHAM
Secretary.....H. A. HEATH
Treasurer.....JOHN R. MULVANE

E. B. COWGILL.....Editor
I. D. GRAHAM.....Live Stock Editor
THOS. OWEN.....Poultry Editor
RUTH COWGILL.....Home Departments Editor

LIVE STOCK REPRESENTATIVES.

L. K. LEWIS.....Kansas and Oklahoma
GEO. E. COLE.....Missouri and Iowa

SPECIAL AGENTS.

New York.
J. C. Bush.....1110 Potter Building
Chicago.
Stillwell Special Agency.....801-804 Unity Building
Kansas City.
J. A. Davidson.....402 Century Building
Pacific Coast.
David R. McGinnis, 21 Peoples Savings
Bank Building, Seattle, Washington

ADVERTISING RATES.

Display advertising, 20 cents per line, agate (fourteen lines to the inch). Continuous orders, run of the paper, 16 cents per agate line.
Special reading notices, 30 cents per line.
Special rates for breeders of pure-bred stock.
Special Want Column advertisements, six words per line, 10 cents per week. Cash with the order.
Electrics should have metal base.

Objectable advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.
All new advertising orders intended for the current week should reach this office not later than Monday.

Change of copy for regular advertisement should reach this office not later than Saturday previous to publication.
Every advertiser will receive a copy of the paper free, during the publication of the advertisement.
Address all communications to

THE KANSAS FARMER CO.,
625 Jackson St., Topeka, Kansas

department. Mrs. Calvin's ability is unquestioned. She has developed her department with a steady purpose of benefiting those who entered its doors. Appreciation of the importance of this work has been such that a \$75,000 domestic science building is now in course of construction.

The task of finding just the right man for president of any college is a difficult one. But scarce as are the men who have the qualifications for the administrative work of other colleges, far scarcer are those whose education, whose experience, whose views of the relations of instruction and experimentation to farming and other industries, and whose administrative abilities fit them to become the head of a great agricultural college, entrusted with direction of the development of 2,000 or more young Kansans and with experiment work which may easily add many millions to the value of the annual production of Kansas farms.

TO OUR NEW SUBSCRIBERS.

Since the last issue of THE KANSAS FARMER several hundred new names have been added to our subscription list. To all of these we bid a hearty welcome to the great KANSAS FARMER family. As a member of this great family each new subscriber is entitled to all of its rights and privileges. You are invited to make use of THE KANSAS FARMER which is now your paper; you have a right to look to its columns for exact information upon questions pertaining to the farm, the home, the orchard, the feed lot. If you need information which you do not find in its columns it may be that you have missed it by lack of earlier membership and you are invited to tell us your troubles and ask questions of our various departments. The answer to such questions as you may ask may save you many dollars or enable you to make more of them. THE KANSAS FARMER departments are conducted by experts and each and every one of them is at your service.

THE NATIONAL CORN EXPOSITION COMMISSIONERS.

Governor Hoch has appointed the Kansas commissioners who will have charge of the Kansas exhibit at the National Corn and Grain Exposition, which will be held at Omaha next fall. These appointments are honorary and the commissioners will serve without

compensation. Prof. A. M. TenEyck, of the State Agricultural College, will be at the head of the commission and have general charge.

Following is a list of the commissioners named:

J. M. Gilman, Leavenworth, president Kansas Corn Breeders' Association; J. G. Haney, Oswego, manager Deming Ranch; H. H. Kern, Bonner Springs; Arthur Capper, Topeka Capital; W. M. Kinnison, Garden City; C. B. Kirtland, Salina, miller; C. K. McClelland, Hays, superintendent of Fort Hays Experiment Station; A. F. Turner, Norton, professor agriculture in Norton County high school; S. W. Black, Columbus, professor agriculture in Cherokee County high school; C. Hoffman, Jr., Enterprise, miller; Edwin Taylor, Edwardsville, regent Agricultural College; W. E. Blackburn, Anthony, regent Agricultural College; I. D. Graham, Topeka, KANSAS FARMER; T. B. Hubbard, Kimball.

FOR A BIG FAIR AT TOPEKA.

The committees in charge of the work of raising a large fund to make certain the success of a great fair at Topeka have worked energetically, persistently, and optimistically. They now report the necessary subscriptions either secured or "in sight." With this assurance the directors of "The Kansas State Exposition Company" held a meeting at the rooms of the Topeka Commercial Club, Monday afternoon, March 30, at which M. A. Low, president of that organization, named as members of the executive committee to have in charge with others a State fair this fall, the following: W. F. Jensen, vice president and general manager of the Continental Creamery Company and president Commercial Club; W. I. Miller, lumber dealer; R. I. Lee, farmer; and F. W. Harrison, chairman of the board of county commissioners.

The other members of the executive committee having in charge the exhibit this year will be the officers of the Exposition Company, as follows: President, M. A. Low; vice presidents, E. H. Crosby and T. P. Babst; R. T. Kreipe, secretary; and C. E. Jewell, treasurer.

It is announced as the intention of the commissioners in August to make a tax levy which shall raise funds for the erection of a permanent brick and steel structure on the fair grounds here, that building to cost \$25,000. It is the understanding that this structure shall be given over to the display of agricultural and horticultural products, as well as the mineral resources of the State. A part of the building will be given over to domestic science and the arts. In time it is the desire to put up a live stock pavilion and other buildings of a permanent kind and creditable to the State in every way, but for this year the present structures on the grounds with some repairs which will be given, will, it is thought, be sufficient for the use of the first general fair.

The time is rather limited in which to carry out the extensive scheme proposed by the management, but by the liberal use of money and energy under capable management great things can be accomplished.

FARMERS' ADVOCATE.

A consolidation of three papers, Farmers' Advocate of Topeka, Western Life of Leavenworth, and Western Breeders' Journal of Clay Center was effected last week. Albert T. Reid, well known as one of the strongest cartoonists of the West, is president of the new company. E. W. Rankin resigned the position of business manager of the Mail and Breeze to take a similar position in the new organization. T. A. Borman, superintendent of the Continental Creamery Company and president of the State Dairy Association, is editor in chief. George A. Clark, former Secretary of State, also State Printer; Dean Low, son of M. A. Low, general attorney for the Rock Island, are also interested. The field men include J. W. Johnson, who resigns a similar position with THE KANSAS FARMER; Jesse R. Johnson, editor of the Western Breeders' Jour-

nal; Grant R. Gaines, and O. W. Devine. The name of the new company is The Western Printing and Publishing Company. The combination is a strong one and will doubtless bring out a good paper.

INHERITANCE—PENSION.

EDITOR KANSAS FARMER:—Please let me know, through your valuable paper, the right of inheritance of a second marriage. To the second union no children were born. The second wife has one son by a former husband. To which does the property belong after the death of the second wife? Which of the heirs does the property belong to, that of the first wife now deceased, or of the second wife now a widow and alive?

Can a widow that was the second wife of an old soldier get a pension? Rush County. SUBSCRIBER.

1. If the first wife left no issue and no will, her property at her death all went to her husband. If she left living issue one-half went to her husband and, in the absence of a will, the other half went to her living issue. The husband's inheritance in either case became his as fully as if he had inherited it from his father or his mother, or had accumulated it by his own efforts.

At the death of the husband, the second wife inherited half of his property if he had living issue, otherwise, in the absence of a will, she inherited his entire estate. If the husband left living issue and no will, half of his estate was inherited by such issue.

At the death of the second wife her property from whatever source inherited or acquired will descend to her heirs.

2. If the widow of the old soldier married him prior to the passage of the act of June 22, 1890, she is entitled to a pension. If the old soldier was a pensioner and died on account of disabilities brought on during service, his widow is entitled to a pension.

FARMS ASSESSED ABOVE THEIR ACTUAL VALUES IN MONEY.

EDITOR KANSAS FARMER:—I would like to know through THE KANSAS FARMER what to do in regard to taxes. I bought 300 acres of rough land for \$2,500. The assessor assessed me \$6,400 for this land. I am not the only one assessed this way, we were all treated alike. Last spring there was a half section sold for \$3,000 joining my land, this ought to be the value of the land. Other townships are taxed accordingly. There are a good many farmers here who offer to take a great deal less than their assessment and step out. I for one would be glad to get \$4,000.

Now the commissioners appointed the trustee and the trustee appointed deputies and I do not think it is of any use to appeal to them. Is there any higher authority that we farmers can appeal to? GEORGE EAVIS.

Sheridan County.

Your assessors have evidently misconstrued the law and the instructions of the State Tax Commission. If a considerable number of farmers in your county will join in a statement showing the amount for which their lands are assessed and the actual value in money of each farm as nearly as can be ascertained, the editor of THE KANSAS FARMER will take the matter before the State Tax Commission and endeavor to have such further instructions forwarded to your County Assessor and the County Commissioners as will assist them in the correct performance of their duties in the matter.

The suggestion of the Tax Commission for ascertaining the "actual value in money," is in effect that it is such price as a person having money to invest but having no urgent need for the property under consideration, might be willing to pay to a person willing to sell, but under no compulsion to do so.

Let the statements be clearly made as to several farms, and as to other property if it is wrongly valued, and let the actual values in money be such as those acquainted with the properties would be willing to swear to as

according with the above suggestions for determining the actual values in money.

There will be no charge for the services of the editor in bringing the matter before the State Tax Commission.

TAXING PEDIGREES—STALLION ACCOUNTS.

EDITOR KANSAS FARMER:—I am an old subscriber to THE KANSAS FARMER and would like to have you reply to the following questions:

1. Was there any provision made by the State Tax Commission, or any other board of authority, for the assessment of registered stock, and if so what is it?

2. I have a conditional book account of last breeding of my stallion who stood under the guaranty that the colt should stand and suck and that no money is due until the colt does stand and suck, which in all cases will be later than March 1. Now probably 50 per cent of this never will nor never did exist as that is all I ever get on an average out of these book accounts. Now do I have to give these book accounts in full to the assessor and pay taxes on same?

CHAS. H. GRIFFIN.

Republic County.

1. Under the new law and the regulations of the State Tax Commission all stock is to be assessed at its actual value in money without regard to whether it is registered. There is no separate assessment of stock simply because it is pedigreed or registered. Pedigrees are not taxable.

2. All such accounts go in for their actual value in money on March 1. Face value or amount does not necessarily control, but the face value would be regarded as the actual value unless it could be shown that the two are not the same. In other words, if it can be shown that on March 1 these accounts, or any of them, did not have their face value then assessment should be made accordingly and their real value returned to the assessor.

SELLING PROPERTY WITHOUT THE WIFE'S CONSENT.

EDITOR KANSAS FARMER:—Will you please tell me through the columns of THE KANSAS FARMER whether a man can take all of the property and sell it and the wife not hold anything? Can he force her to give up all property and leave home without anything? A SUBSCRIBER.

Cheyenne County.

The husband can sell personal property that belongs to him, without the wife's consent. So, too, the wife can sell personal property that belongs to her without the husband's consent. The case is different in respect to real estate. Either husband or wife must have the consent of the other to sell land. A sale of real estate by either husband or wife without the signature of the other to the deed conveys only an undivided half interest.

RED CEDAR SEEDS.

EDITOR KANSAS FARMER:—How shall I treat red cedar seeds so that they will grow? I have a few that I brought from Oklahoma and I would like to plant them but do not know what treatment they should have to make them grow. B. A. WILSON.

Phillips County.

The seeds of the red cedar are very difficult of germination. It would be much cheaper and better to secure very young trees from a cedar grove and transplant them if it were possible. Perhaps the best way to handle the seeds would be to plant them in the fall where they would be subject to the action of the frost. This serves to break the thick, resinous outer coating. If planted in the spring the seeds must be placed in hot water or in a lye that is strong enough to remove this outer coating and even then some of them may not germinate until the second year. If the seeds are entirely dry they will not germinate at all. If our correspondent is successful in getting the seeds to germinate he must remember that the young trees must be protected, during

the first season, from the hot sun. It would be better to thoroughly mulch them and see that the ground about them is kept moist.

C. W. Peckham, president, and E. M. Black, secretary, announce the annual meeting of the Farmers' Independent Grain Dealers' Association, to be held at the court house, in Hutchinson, on Wednesday, April 15, 1908. All farmers' elevator companies, each local union of the F. E. & C.-Op. U., and each local union of the A. S. of E. in Kansas are invited to send delegates. Important business will be transacted.

Miscellany

Ad Astra per Alfalfa.

The March meeting of the Shawnee Alfalfa Club was not so largely attended as some have been but it was full to the brim of enthusiasm. It was an experience meeting for the dissemination of practical experience gained by the members in their own feed lots. As has been true of every meeting, new members were present and other counties than Shawnee were represented. The universal verdict was and is that alfalfa, when properly handled and fed, is the greatest feed plant on earth and the enthusiasm was so great that one member even proposed a change in the State motto. Instead of "To the Stars Through Adversity," it was suggested that it be changed to read, "To Success Through Alfalfa."

A. L. Brooks, of Jefferson County, who is one of the most active members, said, in effect, that alfalfa has become so popular that he should not be greatly surprised if articles of human food were made from it. He spoke particularly on alfalfa as a horse feed and, while he had not been entirely satisfied with it, for this purpose, because of its action upon the kidneys, he held it in high esteem as a pasture if handled judiciously. While he had known of its being used successfully for cattle pasture there was always present the danger from bloat. As a hay there is nothing better for cattle but its highest value, in his experience, was a feed for the hog, either as hay or pasture.

D. M. Howard, of Rossville, began raising alfalfa in 1888 by sowing his first seed in April. This started nicely but was twice destroyed by chinch bugs. He then put the ground into shape and sowed early in September and the next year got three good crops. He now has 300 acres and, while he thinks it is the best feed for hogs he has pastured both cattle and horses upon it and never lost a head. Care must be used, however. He always has a plentiful supply of both salt and water in the field and never turns his cattle upon it when hungry. He begins by turning them on the alfalfa for only twenty or thirty minutes the first day, and gradually lengthens the time. He regards alfalfa very highly for all kinds of stock but care must be had in curing it as well as in feeding it. One load of it is fully equal in feeding value to three loads of clover and timothy is simply nowhere. He has never had a case of hog cholera on his farm since he began to raise alfalfa. His only trouble with alfalfa is because of the gophers and other pests. Everything likes it.

A very valuable paper by Prof. D. H. Otis, of the Wisconsin Experiment Station and formerly of the Kansas Agricultural College, was then read by Secretary I. D. Graham, and discussed by Col. J. F. True, the big Shorthorn breeder of Perry. As this paper is rather too long for insertion here and entirely too valuable to be omitted, both the paper and Colonel True's discussion will be printed in next week's KANSAS FARMER.

Secretary Graham stated that he had found several instances where alfalfa hay was fed regularly to livery horses.

Wm. Van Orsdol thought the bad effects came from feeding too much



The "Pittsburgh Perfect" For Stock, Garden and Poultry

A revolution in fence making

The "Pittsburgh Perfect" Fence, the only welded wire fence in the world, at one broad sweep has done away with all clamps, ties, twists and wraps.

Just a plain, simple construction of line and stay wires. At every contact point (cross) the wires are welded. This weld is as secure as the wire itself and leaves the galvanizing perfect, intact. Does away with all superfluous pieces and bunglesome construction. Upright, tight and firm under all weather changes and conditions. No top or bottom boards required for poultry fence. Adapts readily to uneven ground.

Study the points of merit in the "Pittsburgh Perfect" and you will find it superior to any other fence made. Out of the 73 different styles you will find a fence just suited to your exact needs.

Your dealer sells it, or send for free catalog.

PITTSBURGH STEEL CO.
PITTSBURGH, PA.

THE WELD THAT HELD

and condemned overfeeding of anything, particularly corn.

John Peck had noted bad effects from feeding alfalfa alone and in too great quantities. Fed with other feeds it is all right.

On the matter of overfeeding which seemed to be the real cause of trouble rather than the alfalfa itself, A. L. Brooks said that if he had the value of the feed stuffs that were wasted in Shawnee County by overfeeding it would make him rich. Most horses do not need more than six ears of corn at a feed when fed with alfalfa.

G. E. Clark, owner of the big Gallo-way herd which is headed by one of the most famous bulls now living, has used alfalfa a good deal. He has found that it always gives good results when fed to horses, and thinks it is all right for feeding stallions.

Scott Kelsey had not had much alfalfa experience since the flood of 1903 destroyed his crop. He always makes it a rule to change the feed of his horses so as to give them variety.

O. E. Walker stated that he fed his work horses on alfalfa exclusively, of course with a grain ration, and he has had a number of teams doing grading work all winter and none got sick or off their feed. He finds that alfalfa-meal makes a valuable feed for cows.

The subject selected for discussion at the next meeting, which will be held on April 25 at the Commercial Club rooms, is Curing Alfalfa.

President Bradford Miller invited everybody to be on hand promptly as the interest in the meetings is so great that there is never time enough. On motion of Secretary Graham a vote of thanks was tendered Prof. D. H. Otis for his excellent paper on "The Feeding Value of Alfalfa," and to Colonel True for its discussion; also to D. M. Howard for his valuable address.

Investigation of the Neosho Valley Floods by Drainage Engineers of U. S. Office of Experiment Stations.

The flood conditions along the Neosho River Valley in Southeastern Kansas furnish a striking example of a class of drainage problems of great importance in the economic development of this country. During the summer of 1907 drainage engineers of the Office of Experiment Stations of the United States Department of Agriculture conducted a careful survey of the Neosho River channel, and of the area subject to overflow. The field work was performed by a party in charge of Lawrence Brett working under the general direction of J. O.

Wright, and occupied a period of several months.

It was found that the complete drainage basin of the Neosho River and its tributaries included 5,090 square miles within the State of Kansas. No part of the drainage area is mountainous, but it may all be classed as a rich agricultural territory. The best agricultural lands are worth from \$50 to \$75 per acre, while other land, which would be just as good if it were protected from overflow, is valued at only \$10 to \$15 per acre.

Ever since this region was first visited by white men there have been occasional heavy floods in some of the valleys of Eastern Kansas. Since 1892 attempts have been made to protect the land in Neosho County by the building of levees, but though these have afforded protection ordinarily, they have been found inadequate during such floods as the one which occurred in 1904, and which is estimated to have damaged property to the extent of \$1,200,000.

During the survey of this valley 350 miles of levels were run, the course of the river and the lower portions of its tributaries were mapped, and 300 square miles of overflow land were examined. A line of check levels was run the entire length of the valley and 20 standard metallic bench marks were set at various important points. The cross section of the river channel was measured at 122 places, and a record was kept at various locations of the stage of water in the river during the period covered by the survey.

The discussion of the several problems which presented themselves in the course of the critical examination of the Neosho River, made for the purpose of devising a plan for the protection and reclamation of its bottomland, indicates that the project is one of more than usual magnitude and importance. The data secured and the various physical conditions observed during the field investigations have been given due weight in formulating the plan recommended. A careful consideration of the entire subject shows the relation of engineering, agricultural, industrial, and economic features of the proposition, all of which merit critical inspection before any plan of extensive improvement is adopted.

About 161,800 acres of land will be directly affected by the plans proposed, which if carried out will cost in round numbers \$1,703,000, or an average of \$10.52 an acre if the entire cost is assessed against the land. The plan upon which this estimate is made consists of—

1. The removal of obstructions of all kinds from the bottom and banks of natural channels.

2. Substantial levees on each side of the channel of the river 900 feet apart on the lower section, and return levees on each side of the channels of the larger tributaries.

3. The removal of all brush and trees from land lying between levees.

4. Interior drainage by means of ditches with outlets through the levees into the channels by means of sluice gates.

5. Cutting a few bends, where found practicable, in the upper section of the river.

The benefits accruing to land from adequate protection from overflow are not limited to its use for agriculture. All property beneficially affected by the improvements is subject to special assessments for a portion of the cost, be it highways, railroads, or other property, provided a specific benefit is conferred. However, as much the larger part of the cost of drainage will fall upon the land it benefits for agricultural use, the effect upon such property should be quite fully investigated. Lands subject to overflow are valued at about \$15 an acre. Could these lands be guaranteed against occasional overflows, and the losses occasioned by them, it is stated that their market value would easily be \$60 an acre, based upon their ability to produce a good yield of staple crops each year. This has been given as a conservative estimate by owners of the land in the valley, and if correct shows a possible increase of \$45 per acre in value which will result from drainage.

It is recommended that all the bottom-land along both sides of the river between the State line and Emporia, the value of which will justify the expense, be protected by levees. The levees on the opposite sides of the river should be at least 900 feet apart at all points, leaving a clear channel of that width between them. The levees should be 8 feet high, 6 feet wide on top, and have side slopes of 2 horizontal to 1 vertical, making a base 38 feet wide.

In addition to the construction of the levee system, it is of the utmost importance that certain portions of the river channel should be straightened and the channel further improved by removing the logs, stumps, trees, and brush which now clog it and impede the flow of the water. The space between the levees and the river bank should be cleared absolutely. To get the maximum discharge the full area of the cross section must be free from obstructions. From one end of the river to the other the banks are lined

with oak, cottonwood, sycamore, with now and then walnut, pecan, elm, and maple. Some of these trees are valuable for lumber; and the rest will make good cord wood or mine props. In places there is much worthless underbrush, but as a rule the timber will nearly, if not entirely, pay the cost of the clearing.

A levee of the dimensions recommended, 8 feet high, 6 feet wide on top, and with side slopes of 2 to 1, will contain about 34,400 cubic yards per mile. The cost of such earthwork will vary slightly in different parts of the valley, but taken in large quantities, so that the most improved machinery may be employed, it would not exceed 8 cents per cubic yard. At this price a mile of average levee will cost approximately \$2,800.

The total lengths of new levees recommended is approximately 398 miles, costing about \$1,115,000. It is proposed to enlarge some 35 miles of old levees at a cost of about \$63,000. Approximately 15,800 acres will be required for the right of way for the levees and for the improved clear channel, at a cost of \$237,000. The cost of clearing obstructions from 247 miles of river channel is estimated at \$52,000. The amount of land to be protected from floods by these proposed improvements is 161,800 acres, for which \$1 per acre is allowed for providing the necessary internal ditching and small sluices through the levees. The cost of all other items recommended to be embraced in the scheme of improvements including large sluice gates, is \$38,000, making a total estimated cost of \$1,667,953.

The full report of the investigation in the Neosho Valley, containing the detailed results of the survey, together with a complete description of the improvements recommended and an itemized estimate of their cost, has been issued as Bulletin 198 of the Office of Experiment Stations, and may be obtained upon application to the Secretary of Agriculture at Washington, D. C.

Crab-grass is an enemy to young alfalfa. For this reason many farmers prefer to sow alfalfa in the fall.

Alkali land should be treated with barnyard manure in liberal doses.

Stock Interests

The Trend of the Cattle Trade.


In a Western town with its single wide street there is the expected number of restaurants and their usual large signs. The first one greets you with "Meals at all hours;" the next reads "Open day and night," and then comes that of the watchful Chinaman who, not to be outdone by his competitors, has displayed the sign, "Me Wakee Too."

It may be that many of us could truthfully express ourselves in regard to our knowledge of the trend of the cattle trade in the words of the Chinaman's sign, but if so it seems that we have been very silent about it. It appears to the writer that the extent to which calves are being marketed and consumed is worthy of more than the casual comment it receives in current market reports.

The year that has passed ended with a sensation in cattle breeding and feeding circles when Roan King won the grand championship in the steer classes at the International. While the award has excited the usual discussion it may be proper to ask how many even breeders of Shorthorns are awake to what it means and to what degree it shows the trend of the times. The first Shorthorn steer to attain similar worldwide notoriety was the Durham Ox calved in 1796 and made to weigh 3,024 pounds at the age of five years by Chas. Colling. This steer was shown to acquaint the cattle-breeding world with what the Shorthorn could do at that time, and now, slightly more than a century later, Roan King, nominally a calf, though 13 months old, is made a world's champion at a weight of 1,090 pounds, showing not only what the Shorthorn can do, but also pointing with an index finger to the fact that the trend of the trade has been steadily towards early maturity from that early time to the present day. If this is so, it is surprising how many of us have not been awake to it.

With this as the leading incident in show-yard circles let us turn to the general cattle market and we find that

Three generations of Simpsons have made



EDDYSTONE PRINTS
Founded 1842

Ask your dealer for
Simpson-Eddystone Silver Greys


The famous old "Simpson" Prints made only in Eddystone.

Economy wash fabrics in the most artistic patterns. They wear longest and always look new. Some designs in a new silk finish.

Standard for sixty-five years.

If your dealer hasn't Simpson-Eddystone Prints write us his name. We'll help him supply you. Decline substitutes and imitations.

The Eddystone Mfg. Co., Philadelphia
Established by Wm. Simpson, Sr.



the most noticeable feature of the past year's trade has been the unusual extent to which calves were sent to the markets of Chicago, Kansas City, and Fort Worth. The report of the year's trade from Chicago shows that 421,934 calves were marketed during 1907 and the run of 62,759 during April was the largest of any month at that market. The run was unprecedented at Kansas City and the Fort Worth market, it has been claimed, even surpassed Chicago. There are various reasons why the run has been so unusual, but the main one remains—the consumer wanted veal and he was willing to pay for it.

The Chicago market reports too heavy marketing during April to be due in a measure to the high price of milk, and the Western markets, notably Kansas City, credit their large sales to the fact that there was but little demand for the calves from the feeders in the corn belt because of the price of corn and the unfavorable financial conditions for feeding. While these have been influences yet it was the price of veal that brought the bulk of the calves to market. When calves weighing 120 to 140 pounds will bring as high as \$9 per hundredweight, as they did a year ago this month, and are very near that now, they will naturally gravitate to market. We are not concerned just now so much with the reasons of the liberal marketing of calves, for the demand is likely to continue, but we are anxious to follow the trend of the trade and be awake. If we refer to the development of the sheep trade we will find that it has preceded the cat-

tle market in going through a similar development and the results are very likely to be the same. It is not so very long ago since the sheep trade saw the same trend of events when lambs began to bring much more profit to the producer than mutton, and the condition has continued from year to year with but few variations. Feeders found that lambs would make cheaper gains and bring more per pound than yearlings, hence the liberal feeding and marketing of lambs. As long as the supply was liberal and prices for feeders and feeds cheap, speculators fed large numbers and for a few years made immense profits. But the trend of the trade has squeezed the speculator out of business. The market and the conditions enabled the sheep rancher to hold for stiffer prices and he got them. Now when the sheep rancher found a lamb of either sex would sell for as much and more often for more than a mature sheep he marketed as many as he could, leaving his flock to go without the usual replenishing which in his judgment it had always demanded before. This replenishing of the breeding flock goes on very grudgingly and consequently the increase in breeding stock is kept down even though the business is very profitable. The perpetuating forces are under damper. The veal or calf market takes both sexes and the high prices are bringing them to market, for when a calf at that early age brings more profit than it is likely to bring any time later wherein lies the advisability of carrying it over unless the conditions for doing so are special? Anyway it gives



BLYTHE CONQUOROR
NO. 224431

Blythe Conquoror 224431, full Scotch show bull at the head of the herd of J. L. Stratton & Son, of Ottawa, Franklin County, Kansas. Photographed by Martin. This bull weighs 2,200 pounds in good breeding form. His sire and dam were both imported. The get of this bull carries with them much of his individual characteristics. He is not disappointing either to his owners or their customers. See advertisement page 439.

the rancher two strings to his bow—he can veal his calves or sell them to the feedlot feeder.

We may rest assured that this noticeable trend of the trade—the liberal and profitable marketing of calves—is not likely to injure the cattle trade from the standpoint of the genuine producer, though its influences may be somewhat slow in the other direction.

Will the calf market help the dual-purpose cow? It would seem that any condition that would add to the value of the calf would do this, more specially where the milk is needed for market purposes.

Try Mine With the Money in Your Own Pocket Nothing to Pay Down to Try My Wagon Box Spreader

Bill Galloway Says

For You to Get Your Pencil Now and Write Him for His New, Big, 1908 Free Book About Fertilizing and the Red Hottest Spreader in the World.

Get your name and address down to me now and I'll prove to you that you can't afford to be without one of my Galloway Wagon Box Manure Spreaders. I'll prove it and make you bound you won't have any other kind.

(Get Our 30 Days Special Freight Prepaid Proposition)

GALLOWAY

Endless Apron Force Feed Wagon Box Attachment Manure Spreader—Fits Any Wagon Truck. What do you know about spreaders? I can hear you say "Just about the average." That's it. That's why I want to talk to you.

Get My Special Proposition Price

Read What This Man Says: I have spread all kinds of manure—even hard, frozen chunks and it scatters every-thing. You can't break it. Wish you a prosperous new year, Yours truly, D. HISSAM.

William Galloway, Pres. William Galloway Co. 338 Jefferson St., Waterloo, Iowa

Write Your Name to Me Here Tear Out and Mail Today

William Galloway, 338 Jefferson St., Waterloo, Iowa. Send me your Big, Free Galloway Spreader Book for 1908.

Spend 1 Cent To Save \$50.00

Name..... P O..... State.....



30 Days FREE Trial

Gold Bond \$25,000.00 Guarantee

OFFICIAL SCORE CARD.

Beef Cattle.

- 1. Weight—Score according to age 8
2. Form—Straight top line and underline; deep, broad, low set, stylish 8
3. Quality—Firm handling; hair fine; pliable skin; dense bone; evenly fleshed. 8
4. Condition—Deep, even covering of firm flesh, especially in regions of valuable cuts. 10
5. Head—Broad, short, and clean. 3
6. Neck—Short, thick; chest, clean 4
7. Shoulder Vein—Full. 2
8. Shoulder—Covered with flesh. 3
9. Brisket—Advanced; breast wide 1
10. Legs—Straight, short; arm full; shank fine, and smooth. 2
11. Chest—Full, deep, wide; girth large; crops full. 4
12. Ribs—Long, arched, thickly fleshed. 8
13. Back—Broad, straight, smooth, and deeply fleshed. 8
14. Loin—Thick, broad. 8
15. Flank—Full, even with underline. 2
16. Hips—Smoothly covered; distance apart in proportion with other parts. 2
17. Rump—Long, wide, even; tail head smooth, not patchy. 5
18. Thighs—Full, deep, and wide. 5
19. Twist—Full, well let down. 5
20. Udder—Full, indicating fleshi-ness. 2
21. Legs—Straight, short; shank fine, smooth. 2
Total. 100

Hereford Cattle.

- 1. Color—Red, with white face, chest, legs, belly and small strip of white on top of neck. 4
2. Head—Forehead broad and slightly tapering toward nose; eyes full and bright; horns of medium size; ears of medium size. 8
3. Neck—Medium length and spreading out to meet shoulder. 4
4. Shoulders—Moderately oblique, smooth and well covered. 6
5. Brisket—Deep and projecting well in front of fore legs. 4
6. Chest—Deep, wide and full. 10
7. Ribs—Well arched and deep; crops full. 8
8. Back—Broad, straight and wide, loin thick. 8
9. Rump—Wide, long and smooth. 4
10. Hindquarters—Deep and full; thighs strong and muscular; twist well filled. 8
11. Tail—Fine, coming neatly out of body on line with back; hanging at right angles to back. 2
12. Underline—Straight; flank deep and full. 4
13. Legs—Short, straight and squarely placed. 6
14. Flesh—Even, and without patchiness. 5
15. Skin—Moderate thickness and mellow touch; abundantly covered with thick, soft hair. 8
16. General Appearance—Large enough for age; well bred; females, feminine; males, masculine. 5
17. Udder—Not fleshy; teats squarely placed, well apart and good size. Males, testicles of even size and well let down. 6
Total. 100

Shorthorn Cattle.

- 1. Color—Red, white or any mixture of the two. 2
2. Head—Forehead broad, slightly tapering toward nose; nostrils wide and open; eyes full and bright; horns small and neat; ears medium size. 8
3. Throat—Clean cut and neat. 2
4. Neck—Medium length, spreading out to meet the shoulders with full neck vein. 4
5. Shoulders—Moderately oblique, smooth and well covered. 6
6. Chest—Wide, deep and full. 10
7. Brisket—Deep; projecting well in front of fore legs. 3
8. Ribs—Well arched and deep; crops full. 8
9. Back—Broad, straight from crops to hooks; loins strong and wide. 8
10. Rump—Wide, long and smooth 4
11. Hindquarters—Deep and full; thighs thick and muscular; twist

- 12. Tail—Fine, coming neatly out of body on line with back; hanging at right angles to back. 2
13. Underline—Straight; flank deep and full. 4
14. Legs—Short, straight and squarely placed. 6
15. Flesh—Even and without patchiness. 4
16. Skin—Moderate thickness and mellow touch; abundantly covered with thick, soft hair. 8
17. General Appearance—Large enough for age; well bred; females, feminine; males, masculine. 5
18. Udder—Not fleshy; teats squarely placed, well apart and good size. For bulls, testicles, even size and well let down. 8
Total. 100

Galloway Cattle.

- 1. Color—Black, with brownish tinge. (Entirely black not objectionable.) 4
2. Head—Short and wide; broad forehead and nostrils; without slightest trace of horns or scurs. (Crown wide and oval, not rising to a point.) 8
3. Eye—Large and prominent. 2
4. Ear—Moderate in length and broad; pointing forward and upward, with a fringe of long hair. 2
5. Neck—Moderate in length; clean and filling well into the shoulder; top of neck in line with the back in female and in male gradually rising with age. 3
6. Body—Deep, round and symmetrical. (Well spread and of moderate length.) 8
7. Shoulders—Smooth and straight, moderately wide above. Coarse shoulder points and sharp or high shoulder are objectionable. 6
8. Ribs—Deep and well sprung; crops well filled. 8
9. Back—Broad and straight; loin strong. 10
10. Hook bones—Not prominent. (In fleshy animals not visible.) 3
11. Hindquarters—Long, wide, and well filled. 8
12. Thighs—Broad, straight, and well let down to hock. Rounded buttocks are very objectionable. 8
13. Legs—Short, clean with fine bone. 8
14. Tail—Well set on and moderately thick and carrying a good bush 2
15. Skin—Mellow and moderately thick. 8
16. Hair—Soft and wavy, with a soft, mossy undercoat. Wiry or harsh hair is very objectionable. 7
17. General Appearance—Well proportioned and symmetrical; female, feminine; male, masculine. 5
Total. 100

Aberdeen-Angus Cattle.

- 1. Color—Black. White is objectionable, except on underline behind the navel, and there only to a moderate extent. 3
Head—Forehead moderately broad and slightly indented; tapering toward the nose; muzzle fine; nostrils wide and open; distance from eyes to nostrils of moderate length; eyes full, bright and expressive, indicative of good disposition; ears, medium small, slightly rising upward, and well furnished with hair; poll well defined and without any appearance of horns or scurs; jaws clean. 10
2. Throat—Clean, without any development of loose flesh underneath 3
3. Neck—Medium length, spreading out to meet the shoulders, with full neck vein. 3
4. Shoulders—Moderately oblique, well covered on blades and top; with vertebrae or backbone slightly above the scapula or shoulder-blades, which should be moderately broad. 6
5. Chest—Wide and deep; round and full just back of elbows. 10
6. Brisket—Deep and moderately projecting from between the legs, and proportionately covered with flesh and fat. 4
7. Ribs—Well sprung from backbone, arched and deep, neatly joined to the crops and loins. 8
8. Back—Broad and straight from crops to hooks; loins strong; hook bones moderate in width, not prominent, and well covered; rumps long, full, level and rounded neatly to hindquarters. 10
9. Hindquarters—Deep and full, thighs, thick and muscular, and in proportion to hindquarters; twist filled out well in "seam" so as to form an even, wide plain between thighs. 8
10. Tail—Fine, coming neatly out of body on a line with the back, and hanging at right angles to it. 3
Udder—Not fleshy; coming well forward in line with the body and well up behind; teats squarely placed, well apart and of good size. For males, testicles of even size and well let down. 5
11. Underline—Straight, as nearly as possible, flank deep and full. 4
12. Legs—Short, straight, and squarely placed; hind legs slightly inclined forward below the hocks; forearm muscular; bones fine and clean. 4
13. Flesh—Even and without patchiness. 4
14. Skin—Moderate thickness and mellow touch, abundantly covered with thick, soft hair. (Much of the thriftiness, feeding properties, and value of the animal depends upon this quality, which is of great weight in the grazers' and butchers' judg-

Advertisement for Midland 2 Row Cultivator. Includes text: 'Now much would the Midland 2 Row Cultivator save on your father's corn crop?' and a table comparing labor and machinery for 80 acres.

ment.) A good "touch" will compensate for some deficiencies of form. Nothing can compensate for a skin hard and stiff. In raising the skin from the body it should have a substantial, soft, flexible feeling, and when beneath the outspread hand it should move easily, as through resting on a soft, cellular substance, which, however, becomes firmer as the animal ripens. A thin, papery skin is objectionable, especially in a cold climate. 10
15. General Appearance—Elegant and well bred. The walk square, the step quick, and the head up. Males, masculine; females, feminine. 5
Total. 100

At this writing, March 31, the fruit prospects in Kansas are as good as can be desired. Peaches and plums are in bloom in the latitude of Topeka. Pears are showing their white petals almost ready to expand. Cherries are preparing to appear in white within a few days, and apples are enlarging their buds in great profusion. Of course, a late frost might play havoc with these prospects, but THE KANSAS FARMER is not going to lose the fruit crop until and unless such frost comes.

The report of Professor Hunter, of the State University, that the dreaded "green bugs" are in evidence in only two localities in Kansas and that they are not increasing in these is most gratifying. There are other green plant lice which have caused uneasiness in various parts of the State, but these have turned out on examination to be a different and comparatively harmless species.

The Dutch Boy Painter.

One of the most useful and valuable little booklets that has come to this office is entitled "The Dutch Boy Painter." It is full of practical information for everybody who uses paint, and this means everybody in this land of sunshine. This booklet was evidently written by some one who knew the painting business thoroughly and is of special value to those farmers who do their own painting. Its chief importance however, is in its sound advice in regard to the materials to be used. It does not pay to invest good money in anything but good materials and the man who does so pays well for his experience.

DON'T BUY GASOLINE ENGINES UNTIL YOU INVESTIGATE "THE MASTER WORKMAN,"

alcohol engine, superior to any one-cylinder engine; revolutionizing power. Its weight and bulk are half that of single cylinder engines, with greater durability. Less to Buy—Less to Run. Quickly, easily started. Vibration practically overcome. Cheaply mounted on any wagon. It is a combination portable, stationary or tractor engine. SEND FOR CATALOGUE. THE TEMPLE PUMP CO., Mrs. Meagher and 15th Sts., Chicago. THIS IS OUR FIFTY-FIFTH YEAR.

Field Notes

LIVE STOCK REPRESENTATIVES.

J. W. Johnson.....Kansas and Nebraska
L. K. Lewis.....Kansas and Oklahoma
Geo. E. Cole.....Missouri and Iowa

Mrs. Henry Rogler, Bazaar, Kans., has some excellent bargains in Rose Comb Brown Leghorn eggs.

Mrs. E. S. Myers of Chanute, Kans., makes an important change in her poultry advertising card this week.



J. W. JOHNSON.

J. W. Johnson who has ably and faithfully represented THE KANSAS FARMER in Northern Kansas and Southern Nebraska field has resigned his position with this Company to accept similar work with the newly formed Western Publishing Company in which Mr. Johnson is a prominent stock holder.

Charles C. Fair, originator of the White Ivory strain of White Plymouth Rocks and owner of Blue Ribbon Stock Farm at Sharon, Kans., offers some good things in his advertising card this week.

Chas. Morrison & Son, owners of the Phillips County herd of Red Polled cattle and Poland-China swine at Phillipsburg, Kans., writes as follows: "We have just shipped six Red Polled heifers to J. B. Reser of Bigelow, Kans., and A. Seaton of Waterville, Kans. We shipped Mr. Seaton a fine bull about a month ago and he was so well pleased with him he concluded he wanted some registered heifers, so with Mr. Reser they made us a visit and was very much pleased with the cattle and soon found what they wanted.

May 1. Our Poland-Chinas are doing well and have a few good boars sired by Price Wonder 114279. He is the largest Poland-China in Kansas, and if nothing happens we expect to have him out to the fairs this fall; and you will see a large hog with plenty of finish. Parties looking for Red Polled or Poland-Chinas will do well to make us a visit if you want something good at a moderate price."

J. C. Robison, owner of the White-water Falls stud of Percheron stallions at Towanda, Kans., has just returned from an eastern trip where he picked up some good things for the big Kansas farm. The animals just bought were young Percheron mares which will be added to those retained at the time of the dissolution of the breeding firm of J. W. & J. C. Robison.

T. F. Guthrie, owner of Guthrie Ranch Berkshires, Strong City, Kans., writes about his spring pigs. He says: "I never had such splendid luck with spring pigs as I am having right now. Litters are coming large and the pigs are strong and vigorous. Nearly every pig has a typical head with a splendid long body and perfect feet."

What is believed to be a unique experiment in the pure-bred business is being tried at Brodhead, Wis. Some twenty breeders of Duroc-Jersey hogs have formed an association and propose to guarantee, under rules which they have prescribed, the stock sold by the several members to be breeders and to conform to the representations under which sold.

They intend to make exhibits at the various fairs and perhaps hold a Duroc-Jersey show of their own. They also intend to hold a combination sale at least twice a year and a sale circuit each fall.

If this springs farrowing maintains the reputation of the red hog, the members of this association will be able to show one thousand pure-bred Durocs in a days drive.

They will guarantee the truthfulness and faithful performance of all their advertisements, and if you see it in a Brodhead Duroc-Jersey Breeders' Association advertisement, it is so.

Collynie blood, vigor and quality will be in evidence at the coming Hill-Hanna sale of Shorthorns at Fredonia, on Monday, April 13. We call especial attention to the fact that in Mr. Hill's consignment are quite a number of females bred to his young herd bull, Ingle Lad, that attracted so much attention at the American Royal and the Western Stock Show at Denver last fall.

This young bull is the greatest of all Collynie's good sons and comes from one of Mr. Hanna's most reliable and best breeding families and is sure to prove an extraordinary breeder. In the sale is included by Mr. Hanna a Cruickshank Columbia heifer by old Collynie himself. There will also be two bulls by that great sire and quite a lot of grandsons and granddaughters. Quite an unusual feature of this sale will be the large proportion of beautiful roans in both bulls and heifers. This feature shows that these herds are up-to-date and looking for quality first.

In the consignment by Stevenson Bros., Elk City, will be no less than half a dozen young cows by that great show bull, Gallant Knight. Five of these will have big lusty calves at foot by Lord Mayor 3d, their Babst-bred young bull that comes from the famous Severn Daisy family. This bull also goes in the sale. He is a rich, red, evenly turned fellow that has never been heavily used and should suit some one who is after a good one ready for heavy service.

Mr. I. L. Swinney's consignment is another aged bull ready for heavy duty. This one is a roan Cruickshank Secret, son of Collynie, and he is a proven sire of good ones. Mr. Cowley also has a strong 2-year-old Cruickshank bull by his great breeding son of Collynie.

These with Mr. Hill's ten head of bulls, four of which are Scotch, make up a very strong list—in fact too many good ones for one sale. We think some of them are bound to go cheap. Taken altogether we think this sale is likely to be the best one of the season for the buyer, because none of the cattle are in high condition and the consignors are not expecting high prices.

is nicely illustrated with several good photographs by Ritchie. Drop Mr. H. M. Hill, at Lafontaine, a postal and he will be glad to mail you a copy.

Herefords at Auction at Kansas City. The three days Hereford cattle sale which was held by Funkhouser, Gabbert and others at the fine stock sale pavilion in Kansas City, on Thursday, Friday, and Saturday, of last week was not quite so well attended as had been hoped for by those interested in the sale.

This was possibly due to the fact that the farmers are now very busy in their fields getting in spring crops and could not well afford to leave their work to attend the auction.

The cattle were one of the best lots that has ever been offered in a combination sale in Kansas City, and were drafts from some of the most prominent herds of Herefords in the State.

L. J. Andrews, of Morse, Ia., topped the sale in the purchase of Weston Lad of the Cornish and Patton, consignment at \$300 the next highest price paid was \$265 for Ideal's Pride of the S. L. Standish, consignment by O. Harris, of Harris, Mo.

There were 128 animals sold at an average of \$100.68. The sale was conducted by Colonels Edmundson, Brady, Zaun, and White. Following is a list of sales:

- MISS ANXIETY, 2 years, F. W. Hann, Kirkman, Ia., \$150
LADY WESTON, 2 years, F. W. Hann, Hyacinth, 4 years, A. S. Sample, Luray, Mo., 75
MYRTLE, 4 years, C. T. McFarland, Fabius, Mo., 80
DORA BELLE, 4 years, C. T. McFarland, 75
PRINCESS MARIE, 6 years, J. H. White, Granger, Mo., 85
MILDRED, 2 years, J. F. Gulick, Carthage, Mo., 120
PETUNIA 17th, 1 year, C. T. McFarland, 60
CHARMING LASS 16th, 2 years, O'Bryant, Roberts & O'Bryant, Lancaster, Mo., 90
LESLIE, 2 years, Warren Gammon, Des Moines, Ia., 175
CHARLOTTE, 2 years, J. A. Evans, Granger, Mo., 75
CORAL VALENTINE, 2 years, O'Bryant, Roberts & O'Bryant, Lancaster, Mo., 90
MALLISA, 2 years, O'Bryant, Roberts & O'Bryant, 85
BEAUTY 2d, 4 years, O'Bryant, Roberts & O'Bryant, 85
MARIANA, 2 years, J. H. White, Grange, Mo., 130
COLUMBIA QUEEN 2d, 1 year, Egger Hereford Cattle Co., Appleton City, Mo., 150
FALL BEAUTY, 2 years, J. P. Cudahy, Kansas City, Mo., 150
JEWELL 11th, 1 year, F. W. Hann, Harlan, Ia., 70
FLOSSIE 3d, 1 year J. C. Allen, Bedford, Ia., 175
GAZELLE, 2 years, J. F. Gulick, Carthage, Mo., 125
MONA, 1 year, C. T. McFarland, Fabius, Mo., 70
JANUARY, 3 years, T. J. Andrews, Morse, Ia., 178
MISS DANDY 10th, 2 years, O'Bryant, Roberts & O'Bryant, 65
LADY THORNE 11th, 1 year F. W. Hann, 110
BERTHA and cow calf, 7 years, J. F. Gulick, 100
LADY GALA, 2 years, L. J. Andrews 90
BRIDGET 2d, 2 years, L. J. Andrews. 205
BRIGHT EYES and cow calf, 7 years, J. F. Gulick. 150
ACME'S QUEEN and cow calf, 5 years, J. H. White. 150
IMogene E., 2 years, J. F. Gulick. 95
DUCHESS 5th, 8 years, J. H. White. 100
PETUNIA 13th, 8 years, J. F. Gulick. 125
BELL METAL LIVERY, 2 years, O'Bryant, Roberts & O'Bryant. 110
DEWDROP 2d, 2 years, L. J. Andrews. 130
CURLY LASS, 5 years, J. A. Evans, Granger, Mo., 130
POLLY, 7 years, J. H. White. 95
PRIMROSE 4th, 4 years, J. H. White. 100
MAXIE, 2 years, O'Bryant, Roberts & O'Bryant. 125
LILL, 6 years, J. F. Gulick. 85
FLORA HALBRED, 2 years, F. W. Schiele, Durant, Ia., 110
BELLE COLUMBUS 2d, 2 years, O'Bryant, Roberts & O'Bryant. 110
SORCERESS 10th, 1 year, O'Bryant, Roberts & O'Bryant. 80
LILLIAN HALBRED, 2 years, L. J. Andrews. 120
DIXIE, Miss Anna Ward, Comiska, Kans., 155
OILIE, F. W. Hann, 65
CHARMING LASS 17th, C. T. McFarland, 65
COMELY, J. W. Lenox, Independence, Mo., 70
JULIA, R. S. Burcham. 65
PETUNIA 18th, C. T. McFarland. 65
LADY CACTUS 4th, Miss Anna Howard, 45
GABRIELLE, Wm. Henn. 75
HAPPY CHOICE 7th, 1 year, E. J. Peterson, Inavale, Neb., 90
ADVANCER 32d, 1 year, Will Henn, Kansas City, Kans., 110
UPWARD 11th, 1 year, H. C. Shire, Odessa, Mo., 75
ONWARD 60th, 1 year, S. B. Steele, Waterville, Kans., 145
DUKE, 1 year, Firth Fredley, Friend, Neb., 70
LORD COLUMBUS 5th, 2 years, Patrick Burns, Manhattan, Kans., 125
RELIANCE, 1 year, Will Henn. 70
ALTON, 2 years, M. McGrath, Williamsburg, Kans., 80
CHERRY BOY 5th, 2 years, J. F. Brandon, Bosworth, Mo., 80
MARCH ONWARD 3d, 2 years, William Eckart, Manhattan, Kans., 150
CHERRY METAL, 2 years, William Greenwood, Breckenridge, Mo., 75
NICHOLAS HALBRED, 1 year, E. I. Washington, Manhattan, Kans., 130
PRINCIPAL 9th, 1 year, Will Henn. 40
COLUMBUS N., 2 years, Dean Bros., Hayes, Kans., 125
AUGUSTA, 1 year, Will Henn. 55
PRINCE COLUMBUS, 2 years, Dean Bros., 100
DUTCHMAN, 1 year, Will Henn. 45
ANXIETY DANDY, 1 year, J. P. Cudahy, Kansas City, 115
MEDDLER, 1 year, Will Henn. 55
PRINCIPAL 10th, 1 year, J. F. Gulick, Advancer 30th, 1 year, R. M. Fields, 55

HORSE OWNERS! USE GOMBALZ'S CAUSTIC BALSAM. A safe, speedy and positive cure. THE LAWRENCE-WILLIAMS CO., Cleveland, Ohio.

SCOURS Cured in pigs, calves, colts and sheep by feeding ANTI-SCOUR. THE ONSTAD'S "ONE APPLICATION CURES" LUMPY-JAW CAPSULES. THE ONSTAD CHEMICAL CO., Indianapolis, Ind.

Vincent's Kansas Kolera Kure will cure all hog cholera. McCurdy Bldg., Hutchinson, Kansas.

ARTIFICIAL MARE IMPREGNATORS For getting in foal from 1 to 6 mares from one service of a stallion or jack, \$3.50 to \$6.00. CRITTENDEN & CO. Dept. 31, Cleveland, Ohio.

Get the FREE BOOK "EASY DIGGING" today and learn about the wonderful fast-digging Iwan Auger. THE IWAN AUGER. Iwan Bros., Dept. G, STREATOR, ILL.

GALL CURE Money refunded if Bruises, Cuts, Harness and Saddle Galls, Scratches, Grease Heel, Chafes, Rope Burns and similar affections are not speedily cured with Bickmore's Gall Cure. Bickmore Gall Cure Co., Box 916, Old Town, Maine.

KRESO-DIP FOR SPRING DIPPING AND Hand Dressing All Stock. PUTS AN END TO LICE, TICKS, MITES, FLEAS, MANGE, SCAB, RINGWORM, ALL SKIN DISEASES. Don't waste time and money on inferior dips.

PARKE, DAVIS & CO. DETROIT, MICHIGAN. BRANCHES: New York, Chicago, St. Louis, Boston, Baltimore, New Orleans, Kansas City, Indianapolis, Minneapolis, Memphis, London, Eng., Montreal, Que., Sydney, N.S.W.; St. Petersburg, Russia; Bombay, India; Tokio, Japan; Buenos Aires, Argentina.

The Blossom House Kansas City, Mo. Oposite Union Depot. Everything first-class. Cafe in connection. Cars for the Stock Yards, the up town business and residence parts of the city and for Kansas City, Kansas, pass the door. Solid comfort at moderate prices. A trial will please you.

Horticulture

Native Lumber.

I am going to build a new residence and would like to have your opinion as to whether we could use native lumber green? A saw mill has just been located on the farm, and it would be a considerable saving if we could use the lumber, which consists of elm, sycamore, hackberry, and cottonwood. How would you advise piling it and curing so as to prevent warping?

Chase County. HENRY ROGGER.
You should be able to make good use of your native elm, sycamore, cottonwood, and hickory in house building. Under no circumstances should they be used in green condition, as they will be less durable if so used; and in addition, the shrinking which takes place in seasoning would give much trouble. The lumber should be carefully sawed, and then left piled to season for a few months. All these woods, especially the cottonwood, are likely to warp in seasoning unless properly handled. The lumber should be piled upon a solid foundation a foot or so above the ground, using seasoned cross pieces one inch in thickness and an inch or two wide. The cross pieces should be not more than three feet apart, and care should be exercised to see that each cross piece is laid exactly over the one beneath so that finally they will form a vertical line through the pile. Boards of different lengths should be piled separately. A copy of Forest Service Circular 40, "The Utilization of Tupelo," has been sent to you. The directions given in the latter part of this circular for air-seasoning tupelo apply equally as well to the woods which you have. Tupelo is fully as difficult to season as cottonwood, but by following the methods outlined in this circular it is successfully handled. Seasoning, of course, will take place much more rapidly in Kansas than in Louisiana where the tupelo experiments were made.

The elm would probably give best satisfaction for stair-casing, newel posts, and grill work. The sycamore, if quarter-sawed and used for inside finishing, would give an excellent effect. The hackberry could be used either with the sycamore or elm; and the cottonwood probably would give the best results for the 2 by 4 and 2 by 6 material for the frame work. It would also do fairly well for bevel or drop siding if first thoroughly seasoned and kept well painted; otherwise it will not be very durable.

R. S. KELLOGG,
Chief of Branch of Wood Utilization, U. S. Forestry Service.

Arbor Day—1908.

(APRIL 10.)

From the Arbor Day Bulletin of Hon. E. T. Fairchild, State Superintendent of Public Instruction.

SUGGESTIVE PROGRAM.

- Song.
 - Reading Letter of President Roosevelt.
 - Reading Proclamation of Governor E. W. Hoch.
 - Reading Letter of Superintendent of Public Instruction, Edw. T. Fairchild.
 - Reading History of Arbor Day.
 - Song.
 - Recitations.
 - Essays on some Famous Trees.
 - Song.
 - Discussion—"Best Means to Improve and Beautify Our School Grounds and Buildings."
 - Song.
 - Planting of Trees.
- [NOTE.—Remember the real significance of Arbor Day is absolutely lost unless there is actual planting of trees. We trust that the superintendent or teacher will make a strong effort to observe Arbor Day by the planting of at least a few trees, and the carrying out of an appropriate program. The State Superintendent will particularly appreciate a report from your school as to whether Arbor Day was observed and how.]

TO THE SCHOOL CHILDREN OF THE UNITED STATES.

Arbor day (which means simply "Tree Day") is now observed in every State in our Union—and mainly in the schools. At various times from January to December, but chiefly in this month of April, you give a day or part of a day to special exercises and perhaps to actual tree planting, in recognition of the importance of

trees to us as a nation, and of what they yield in adornment, comfort, and useful products to the communities in which you live.

It is well that you should celebrate your Arbor Day thoughtfully, for within your lifetime the Nation's need of trees will become serious. We of an older generation can get along with what we have, though with growing hardship; but in your full manhood and womanhood you will want what nature once so bountifully supplied, and man so thoughtlessly destroyed; and because of that want you will reproach us, not for what we have used, but for what we have wasted.

For the Nation, as for the man or woman and the boy or girl, the road to success is the right use of what we have and the improvement of present opportunity. If you neglect to prepare yourselves now for the duties and responsibilities which will fall upon you later, if you do not learn the things which you will need to know when your school days are over, you will suffer the consequences. So any Nation which in its youth lives only for the day, reaps without sowing, and consumes without husbanding, must expect the penalty of the prodigal, whose labor could with difficulty find him the bare means of life.

A people without children would face a hopeless future; a country without trees is almost as hopeless; forests which are so used that they cannot renew themselves will soon vanish, and with them all their benefits. A true forest is not merely a storehouse full of wood, but, as it were, a factory of wood, and at the same time a reservoir of water. When you help to preserve our forests or to plant new ones you are acting the part of good citizens. The value of forestry deserves, therefore, to be taught in the schools, which aim to make good citizens of you. If your Arbor Day exercises help you to realize what benefits each one of you receives from the forests, and how by your assistance these benefits may continue, they will serve a good end.

THEODORE ROOSEVELT.

ARBOR DAY PROCLAMATION.

Springtime, with its buds and blossoms and wealth of foliage, will soon be here, and in contemplation of its coming I desire to call the attention of the people of the State to the time-honored custom of devoting one day each year to the planting of trees. Nature shows its friendship for beast and bird and man in no greater way than in the forests which enrich the world and in the trees which everywhere adorn the landscape. "Trees," says Henry Van Dyke, "are rooted in our richest feelings, and our sweetest memories, like birds, build nests in the branches." Shakespeare says that "trees have tongues," and he adds, "who does not understand their language and enjoy their converse." In some lands trees are so greatly valued that no one can cut one down without governmental permission, and then another must be planted in its stead. In our own land the wasteful extravagance with which our timber land has been denuded has alarmed our statesmen until the preservation and restoration of our forests has become a National issue of such great importance that the President of the United States has called a Congress of Governors to meet in May largely for the purpose of considering this great question. But trees are not only essential to the country for commercial purposes; they are essential to the esthetic interests of the country as well. They adorn our cities and surround our homes with an indispensable environment of beauty. In summer they shield us from the burning sun, and caress us with their cool breezes. In winter they stand like mute sentinels keeping faithful vigil over sleeping comrades.

Kansas, originally a prairie State, has assiduously cultivated trees until nearly every village and city is a bower of beauty and nearly every farmhouse is blessed with these beneficent gifts of nature. The one spot, however, where trees are most painfully lacking is the average country



CONGO ROOFING
NEVER LEAK

Sample Free

WHY CONTINUE to patch when a few rolls of Congo "Never-Leak" Roofing will put an end to all of that expense at very little cost over what you are paying for repairs?

You can lay it right over your old roof, it is so soft and pliable. In these days of progress, articles which save Time, Labor and Money are what the busy man is looking for. And in Congo Roofing the three are most satisfactorily combined.

Congo will not leak or rot. It is pliable, non-shrinkable, unaffected by climatic changes, winds or water.

It is easy to lay, durable, and will give the most service at the least money. Free Sample sent on request. Write today.

UNITED ROOFING & MFG. CO.,

Successors to Buchanan Foster Co., 537 West End Trust Bldg., Philadelphia, Pa. Chicago and San Francisco

school environment, and nowhere are trees more needed, for the environment of a schoolhouse enters unconsciously into the life of the pupil and is a vital part of his education.

In consultation with Hon. E. T. Fairchild, State superintendent of public instruction, it has been agreed that Arbor Day this year shall be especially devoted, so far as our mutual influence may go, to the adornment of the school grounds of the State with trees, and this message, supplemented by a letter from Mr. Fairchild with other matter appropriate to this subject, will be placed in the hands of the school people of the State; and I urge boards of education, teachers and pupils alike to devote FRIDAY, APRIL 10, which I here and now designate as ARBOR DAY, to the planting of trees about the school premises of the State. Let it be a day memorable in the history of the nearly nine thousand school districts of Kansas.

IN TESTIMONY WHEREOF, I have heretofore subscribed my name and caused to be affixed the Great Seal of the State of Kansas. Done at Topeka, this 17th day of March, 1908.

E. W. HOCH,
Governor.

(SEAL.)
By the Governor:
C. E. DENTON,
Secretary of State.

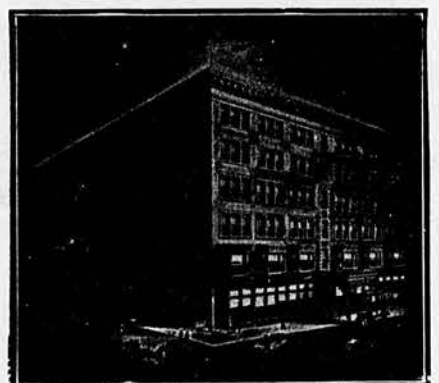
TO THE TEACHERS OF KANSAS.

"The best and highest thing a man can do in a day is to sow a seed, whether it in the shape of a word, an act, or an acorn."

Arbor Day is the embodiment of a beautiful principle. It is an expression of our love of nature, and its observance means that we shall be a little better.

(Continued on page 427.)

HOTEL KUPPER
11th and McCle St.
Kansas City, Missouri

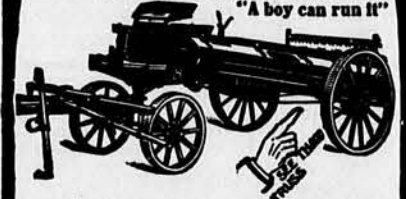


One of the newest and most centrally located hotel in the city. Absolutely modern in every detail. European plan, \$1.00 per day and up.

When writing advertisers please mention THE KANSAS FARMER.

BEFORE YOU BUY A MANURE SPREADER

SEE that its frame and sills are made of oak; that it has a ball and socket joint on front axle to prevent racking and twisting and steel braces and steel truss rods to guard against warping and sagging. See that the apron does not run backward and forward on hilly ground but insist on a positive and continuous apron drive.



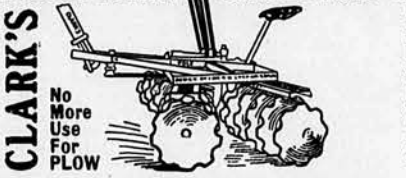
See that it is practically automatic and so simple that any boy who can drive a team can run it as well as any man and control its every operation without leaving the seat. The

Appletton Manure Spreader has all these improved features and many others equally important. Write to-day for free catalogue of special prices and terms.

APPLETON MANUFACTURING CO.
19 Fargo Street, Batavia, Ill., U. S. A.

WORK WHEN YOU WORK and use

DOUBLE ACTION JOINTED POLE CUTTING HARROW



Unexcelled for cutting stalks, chopping up alfalfa fields or for any and all intense cultivation. Equipped with Extension for Orchard work, when desired. For catalogue, prices, etc., address,

J. C. Conley, Gen. Agt., Wichita, Kans.

TO THE LADIES.

THIS OFFER FOR FIFTEEN DAYS ONLY. We want you to try our goods. We know if you try them you will continue to use them. We have tried various methods of placing these goods in the hands of the consumer, and have at last discovered the proper method, but one that is very expensive to us, and unless you continue to purchase the goods after trying them, we would be unable to continue in the business. For 15 days only, we make you the following proposition: For \$1.00 we will mail you one 50c jar of "Mexican Rose Cream," the greatest of all skin foods; it heals and softens rough skin, removes wrinkles, eczema, pimples and black heads; is the most delightful cold cream on the market. One 50c jar of "Menthomexico," the great Mexican save, one of the greatest Menthol-Camphor preparations on the market for colds, burns, scalds, insect bites, sore throat, chapped hands, hay fever. One 25c can of "Mexican Talcum Powder," made from absolutely pure Imported Talc.; has no equal on the market. One "Instruction Book on Massage," with the rules so simple a child can understand them. And with the first order for these goods, we send you one beautiful, imported Swiss Embroidered Handkerchief of pretty design, would cost you \$1 in any large department store. This offer is open for 15 days only. Write today. The Mexican Mfg. Co. Wichita, Kans.

VARICOCELE

A Safe, Painless, Permanent Cure GUARANTEED. 30 years' experience. No money accepted until patient is well. CONSULTATION and valuable BOOK FREE, by mail or at once. DR. C. M. COE, 215 North 10th St., Kansas City, Mo.

Agriculture

Experiments with and Knowledge of the "Green Bug" to Date.

BY S. J. HUNTER, UNIVERSITY OF KANSAS, LAWRENCE.

The insect commonly known as the "green bug" first came into prominence in 1852, at Bologna, Italy. Doctor Rondani, who described the species at that time, stated that in June the number of winged females was so great in all Northern Italy as to form large groups like clouds in the air, causing annoyance to the people, and later to cover the streets of the city with their remains. Since that year they have never been so overwhelmingly abundant in Italy, although the green bug has often been found sufficiently numerous in the regions of Central and Northern Italy to cause considerable damage to sorghum, corn, and the small grains. It lives there on certain grasses of the meadows and pastures. In 1884 it became of economic importance in Hungary.

Since we are especially interested in its history and activity in the United States, it may be well to add, with some detail, that it was first recorded from the United States by the Department of Agriculture in 1882, locality not obtained. Two years later, however, it was found at Cabin John bridge, Maryland, causing considerable damage to wheat. The following year it was found at Oxford, Ind.; five years later, in 1890, on wheat at La Fayette, Ind., also in Posey County upon oats, in both places causing considerable damage to these crops. In this same year it was present in a large area of some of the grain-producing States of the South, being first reported from Monroe County, Tennessee. It destroyed much wheat in Alamance County, North Carolina, likewise in Cook County, Texas, where it is estimated that one-half the acreage was planted to other crops and the remaining half was about half a stand. Injury to oats was reported in June from Cadet, Mo. Beginning in March of the year 1901, and continuing through May, serious injury was reported to the Department of Agriculture throughout the grain belt of Texas. Thus far the most general occurrence was the present year, where the green bug covered (approximately) in the United States the territory east of longitude 105. This, then is its first known appearance in Kansas, and its behavior here becomes a matter of record for the first time.

Accordingly, since my aim is to discuss the green bug largely in relation to its presence in Kansas, a detailed statement concerning its activities elsewhere will not be necessary.

MANNER OF LIFE.

Before taking up that phase of the subject it will be of interest to speak of its manner of life. This green bug is one of the plant-lice and is included in the same family as the green fly of the house and green-house plants, and the woolly aphid of the apple. Its general structure groups it with the chinch-bug, the squash-bug, and the scale insects. In common with all these it takes its nourishment, not by chewing the plant, as the grasshopper does, but by piercing the plant with a beak well adapted for drawing therefrom the plant juices. It is about one-sixteenth of an inch in length, pea-green in color, with a distinctly darker green stripe down its back. In common with other plant-lice, its different forms, and the ways in which these forms appear, are of almost magic interest. In its economy it plans to spend the winter as an egg.

THE BIRTH OF THE GREEN BUG.

These eggs are deposited early in the fall by true females on the leaves of the host-plant. Out of these eggs in the early spring hatch the form known as the "stem mother." Judging from other species, it is probable that these stem mothers are wingless and reproduce without fertilization. The offspring of these stem mothers may be either winged or wingless and they in turn reproduce without fertilization.

Throughout the whole summer season there are no males nor true females, but each and every individual gives birth to young, at the rate of about two per day, during the greater part of the life of each individual.

LENGTH OF THE BUGS LIFE.

In our experimental laboratory, from May to September, the average life is thirty-six days, and the average production per individual fifty-six. Each individual begins to reproduce when about seven days old and ceases the process of reproduction five to ten days before death. This is an average computed from the life-record of many individuals. Now, when you take into consideration that there are no sterile individuals among these summer green bugs—that each and every one of the offspring begin to repeat the series of reproductions when seven days old, and that the offspring are born and do not have to await the slower process of hatching from an egg, as do most other insects, you can understand, in a measure, how these insects can appear in such countless numbers in a time so short as to be almost incredible.

Its rate of growth and reproduction is obviously very much slower at this season of the year (January). The subject of temperature in relation to the green bug is an important one, and our studies upon that phase are not yet completed. Suffice it to say that, in such weather as we have had during the month of December, the green bug requires from thirty to sixty days to reach maturity. Even development in the laboratory requires three times as long as it did in the summer months.

THE WINGED FORMS.

Now, were all these forms wingless the economic problem would be greatly simplified. On the contrary, however, many of these agamic green bugs become winged and fly to other fields, there to found new colonies, which establish new series of agamic generations. Thus the spring and early summer is spent, subsisting principally upon wheat, oats, and other small grains, until these plants have become too mature for succulent nourishment. Then, if need be, the green bug can tide over the brief period between reaping and sowing on certain grasses of the meadows and pastures. This inconvenience has not been caused then, however, this year, as our field observations have uniformly shown that they have taken advantage of the volunteer grains allowed to stand by the farmer, unmindful of his own interest, at this critical and vulnerable period in the life of this thrifty insect. Volunteer grains have long ferried the Hessian fly over the perilous period in its life's journey, and it seems now that the green bug is using the same material for the same purpose.

THE TASTES OF THE GREEN BUG.

The tastes of the green bug include a rather wide range of plants. With us it has prospered on wheat, oats, rye, barley, speltz, corn, and a number of the grasses. It is also recorded on sorghum. So you see this shift species is not likely to want for food. Adaptability, and ability to subsist on such a large range of food plants, is no small factor in its successful existence.

In this way the green bug spends the summer, subsisting, growing, pro-

You Can't Tell The Horse Power By The Exhaust

Can save you \$20.00 give you 2-year Warranty and Guarantee to Satisfy You.

A manufacturer can take the cheapest shafts that are made; (lots of them sold) a set of what they call "E" Splice rim wheels, (mostly made of culle—lots of them sold) body with a small sill and split panels filled with a "dutchman"; a detachable back seat, etc., put on several good coats of paint and varnish, and a fair grade of upholstery; sell it by his method and you will find it on the floor of the dealer marked \$48.00, with \$20.00 difference between factory cost and what the user pays. Ah! Paint may cover a multitude of defects when you have the defects to cover, and the \$20.00 that isn't in the buggy—"too bad." We do not make that kind and absolutely will not. It is a "Square Deal" with us while we build them. A "Square Deal" for you when you buy them.

Send for our Special Vehicle Book. This story of "the way it is done" is continued there. You will find the book the most interesting piece of vehicle literature ever issued. Our 2-year Warranty, our Guarantee of Satisfaction, our free trial offer all explained. Testimonials, unsolicited, of hundreds who bought and saved \$20 to \$40 a rig.

Send for Copy Today. 300,000 Ready for Distribution.

Montgomery Ward & Co., Chicago and Kansas City



\$55⁰⁰ Our Factory

INSURE YOUR ROOF

Against Water, Weather and Wear

Use "Vulcanite" Ready Roofing and insure your roof against damage by water, weather and wear. It assures long life to buildings and absolute protection to their contents. For over 60 years its superior qualities have been recognized wherever roofing is used. It is today the recognized standard Ready Roofing of two continents, is cheaper than shingles or tin—lasts longer, requires no annual painting; easily put on—not affected by rain or snow, wet or dry, heat or cold; is fire-resisting, acid-proof and smoke-proof. Put on over old shingles it makes the old roof better than new. Before you build or repair write for free booklet, "The Right Roofing and the Reasons Why." Write today.

Patent Vulcanite Roofing Co., Dept. 43
626-59 S. Campbell Ave., Chicago, Ill.,
or Franklin, Warren Co., Ohio.



The "Jayhawk" STACKER SAVES HIRED HELP

The "Jayhawk" Stacker will do a given amount of work with less help than any other stacker—and it will do it with cheaper help. It handles alfalfa, clover, timothy, Kamir corn, sugar cane, fodder or prairie hay equally well. You don't have to use a different stacker for different crops. With the "Jayhawk" you can make ricks as long as you please, and you can place the hay on the rick right where you want it. There are 10 good reasons why you should buy the "Jayhawk" and you'll want to know every one of them before you buy. Our Big Booklet, "STACK HAY THE EASY WAY," gives all the reasons why. It's free. Write for it today.

THE F. WYATT MFG. CO., 13 Fifth St., Salina, Kansas



CORRUGATED METAL ROAD CULVERTS

made by us stand up under the heaviest traction engines. Made any length. Easy to place. Cost no more than wood or tile. Our culverts are used by the U. S. Government and many railroads. The safe, economical culvert for every road. Illustrated catalogue free.

Corrugated Metal Mfg. Co., Emporia, Kan.



LIGHTNING PORTABLE WAGON SCALE

All above ground. Steel frame, only eight inches high. Octagon levers. Tool steel bearings. Compound beam. Most accurate and durable. Write for catalogue and price.

KANSAS CITY HAY PRESS COMPANY, 120 Hill Street, Kansas City, Missouri

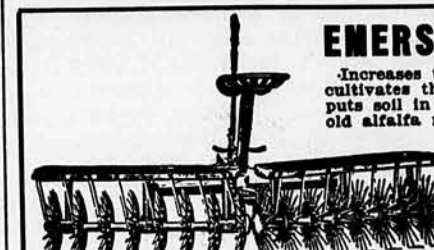


EMERSON'S ALFALFA RENOVATOR

Increases the yield of alfalfa, kills weeds and crab grass, cultivates the ground around the plant without injuring it, puts soil in condition to catch and hold moisture. Gives an old alfalfa meadow a new lease on life.

Will pay for itself twice over on ten acres in one season. No man with alfalfa on his farm can afford to be without one. Use it after each cutting if desired. Write us for further information and testimonials from users.

Address EMERSON-NEWTON COMPANY, 1318 West 11th, Kansas City, Mo.



WITTE GAS AND GASOLINE ENGINES

All styles and sizes, any fuel. Highest PERFECTION in ACCURACY and mechanical workmanship. All parts interchangeable and adjustable.

FIVE YEAR BOND GUARANTEE.

Exclusively BENSONIZED BRONZE bearings. EASY starting, SELF cleaning electric igniter. The result of 30 years' experience. Write for catalog K.


WITTE IRON WORKS CO., 627 W. 5th, KANSAS CITY, MO.



ALFALFA SEED

Highest award St. Louis Exposition, Kansas-grown. Crop of 1907. Also Cane and Millet; Macaroni Wheat and other Field Seeds in carload lots or less. Write for prices.

MOBETH & KINNISON - GARDEN CITY, KANS.



ducing, reproducing, generation after generation, in successions of seven days. As yet we have not had time to compute the progeny of one individual. Doctor Forbes has made an estimate of the rate of increase for the corn-root aphid, a member of the same family as the green bug, which goes to illustrate its fecundity. A single stem mother of the corn-root aphid has from twelve to fifteen offspring, which mature in a fortnight. "Supposing," says Doctor Forbes, "that all the plant-lice descending from a single female hatched from the egg in the spring were to live and reproduce throughout the year, we should have coming from the egg the following spring nine and a half trillion young. As each plant-lice measures about 1.4 mm. (1-16th in.) in length and .93 mm (1-32d in.) in width, an easy calculation shows that these conceivably possible descendants of a single female would, if closely placed end to end, form a procession seven million eight hundred and fifty thousand miles in length; or they would make a belt or strip ten feet wide and two hundred and thirty miles long."

PRODUCTION OF THE AGAMIC INDIVIDUALS.

Returning now to the green bug, these agamic individuals in the fall give birth to true males and females, and these true females lay truly fertilized eggs, out of which the following spring will come the stem mothers, to continue the production of the agamic generations.

The life of the green bug, however, is not all clear sailing. There are certain other insects which subsist largely upon it, devouring great numbers. Chief among these predaceous forms may be classed the "lady-bugs," little red-spotted beetles, common in the grain-fields. These are well known in the adult stage, but the immature, dark-spotted, slug-like voracious grubs from which they develop, are not so well known. These little slug-like, immature forms were frequently sent to the department last summer, accompanied by the information that they were causing the injury to the wheat. On the contrary, they were an active agency in reducing the number of green bugs. One of these, by actual count, will eat from thirty to forty green bugs a day. The clusters of orange-yellow eggs of the ladybug, from which these slugs hatch, you have no doubt seen attached to leaves of the wheat.

In this predaceous class comes the immature stage of a wonderfully delicate, green, gauzy-winged insect called the lace-winged fly. The immature or developing stage of this beautiful insect is a fiercely predaceous creature, called an "aphis lion," because it crawls about over the plants in search of such plant-lice as the green bug, piercing its prey with its long jaws and sucking the blood of its victims.

Another is a small, slender, greenish maggot, the offspring of a rather brightly banded fly, which subsists in its immature stage on plant-lice such as the green bug.

PARASITIC INSECTS.

More potent, however, in decimating the ranks of the green bug are the parasitic insects, those whose young spend the developing stages in the bodies of plant-lice.

Chief among these parasites is the one which was so active last spring, and to whose activity is due the control of this harmful insect. This parasite is a small, black, wasp-like creature, a little longer than the green bug but not so large in body. The female parasite can be seen by an ordinary observer running up and down the leaves of the plant in quest of green bugs upon which to lay her eggs. As soon as she perceives one with her feeler, she quickly thrusts her abdomen out from under and in front of the head until the tip touches the body of the green bug. In this way the egg is laid singly in the body of the green bug. She repeats this process in quick succession upon a number of green bugs, then rests and cleans her feelers, ready to repeat the operation. In about twenty-four hours of the summer season, the body of the newly parasitized green bug begins to turn orange-yellow, and usually before the third

day it is dead, much swollen, and securely fastened to the blade by the internal parasite.

Out of this shell, about four days later, another little wasp-like parasite emerges to repeat the process of parasitizing other green bugs. In this manner countless numbers of green bugs are soon changed from active, plant-destroying insects to harmless dead insects, out of which come crop protectors.

The parasitic insect lives only on other insects, and under no manner of necessity could it reproduce on plant life. Accordingly it could never become a menace to growing crops of any kind.

That this parasite did not only control, but, in many places, practically exterminate the green bug last season, no one questions. The work of the parasite was made known, not by the absence of the green bug but by the countless numbers of dead bugs clustered on the blades of grain, unimpeachable witnesses of the effect of this parasite.

"WHY DOES THE GREEN BUG FLOURISH AT ALL?"

Now the question naturally arises, with such an enemy as this parasite proves to be, why does the green bug flourish at all? In reply, it may be said: In the first place the green bug continues to be active and reproductive at a lower temperature than does this parasite. No one acquainted with the facts questions this. And so we find the green bug reproducing, even at this late date in the year, many winged migrants, which are founding new colonies in new localities, while the parasite is almost inactive. Furthermore, an examination of the structure of the two insects shows a much larger wing expanse in the green bug, suited to soaring and ready transportation by the wind. Taking into consideration the relative weights of the bodies of the two insects, the green bug still has an advantage in the matter of its flight and ability to be carried for long distances through the air. Furthermore, the instinct of this migrant is to take to the wind, to migrate.

As for the parasite, its wings have less than half the surface area and flight is attained largely by muscular vibration; that is, it works its way, while the green bug simply holds itself in the air and depends largely on the wind for transportation. The parasite is content to remain in a place as long as there are green bugs upon which it may oviposit.

It has been stated that there is a possibility of the parasite being transported as an egg in the body of the winged migrant. Were this the case, we would then expect it to accompany the green bug, and to be present wherever the green bug it. Since this possible means of the transportation of the parasite is merely hypothesis, we will have to look for its verification in the conditions as they exist.

DEVELOPMENT OF THE EXPERIMENT'S LAST YEAR.

And here we must deviate and enter somewhat into the development of the experimental phase of this subject during the past year in Kansas.

On March 9, the following telegram was sent: "C. E. Sanborn, College Station, Tex.—Wire name of insect damaging wheat in Texas. State amount of damage.—S. J. Hunter." The answer was: "College Station, Texas, March 10. S. J. Hunter, Lawrence, Kans.—Toxoptera graminum. Damage fifty million bushels grain. It was present in Kansas December, naught six. I am working on it. No good remedy yet.—C. E. Sanborn."

On March 26 letters were sent out to correspondents in the principal wheat-growing sections of the State, asking that the wheat be examined, and if insects of any kind be found therein, that boxes of wheat so infested be sent to this department at once. This resulted in wheat being received from twenty-seven localities up to April 16, as shown in map I, all of which revealed the presence of Toxoptera graminum, commonly known as the green bug, but nowhere was the principal parasitic enemy found. In answer to these correspondents

A Good Paint Test

A man always buys with confidence when he has some special knowledge which enables him to tell good from bad without depending on anyone else.



There is an absolute test for good paint and it requires only a tiny quantity. We will send full instructions together with a blowpipe necessary to make the test, free upon request. Ask for Test Equipment No. 23. We do this to convince you of the absolute purity of White Lead on which the Dutch Boy Painter trademark stands. It makes the best paint.

NATIONAL LEAD COMPANY
in whichever of the following cities is nearest you:

New York, Boston, Buffalo, Cleveland, Cincinnati, Chicago, St. Louis, Philadelphia (John T. Lewis & Bros. Co.), Pittsburgh (National Lead & Oil Co.)

and to many other inquiries, the assurance was given that no serious injury would be wrought in Kansas by this insect. An example of one of many letters is the following:

"April 9, 1907.

"Mr. C. A. Kirkendall, Emporia, Kans.

"I have your courteous letter of the 7th inst. The article referred to by you was written and published without my knowledge or consent. Accordingly, as might be expected, it has some misstatements. In the first place, the insect there named is not the one creating the most damage in the wheat of the South, in the second place, the department is not endeavoring to distribute the predaceous or parasitic enemies of the green bug, known to science as Toxoptera graminum, for the reason that our observations show that these enemies of this pest follow it up faster that we could distribute the parasites. You will doubtless observe them in your fields—a little, black, four-winged fly, a number of small, spotted beetles, and probably one or two species of larger, green, gauzy-winged insects. S. J. HUNTER."

This was my own opinion, and I based these assurances upon experience with the European grain-louse, Siphocoryne avenae, in Kansas in 1901. The green bug, however, is a harder, more active, more prolific species.

GREEN BUG WAS PRESENT IN WHEAT FIELDS.

When, then, on the 14th of April, it was evident from reliable sources, viz., the packages of infested wheat referred to, and reports, after personal examination, of Agent Sanborn, of the Federal Bureau of Entomology, of areas shown in accompanying chart, that the green bug was present throughout the wheat area of the State, and the principal natural enemy, the parasite, was not found anywhere in the State except one point on the extreme southern border; that the weather conditions were such as to hinder, if not preclude, its wide distribution naturally, it seemed but reasonable and entirely fitting that this parasitic insect inimical to the increase of the green bug, should be as widely distributed as possible; the more so when urgent requests were being received by letter, telephone and telegram from wheat raisers, millers, and grain men, asking that something be done.

Accordingly the matter was presented to Chancellor Strong, and \$150 was appropriated for the work. This amount gave an opportunity for a practical test by those most interested, so that in a large measure this initial sum was responsible for the subsequent scope of the work.

THE WORK CARRIED ON AT ENID.

C. E. Sanborn, an agent of the Federal Bureau of Entomology, who at that time was in Kansas, detailed by the Texas Agricultural College, at request of Texas grain dealers, to study the green bug situation, kindly offered to report a favorable location from which to distribute the parasites. On his return trip through Oklahoma he decided upon Enid. Messrs. W. S. Griesa and E. S. Crumb, students in

TEXAS FARM LAND

Rich chocolate loam, clay subsoil; can plow every foot; inexhaustible supply fine water at 25 to 50 feet. Soil equal to the best improved land in state selling at \$50 to \$75 per acre. Price only \$15 per acre. Liberal terms. Address for full particulars, E. F. SNELLBERGER, 729 SHUKERT BLDG., KANSAS CITY, MO.

WIRE FENCE 29¢

48-in. stock fence per rod only

Best high carbon coiled steel spring wire. Catalogue of fences, tools and supplies FREE. Buy direct at wholesale. Write to-day. MASON FENCE CO., Box 83, Leesburg, O.

BROWN PAYS THE FREIGHT

HEAVIEST FENCE MADE

All No. 9 Steel Wire. Well galvanized. Weighs 16 lbs. more than most fences. 15 to 25¢ per rod. Galvanized. Write for free sample for inspection and price. Write for fence book of 188 pages. The Brown Fence & Wire Co., Cleveland, Ohio.

BALL BEARING AUTOMATIC GATE

GUARANTEED THE SIMPLEST, EASIEST TO OPERATE AUTOMATIC GATE ON THE MARKET.

SEND FOR CIRCULARS OF ALL KINDS OF GATES

MONEY REFUNDED IF NOT SATISFACTORY IN EVERY WAY

E. W. ADAMS
ST. LOUIS, MO.

M. M. S. POULTRY FENCE

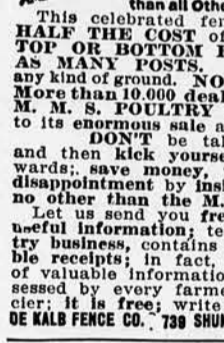
RECEIVES STRONGER ENDORSEMENTS THAN ALL OTHER POULTRY FENCES COMBINED

This celebrated fence can be erected at HALF THE COST of netting; requires NO TOP OR BOTTOM RAIL and only HALF AS MANY POSTS. Easily stretched over any kind of ground. NO SAG OR BAC TO IT. More than 10,000 dealers who are handling the M. M. S. POULTRY FENCING fully attest to its enormous sale and superior merit.

DON'T be talked into a substitute and then kick yourself with regrets afterwards; save money, worry, annoyance and disappointment by insisting upon and taking no other than the M. M. S. Poultry Fence. Let us send you free our 50 cent book of useful information; tells all about the poultry business, contains many rare and valuable receipts; in fact, it is an encyclopedia of valuable information, and should be possessed by every farmer, stockman, and fancier; it is free; write for it today.

DE KALB FENCE CO., 739 SHUKERT BLDG., KANSAS CITY, MO.

USE SAUNDERS' GOPHER EXTERMINATOR



To kill prairie dogs, squirrels, badgers, etc. The apparatus shown in cut forces air through carbon bisulphide direct to holes and runways and is the most effective remedy known.

Price, complete with full directions for using. \$5.00.

FLINT SAUNDERS
Lincoln, Kans.

AUTOMOBILE FOR SALE

A five-passenger, side-entrance, 20 H. P. Touring Car, 1907 Model, slightly used but in good condition. This car is made by one of the best concerns in the country, and bears the manufacturers' guaranty. Speed 45 miles per hour and a good hill climber. Address, E. V. McMILLAN, Box 87, Detroit Mich.

the entomological department of the University, arrived at Enid on the 16th of April, and began sending out parasites on the 17th. For over two weeks they conducted the work there without recompense other than actual expenses. At the end of their stay Messrs. Harold Armsby, Maurice Briedenthal, and Victor Chesky took their places upon the same terms for the same length of time. Messrs. Griesa, Crumb, and Chesky rendered valuable services throughout the work—the first in charge of shipments from Lawrence, the second in the field, and the third in the laboratory.

Through the active cooperation and direction of Thos. M. Potter, a field-station was established on May 20, at Peabody, and shipments made from there. Prof. P. A. Glenn, then of Highland College, and to be acting head of the department of entomology for the coming year at the University of Missouri, came to the work here, making field observations after shipments had closed.

ASSISTANCE GIVEN THE WORKERS.

The fund appropriated by the University was expended before this, of the Bowersock Mill and Power Company, taken the financial part of the work in hand. He first presented the situation to J. D. Bowersock, who at once sent \$100 as a guarantee fund, with the assurance of more if necessary. How well Mr. Jackman carried out his part of the work is best shown by the \$2,316.39 received. A part came too late to be of service that year and so was returned, the guarantors receiving 53½ per cent of their guarantee.

The Bell Telephone Company gave unlimited service over its whole system, an invaluable aid, enabling the department to keep in direct and satisfactory communication with all field-work.

The Wells Fargo, the Pacific, the United States, the Adams and the American Express Companies transported all packages free of charge within the State. In the beginning, the boxes of parasites had been sent by mail at a cost of twenty-four to thirty cents per box. Over 8,500 were transported by these express companies. Transcripts from the companies' books show the total amount of business handled without charge to be \$2,847.30, and express on bulk material from Enid, \$215.63.

(To be continued.)

Arbor Day—1908.

(Continued from page 424.)

He better thereafter. We have long preached, and to a considerable extent practised, the doctrine of home-like and attractive interiors for our schoolrooms. Is it not time that a special effort be made to beautify our school surroundings? The barren and forbidding appearance of thousands of school-grounds in this State is at war with the whole spirit of modern education.

What better time to begin a systematic and State-wide movement for handsome and more attractive school-grounds than Arbor Day? The planting of trees, of shrubbery, of flowers—there is so much to be said in its favor! The argument lies not alone in the economic value of trees, but in the awakening and training that comes to the child in the beautifying of the grounds; pupils in their little republic learn something of civic duty; of their mutual relations to the district, the county and the State. It is also an appeal to the esthetic—the strongest possible ally in the establishing of morality—high standards.

A beautiful school yard in country or town means improved home yards, and such conditions always mean an improved school spirit in the community. The real observance of Arbor Day, the planting of trees, will arouse in the children a desire to know more about trees and plants, and will find its future expression in the homes that they are to build.

In harmony with the inspiring message of the President of the United States, and with the beautiful and timely proclamation of the Governor of Kansas, let every teacher and every pupil join this year in an effort to

plant trees on every school-ground in Kansas.

"Wouldst thou make day more fair, and night more rich and holy,
Winter more keenly bright, and summer's self more dear—
Grant the sweet earth a gift, deep rooted, ripening slowly,
Add to the sum of joys that bless the rounded year?"

"Go, then, and plant a tree lovingly in sun and shadow.
Gracious in every kind—maple, elm and pine.
Peace of the forest glade, wealth of the fruitful meadow,
Blessings of dew and shade, hereafter shall be thine!"

"For though thou never see the joy thy hand hath granted,
Those who shall follow thee thy generous boon may share.
Thou shalt be nature's child, who her best fruit hath planted,
And each of many a spring shall find thy gift more fair."

EDWARD T. FAIRCHILD,
State Superintendent of Public Instruction.

HISTORY OF ARBOR DAY.

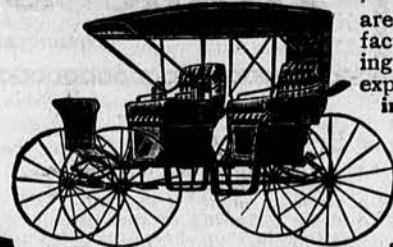
An old Swiss chronicle relates that away back in the fifth century the people of a little Swiss village by the name of Brugg determined to secure a forest of oak trees on the common. more than a dozen sacks of acorns were sown, and after the work was done each participant received a wheaten roll as a reward for his labor. For some reason unexplained the acorns refused to sprout and the next year another effort was made, but again the acorns refused to grow. The people, however, were determined to have an oak grove, so a day was appointed and the entire community, men, women and children, marched to the woods, where each very carefully dug up a sapling and transported it to the common, where a competent gardener superintended its transplanting. At the close of the tree planting each boy and girl was presented with a roll and in the evening the grown people had a merry feast and frolic at the town hall. The saplings were well watered and cared for by details of citizens under direction of the gardener, the work being voluntarily done, but every one was expected to do his share. In the course of years a fine grove was the result, which furnished a place of shade, rest and recreation for the citizens and their descendants. For years the anniversary of this tree planting was observed by the people of this town with appropriate exercises, among them being a parade of the children carrying oak leaves and branches, at the close of which rolls or other eatables were distributed in commemoration of the event. It is said a similar festival still exists in this and other Swiss villages. This seems to be the first recorded effort at organized tree planting and this custom instituted so long ago finds a happy revival in our modern Arbor Day exercises.

The rapid destruction of the forests in our country called attention of students of forestry to the dangers which confronted us and brought forth numerous publications on the topic of forest preservation. In 1864 a work on "Man and Nature," by Geo. P. Marsh, aroused considerable public interest in tree planting, as did also later books by Dr. Franklin Hough and others.

The Hon. B. G. Northrup, secretary of the Connecticut board of education, in his official report for 1865, made the suggestion respecting the annual planting of trees by children, but so far as recorded the suggestion was not acted on. Notwithstanding this fact, and also that Mr. Northrup does not claim the honor of originating the idea, yet much credit should be accorded him, as chairman of the American Forestry Association, for his persistent effort to encourage tree planting by children and to interest governors and legislatures in the plan. His last words to several governors were, "This thing is sure to go. The only question is, shall it be under your administration or that of your successor."

It devolved, however, upon "Treeless Nebraska" to institute systematic tree planting on a given day through the organized effort of schools and citizens. The Hon. J. Sterling Morton is generally credited with originating the idea. In 1872, acting upon

Elkhart Buggies and Harness



are sold direct from our factory to the user. In buying from us you save the dealer's expenses and profits. 35 Years Selling Direct is our record, and we are today

The Largest Manufacturers in the World



selling to the consumer exclusively. We ship for examination and approval, guaranteeing safe delivery. No cost to you if not satisfied as to style, quality and price. Over 200 styles of Vehicles and 65 styles of Harness. Send for new, free catalogue.

Send For New, Free Catalogue

ELKHART CARRIAGE & HARNESS MFG. CO.
Elkhart, Ind.

No. 686. Combination Buggy with Stanhope style seat. Bike gear and extra spindle seat. Price complete, \$64.50. As good as sells for \$75 more.



Cow Peas Should be sown or planted on every farm to renew and conserve fertility—it is purely a business proposition, and a profitable one, too. Ask for samples and prices. ROSS BROTHERS SEED HOUSE, 311 E. Douglas, Wichita, Ks.

All kinds of Pure and Reliable

SEEDS

Seed Potatoes Ask For Prices. Geo. T. Fielding & Sons, Manhattan, Kans.

Fielding's White Pearl SEED CORN Averaged 80 bu. to acre last season. Ask about it

Pure and Reliable SEEDS All Kinds Kansas grown alfalfa seed. Ask for prices. GEO. T. FIELDING & SONS, Manhattan, Kans.



PEACHES! We offer you 1 Elberta Peach Tree, 1 Red Cross Currant Bush, 1 C. A. Green New White Grape Vine, and 2 Live-For-ever Rose Bushes, all delivered to your house by mail for 25 cents, or two of these collections for \$1.00. (Capital \$100.00.) Send for free Fruit Catalogue, and a copy of Green's Fruit Magazine. Established 30 years. Five Nursery Farms. GREEN'S NURSERY CO., Rochester, N. Y.

40 VARIETIES of Berry Fruits that it pays to plant. My 26th annual Catalogue tells the truth about them. B. F. SMITH, Box 7, Lawrence, Kans.

Strawberry Plants for Sale 60 Acres, 60 Varieties. Strong, prolific, hardy. T. J. PUGH, FULLERTON, NEB

his suggestion, the governor of the State issued a proclamation designating Arbor Day and asking that the schools and citizens generally observe the day by appropriate exercises and tree planting. The setting April sun saw over a million trees planted in Nebraska soil as a result of the first Arbor Day celebration. In 1885 Arbor Day, April 22, Morton's birthday, was made a legal holiday in Nebraska. Careful statisticians claim that more than 1,000 million trees are now in a thriving condition in this once "treeless State," through the united efforts of the school children and their parents on Arbor Day.

The originator of the idea lived long enough to see Arbor Day adopted in more than forty States and Territories, to record millions and millions of trees added to the growing prosperity of the States, to note thousands of schoolhouses change cheerless surroundings for those of comfort and beauty, and to feel that in stimulating the planting of trees he had been an active factor in fostering a love for the school, the home and our country.

Minnesota is given the credit of being the first State to follow the lead of Nebraska, with Kansas and Tennessee close seconds. Ohio, Iowa, Illinois, Michigan and West Virginia followed a few years later. The influence of the idea has spread until Arbor Day is celebrated in nearly every State and Territory in the Union. While the schools have been the strongest factor in this forward movement, due credit must be given to the G. A. R., the Grange, Civic Improvement Associations, Women's Clubs, and Forestry Associations that have all worked for the common good. —Illinois Arbor and Bird Day Manual.

SEED CORN

Boone Co. White and Hildreth Yellow Dent.

IMMENSE YIELD, HIGH QUALITY. Our corn took 1st in County; 1st and 2d in Boys' County Contest; 4th and 6th in Boys' State Contest; 2d in Capper Contest; 2d at State Corn Show; 2d, 3d and 6th at National Corn Exposition; 1st and 2d in Yield-per-acre Contest, 1907. Best acre, 114 bushels, 49 lbs. corrected weight, which constitutes the record for Kansas. Best 10 acres, about 1100 bushels, field weight. All corn carefully tested for germination. Carefully selected ears in crates, \$2.50 per bushel; 2d grade shelled, \$1.50 per bushel, f. o. b. at Leavenworth.

J. M. GILMAN & SONS, ROUTE 1, LEAVENWORTH, KANS.

Reid's Yellow Dent

(MARTIN'S TYPE) Winner of 1st prize at Precinct, County, State Fair and State Corn Show; also gold medal winner at St. Louis and Portland, and winner of 1st prize at the National Corn Show at Chicago, 1907, in class E, Nebraska, and 2d prize and sweepstakes at the Kansas Corn Show, 1908. Write for prices.

Ed Flaharty, R. 2, Seneca, Kans



The Great World's Fair Prize-Winning Corn Send to the old reliable seed-corn breeder for your seed corn and other field seeds. John D. Ziller, Hiawatha, Kans. Also breeder of Poland-China hogs and 50 pure Barred Rock hens. Send for catalog

Bilbrook Farm SEED CORN

Buy your seed corn from the man who grows it. We have a large quantity of well-matured, well-selected "Boone County White" corn, that we are selling at \$1.50 per bushel, shelled. Do not delay ordering until it is too late.

H. O. TUDOR, Holton, Kansas.

SILVER MINE SEED CORN

Pure-bred. Recommended by Kansas State Agril College, and grown from their high yielding ear-rows test breeding stock. The kind that fills the wagon box. Write for prices. Maple Hill Farms, R. 6, Lawrence, Kans

Simpson-Eddystone Zephyrette Ginghams

Remarkably durable new dress ginghams of great beauty, fine fabric and absolutely fast colors. These results are obtained by our scientific new process which marks a decided advance in the making of stylish and economical dress ginghams.


New Process Dress Gingham

To insure getting the genuine, be sure to ask your dealer for Simpson-Eddystone Zephyrette Gingham. Write us his name if he hasn't them in stock. We'll help him supply you.

The Eddystone Mfg. Co. Philadelphia



When in Detroit Stop at HOTEL TULLER
New and Absolutely Fireproof.
Corner Adams Avenue and Park St.



In the center of Theatre, Shopping and Business District. A la Carte Cafe. Newest and Finest Grill Room in the City
Club Breakfast.....40c up
Luncheon.....50c
Table de Hote Dinners.....75c
Music from 6 P. M. to 12 P. M.
Every Room Has Private Bath.
EUROPEAN PLAN.
Rates: \$1.50 per day and up.
L. W. TULLER, Prop. M. A. SHAW, Mgr.

HENRY W. ROBY, M. D.
Surgeon,
730 Kansas Ave., Topeka, Kans.

Res. Tel. 775. Office Tel. 192.

L. M. PENWELL,
Funeral Director and Licensed Embalmer.
511 Quincy St. Topeka, Kansas

KANSAS CITY BUSINESS COLLEGE
Dement, Graham, Pitman or Gregg Shorthand Bookkeeping, Telegraphy. Twice as many teachers of Shorthand constantly employed as any other school in the city. Individual instruction. Position secured for graduates. Address CHAS. T. SMITH, Prop., 928 Walnut, Kansas City, Mo.

SALT CITY BUSINESS COLLEGE
HUTCHINSON, KANSAS

POSITIONS SECURED FOR GRADUATES. STUDENTS LEARN EVERY WEEK. THOROUGH COURSES. TUITION REASONABLE. MEMBERSHIP AND SHORTHAND TAUGHT BY MAIL. OWNED AND CONDUCTED BY BANKERS, STATEMEN AND PROFESSIONAL MEN. THE LEADING BUSINESS COLLEGE IN KANSAS. NO SUPERIOR SCHOOL IN AMERICA. SIXTY-FOUR PAGE CATALOGUE FREE. WRITE TODAY.

LAWRENCE Business College
Lawrence, Kansas.

38th YEAR. Thorough Commercial and Shorthand Courses. GOOD POSITIONS for graduates. Write for FREE Catalogue.

Lawrence Business College, Lawrence, Kans.
Address Lock Box F.

BEE SUPPLIES

We can furnish you bee and all kinds of bee-keepers' supplies cheaper than you can get elsewhere, and save you freight. Send for our catalogue with discount sheet for early orders!

TOPEKA SUPPLY HOUSE,
714 and Quincy, Topeka, Kans.

Home Departments

CONDUCTED BY RUTH COWGILL.

SUNSHINE.

A little gold amidst the gray,
That's sunshine;
A little brightness on the way,
That's sunshine;
A little glimpse of the blue,
A little widening of the view,
A little heaven breaking through,
That's sunshine.

A little looking for the light,
That's sunshine;
A little patience through the night,
That's sunshine;
A little bowing of the will,
A little resting on the hill,
A little standing very still,
That's sunshine.

A little smiling through the tears,
That's sunshine;
A little faith behind the fears,
That's sunshine;
A little folding of the hands,
A little yielding of demand,
A little grace to understand,
That's sunshine.

—Stuart Maclean.

The Little Ones.

There are so many hopeful things in the world, so much to prove that the world is growing better and wiser. One of the many hopeful signs is the thought that is given to the weak things, the little things, the helpless and dependent. It is an evidence that the heart of man is greater. It is a sign of higher development and a further removal of the human race from barbarism. The little one born into the world has a much better chance to live and be well than ever before. If there is a spark of life at birth science and skill can make it a healthful being, and this little life that God has given, man thinks it worth while to cherish and save and develop. Among the lower races and classes, in heathen countries, the life of the weak and deformed is not considered worth saving and is left uncared for to die and in many cases is destroyed. Your baby has a very much better chance of life than you had. In London, less than half the children born in the year 1750, lived to be five years old and more than one-third perished in their first year. To-day, in United States less than twenty per cent die before they reach the age of five years and only about ten per cent die in their first year.

The other day there was an account in the papers of a baby's being born that could not live unless the blood from the veins of a healthy and strong person be infused into its own veins, and its father willingly gave of his life blood to save the tiny spark of life in the little one and it is living and growing. Every one knows about the incubator baby that was carefully kept in an incubator until life was sufficiently developed in its little body for it to be able to continue its growth as other babies, and is to-day a healthy, hearty little girl. There are many cases more wonderful than these that show how much thought is given to these little ones and the papers and magazines are full of advise and directions for their care and comfort, so that mothers may, if they will, more wisely care for them and train them. Little ones have had to endure much because of the ignorance of parents and nurses, and doctors I may add. It is a blessing that they do not remember long and that their sensibilities are not so very acute, and it is wonderful that so many resist the evil and survive. Mothers or most of them want to do the best for their child and have a natural instinct for some things they do, but there are some queer notions that have been handed down from one generation to another that ought to be, and are being changed.

The notion that the little one should be kept out of the air and its head be kept bundled is so erroneous. Of all things the baby needs air, fresh, pure air, and plenty of it. It should be kept warm, most certainly, but to put it to sleep with its head under cover it ruinous. Some mothers at night place it next to her own body and put the covers of the bed over its

head so that it must breath over and over, not only its own breath but the impurities that escape from the bodies under cover. It is a wonder it survives. The modern and sensible way is to have it sleep in a little bed of its own, with its little mouth and nose out, so that it may breath the pure, fresh air that comes into the well ventilated room. Some persons put the baby in its carriage warmly covered and let it take its daily nap in the open air even in the winter, being careful that it is in a place that is sheltered from the wind. The latest way to treat pneumonia is in the same manner. So that it can not hurt the healthy infant if it cures the sick one. Upon this subject Dr. Woods Hutchinson says: "Give a child as much fresh, pure milk as he wants, whenever he wants it, as much sleep as he will take, all the sunshine he can get in northern latitudes, and let him live in a gentle current of pure, fresh air day and night, with plenty of room to kick when he feels like it, and most of the possible evils to be dreaded in his horoscope will be averted."

Grass.

Grass is the forgiveness of nature—her constant benediction. Fields trampled with battle, saturated with blood, torn with the ruts of cannon, grow green again with grass, and carnage is forgotten. Streets abandoned by traffic become grass-grown like rural lanes, and are obliterated. Forests decay, harvests perish, flowers vanish, but grass is immortal. Beleaguered by the sullen hosts of winter, it withdraws into the impregnable fortress of its subterranean vitality, and emerges upon the first solicitation of spring. Sown by the winds, by wandering birds, propagated by the subtle horticulture of the elements which are its ministers and servants, it softens the rude outline of the world. Its tenacious fibers hold the earth in its place, and prevent its soluble components from washing into the wasting sea. It invades the solitude of deserts, climbs the inaccessible slopes and forbidding pinnacles of mountains, modifies climates, and determines the history, character, and destiny of nations. Unobtrusive and patient, it has immortal vigor and aggression. Banished from the thoroughfare and the field, it abides its time to return, and when vigilance is relaxed, or the dynasty has perished, it silently resumes the throne from which it has been expelled, but which it never abdicates. It bears no blazonry of bloom to charm the senses with fragrance or splendor, but its homely hue is more enchanting than the lily or the rose. It yields no fruit in earth or air, and yet should its harvest fail for a single year, famine would depopulate the world.—John James Ingalls.

Reaction From Drunkenness Worse Than Drunkenness.

In the April American Magazine "The Interpreter" delivers himself of a tremendously interesting temperance talk. He says, in part: "It is not in drunkenness itself and alone that I find my chief objection to the use of alcohol—although the sight of a reeling, sodden creature in the street, or of a man of more control or habituated to less poisonous drink distorted into a mental shape unbelievable—refined become coarse, witty become commonplace, alert become sleepy, generous become suspicious, gentle become combative, boasting, cruel, defiant, foolishly lustful, absurdly proud, egotistical, jealous, alternating between a disgusting gayety and maudlin melancholy, unsteady, vacant, resentful, and dangerous—is enough to make any thoughtful man resolve never again to 'take a drink.' But drink is not always at its worst when its apparent sway is most complete. The crimes of al-

If You Read This

It will be to learn that the leading medical writers and teachers of all the several schools of practice recommend, in the strongest terms possible, each and every ingredient entering into the composition of Dr. Pierce's Golden Medical Discovery for the cure of weak stomach, dyspepsia, catarrh of stomach, "liver complaint," torpid liver, or biliousness, chronic bowel affections, and all catarrhal diseases of whatever region, name or nature. It is also a specific remedy for all such chronic or long standing cases of catarrhal affections and their resultants, as bronchial, throat and lung disease (except consumption) accompanied with severe coughs. It is not so good for acute colds and coughs, but for lingering, or chronic cases it is especially efficacious in producing perfect cures. It contains Black Cherrybark, Golden Seal root, Bloodroot, Stone root, Mandrake root and Queen's root—all of which are highly praised as remedies for all the above mentioned affections by such eminent medical writers and teachers as Prof. Bartholow, of Jefferson Med. College; Prof. Hare, of the Univ. of Pa.; Prof. Finley, of Chicago, M. D., of Bennett Med. College; Prof. John King, M. D., of Cincinnati; Prof. John M. Scudder, M. D., of Cincinnati; Prof. Edwin M. Hale, M. D., of Hahnemann Med. College, Chicago, and scores of others equally eminent in their several schools of practice.

The "Golden Medical Discovery" is the only medicine put up for sale through druggists for like purposes, that has any such professional endorsement—worth more than any number of ordinary testimonials. Open publicity of its formula is the best possible guaranty of its merits. A glance at this published formula will show that "Golden Medical Discovery" contains no poisonous, harmful or habit-forming drugs and no alcohol—chemically pure, triple-refined glycerine being used instead. Glycerine is entirely unobjectionable and besides is a most useful agent in the cure of all stomach as well as bronchial, throat and lung affections. There is the highest medical authority for its use in all such cases. The "Discovery" is a concentrated glyceric extract of native, medicinal roots and is safe and reliable.

A booklet of extracts from eminent, medical authorities, endorsing its ingredients mailed free on request. Address Dr. R. V. Pierce, Buffalo, N. Y.

The Name of JONES

on a scale guaranteed quality second to none, a fair price, and just treatment from me. I am the man who first dared to fight the scale trust. I was the first to sell my scales on trial to the farmer, and I am to-day selling (as I have for 43 years) a first class scale at a lower price than you can buy the poorest.

I don't ask a penny unless my scale proves to be exactly as represented. Because of these things, give me a chance to sell you.

I make the best of all kinds of scales. You can have my "Reasons Why You Should Own a Scale," by writing

JONES
BINGHAMTON, N.Y.

"JONES, HE PAYS THE FREIGHT"
Box 893 Binghamton, N. Y.

WE SHIP ON APPROVAL

without a cent deposit, prepay the freight and allow 10 DAYS FREE TRIAL. IT ONLY COSTS one cent to learn our unheard of prices and marvelous offers on highest grade 1908 model bicycles.

FACTORY PRICES Do not buy a pair of tires from anyone at any price until you write for our large Art Catalog and learn our wonderful proposition on first sample bicycle going to your town.

RIDER AGENTS everywhere are money exhibiting our great paint offer. We sell cheaper than any other factory. Tires, Coaster-Brakes, single wheels, parts, repairs and sundries at half usual prices. Do Not Wait; write today for our special offer.

MEAD CYCLE CO., Dept. D270 CHICAGO

39¢ A GALLON FOR READY MIXED PAINT

Have you heard of our latest and greatest offers in Ready Mixed House, Barn and other Paints? Comparatively speaking, we have reduced the cost of painting to next to nothing, and made it so easy that a boy can do the work. If you don't know all about our great paint offer, look in one of our Big Catalogues for the Paint Department. If you haven't the Big Book, borrow your neighbor's, otherwise, on a postal card addressed to us simply say, "Mail me your great free PAINT OFFERS AND FREE PAINT BOOKS." Address, SEARS, ROEBUCK & CO., CHICAGO, ILL.

Let Me Pay Postage on My Big Free Book to You

Just write a postal for my Big 1908 Book—shows big line of

Split Hickory Vehicles
—Sold on 30 Days Trial—Guaranteed Two Years—I make all my Buggies to order—sell them direct from factory and let you use them free for 30 days as a test. My Buggy Book gives you full particulars of my offer. Two big factories. H. C. Phelps, Pres., OHIO CARRIAGE MFG. CO., Station 251 Columbus, Ohio.

SUPERFLUOUS HAIR PERFECTLY REMOVED.

I have a safe and positively SURE way to take hairs off face, neck, arms, etc. FOREVER. I HAVE THE TRUE SECRET. Write for information, I send it sealed, FREE. Address ELEN DOUGLAS, 20 E. 22 St. New York

"THE OLD RELIABLE"

DIETZ LANTERNS

THERE ARE NONE "JUST AS GOOD" WHEN YOU BUY A LANTERN INSIST ON A "DIETZ"

MADE BY R. E. DIETZ COMPANY NEW YORK
Largest Makers of Lanterns in the World
ESTABLISHED 1840
PIONEERS AND LEADERS

BUCKEYE MOWER and REPAIRS
Weber Implement Co., 415 N. Main St., St. Louis, Mo.

THE LARGEST AND BEST LINE OF
WELL DRILLING MACHINERY in America. We have been making it for over 20 years. Do not buy until you see our new Illustrated Catalogue No. 41. Send for it now. It is FREE!

Austin Manufacturing Co., Chicago

\$10.00 Sweep Feed Grinder.
\$14.00 Galvanized Steel Wind Mill.

We manufacture all sizes and styles. It will pay you to investigate. Write for catalog and price list.

CURRIE WIND MILL CO.,
Seventh St., Topeka, Kansas

THE KEMPER DISC FURROW OPENER



will increase the yield of corn from 8 to 20 bushels per acre. Guaranteed to pay for itself in one day. Works on any planter. Write for circular and prices.

WALKER MFG. CO., Council Bluffs, Ia.

The Most Powerful Windmill in the World. There is more power in half the wheel to the wind than the old style mill fully in wind. This is an entirely new feature in windmills. More powerful and less parts than any



windmill on earth. Write for price list and catalog.

Atlas Manufacturing Co., Ottawa, Kas

MADE FOR SERVICE IN THE ROUGHEST WEATHER AND GUARANTEED ABSOLUTELY **WATERPROOF**

TOWERS FISH BRAND POMMEL SLICKERS \$3.50

This trade mark and the word TOWER on the buttons distinguish this high grade slicker from the just as good brands

A. J. TOWER CO. BOSTON, U. S. A.
TOWER CANADIAN CO. LIMITED, TORONTO, CAN.

160 Acre FARMS in Western Canada FREE

Illustration Showing Mixed Farming Scene in **WESTERN CANADA**

Some of the choicest lands for grain growing, stock raising and mixed farming in the new districts of Saskatchewan and Alberta have recently been opened for settlement under the **REVISED HOMESTEAD REGULATIONS**

Entry may now be made by proxy (on certain conditions), by the father, mother, son, daughter, brother or sister of an intending homesteader. Thousands of homesteads of 160 acres each are thus now easily available in these grain-growing, stock-raising and mixed farming sections.

There you will find healthful climate, good neighbors, churches for family worship, schools for your children, good laws, splendid crops and railroads convenient to market.

Entry fee in each case is \$10.00. For pamphlet "Last Best West," particulars as to rates, routes, best time to go and where to locate, apply to

J. S. CRAWFORD
125 W. 9th St., Kansas City, Mo.
Canadian Government Agent

coholism, violent explosions of alcoholic mania sometimes murderous in character, are put down in the records. But no one has reported the crimes against the world indirectly resulting from alcohol. It is by the terrors of its indirect results that the alcoholic is driven back to the dangers of its direct results.

"But alcoholic poisoning has not run its course even with the strongest when its first inflammation has subsided. How often have I seen men upon whom great interests depended hesitate from a sheer, unnatural fear of themselves and their powers, to venture on the business of the day before stimulating their degraded nerves anew. They were afraid to sign their own names to papers or checks, to meet their subordinates, to consult with their equals. Their purposes, so bold the night before, shivered and disappeared in the dawn of the morning after. Their courage was turned into timidity; their minds were filled with apprehensions of danger; all their symptoms simulated acute nervous prostration. They were capable only of meannesses and treacheries that fears beget. They dared not venture. They were distrustful of the world and of themselves.

"Can any one tell me that a judge who has sat up all night revelling is fitted properly to administer justice in the morning—that he is not either timid, careless, nervous, apprehensive, afraid to carry out the functions of his office, or, if the drink persists in him, violently prejudiced, irritable and oppressive?"

The Young Folks

JIM JONES.

Jim Jones gets up at half-past four in rain or shine or cold, And leaves the papers at the doors. He's only twelve years old, But my! he's big, and makes me wish I had some work like his. He says to me, "Poor kid; of course you'd like my job. Gee whiz! If you could hear the things I hear, and see the things I see When I get up at half-past four, you'd wish that you was me!" He squints his eyes. "Why, Chub," he says, "I own the whole blame street! And if you knew the things I know you'd say they're hard to beat." "Oh, Jim," I say, "please tell me now what all these things can be." "Not yet," says Jim; "you're lots too young. Wait till you're big like me." "But, Jim, it must be awful cold in winter when it's dark." "Oh, sure," he says, "so fine and cold it's just a perfect lark. Of course I never dare to laugh for fear my face will crack; Nor I can't frown, for it might freeze and turn an awful black. So I just wear a half-way grin, and if my face should freeze, I'd be all right to look at with a cheerful smile to please. "You poor young kid," he says real sad, "I'm sorry as can be Your pa won't let you go to work and see the things I see. I cross my heart they're true," he says each time I talk with him. Oh, dear! why can't I get up, too, at half-past four, like Jim?" —Louise Ayers Garnett in Woman's Home Companion.

Daniel Boone, Indian Fighter.

Daniel Boone will always occupy a unique place in our history as the archtype of the hunter and wilderness wanderer. He was a true pioneer, and stood at the head of that class of Indian fighters, game hunters, forest fellers, and backwoods farmers who, generation after generation, pushed westward the border of civilization from the Alleghanies to the Pacific. As he himself said, he was "an instrument ordained of God to settle the wilderness." Born in Pennsylvania, he drifted South into Western North Carolina, and settled on what was then the extreme frontier. There he married, built a log cabin, and hunted, chopped trees, and tilled the ground like any other frontiersman. The Alleghany mountains still marked a boundary beyond which the settlers dared not go; for west of them lay immense reaches of frowning forest, uninhabited save by bands of warlike Indians. Occasionally some venturesome hunter or trapper penetrated this immense wilderness and returned with strange stories of what he had seen and done.

In 1769 Boone, excited by these

vague and wondrous tales, determined himself to cross the mountains and find out what manner of land it was that lay beyond. With a few chosen companions he set out, making his own trail through the gloomy forest. After weeks of wandering, he at last emerged into the beautiful and fertile country of Kentucky, for which, in after years, the red men and the white strove with such obstinate fury that it grew to be called "the dark and bloody ground." But when Boone first saw it, it was a fair and smiling land of groves and glades and running waters, where the open forest grew tall and beautiful, and where innumerable herds of game grazed, roaming ceaselessly to and fro along the trails they had trodden during countless generations. Kentucky was not owned by any Indian tribe, and was visited only by wandering war parties and hunting parties who came from among the savage nations living north of the Ohio or south of the Tennessee.

A roving war party stumbled upon one of Boone's companions and killed him, and the others then left Boone and journeyed home; but his brother came out to join him, and the two spent the winter together. Self-reliant, fearless, and possessed of great bodily strength and hardihood, they cared little for the loneliness. The teeming myriads of game furnished abundant food; the herds of shaggy-maned bison and noble-antlered elk, the bands of deer and the numerous black bear, were all ready for the rifle, and they were tame and easily slain. The wolf and the cougar, too, sometimes fell victims to the prowess of the two hunters.

At times they slept in hollow trees, or in some bush lean-to of their own making; at other times, when they feared Indians, they changed their resting place every night, and after making a fire would go off a mile or two in the woods to sleep. Surrounded by brutè and human foes, they owed their lives to their sleepless vigilance, their keen senses, their eagle eyes, and their resolute hearts.

When the spring came, and the woods were white with the dogwood blossoms, and crimsoned with the red-bud, Boone's brother left him, and Daniel remained for three months alone in the wilderness. The brother soon came back again with a party of hunters; and other parties likewise came in, to wander for months and years through the wilderness; and they wrought huge havoc among the vast herds of game.

In 1771 Boone returned to his home. Two years later he started to lead a party of settlers to the new country; but while passing through the frowning defiles of Cumberland Gap they were attacked by Indians and driven back—two of Boone's own sons being slain. In 1775, however, he made another attempt, and this attempt was successful. The Indians attached the newcomers but by this time the parties of would-be settlers were sufficiently numerous to hold their own. They beat back the Indians and built rough little hamlets surrounded by log stockades, at Boonesborough and Harrodsburg; and the permanent settlement of Kentucky had begun.

The next few years were passed by Boone amid unending Indian conflicts. He was a leader among the settlers, both in peace and in war. At one time he represented them in the House of Burgesses of Virginia; at another time he was a member of the first little Kentucky parliament itself; and he became a colonel of the frontier militia. He tilled the land and he chopped the cabins and stockades with his own hands, wielding the long-handled, light-headed frontier ax as skillfully as other frontiersmen. His main business was that of surveyor, for his knowledge of the country, and his ability to travel through it, in spite of the danger from Indians, created much demand from his services among people who wished to lay off tracts of wild land for their own future use. But whatever he did, and wherever he went, he had to be sleeplessly on the lookout for his Indian foes. When he and his fellows tilled the stump-dotted



Build Your Home OF Concrete Blocks

Desirable as Brick
Durable as Stone **Cheap as Wood**
Cement, Gravel and Sand are the only materials necessary—experience not essential. We furnish simple instruction which will enable any man to operate our machines and to succeed in the manufacture of concrete blocks and bricks. Concrete construction while long used in bridges and heavier masonry has only sprung into general use within the last few years. The great reduction in the price of cement, the presence in every community of all necessary raw materials, make it possible and even of great advantage to use concrete blocks or bricks in general construction. Homes, Churches, Schools, Stores, Warehouses, Public Buildings, Barns, Milk Houses, Fences, Walls, &c. all over the country are being built of blocks and bricks made with our machines. We are now putting up the largest mercantile building in the world out of concrete.

Special Concrete Machine Book—Just off the press. Full information about the machines and how to do the work. Lowest prices ever quoted. Go into the business of making blocks and bricks for your community. Men do it on an investment of less than \$75 and are making money.

Send for book today to **Montgomery Ward & Co**

\$17.50



Our 2 H. P. Gasoline Engine complete—ready for work, guaranteed Satisfaction. Send for book today.

\$51.00

Branch House, Kansas City 56
Montgomery Ward & Co.
Michigan Ave., Madison & Washington Sts., Chicago

If It's Neuralgia

and those sharp, shooting, agonizing pains drive you almost crazy, take **Dr. Miles' Anti-Pain Pills**, and get relief. They drive out the pain by their soothing effect upon the nerves. When taken as directed they are harmless, and leave no bad after-effects. That's the reason they are so popular with all who use them. Your druggist can tell you what others in your locality think of them.

"I do positively think that Dr. Miles' Anti-Pain Pills are the best medicine ever put upon the market. I find them so restful and soothing, and without any bad after-effects. I have suffered with neuralgia so that my system would just ache and quiver, and I cannot take opiates; but I can take these tablets, and they always relieve me. No one that suffers with neuralgia need fear to take them as I knew they will not form a habit, for if there was any opiate in them I could not take them. Just one in the morning when I feel bad, and I can do my work all day."

MRS. W. H. BURKETT, Macon, Ga.

Dr. Miles' Anti-Pain Pills are sold by your druggist, who will guarantee that the first package will benefit. If it fails, he will return your money. 25 doses, 25 cents. Never sold in bulk.

Miles Medical Co., Elkhart, Ind

2941 Hidden Name, Friendship, Silk Fringe, Envelope and all other kinds of GARD and Premium Articles. Sample Album of Finest Cards and Biggest Premium List, all for a 2-cent stamp. OHEO GARD COMPANY, GARD, OHIO.

ENLARGED PORTRAITS.

If you have a tintype or photo you would like an enlarged send it to us with \$1.00 and we will make you a beautiful enlargement mounted and hand-colored in crayon colored. Shipped prepaid. Will positively improve the original in any way. Crescent Portrait Co. 417 East 12th St., Kansas City, Mo.

fields of corn, one or more of the party were always on guard, with weapon at the ready, for fear of lurking savages. When he went to the House of Burgesses he carried his long rifle, and traversed roads not a mile of which was free from danger of Indian attack. The settlements in the early days depended exclusively upon game for their meat. Boone was the mightiest of all hunters, so that upon him devolved the task of keeping his people supplied. He killed many buffaloes and pickled the buffalo beef for use in winter. He killed great numbers of black bear, and made bacon of them, precisely as if they had been hogs. The common game were deer and elk. At that time none of the hunters of Kentucky would waste a shot on anything so small as a prairie chicken or wild duck; but they sometimes killed geese and swans when they came South in winter and lit on the rivers. But whenever Boone went into the woods after game, he had perpetually to keep watch lest he himself might be hunted in turn. He never lay in wait at a game lick, save with ears strained to hear the approach of some crawling red foe. He never crept up to a turkey he heard calling without exercising the utmost care to see that it was not an Indian; for one of the favorite devices of the Indians was to imitate the turkey call, and thus allure within range some inexperienced hunter.

Besides this warfare, which went on in the midst of his usual vocations, Boone frequently took the field on set expeditions against the savages. Once when he and a party of other men were making salt at a lick, they were surprised and carried off by the Indians. The old hunter was a prisoner with them for some months, but finally made his escape and came home through the trackless woods as straight as the wild pigeon flies. He was ever on the watch to ward off the Indian inroads, and to follow the war parties and try to rescue the prisoners. Once his own daughter and two other girls who were with her were carried off by a band of Indians. Boone raised some friends and followed the trail steadily for two days and a night; then they came to where the Indians had killed a buffalo calf and were camped around it. Firing from a little distance, the whites shot two of the Indians, and, rushing in, rescued the girls. On another occasion, when Boone had gone to visit a salt lick with his brother, the Indians ambushed them and shot the latter. Boone himself escaped but the Indians followed him for three miles by the aid of a tracking dog, until Boone turned, shot the dog and then eluded his pursuers. In company with Simon Kenton and many other noted hunters and wilderness warriors he once and again took part in expeditions into the Indian country, where they killed the braves and drove off the horses. Twice bands of Indians, accompanied by French, Tory, and British partisans from Detroit, bearing the flag of Great Britain, attacked Boonesborough. In each case Boone and his fellow-settlers beat them off with loss. At the fatal battle of the Blue Licks, in which two hundred of the best riflemen of Kentucky were beaten with terrible slaughter by a great force of Indians from the lakes, Boone commanded the left wing. Leading his men, rifle in hand, he pushed back and overthrew the force against him; but meanwhile the Indians destroyed the right wing and center, and got round in his rear, so that there was nothing left for Boone's men except to flee with all possible speed.

As Kentucky became settled Boone grew restless and ill at ease. He loved the wilderness; he loved the great forests and the great prairie-like glades, and the life in the little lonely cabin, where from the door he could see the deer come out into the clearing at nightfall! The neighborhood of his own kind made him feel cramped and ill at ease. So he moved ever westward with the frontiers; and as Kentucky filled up he crossed the Mississippi and settled on the borders of the prairie country of Missouri, where Spaniards, who ruled the ter-

ritory, made him an alcade, or judge. He lived to a great age, and died out on the border, a backwoods hunter to the last.—Theodore Roosevelt, in Kansas City Star.

The Little Ones

MAMMY'S LI'L' HONEY-BEE.

BY B. MCDUFF.

Now, Dimple, honey, shet yo'h eyes,
An' mammy'll sing a song;
She's sung it many a time befoh.
She don' know jes' how long.
It's 'bout de 'possums in de woods,
De squirrels in de trees;
De ants a wo'kin' all day long,
Jes' like de honey-bees.
De 'possums, dey is berry smart,
An' p'ten's to be asleep;
An' when yo'h ain't a lookin' shaph.
Dey up, an' plays bo-peep.
De squirrels is so berry wise,
Dey runs about de groun',
An' hides de good nut in de trees.
Wah dey is safe an' soun'.
De ant is berry li'l' folks,
Dat keeps agoin' roun'.
An' wo'kin' hiah an' wo'kin' dar,
At all dat can be foun'.
But oh! de li'l' honey-bees,
Dey flit from flower to flower.
An' sip de sweets an' stoh dem up,
To hab in winter hour.
An' so I wants my li'l' gal,
To be a honey-bee,
An' sip de sweets she gits in life,
An' stoh dem up, you see.
Kaze mammy knows dat latter life,
Am sometimes not so sweet;
Her wants to make a nice smooove paf'
F'us dese he'h li'l' feet.

An April Fool Dog.

Oh, Mr. Patch was the crossdest man you ever saw! He used to sit at the window every night when school was out, just to watch us go by and see that we did not "trespass" on his land. If one of the boys put his foot on the grass, the window would fly open, and he would call out, "I can't have that boys; I can't have that." Such a creaky voice. He wasn't nice to look at, either. His skin was yellow and the bones showed through.

We knew he did not like children, and we were pretty sure he did not like pets, for there was nothing stirring around the house; it was just like Sunday there all the time. And there was not a flower anywhere, only grass and trees. It was a pretty house, though; and I liked to look at it, and I wished he was not always at the window watching. I think he noticed me looking a good deal, and that was why he "suspicioned" me, as my little brother said, when we April-fooled him.

One day—it was almost the first of April—two little girls came by our house. They were twins. They had just had a birthday, and Little Brother and I went to the party. That was yesterday; the day before the day I am speaking about. They each had a paper dog in their hands. When they were going by our house, one stopped, took the dog away from the other threw it on the grass and stamped on it about a dozen times, I should think. Such a naughty girl! Then she took it up and showed it, all mud, to her sister and said: "You don't care, do you?"

And if you will believe it, that little mite was so full of birthday party that she just did not care, and never said a word. How glad I was; I knew the naughty girl thought her sister would want the other dog, and cry for it. I went out and picked up the poor dog, rinsed the mud off of him, and he was almost as good as new. That night before supper I sat out on the doorstep with the dog beside me, playing he was alive and trying to think of some real funny April-fools, when Mr. Patch walked by so stiff and solemn. He had a long brown envelope in his hand, and all at once I thought it; the funniest April-fool!

I called Little Brother and told him: "I am going to buy a long, brown envelope and put Ponto"—I had named the paper dog Ponto—"in it, and tie a string through the corner and hang it on Mr. Patch's door. He will think it is something very important, and oh, how funny it will be when he opens it!"

Just then I heard a swish like long skirts, and I looked over my shoulder and mama stood there. I thought by the look on her face she had heard what I was telling, and was not pleased, but she said just as sweet, "That is a good idea, children; Mr. Patch needs something to cheer him

The children's laxative—Cascarets. Candy tablets, pleasant to take, gentle in their effects. Throw out the old-time physics.

Look back at your childhood days.
Remember the physic that mother insisted on once in a while
—castor oil, salts or cathartics.
How you hated them. How you fought against taking them.
How you dreaded their after-effects.
That was all wrong, but then nobody knew better.

With our children it's different.
They belong to the day of the gentle in medicine. The day
of harsh physics is over.
We don't force the bowels now; we coax them.
We have no dreaded after-effects.
And the dose is a candy tablet.

Mothers who cling to the old form of physic simply don't
know what they do.

The children's revolt is well-founded.
Their tender bowels are harmed by them.
The modern way is to give a gentle laxative, and to give it
more frequently. To keep the bowels always active.
The best method is Cascarets. One-half a tablet, as often as
needed, does more than anything else to keep a child well.

Cascarets are candy tablets. They are sold by all druggists,
but never in bulk. Be sure you get the genuine, with CCC on
every tablet. The price is 50c, 25c and

Ten Cents per Box

802

Topoka Business College

The School that always gets you a good position in

BOOKKEEPING
SHORTHAND
TELEGRAPHY
CIVIC SERVICE or
FRENCH

L. H. Strickler

Address

TOPEKA BUSINESS COLLEGE, Topeka, Kansas

CROUP! CROUP!

Barnes' Croup Grease

A Sure Cure For Croup.

Relieves cold, croup on the lungs, and prevents pneumonia and diphtheria. Sold by all druggists.
Price 25c and 50c.

Mfd. by NATIONAL CHEMICAL CO., Caney, Kans.
If not in drug store, mailed postpaid on receipt of price.

"Cyclone" Ornamental Fence and Gates

Will Add 50% to the Beauty of Your Front Yard



Every home owner who takes pride in the appearance
of his home should write today for our Free Picture Book
of Ornamental Fences and Gates, which tells how, at mod-
erate cost, he can have the finest looking and most desirable
fence in his entire neighborhood. A poor fence is a dis-
grace to a front yard. It gives the place a "run-down"
appearance. You will be proud of CYCLONE Ornamental
Fence and Gates. Write for Free Book and Low Prices.
CYCLONE FENCE CO., Dept. 33, WAUKEGAN, ILL.

RANGER REVOLVING BARBED WIRE

The only Rotary barb
made. The barbs re-
volve around the main wire; cannot
bunch together, spaced only 3 inches
apart, pointing in all directions produces
absolutely the most effective, and the only
Humane Barb Wire made. Ranger barbs
scratch and slip from an animal, while the
rigid, old style vicious barbs suck in under the
skin and tears out, doing great damage to the
animal. The Ranger being constructed from
special high tension springy steel, con-
centrated into one wire enables us to produce
a wire of great strength and elasticity, that will not
sag, stretch or slack like the common twisted
wire. Easy to handle and easy to stretch; more
durable than the common kind because the galvanizing is

not cracked or the fibres of
steel broken and weakened by
twisting. The Ranger in addition to being the
only Humane Barb Wire, most effective,
durable and strong, costs you 25 to 50
per cent less than the common vicious, rigid
barb wire. Why take chances on having a
valuable animal ruined when you save 25 to
50 per cent in the cost of your fence by using
Ranger Humane Wire. Write us at once,
stating number of rods of barb wire fence
you expect to build, and we will send sample
of Ranger naming you price, freight
paid to your railroad station, with our absolute, pos-
itive guarantee that goes with each spool of Ranger Wire.
KLEFS MANUFACTURING CO.
BLOCK 59 KANSAS CITY MO.

Blacklegoids

Simplest, Safest, Surest Vaccination
for the prevention of
BLACKLEG IN CATTLE
NO DOSE TO MEASURE. NO LIQUID TO SPILL. NO STRING TO ROT.
Just a little pill to be placed under the skin of the animal by a single thrust of the
instrument. You cannot afford to let your cattle die of blackleg when a few
dollars spent on Blacklegoids will save them. Write for circular.
PARKE, DAVIS & COMPANY
HOME OFFICES AND LABORATORIES, DETROIT, MICH.
NOTICE.—For a limited time we will give to any stockman an injector free with
his first purchase of 100 vaccinations.

up, he is so lonely." Then she told us about his little boy that ran off once when he was a big boy and never came back, and how he liked to watch the boys and girls and think of his boy when he was little. And how he always left the shade raised in the veranda so a light would shine out a welcome for his boy when he came back.

Then we went in to supper, and after supper mama brought out a long blue envelope and wrapped Ponto in a sheet of blue paper, and I wrote on it—mama told me what to say—"You need not handle with care; I am tough."

"Now," said mama; "let us write a story about Ponto." Oh, but it was a funny story; I'll tell it to you. But you mustn't laugh as much as I did, for you can't listen so well. Mama made some of it, and I made some.

"Knowing there was no dog in your family, I thought one might be a welcome addition. His name is Ponto. He is a well-behaved dog, but he came into my hands through the misbehavior of a little girl." (Then we told about the twins.) "He will stand up nicely, but you see he hasn't any tail, so I thought I would send a tale along with him. It fits well. You see how all things work together for good. If the little girl had not stamped on Ponto and deserted him, he might have lived with her many days to be abused and at last cremated." (That means burned up, you know.) "Now he has found his way to the tender mercies of a kind-hearted gentleman. Ponto will never desert his master; he always sleeps with both eyes open, and never changes his coat. He is not afraid of burglars, and it costs nothing to keep him. You may search longer and go farther and not find the equal of Ponto, your April-fool dog."

Mama put a stamp on the envelope and we put it in the postoffice, like a truly letter, the next day. We watched all day for Mr. Patch to go to the post-office, and he did not go until most dark. We crept over as still as mice as soon as he had gone into the house. He looked mad at first, but pretty soon he laughed; then we ran home.

The next day Little Brother and I went to the store for mama, and we saw a tall man standing by the big oak where the brook runs under the road. We always stop there and listen to the brook. I smiled at the man and Little Brother said: "Dood mornin'. Mister Man." He asked us a lot of questions and said: "Does Mr. Nathan Patch live in this town now?" And I told him: "Yes, and he is terrible lonesome and wants his little boy to come home." Then he started off quick and we ran after him as fast as we could, and he went right into the house without knocking. We ran home and told mama, and she thought it must be the little boy come home. She said we had helped God to send Mr. Patch's little boy back to him. If it hadn't been for Ponto we couldn't have helped I guess for I shouldn't have found out about the little boy and I should have said to the man: "Yes, Mr. Patch lives here and he's the crossiest man you ever saw," and may be he'd have been awful scared and run away.

And it was the little boy come home, and after dinner we were all invited over to Mr. Patch's house and we had the loveliest time, and Ponto stood up on the mantel over the big fireplace.—Mabel Gifford, in *Pets and Animals*.

Instead of putting your property in your wife's name, try putting your conduct there.

"Disproportionableness" is considered the longest classified word in the English language.

"Somebody did a golden deed; Somebody proved a friend in need; Somebody sang a beautiful song; Somebody smiled the whole day long; Somebody thought 'Tis sweet to live; Somebody said 'I'm glad to give; Somebody fought a valiant fight; Somebody lived to shield the right; Was that somebody you?"

To Plant Pure-Bred Seed Corn.
At a cost of about 20 cents per acre with such leading varieties as Boone County White, Imperial, St. Charles, Legal Tender, and Banner Yellow Dent would be the best investment a farmer could make. For prices and particulars write W. D. Kuhn, Holton, Kans., the largest seed corn distributor in the State.

Mayer's
HONORBILT
SHOES FOR MEN

"Built on Honor"

must be worn to be appreciated. They have snap and style, as well as strength and durability.
HONORBILT SHOES are carefully and capably made throughout—flawless and faultless in every detail.
 The very best oak tanned, time seasoned, tough and durable sole leather, as well as the finest upper leather, is used in making them.

HONORBILT SHOES
ARE QUALITY SHOES. It is this high quality and perfect workmanship that makes them wear longer, fit better and give greater satisfaction than any other shoes you could buy for the same price.

Your shoe dealer will supply you; if not, write to us. Look for the **MAYER** trade mark on the sole.

We also make the **LEADING LADY SHOES, MARTHA WASHINGTON COMFORT SHOES, SPECIAL MERIT SCHOOL SHOES,** and a worthy line of **WORK SHOES.**

F. MAYER BOOT & SHOE CO.,
MILWAUKEE, WIS.

Club Department

Officers of the State Federation of Women's Clubs.
 President.....Mrs. Eustace H. Brown, Olathe
 Vice-President.....Mrs. C. E. Trott, Junction City
 Rec. Secretary.....Mrs. F. B. Wheeler, Pittsburg
 Cor. Secretary.....Mrs. Charles C. Shoales, Olathe
 Treasurer.....Mrs. C. W. Landis, Osborne
 Auditor.....Mrs. M. S. Munson, Eldorado
 General Secretary.....Mrs. C. C. Giddard, Leavenworth
 General Director.....Mrs. W. A. Johnson, Topeka

Our Club Roll
 Excelsior Club (1903).....Fotwin, Butler Co.
 Women's Literary Club (1903) Osborne, Osborne Co.
 Women's Club (1902).....Logan, Phillips Co.
 Domestic Science Club (1902).....Osage, Osage Co.
 Ladies' Social Society No. 1, (1898).....Minneapolis, Ottawa Co.
 Chautau Club (1902).....Highland Park, Shawnee Co.
 Cultus Club (1902).....Phillipsburg, Phillips Co.
 Literateur Club (1902).....Ford, Ford Co.
 Star Valley Women's Club (1902).....Tola, Allen Co.
 West Side Forestry Club (1902).....Topeka, Shawnee Co., Route 8.
 Fortnight Club (1903).....Grant Township, Reno Co.
 Progressive Society (1903).....Rosalia, Butler Co.
 Plesant Hour Club (1898).....Wakarusa Township, Douglas Co.
 The Lady Farmer's Institute (1902).....Marysville, Marshall Co.
 Women's Country Club.....Anthony, Harper Co.
 Richardson Embroidery Club (1902).....Madison, Greenwood Co.
 Prentiss Reading Club (1902) Cawker City, Mitchell Co.
 Cosmos Club.....Russell, Kans.
 The Sunflower Club (1904).....Ferry, Jefferson Co.
 Chaldean Club (1904).....Sterling, Rice Co.
 Jewell Reading Club.....Osage Co.
 The Mutual Helpers (1906).....Madison, Kans.
 West Side Study Club (1906).....Delphos, Ottawa Co.
 Domestic Science Club (1906) Berryton, Shawnee Co.
 Mutual Improvement Club (1908).....Vermillion, Marshall Co.
 Clio Club (1907).....Columbus, Kans.
 Centralia Reading Circle.....Nemaha Co.
 White Rose Branch (1907).....Syracuse, Kans.
 Cedar Branch (1907).....Lookaba, Okla.
 Girls Fancy Work Club.....Princeton, Franklin Co.
 Silver Prairie Club (1907).....Wauneta, Kans.
 The Ladies Mutual Improvement Club.....Crawford Co.

(All communications for the Club Department should be directed to the Club Department, Kansas Farmer, Topeka, Kans.)

Ladies' Mutual Improvement Club.

This club sends in a yearly report for the year 1908. We have a Mutual Improvement in Marshall County, but this is a new one on our roll and is in District 68, Grant Township, Crawford County. We are glad to have it among our number and hope to hear from it often and at length. They have enrolled eighteen members, one of which was removed by death and two moved away, but the vacancies were filled by others. Last year they held seventeen meetings. Their programs consist of quotations, reading, recitations, and music, both instrumental and vocal, and graphophone selections. They improved the time also by quilting and sewing carpet rags. May Rallsback is the secretary and treasurer.

Program.
 I. The Little Ones.
 II. Feeding the Baby.
 III. Shall we Let the Baby Cry for What it Wants?

HOW ABOUT THE LITTLE FOLKS?

You take the best of care of them, feed them, clothe them, and are now planning on how to educate them.



They are your joy, your comfort, your very life, you shield them from every danger.

If you knew of an open well on your place and one of them should fall into it you would feel guilty because you could have prevented it had you acted in time. If any other danger threatened your family you would hastily guard against it—the only exception is lightning. Hundreds of people are killed each year by lightning and thousands more are crippled for life just because they neglect to protect themselves.

It is conceded that where proper Lightning Rods are properly erected there is no danger to life and no loss of property—any authority will tell you so, your encyclopedia, your professor, or the editor of your best farm paper.

You may never have considered the matter carefully or without getting any authority on the subject have said, "There is nothing in it." If that is true we want to send you some testimonials and some quotations from men who have made these things a life study. Just drop us a line and we will send information that will be of value to you.

You owe it to yourself and to your family to go to the bottom of the lightning rod question. It may mean life or death—and the loss of a home.

Just drop us a line and say you want to post up a little on the subject of Lightning Rods and we will send free of charge some things of value to you.

Now is the time—for now you have not suffered loss, and tomorrow may tell a sad story

DODD & STRUTHERS, DES MOINES IOWA
 Makers of Lightning Rods that keep out the Lightning.

IV. Fresh Air and Exercise.

I. This program will appeal to the mothers and many helpful suggestions will be gathered from the papers and discussions.

II. What is the best artificial food for the infant when the natural food is not available and how and when should it be fed? Some mothers feed at given times, and some think it should have it when ever it acts hungry.

III. Let this be discussed freely, one woman opening the discussion and all joining in afterwards.

IV. If some mother who has brought up a large family would give her own experience with her babies, and how she managed them, in regard to air and exercise it would be very interesting.

He who does one thing right has accomplished more than he who tries to do a hundred.

IMPORTED HARTZ MOUNTAIN AND ST. ANDREASBERG CANARIES
 For particulars address DEER LAKE PARK, SEVERY, KANSAS.

The Club Member

A Monthly Magazine published for women by women. It contains these departments: Editorial, Schools and Colleges; The Club Woman; The W. K. D. C.; The D. A. R.; The W. R. C.; The Woman Who Votes; Notes on Bible Study; Children's Hour; Us Men; Among the Books. Send for sample copy to Club Member Publishing Co., Topeka, Kan.

Pay When You Are Well

for Piles and Gonor. No knife or Muzzing. Not detained from work. Call or write. Will furnish treatment.
W. J. LANKFORD, M. D.,
 Phone 728, Hertzick Bldg. OKMUTZ, KANS.

Dairy Interests

Jerseys or Holsteins.

I have at present a Jersey bull, a grade, but I want an improvement in the herd. I will either get another Jersey or a Holstein. Are the pure-bred Jersey cows, as a rule, inclined to be so nervous that a stranger will make trouble by going into the milk stable? Are they more particular and nervous than the Holsteins? I sell the cream and feed the skim-milk to the hogs and calves. Would there be any great advantage in having the Holsteins on account of the greater amount of milk I would have?

Cowley County. G. H. RHODES.

It is certainly a step in the right direction, to dispose of the grade sire, which you are now using in your herd. There is no greater impediment to the best dairy progress in our country today, than the practise of using grades, instead of pure-bred sires among dairy herds. There would be an advantage in using a Jersey sire in this instance, since greater progress should be made in grading up the grade Jerseys, which you already have in your herd.

The Jerseys like all of our high-bred dairy stock, are high strung and of a nervous temperament, since upon these qualities largely depends the ability of the animals, to produce a large yield of milk and butter. It is hardly fair, however, to say that this is a characteristic of any particular breed. The trouble which you mention about have strangers present in the stable, has doubtless been somewhat exaggerated, although our best dairy stock is very sensitive to any unusual excitement. The presence of dogs, children, and strangers in the stable at milking time, is not desirable, and will under some circumstances, affect the milk yield of the herd.

The feeding value of skim-milk to calves and pigs, ranges from 15 to 25 cents a hundred, and their might be some advantage in having a larger amount of skim-milk, to feed your animals. This will depend largely upon the kind and amount of work you are doing. What should govern your selection of any breed, should be your preference in the matter. The dairyman in order to be successful in his breeding operations, must be in love with his work, and he handling the kind of stock which he has the greatest faith in.

J. C. KENDALL.

Feeding the Dairy Cow.

To achieve the highest degree of success in the management of a dairy at any time in the year, one should know the requirements and possibilities of each individual cow. The man to whom every dairy animal is only a cow, has yet to learn the first lesson in his business. The proper beginning then, is to know the herd with which we have to deal.

I believe October and November are good months in which to have the cows come fresh: August and September abound in flies, in short pastures, and in labor upon the farm. They, therefore, constitute an opportune season for the cow's vacation. From four to six weeks is long enough, as a rule, for an animal to rest. As she nears the period of freshening, care should be given to her ration. Since the discovery of the new air treatment for milk fever, the danger of overfeeding at this time has been largely removed. There is no other period in the life of a cow when it is so essential that she should be strong and healthy. If pastures are good, she needs nothing better, but if they are short and brown a small grain ration should be added as the time of calving approaches.

The herd should be sheltered always from the cold fall rains. Summer showers do not harm, in fact they are a source of enjoyment to the cows, but the practise of leaving them out all day, and often all night, during the cold winds and rains of October and November can not be too strongly condemned.

A VERY IMPORTANT MATTER

is to get the cows onto a winter ration without a decrease in the flow of milk. This can be accomplished in but one way—it must be done so gradually that the old cow never knows by her bill of fare where summer leaves off and winter begins.

It is hard to imagine a winter dairy without a silo, and we shall not attempt it here. Begin feeding the ensilage early, in small quantities at first, giving more, of course, to cows that are in milk. Give a small allowance of clover hay and grain gradually increasing all as the pastures fail. The cow that has just freshened should receive a moderate ration at first and, while no infallible rule can be given, an increase of half a pound of grain every other day until the full flow of milk is obtained, will be found to work well in the majority of cases.

The amount and kinds of grain to be fed will depend upon the ability of the cow to assimilate it, and, in some degree, upon what we have at hand. However, we must balance the ration properly. To do this is always economy, providing the cow is what she should be. It is much cheaper to balance the ration ourselves than to let the cow do it for us.

Suppose, for example, that cornmeal is the only grain fed to a cow capable of giving 35 pounds of milk per day. From 2½ to 2¾ pounds of protein would probably be required in the production of that amount of milk. Were she to get 40 pounds, of ensilage and 10 pounds of mixed hay, she would require about 1¾ pounds of protein in her grain ration. To get this from cornmeal alone she would have to have from 20 to 22 pounds. Of course, this would be practically impossible for any great length of time. But suppose it were entirely possible, she would balance the ration only by using the necessary amount of carbohydrates and avoiding the rest.

"Corn is king!" It should have its place in the ration of the dairy cow and the fattening steer. The sum of the corn crop always indicates with more or less accuracy, the amount of pork production, but corn alone is not a complete ration for any farm animal. The ratio of 1 pound protein to 5 or 5½ pounds of carbohydrates will constitute

AN IDEAL DAIRY FOOD,

providing it is palatable and assimilated without too much difficulty.

From 1½ to 3 pounds of protein per day will be required by the cow. The amount should be determined in each individual case by the ability of the animal to turn it to profitable account

FOR 16 YEARS THE BEST!

**STILL BETTER
IN 1908**

**UNITED STATES
Cream Separators.**



The United States has always, since its introduction, separated more cream from the milk, and has done it more thoroughly and quickly than any other separator. The figures of the public national and international tests demonstrate this.

THE 1908 MODELS HAVE IMPROVEMENTS

which make the handling of milk still easier, quicker and more profitable. They do their work more efficiently, more economically than any other, and are built to wear. In spite of the fact that the demand is greater than ever before, and that dairymen everywhere are exchanging other makes for the reliable and efficient United States, the standard separator, we are prepared to make prompt deliveries anywhere.

Write to-day for "Catalogue No. 91 and any desired particulars
VERMONT FARM MACHINE CO., Bellows Falls, Vt.
Distributing warehouses at: Chicago, Ill., La Crosse, Wis., Minneapolis, Minn., Kansas City, Mo., Omaha, Neb., Toledo, O., Salt Lake City, Utah, Denver, Colo., San Francisco, Cal., Spokane, Wash., Portland, Ore., Buffalo, N. Y., Auburn, Me., Montreal and Sherbrooke, Quebec, Winnipeg, Man., Hamilton, Ont., Calgary, Alta.

Where Goes Your Cream

—Into Calves at 6 Cents a Pound
or Butter at 30 Cents a Pound?



Here's a little problem that may touch your pocket-book. Isn't it like throwing money away to feed cream to the calves? That's exactly what you do when you feed milk that has been imperfectly skimmed by a cheap or inferior separator.

A Poor Separator is but little better than none—it gets only two-thirds of the cream (when it works)—is usually out of order—is hard to run—is too high to reach, and has a dozen or more things to wash. That kind of Separator is dear at any price.

You don't make such a mistake with the

**National
Cream Separator**

It gets all the butter-fat. We know this to be true of every National before it leaves the factory. It has got to show by actual test that it does perfect work before it goes to the buyer. We know also that it will continue to do this kind of work—run just as smoothly—skim just as closely—

year after year for a lifetime. We are not content to sell you a separator "just as good" as the others. It must be better than any other. That's why the National stands for Quality—Durability—Satisfaction. All the mistakes of the others have been cut out. The good points of the National have been acquired only through many years of careful experiments and tests. It's the machine that means Real Economy in the long run. Think it over.

Our Free Illustrated Catalog tells you all about the National—the machine that has only two parts to clean in less than three minutes—the machine that stands alone in simplicity—the machine that is used by 40,000 satisfied farmers and dairymen.

Write today—it will save you money. Ask for No. Y2. Our Free Trial Proposition will interest you. Address nearest office.

**National Dairy
Machine Co.
Chicago, Ill.,
and Goshen, Ind.**

**A \$10
Separator**



Would be about as much use to you as a \$10 cow

You'd never in the wide world think of trying to run a dairy with a lot of scrub cows, and you know full well it would be just throwing money away to have a separator that wouldn't skim all the cream. If you're like most farmers you've had to work hard for what you've got and you just can't afford to put your good, hard-earned dollars into a separator of any kind until you have at least seen the

**Peerless
Cream Separator**

The only machine with combination of hollow and disc bowl—gives double capacity—the hollow bowl doesn't break the large fat globules—you know that means more butter from every gallon of cream you churn; or a better price if you sell the cream. There are a dozen points where the Peerless Separator is different from all others, and every single point of difference will help you to get more profit out of your dairy. Haven't room to tell you ALL about it here—but send for our catalog and look it over pretty carefully—it will be money in your pocket. Write us today while the matter is fresh in your mind.

**Waterloo Cream Separator Company
Dept. C, Waterloo, Iowa**

The Biggest and Best Cream Separator Bargain Ever Offered the Farmer.



\$31.25

No difference what propositions have been made before or what prices have been quoted to you, I can prove that this is the best cream separator proposition you ever saw. The Monarch machine is one of the best machines on the market to-day, and in order to introduce it into every community I am going to make a proposition for the next ten days that will positively make any farmer that has as many as three cows more money than any other proposition he has ever had. I am making a special proposition and a special price, and it will pay you big to make a deal with me at once.

I am not going to tell you that every farmer writing me will receive this proposition, but I will make it to the first one writing me from each neighborhood. That is why I want you to tell me just how far you live from town and in what direction, for I am going to give one man in your neighborhood a chance to own a Monarch Cream Separator in a very short time without having one cent invested in it.

There are thousands of Monarch Cream Separators in use to-day and every one of them stands as a witness to their superior quality. I sell them under a positive guarantee to be first class in every respect, extra high grade and standard machines. They have always before been sold through the dealer and I am now simply to introduce them into new localities. Write me to-day for my catalogue and special introductory prices. If you don't want to pay cash I will sell you a Monarch Separator on easy monthly payments so it will pay for itself. If you want to be the only one in your neighborhood to receive this proposition do not lay this paper down until you have written me a card saying, "Send me your catalogue and tell me of your easy plan." Address

E. R. BAILEY, 351 New Nelson Bldg., Kansas City, Mo.

in the production of milk. Nearly all kinds of feed produced upon the farm are rich in carbohydrates, and in common practise there need be no fear of running short of this element. It should be our chief concern to provide sufficient protein, and, if we must purchase it in the market, to obtain it in the cheapest form.

It is often economy to sell a part of the grain raised upon the farm and purchase concentrated feeds rich in

protein, etc. If oats can be sold for a cent a pound in the market, they are an expensive dairy food, because by the time they are ground and tolled at the mill, the protein in the meal will cost about 11 cents per pound. If we purchase 100 pounds of wheat bran for \$1 we have 12.6 pounds of digestible protein. If we pay \$1.25 for the same amount of gluten meal, we have from 20 to 26 pounds of digestible protein. If we purchase 100 pounds of linseed-meal at \$1.50, we have 29 pounds digestible protein. Just now the best brand of cottonseed-meal should be purchasable anywhere in the East at from \$1.40 to \$1.50 per hundredweight in carload lots, and though different samples vary widely in analysis, 100 pounds of good meal should contain over 37 pounds of digestible protein.

With corn at 60 cents per bushel, we can purchase only 7.9 pounds of protein for \$1, but if a hundredweight of corn be sold for \$1

AND THE MONEY INVESTED

in cottonseed-meal at the rate of \$25 per ton, we have 80 pounds of the meal containing 29.6 pounds of protein, or more than 3½ times the amount in a hundredweight of corn.

But cottonseed gives more satisfactory results when fed in limited quantities, from 1 to 3 pounds per day, according to the capacity of the cow. It can be mixed with other grains and fed for any length of time with no deleterious results whatever. If cottonseed-meal is fed alone or with heavy grains, such as corn, rye, or pea-meal, it should be mixed with silage, if any is fed; if not, it may be fed with roots. If these are not obtainable, wheat bran or some other bulky grain should be made a part of the ration.

I make silage my main cow feed. I feed from 30 to 40 pounds silage per day in proportion to the cow. It is my intention for the cows to have all they want and to keep them in the best of condition. The silage ration is balanced with bran, gluten, and clover, oat, and pea-hay. The bran and gluten is fed in proportion to the period of lactation of the cow, and as much as she will consume at a profit.

A cow should have no more good roughage than she will clean up. She should not be allowed to get into the habit of culling her food. But if we succeed in the dairy business, we must have faith enough in her to give her every pound of feed she can use to advantage. The man who succeeds today in the dairy business must read and think, and he who will not do this must sooner or later fail, and yield his place to some one who will.—J. P. F., in Jersey Bulletin.

When the Butter Doesn't Come.

The modern methods of dairying, making the dairy industry an adjunct to the creamery business have absorbed so much attention that the matter of churning on the farm has been neglected in dairy discussions. It is therefore refreshing to read a communication like the following from Mrs. E. R. Wood to the National Stockman and Farmer:

"There is always a reason for it when the butter fails to separate after a reasonable amount of churning. There are in fact a number of different conditions which may combine to cause the difficulty, or any one alone may do it.

"First, all milk is composed of water, casein, fat, and other ingredients, these three predominating. When the cow is fresh the proportion of water is greater than at any other time. The fat globules are then larger and consequently more easily separated in the process of churning than later on when the cow becomes nearly dry. During the later period of lactation, too, the milk becomes viscous, or sticky, as the water content diminishes and the minute globules of fat are more easily entangled in it, thereby retarding separation. This, then, is one cause of delayed churning, namely, cows long in lactation. The fresh cow never gives any trouble on that score. The obvious remedy is to dilute the milk with water, which relieves the viscous condition. This may be done in a large herd by the milk of fresh cows being mixed with the other, when

difficulty of this nature rarely appears. Or, if there is no fresh cow in the herd the milk may be directly diluted with water, preferably hot, so as to raise the temperature to at least 100 degrees before setting. The exact amount of water is immaterial, but one-fourth, or 25 per cent, will be about right.

"Another cause of delay in churning is attempted to churn unripe cream or cream which is too thin. Properly ripened cream is about as thick as molasses. When a cup is dipped into it a thick coat of cream should adhere to it, and it should be pleasantly acid, free from lumps either of cream or curd, and without any whey in the bottom of the can. This cream if churned at a temperature of 60 to 62 degrees in winter ought to come in 30 to 40 minutes unless the churn is too full. And right here we come to another source of trouble, one which accounts for many an hour unnecessarily spent at the churn handle.

"For best results, never fill the churn more than one-third full of cream. It swells upon being agitated and the lessened opportunity for concussion results in a longer time being required to bring the butter than would have been the case with a smaller quantity.

"Temperature of cream at time of churning must also be taken into consideration. In winter, when cream is liable to be too cold, it is very easy to get troubled unless a reliable thermometer is depended upon. Jersey cows yield milk with fat exceptionally hard in composition, hence cream from such milk stands a higher degree of heat. Trial should be made of individual herds and the temperature found to be most satisfactory adhered to. To do this one should have a Babcock test and determine by its use exactly the amount of waste going on. Too high a temperature invariably means loss of butter-fat, while too low temperature unnecessarily retards the churning. This point is important.

"To sum the matter up these points should be kept in mind: It is the cream from the stripper, or farrow cow, in nine cases out of ten that makes the trouble when the butter does not come. Thin cream should be avoided and the amount of acidity quite pronounced. Let the amount in the churn be not more than one-third of its capacity and use the thermometer to make sure the cream is sufficiently warm.

"It might be added that sometimes conditions of special bacteria at work causing stringiness orropy milk or other disturbances may have an influence and require a special sterilizing treatment for their eradication. In the main, however, the trouble will be found outlined as above."

THE "CHATHAM" PEOPLE'S NEW KANSAS CITY OFFICE.

Manson Campbell Co., of Detroit, Open Southwest Headquarters.

Every reader of this paper who visits Kansas City, Mo., at any time should take time to call and see the daily demonstrations being made with the famous Chatham Fanning Mill—Chatham Incubators and Brooders, and Chatham Fireless Cookers at the new offices that have been opened by the manufacturers—Manson Campbell Company whose two large factories are at Detroit, Mich., and Chatham, Ontario. These Kansas City offices are at 1108 West 11th St., and a postal with your name and address written there will promptly bring you a free catalogue telling all about any of the above articles if you say which ones you are interested in.

The Manson Campbell Company which is one of the oldest and most reliable concerns in America has a capital of \$600,000 and sells all of its Chatham machines on a most liberal direct selling plan. For example, any farmer who wants a Chatham Fanning Mill can have one sent to him at once, freight prepaid, and take his time to pay for it if he don't want to pay cash down. One of the officers recently said: "We are dealing all the time with the most reliable class of people in the world. If any man has use for our machines we know he has got the money to pay for it or will pay us when it is convenient. Our Kansas City offices and large warehouse make it possible to ship most promptly in all Southwest territory."

Either call at these Kansas City offices or write to that address, or to the factory of the Manson Campbell Company at Detroit for their free books. If you have the opportunity it will pay you to call.

Put the Kansas City address down—1108 West 11th St., Kansas City, Mo.

The best way to market your farm crops is on the hoof. Don't haul your crops to market—drive them.

DE LAVAL CREAM SEPARATORS ALWAYS IN THE LEAD

From the invention by DE LAVAL of the first practical cream separator in 1878 the DE LAVAL machines have been always in the lead.

The first "hollow" bowl cream separator; the first factory cream separator; all of the several first styles of hand separators; the first steam turbine separator; the first "disc" bowl separator, and the first "split-wing" or distributing tubular shaft separator—were each and all DE LAVAL inventions, each marking periods of advancing evolution in the usefulness of the cream separator.

So too were the first "tubular" shaped bowl separator; the first bottom feed separator; the first vertical "blade" bowl separator; the first interior cone construction bowl separator, and numberless other types of construction, each and all DE LAVAL inventions, though found so impractical or comparatively inferior, from one reason or another, that they were never put into commercial use in the DE LAVAL machines.

Every would-be competing cream separator on the market to-day merely utilizes some patent expired or abandoned DE LAVAL construction, and if any one of them should make pretense of denying it the patent evidence may be easily produced showing the falsity or evasion of such denial.

The new 1908 DE LAVAL cream separators mark another great evolution in cream separator construction, being new and remodelled in practically every detail, and place a still wider margin of superiority between the DE LAVAL and even the best of imitating separators.

The DE LAVAL main factories in the United States and Sweden are the largest and finest of their kind and have ranged for ten years among the model shops of the world; their equipment is the best that mechanical science and money can make it; the twenty smaller DE LAVAL factories, assembling, and repair shops, in as many different countries, are relatively as superior; the DE LAVAL inventors and experimental engineers are the best of the men who have shown practical separator genius in every country, and a large staff of them is kept constantly at the betterment of the DE LAVAL machines, while the shop employes generally are the most competent and best paid in their various classes.

THE GREAT OBJECT EVER KEPT BEFORE EVERY MEMBER OF THE DE LAVAL PRODUCTIVE ORGANIZATION IS THE MAKING OF THE BEST CREAM SEPARATOR POSSIBLE AND EVER THE MAKING OF IT BETTER THIS YEAR THAN LAST YEAR.

These are the reasons why the DE LAVAL machines began in the lead and have kept it from 1878 to 1908, excelling all attempted imitation and competition in even greater degree to-day than at any past time.

The new 1908 DE LAVAL catalogue—affording an education in separator knowledge—is to be had for the asking.

THE DE LAVAL SEPARATOR CO.

42 E. Madison Street,
CHICAGO.
1213-1215 Filbert Street,
PHILADELPHIA.
Drum & Sacramento,
SAN FRANCISCO.

General Offices:
74 CORTLANDT STREET,
NEW YORK,

172-177 William Street,
MONTREAL
14 & 16 Princess Street,
WINNIPEG,
107 First Street,
PORTLAND, ORE.

tained which make the incubator practically perfect. Nine years of unceasing work and study on the part of the inventor has made this an incubator that is a guaranteed result producer. We suggest that our readers write the X-Ray Incubator Company, L. Street, Blair, Neb., for their 1908 catalogue, which fully describes the practical and common-sense points centered in their incubator. In addition to the other important points covered, the matter of artificial incubation is thoroughly discussed.

Something About Telephones.

While the annual report of the president and directors of the American Telephone and Telegraph Company to the stockholders gives no detailed figures regarding the effects of the new Bell policy as to the sale of instruments, the change in plan, which took place last autumn and which was largely commented upon by the agricultural press, is directly referred to in one of President Vail's paragraphs. He says:

"The policy of our company in the past has been to lease telephones, and to allow the Western Electric Company to sell only apparatus to our licensees. Believing that the best interests of all would be advanced by the general use of standard telephonic apparatus, after consultation with and with the approval of our associated and licensed companies, we authorized the Western Electric Company to sell both telephones and telephonic apparatus to all applicants. While the time has been too short to show positively the effect of this policy, the indications are that the benefits direct and indirect will be large, particularly in the development of unoccupied territory in connection with the Bell system."

The ever increasing value to farmers of connection with the Bell system, whether through direct service or through some switching arrangement, is demonstrated specifically in the remarkable figures of growth which are set forth in this year's report.

The total number of telephone stations connected with the system at the beginning of the present year was 2,839,000 an increase of 768,340 over the record of twelve months before. The mileage of wire stored at \$610,592, of which 1,141,887 were added in 1907. About 5,997,000 messages were transmitted over the wires. More than thirty-six million dollars were expended upon maintenance and reconstruction, while more than fifty millions went to new construction. The grand total of expenditures for new construction in the past eight years has amounted to a little more than \$350,000,000. The total earnings were \$120,753,200, an increase of \$15,311,000 over the preceding year. The total of dividends paid by the Bell companies to their stockholders amounted to about nineteen million dollars.

From the point of view of the general public two especially remarkable features of President Vail's report are its admission that the principle of public control of this great industry is unobjectionable, "provided it is independent, intelligent, considerate, thorough and just, recognizing, as does the Interstate Commerce Commission in its report recently issued, that capital is entitled to its fair return, and good management or enterprise to its reward." The other extraordinary feature is the detailed summary of the results of a plan of physical valuation—similar to that projected by President Roosevelt for the railroads, which was voluntarily undertaken during 1907 with an idea of discovering precisely what the replacement value of the plants of the Bell companies would be. The net result of this attempt was the appraisal by the engineers of the whole plant, in-

cluding exchanges, and all outside connections, as worth, with copper at fifteen cents a pound, about \$488,296,000. On comparison with the books of the various companies it was discovered that the same plants were carried by them at a total valuation of \$492,496,000.

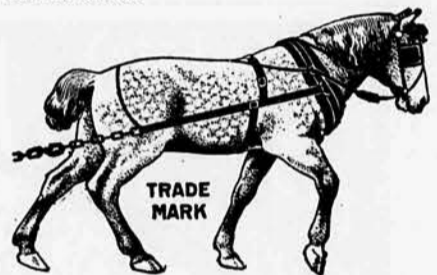
About Land Bargains.

The great State of Texas now seems to be the center of attraction for land buyers and home seekers and probably is the most extensive and inviting field in the world for profitable and permanent land instruments. On page 437 this week, Mr. H. P. Richards is advertising 25,000 acres in the Pan Handle country and 22,000 acres in South Texas, consisting of rice, cotton, sugar cane, and fruit lands. Also fertile lands in the Artesian Belt of Texas. Mr. Richards is a large operator in land bargains and in additions to the big tracts in Texas has a splendid line of Kansas ranches and farms, also ten thousand acres in Colorado.

To accommodate the demand of investors, the next regular railroad excursion to all points in Texas will be on April 7, 1908. For further information write to H. P. Richards, Lock box 116, Topeka, Kans.

A Suggestion Worth Heeding.

There has been much in the press of late concerning substitution and buyers have been repeatedly warned to stick to the brands of goods having an established reputation and which have demonstrated their worth. One of the surest methods of protecting oneself against inferior imitations is to become familiar with the trade marks of standard articles.



Our readers will recognize in the illustration here shown a trade mark of this character. Whenever the dapple gray horse above illustrated appears on a box of gall cure, the purchaser may be certain that the contents was manufactured by the Bickmore Gall Cure Company, Old Town, Maine, and that it can be relied upon to accomplish the results claimed for it by its makers.

This firm has for many years manufactured and sold this very useful preparation, which is of great value for curing saddle and harness galls, sore shoulder, scratches, grease heel, wire cuts, and other sores and abrasions on horses and other animals. One of the decided advantages about this preparation is the fact that the afflicted animal may be kept at work while the cure is in process and oftentimes the cure is more rapid when the animal is working than it would be if he were left idle in the stall.

The frequency with which a working horse is liable to be affected with some of the complaints above mentioned makes it desirable to have on hand at all times a remedy of this sort; not only for the reason that it enables the owner to keep his animals in working condition, but from a humane standpoint as well. Nothing is more distressing to a person of tender sensibilities than to see a horse hard at work under the harness being tormented by

a sore which is being constantly irritated and is a continual source of torment to the animal, and no man, unless he is exceedingly heartless, will allow such a condition of affairs longer than it can be helped.

By having a supply of Bickmore's Gall Cure on hand such unpleasant circumstances can be avoided and the animal saved much unnecessary suffering. The Bickmore Gall Cure Company issue an attractive booklet which they call their Horse Book, and which they send, together with a free sample of their gall cure to anyone on receipt of 10 cents to cover postage and packing. To secure the same, address the Bickmore Gall Cure Co., Old Town, Maine, kindly mentioning this paper.

Spring Time is Paint Time.

Now is the time to commence to think about Paint—and the kind you are going to buy.

Ready-made paint has many disadvantages. First, it necessarily has to be made a long time in advance of its being used—on account of the roundabout way in which it is sold through jobbers and dealers. This gives opportunity for its settling in cement-like substance at the bottom of the can. Then the mineral pigments and chemical acting driers in ready-made paints attack the Linseed Oil while standing in the can—oftentimes partially destroying the elasticity and life of the oil and thus the life of the paint.

Painter-made paint is oftentimes unsatisfactory, first, on account of the painter not being able to obtain pure and fresh paint ingredients at local stores, and second, on account of the painter not being able to properly blend, mix and assimilate—by hand with a paddle—paint pigments, driers, and Linseed Oil, which should always be ground together by heavy grinding and mixing machinery, such as is found only in large paint factories.

Mr. Chase has been very successful in building up a large business making paint this way for the individual users. His method of selling paint is extremely fair—unique—and unusual, in that he pays all freight charges on orders of six gallons or over—allows three months' time to responsible parties—guarantees his paint to be absolutely pure under forfeit of \$100.00 in gold—and not only allows, but requests each customer to use two full gallons out of any six-gallon order or over that he purchases, as a test, on his own buildings. Then if he's not entirely satisfied with his paint, he can return the balance of the order, get his money back, and not have to pay a penny for the two gallons he has used in the test.

Such a splendid method of manufacturing—and such a liberal plan of selling paint, certainly entitles Mr. Chase to the immense business he has built up throughout the United States. Mr. Chase issues a very handsome and complete Paint Book—probably the most elaborate of its kind ever issued—which is full of useful information about paint. With this book he sends extra large color samples to select from—also a free book on all kinds of Painters' Supplies which he sells direct to user at direct-to-user prices. These books are sent out absolutely free upon request, and anyone interested in paint should surely get these books before buying. They can be obtained by simply addressing a postal card requesting them, to O. L. CHASE, The Painter, Dept. 31 St. Louis, Mo.



O. L. CHASE, The Painter of St. Louis

Get 15 to 20 More Bushels to Acre From Accuracy of the NEW DEERE Corn No. 9 Planter



Just write postal with your name and address so we can put you on the "Deere" Free Mailing List. Then you'll keep informed on all the latest improvements and values in farm implements.

Right here is the New Deere No. 9 Edge Drop Corn Planter. It's the most accurate Corn Planter made and the most famous double-row combination check-row planter or drill of today.

Most Progressive Farmers and Planters won't have any other. Best informed dealers refuse to consider handling any other. Investigate the time-saving and profitable reasons why.

Checks Corn or Beans in Rows Both Ways—Or Drills

Deere genuine edge selection of corn gives highest accuracy of drop attainable and it has been repeatedly proven that accuracy of planting gives 15 to 20 bushels more to acre. Main seed shaft driven directly by traction wheels instead of by check-row wire like many others. That does away with all side draft and besides saves wire and machine. Change from hill to drill made instantly without leaving seat.

Comes Complete Ready To Plant

We make plates for all kinds of corn and furnish any five sets wanted without extra charge. Eighty rods annealed steel check wire with automatic reel. Any distance between buttons from 8ft. to 4ft. if so ordered. All fully explained and shown in our free booklets. Ask for Free Book No. 914 "Corn—More and Better."

Deere & Mansur Co., Moline, Ill.

Kansas Seeds for Kansas Farmers.

The Barteldes Seed Company of Lawrence, Kans., have become so well known that their name is a household word in the southeast. As a result of their long continuance in business and the success which has attended their methods they have been obliged to open big branch houses at Denver and Oklahoma City. They are now prepared to ship seeds of the best quality from their nearest store and thus save expense in many cases. They issue a very complete catalogue which may be had for the asking and which contains lists of well known and home-grown varieties as well as the newest kinds of vegetable and field seeds. Drop them a postal card asking for their catalogue and read their big premium offer.

An alfalfa field on every farm should be the State motto of Kansas.

APRIL 13—A LUCKY DAY

for those who attend the spring sale of Shorthorns AT FREDONIA, KANSAS—BECAUSE—

13 bulls will be sold including some Scotch herd bull prospects and a few others equally outstanding, but all of which will likely sell in the reach of any good stockman. 32 cows and heifers, mostly in their every day clothes but including some show material, will sell carrying or suckling calves by outstanding sires, yet probably at the worth of less desirable cattle.

BECAUSE

In the offering are sons and daughters of the following sires of note and proven excellence, viz: Lord Mayor, Imp. Collynie, Gallant Knight, Imp. Lord Cowslip, Archer, Aberdeen, Secret Archer, and last but not least the 2,840 pound Prince of Collynie, a bull with few equals for scale, quality, constitution, and best beef form and power to breed all four.

BECAUSE

The proportion of well bred Scotch cattle is large, yet the lack of high fitting on the females will mean more usefulness and lower prices. Because of the activity of the men back of this sale in behalf of good Shorthorns everywhere and finally because good pure-bred beef stock is going up and every sale that follows this will be made on a higher market. Many of the heifers are bred to Ingle Lad.

The offering is made up as follows: H. E. Hill, 30 head; S. C. Hanna, Howard, Ks., 2 head; Fred Cowley, Hallowell, Ks., 2 head; and Stevenson Bros., Elk City, Ks., 11 head.

The catalogue is full of good things; send for one at once, addressing—

H. M. HILL, Mgr. - - - **La Fontaine, Kansas**

L. K. LEWIS, representing The Kansas Farmer. GEO. P. BELLOWS, Auctioneer. Remember, sale is at Fredonia, Monday, April 13.

Before He Bought a Tubular

**This Man
Used to Carry
Half Ton of
Butter
to His Hogs
Every Year**



THAT'S what Mr. McKerrow did for twelve years previous to 1903. Then he bought a Tubular. When he discovered how wasteful he had been with cream, he says that he felt like "kicking himself." Listen to him:

Herkimer, New York.
Gentlemen:—Did you ever feel like kicking your own self? I have felt like that every time I think of what I have been throwing away for the last twelve years. **Six tons of butter carried to the hogs in that time!** I made 315 pounds per cow in 1904, deep setting; 368 pounds per cow in 1905, using Dairy Tubular. 53 pounds per cow for 20 cows makes 1060 pounds; this, at 28 cents, makes about \$300.00. I guess the Tubular has paid for itself all right. Skim-milk worth double too.
WM. MCKERROW.

This is not an isolated case. Thousands of thankful families all over the globe are rejoicing in the possession of this profit-bringing, cream-saving machine. It seems like a friend ever after the first week. Even one day's lack of use makes the dairyman or farmer miss it **tremendously**.

Ten Things a Tubular Surely Does.

- 1—Runs daily for months and months without a hitch. One man writes that in three years he paid out 40 cents for repairs.
- 2—It skims so clean we guarantee it to leave only one-half of that left by any other machine.
- 3—It turns easily requiring one-half the power needed by other machines.
- 4—It will run one-half longer without clogging than any other machine.
- 5—It delivers one-half less froth in cream than any other separator.
- 6—Needs only a tablespoonful of oil twice a week.
- 7—It requires little attention from the operator because every part is thoroughly tested and inspected by experts at our factory before shipping.
- 8—It requires one-tenth the time in washing required by any other separator.
- 9—The receiving can is lowest of them all and most convenient to clean and adjust.
- 10—A Tubular causes you no worry, fuss or muss. It's just a tried and true workman that is always on time; always sober.

A Tubular Will Pay for Itself

We don't care where you live. If you own eight or ten cows you can use a Tubular and pay for it in cream saved in a year. Buy the easiest machine to fill, to turn, to wash. A separator that skims clean, needs next to no repairs and saves you fuss, worry and trouble. It would pay to sell one of the cows and buy a Tubular.

Putting in Milk

No high lifting, no slipping milk pail and lost profits with a Tubular. The waist-low can solves the problem. Skimming is fun for the whole family from the six year-old up. It is a pleasant anticipation because the exercise is not exhausting and the operation is without fatigue.



This is the way one man views the "high up" kind: "Gentlemen:—To say that we are pleased with our Tubular is putting it mildly. We have used a disc-filled, bucket bowl for several years. We find that we have been losing quite a percentage of cream besides 'climbing up to the top of the house and pouring the milk down the chimney.' For ease of operation, rapidity, and thoroughness of separation there is no comparison between the two."

Washing a Tubular

Only three pieces in the bowl to wash, all easily gotten at. Nothing to rake and scrape your knuckles nor skin your wrists and fingers.



One man who owns a "bucket bowl" machine allows it to stand idle in his dairy house. That means \$225 rusting! He uses a Tubular instead. Why? "Not for all the money in the Universe" says he "will I break my wife's back, ruffle her temper or spoil her digestion by requiring her to wash twice a day those 35 'pie plates' 365 days in the year."

Fill Out the Coupon

We have asked you questions which we suspect you are willing to answer. If you will fill out the coupon and forward to us we will see that you get just the treatment that will make you a lasting friend of ours. We shall not force ourselves upon you to make you feel unpleasant and under obligations. All we ask is for you to give the Tubular a reasonable trial along side of as many other separators as you wish, or alone. If it does not perform as we claim, you needn't keep it.

SHARPLES TUBULAR SEPARATOR

THE SHARPLES SEPARATOR CO.
WEST CHESTER, PA.

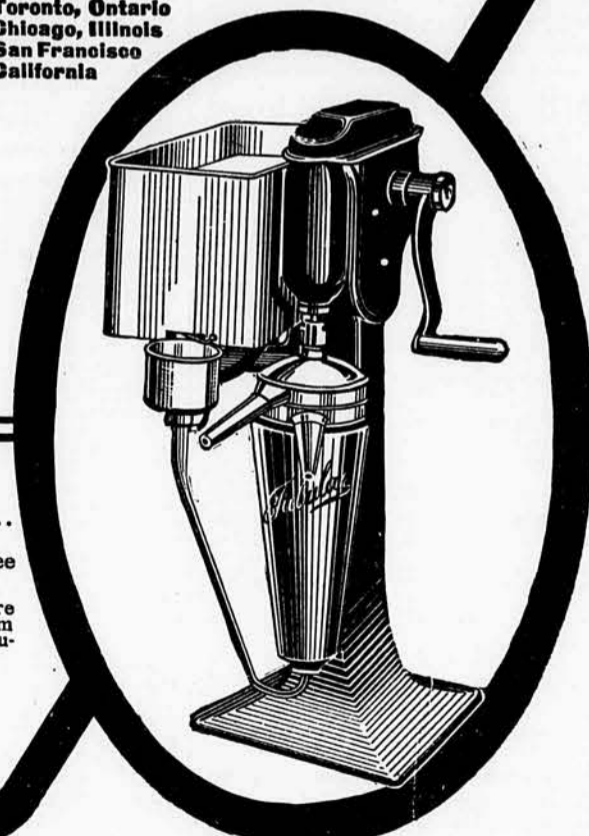
Turning a Tubular

All working parts run in oil. Every part is adapted so perfectly to the other that once got in motion it's a joke to keep the bowl spinning.

The oil compartment cannot possibly leak nor at any time allow the oil to spatter on or contaminate cream or milk. The machine takes care of itself and does not worry anyone with clogged oil holes or leaking bearings. Thus your cream and butter are free from the remotest possibility of ever being rejected because of machine-grease, odor or suggestion of rancidity. This one feature saves you much worry.



Toronto, Ontario
Chicago, Illinois
San Francisco
California



Application for More Information About a Tubular

.....190....
THE SHARPLES SEPARATOR CO.

Gentlemen:—I would like to know more about your Tubular Separators. In order that you may treat me intelligently I will answer the questions below which I deem proper.

1. How many cows do you milk?.....
2. Have you a Separator?.... What style?.....
3. Have you ever seen a Tubular skim?.....
4. Are there any of your neighbors who use a Tubular?.....
5. Is there a local agent near you who sells Tubulars?.....

6. How far are you from a railroad station?.....
What is its name?.....

7. Send me your catalog No. 165, and other free literature explaining all about the Tubular.

I understand that this coupon with my signature attached does not obligate me in any particular. I am filling out this coupon to obtain information about Tubular Separators.

Name

Address

Town..... State.....

There is no proof like experience, and the experience of users of Tubular Separators is all in one direction. There is no cream remains in the milk which has gone through a Tubular bowl. Here is what people say who have tried the Tubular and know:

Tried Four—Tubular Best.

Minot, N. Dak., Feb. 11, 1907.
Your Sharples Separator is best of all. We have had four. We have surprised a good many with it and we like it very well. AMUND E. STAKTSON.

Examined All—Choose Tubular.

Bussey, Iowa, Aug. 19, 1907.
Your No. 2 Tubular is the finest thing in the separator world. For easiest running, closest skimming and quietest cleaning, would not do without it for ten times its cost. It is surely the easiest taken apart and the quickest put together of any separator ever made, and we examined all of them before buying. We can not say too much in its favor. You will hear from us again in this line. Our sep-

arator is going to make you many customers in this neighborhood.
F. J. MARMON, Manager,
Arlington Heights Dairy.

Tubular Nearest Perfection.

Hardy, Mont., Jan. 13, 1907.
I have been engaged in the dairy business more or less in Montana for over forty years, and find the Sharples Dairy Tubular to be the nearest to perfection of any separator I have ever seen. One of my neighbors was to

see it this morning and thinks it beats all he ever saw. There are several kinds of "bucket bowl" machines in the neighborhood, but I don't want any "bucket bowl" machine in mine.
ALLIN W. WOODS.

Saved Much Cream.

Washington, Mo., June 1, 1907.
I am well pleased with the Sharples Tubular Separator, it having saved us four gallons of cream in one week over the old hand-skimming process.
EDW. HEIMANN.