

KANSAS FARMER

Volume XLV. Number 19

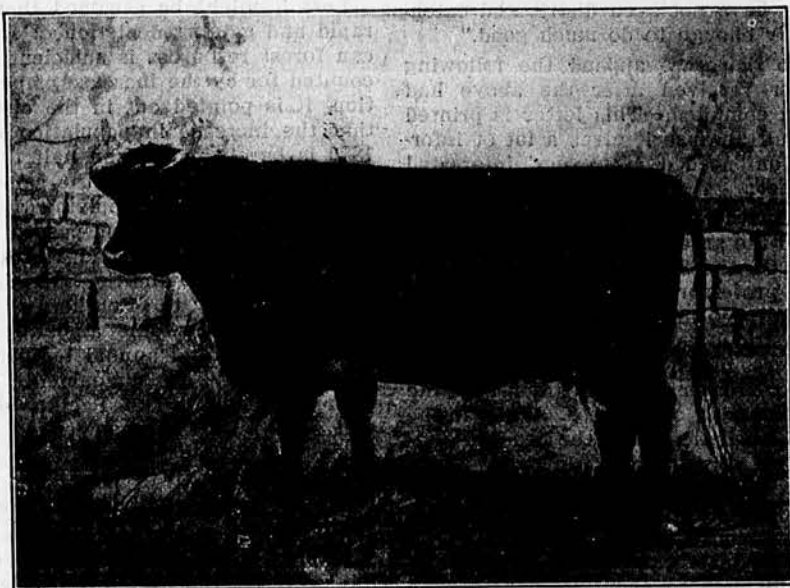
TOPEKA, KANSAS MAY 9, 1907

Established 183. \$1 a Year

THE GREEN BUGS.

Great interest and no little anxiety obtains throughout Kansas on account of the presence of a pest which has threatened serious damage to the wheat, and is reported to have an appetite for corn when wheat becomes unpalatable to her bugship. That the Southern plant-louse, known to entomologists as *Toxoptera gramineum* (gramineum is the spelling used by about half the authorities examined), has done serious damage in Texas was shown by the sworn testimony of a Texas witness

week, Prof. S. J. Hunter, head of the department of entomology of the State University, is waging a warfare on the new enemy. We are informed that when the wheat-louse reached the southern border of Kansas many letters daily were received by the department of entomology at the university asking for aid and direction in checking the further spread of this insect. Some days twenty-five letters were received on this subject, and in one instance the county commissioners asked that the head of the department come to their county



To be sold in the Shorthorn sale of Henry Kupper, at Humboldt, Neb., May 25, 1907.

before the Interstate Commerce Commission in Topeka a few weeks ago. This witness stated that the Texas wheat crop had been destroyed. Reports from Oklahoma are not as bad as those from Texas, but portions of the new State have suffered severe loss.

A few weeks ago considerable apprehension was created by reports of the appearance of the green bug in wheat-fields in Southern Kansas. That they have now reached as far north as McPherson County, the writer is informed by Warren Knaus, of McPherson, whose entomological researches have made him known wherever insects are studied.

THE KANSAS FARMER expects to present next week a fully illustrated paper on this class of insects. This paper is in preparation by Dr. L. C. Riddle-Smyth, of the Kansas State Museum. Dr. Smyth is making such drawings of this louse and related species as will aid greatly in the identification of these enemies.

As was stated in THE KANSAS FARMER of last

week, Prof. S. J. Hunter, head of the department of entomology of the State University, is waging a warfare on the new enemy. In response to these requests, the university, through the department of entomology and under the direction of Professor Hunter, is now at work to prevent damage being done to Kansas wheat and oats by the Southern wheat-louse, commonly known as the "green bug." The work consists in distributing throughout this State parasitic insects which prey upon the green bug. These parasites will, it is believed, under favorable climatic conditions exterminate this injurious insect and prevent its further progress northward. The university in this work is being aided by the liberal financial support of the Kansas millers and the Board of Trade of Kansas City, Mo. The Bell Telephone Company has placed its lines at the service of the department of entomology for this work. The railroads called upon have also cooperated in the matter of transportation. The Wells Fargo, Pacific, United States, and Adams Express Companies are transporting all packages of parasitic bees to all points on their lines free of

Principal Contents of This Week's Paper

Alfalfa in the fall, sow.....	587
Aplary.....	593
Bugs, the green.....	577
Club department.....	590
Commercial seeds of brome-grass, etc.....	584
Corn exposition prizes, national.....	580
Corn and oil-meal.....	581
Country, the call of the.....	588
Dairy commissioner, Kansas.....	592
Dairy cow, feed and care of the.....	591
Eggs.....	588
Foreign demand for American stock.....	581
Harp's song, the (poem).....	589

Lady farmers' institute.....	590
Lime and sulfur dip.....	579
New Year, a verse for the (poem).....	590
Partnership questions.....	579
Pioneer passes on, a Kansas.....	578
Poultry notes.....	592
Poultry, providing shade for.....	593
Road-tax questions.....	579
Spider, the.....	590
Squirrel, the civilized.....	589
Testing times, our.....	588
Timber supply, the.....	578
When earth's last picture is painted (poem).....	588

KANSAS FARMER.

Established in 1863.

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 and General Agent.....I. D. GRAHAM
 Secretary and Manager.....H. A. HEATE
 Treasurer.....JOHN R. MULVANE

E. B. COWGILL.....Managing Editor
 I. D. GRAHAM.....Live Stock Editor
 DR. C. L. BARNES.....Veterinary Editor
 THOS. OWEN.....Poultry Editor
 RUTH COWGILL.....Home Departments Editor

LIVE STOCK REPRESENTATIVES.

C. E. SHAFER, Eastern Kansas, Missouri and Iowa
 L. K. LEWIS.....Kansas, Nebraska and Oklahoma

SPECIAL AGENTS.

New York.
 J. C. Bush.....1110 Potter Building
 Boston.
 W. H. Daggett.....1006 Paddock Building
 Chicago.
 Stillwell Special Agency.....801-804 Unity Building
 St. Louis.
 B. A. Tharp.....710 Missouri Trust Building
 Pacific Coast.
 David R. McGinnis, 211 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, \$1.82 per inch per week.

Special reading notices, 30 cents per line.
 Special rates for breeders of pure-bred stock.
 Special Want Column advertisements, 10 cents per line of seven words, per week. Cash with the order.

Electrotype must have metal base.
 Objectionable 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



charge. Messrs. William S. Griesa, Harold Armsby, E. S. Crumb, Victor Chesky, and Maurice Bridenthal, students in the department of entomology, are field assistants in this work, and they too give their time without remuneration.

These parasitic insects are furnished upon request without charge. In the letter of instructions accompanying each box the request is made for return of postage. These parasites live only upon other insects, and consequently it is hoped will be established in this State to prey upon such plant-lice whenever they may occur.

The first evidence of the benefit from the parasite is shown by the presence of the brown and black bodies of the green bugs sticking to the leaves of wheat. In each of these bodies there is a young grub which soon comes forth as one of the little parasitic bees to continue the work of parasitizing other green bugs.

The department of entomology at the university is now receiving on an average 130 letters a day, and has been for the past two weeks. We are informed that during the recent extremely unseasonable and cold weather the parasitic bees were being packed, addressed, and placed in cold storage, awaiting warmer weather in which they can work effectively.

Being anxious to know what the farmers who have used the parasitic bees have observed of the effect of their distribution, THE KANSAS FARMER has secured a few statements from the field.

C. M. Easterly, Dexter, Kans., April 30: I received the bugs one week ago all right, distributed as directed. There are any amount of the (parasitic) bees in my wheat; 80 per cent of the bugs have disappeared from some cause. The weather probably had something to do with them. We had a big rain yesterday and we are in better hopes to-day.

J. R. Thompson, Winfield, Kans., April 30: I received the box of bugs sent me and put them in the wheat at once, and am pleased with the results.

Chas. W. Lowe, Galva, Kans., April 29: The parasites received the 27th, and I put them in the wheat-fields at once and we watched them work. We noticed two of the little bees attack

the green bugs in just a few minutes after they were liberated.

Harry E. Kiff, Abilene, Kans., April 27: I put the parasites at once in my wheat and I think they are commencing to work on the green bug. For the last week the green bug hasn't been so noticeable as the week before, so I draw the conclusion that the parasites are working on them.

A. J. Buckman, Conway, Kans., May 2: My boy put the parasitic bees out in the fields yesterday morning. They went for the green lice right away.

Dickinson Bros., Humboldt, Kans., May 4: We have placed all the packages sent us (24 in number), with good farmers, and all the reports we have had from them have been favorable.

The following is from the Kansas City Star of May 3:

"Hutchinson, Kans., May 2.—T. J. Templar, of the Kansas Grain Company; W. K. McMillan, of the Rock Island Grain Company; L. S. Hoyt, a Chicago grain man; and a local newspaper man made a 40-mile trip to-day through Reno County wheat-fields. Their verdict was that the recent freeze had not hurt the wheat, but that green bugs are increasing at an alarming rate and their ravages are very menacing. They consider conditions as at least 15 per cent worse than a week ago, when returns for Secretary Coburn's last report were made. This would make the present condition of wheat about 72. With good rains and fair weather, it is believed the wheat can beat the green bugs out. The parasites put to work in several fields are showing good results, but they have not been distributed extensively enough to do much good."

To these we append the following letter received after the above had been compiled. This letter is printed in full because it gives a lot of information needed by every interested farmer:

"EDITOR KANSAS FARMER:—I first noticed the green bug in the wheat April 23. On the 25th I went to S. J. Hunter, professor of entomology Kansas University, and obtained a supply of parasitic bees which I scattered over 75 acres of wheat. Six days later Professor Hunter came out to observe the development of the bees. While in the field we noticed that the bee had multiplied very rapidly; in fact, it appeared that the green bug would soon be destroyed, as nearly all the full-grown bugs had been stung. There is neither male nor female, every bug giving birth to about four little bugs per day. These bugs are hungry and ready to eat. They may be distinguished by their black eyes, from the plant-louse which is more or less abundant every year.

"The parasitic bee looks very much like a black ant with wings. It is proud and very lively, and works better on a bright, warm day. It stings this green bug in the back, lays an egg, then an orange tinge appears, which turns brown and the bug dies. In five days or about that time a new bee breaks out of the dead hull which will sting about twelve green bugs per day. So while a green bug increases at the rate of four a day, a parasitic bee is increasing twelve, or three to one. Is there any question as to the green bugs' future? This bee does not confine its work to one field, but emigrates. A few days after being put out the bees were found in fields one and a half miles away. I am satisfied that I saved a crop of wheat and helped the neighborhood by a timely effort. But the credit is due Professor Hunter, who got busy.

"Douglas County. C. L. WALL."

That science is able to render valuable assistance to industry, and that the farmer is to be included in its benefits is a fact at which all should rejoice.

THE TIMBER SUPPLY.

A recent circular of the U. S. Forestry Service—Circular 97—makes plain some facts which have been gradually impressing themselves upon the users of timber in the United States.

It appears that the average person in the United States is using over six times as much wood as he would use

if he were in Europe. The country as a whole consumes every year between three and four times more wood than all of the forests of the United States grow in the meantime. The average acre of forest lays up a store of only 10 cubic feet annually, whereas it ought to be laying up at least 30 cubic feet in order to furnish the products taken out of it. Since 1880 more than 700,000,000,000 feet of timber have been cut for lumber alone, including 80,000,000,000 feet of coniferous timber in excess of the total coniferous stumpage estimate of the Census in 1880.

A study of the circular must lead directly to the conclusion that the rate at which forest products in the United States have been and are being consumed is far too lavish, and that only one result can follow unless steps are promptly taken to prevent waste in use and to increase the growth rate of every acre of forest in the United States. This result is a timber famine. This country is to-day in the same position with regard to forest resources as was Germany one hundred and fifty years ago. During this period of one hundred and fifty years such German States as Saxony and Prussia, particularly the latter, have applied a policy of government control and regulation which has immensely increased the productivity of their forests. The same policy will achieve even better results in the United States, because we have the advantage of all the lessons which Europe has learned and paid for in the course of a century of theory and practice.

Lest it might be assumed that the rapid and gaining depletion of American forest resources is sufficiently accounted for by the increase of population, it is pointed out in the circular that the increase in population since 1880 is barely more than half the increase in lumber cut in the same period. Two areas supplying timber have already reached and passed their maximum production—the Northeastern States in 1870 and the Lake States in 1890. To-day the Southern States, which cut yellow pine amounting to one-third the total annual lumber cut of the country, are undoubtedly near their maximum. The Pacific States will soon take the ascendancy. The State of Washington within a few years has come to the front and now ranks first of all individual States in volume of cut.

At present but one-fifth of the total forest area of the United States is embraced in National forests. The remaining four-fifths have already passed or are most likely to pass into private hands. The average age of the trees felled for lumber this year is not less than one hundred and fifty years. In other words, if he is to secure a second crop of trees of the same size, the lumberman or private forest-owner must wait, say, at least one hundred years for the second crop to grow. As a rule, such long-time investments as this waiting would involve do not commend themselves to business men who are accustomed to quick returns. But the States and the Nation can look much farther ahead. The larger, then, the area of National and State control over woodlands, the greater is the likelihood that the forests of the country will be kept permanently productive.

This circular, prepared by Royal S. Kellogg, a graduate of the Kansas Agricultural College, now forest inspector of the U. S. Department of Agriculture, is worthy of the fullest credence for accuracy of statement.

A KANSAS PIONEER PASSES ON.

General J. K. Hudson, one of the men who helped mightily to make Kansas what it is, died at his residence in Topeka, on Sunday morning, May 5, 1907.

The fact that General Hudson—then Major Hudson—was a pioneer Kansas farmer, and the further fact that he was from 1874 to 1879 inclusive, editor and publisher of THE KANSAS FARMER, brings him especially near to many of the older readers of this paper.

Of Ohio Quaker stock young Hud-

son came to Kansas to take part in the proper settlement of the early pioneer troubles as a member of the "John Brown League." When the war broke out he joined the army under General James H. Lane. He was a good fighter, and by the close of the war had become a major. At the opening of the war with Spain Mr. Hudson was appointed a brigadier general. After his return from this service it was hard for his old friends to discontinue his old title of major for the more pretentious one of general. He once said to the writer, "I like the old one best. I earned that."

After the Civil War, Major Hudson settled with his family on a farm in Wyandotte County, where he resided for about eight years. He was a regent of the State Agricultural College during a part of this time, and it was largely owing to his radical views that the college was changed from an academic to an agricultural school.

Major Hudson served a term as a member of the Legislature from Wyandotte County.

In 1873 he bought THE KANSAS FARMER, then a bi-monthly published at Leavenworth; moved it to Topeka, and with the beginning of 1874 changed it to a weekly and placed it in the front rank of agricultural journals.

The Grange movement was then spreading with great rapidity. Major Hudson took THE KANSAS FARMER into it with characteristic energy. He championed farmers' interests with great zeal, and fought any foe no matter how formidable with such valor that he was recognized as entitled to the appellation "Fighting Joe Hudson."

Reform sentiment seemed to be sweeping the State and, reluctantly, Major Hudson allowed it to make him its candidate for Congressman from the Third Kansas District. He made a brave fight but was defeated by the regular Republican nominee.

While still interested in THE KANSAS FARMER, Major Hudson started the Topeka Daily Capital. It was at first a small paper and was printed on THE KANSAS FARMER press.

Disposing of his interest in THE KANSAS FARMER, Mr. Hudson gave his entire energies to the Capital, with which he presently consolidated the Daily Commonwealth.

The Daily Capital from the start took an active and aggressive part in politics as the mouthpiece of the best elements in the Republican party. From Mr. Hudson's views as to the course the paper should take there was no appeal. Without the support he gave it Prohibition could not then have been made a part of the fundamental law of Kansas.

After his retirement from the Capital some ten years ago, Major Hudson was actively engaged in real estate and mining enterprises, chiefly in Missouri, until a short time before his death.

Major Hudson was a man whose friends loved him and whose enemies dreaded his attacks. He was by some thought to be of stern visage, but his friends looked straight through this exterior into a warm heart and a good fellowship which all could realize on stirring up his jovial laughter.

May we have more men as useful as he!

ROAD-TAX QUESTIONS.

EDITOR KANSAS FARMER:—How many days can a road overseer put in on the road each year? Is he allowed to count time for ordering out his men and going after scrapers? He had to go three and one-half miles to get them when appointed road overseer. Does a person that stays in one township and gets his washing done in another have to work poll tax where he stays if ordered out by the overseer?

Saline County. C. W. OLEEN.

Section 6594, General Statutes of 1905 provides that a road overseer shall receive a salary of two dollars per day for each day's actual service, for as many days in each year as the commissioners—the township trustee, treasurer, and clerk—may direct. Time should be allowed for ordering out the men, for going after tools, and

for any other service necessary for the road overseer to render.

Section 6555 provides that each man shall work his road tax in the township in which he resides. The rules for determining the residences of voters are contained in section 2648. These rules are scarcely definite enough to determine the residence of an unmarried man who has no home at which he resides or to which he expects to return. In some communities a rule is observed locating the residence where the man has his washing done. Manifestly such rule should be applied with common sense. A man whose permanent home is in one township may send his washing across the line in another township or may send it to the city and have it done at a laundry. The question of residence where it can not be determined under the statutory rules above referred to should be determined as being at his usual abiding place.

PARTNERSHIP QUESTIONS.

EDITOR KANSAS FARMER:—I belong to an unincorporated farmers' telephone company which of course is acting under the laws of partnership. Now, I would like to know something about the laws of partnership. In such a case, of what force is a constitution and by-laws, and to what extent are they binding? How much more authority has the president, or any other officer, than any other member of the firm? Can they sell stock or is it simply a share in the firm? Also, is the firm acting under the ordinary laws of partnership?

Cowley County. A SUBSCRIBER.

The subject of partnership is a very large one. It is treated through many volumes of the law books. The subject of partnership is treated in chapters 74 and 75 of the General Statutes of 1905. The first of these chapters is devoted to limited partnership. The other chapter provides for dissolution of partnerships and care of their obligations.

This correspondent does not state whether the partnership mentioned is "limited" or "general." The inference is that it is a general partnership. In this case the constitution and by-laws, while binding as a contract among the shareholders who sign it, does not probably affect the relations between the partnership or its members and persons other than the partners. The president of such partnership company possesses powers differing from the powers of other partners only as the partnership agreement confers special powers upon him. This partnership agreement should be in writing and may be in the form of constitution and by-laws signed by the shareholders as heretofore suggested. Unless authorized by the partnership agreement, or in some other definite way, the president or any other officer of such partnership could have no right to sell any shares other than his own or that of some member who has conferred authority to sell some portion or all of his individual holding.

All partnerships except "limited partnerships" are in Kansas under the ordinary laws of partnership. The law of "limited partnership" in Kansas is designed to relieve "silent partners" from financial responsibility beyond the amount they invest in the business.

Aside from the provisions for securing such immunity from responsibility, the limited partnership does not differ materially in its powers and responsibilities from the general partnership.

In a newsy postal card communication J. B. Dobbs, of Marion County, gives the following information: "There was ice almost one-half inch thick this morning, May 4. In March F. C. Utting, of Antelope, this county, shipped \$510 worth of eggs—not bad for a flag station. The night of the 2d we had a nice rain, but it snowed quite hard yesterday forenoon. Alfalfa is badly frozen."

A report from Syracuse, Hamilton County, states that the rain of last week added to the moisture resulting from the melted snow has made the

soil so wet as to delay plowing for several days. A total absence of green bugs was reported. The acreage of wheat is not large, but the stand is good and the condition ideal.

"Licensed Loot" is the title of a striking pamphlet by H. B. Kelly, of Topeka. Whether one agrees or disagrees with Mr. Kelly's propositions he is apt to read his forceful presentation of well-matured views on some points of vital importance to the people's prosperity.

It is stated that a call will soon be issued for a State meeting of the Kansas lodges of the Farmers' Educational and Cooperative Union, to be held at Hutchinson, May 21 and 22.

Miscellany

Lime and Sulfur Dip.

EDITOR KANSAS FARMER:—Where can I get the lime and sulfur dip? Can it be prepared at home?

WM. THIEMANN.

Cloud County.

Following are the directions for preparing the lime and sulfur dip as given in Bulletin No. 40, Bureau of Animal Industry:

TREATMENT.

Methods in operation for the treatment of scabies in sheep have become more or less familiar to all people interested in sheep husbandry, and it may be said that the same treatment so successfully applied in ridding sheep of scabies has been found equally efficacious in the treatment of scabies in cattle.

In 1898 the Bureau of Animal Industry issued Bulletin No. 21, entitled "Sheep Scab: Its Nature and Treatment," which gives a description of this disease in sheep, its cause and treatment, with numerous formulas for the preparation of dips, and illustrations of the methods of applying them, together with directions for their use on both a large and small scale. The treatment of such large animals as cattle, which are difficult to handle, both because of their size and the conditions under which they live—the latter making them more or less intractable—would require a considerable amount of any preparation thoroughly to wet all parts of their bodies; next to effectiveness, therefore, small expense is the first object that much be considered. In the treatment of cattle for scabies, it seems fortunate that the dips of lime and sulfur, both of which are inexpensive, have proven effective and entirely satisfactory. During the past season thousands of cattle have been successfully treated for mange in the State of North Dakota, which work has been carefully investigated and observed by Dr. Robert H. Treacy, an inspector of this Bureau, who has furnished diagrams and photographs of the various plants, and who states that the dip which has been universally used in that section is that designated in Bulletin No. 21 as the No. 3 South African (Cape Town) official lime-and-sulfur dip (February 4, 1897), which is as follows:

Flowers of sulfur, pounds..... 21
Unslaked lime, pounds..... 16½
Water, gallons..... 100

Place the unslaked lime in a mortar box or some suitable vessel and add enough water to slake the lime and form a lime paste or lime putty. Sift into this lime paste the flowers of sulfur and stir the mixture well. Be sure to weigh both the lime and sulfur, and do not trust to measure them in a bucket or guess at the weight. Place the sulfur and lime paste in a kettle or boiler with about 25 or 30 gallons of boiling water, and boil the mixture for two hours at least, stirring the liquid and sediment. The boiling should be continued until the sulfur disappears, or almost disappears, from the surface. The solution is then of a

CONGO ROOFING

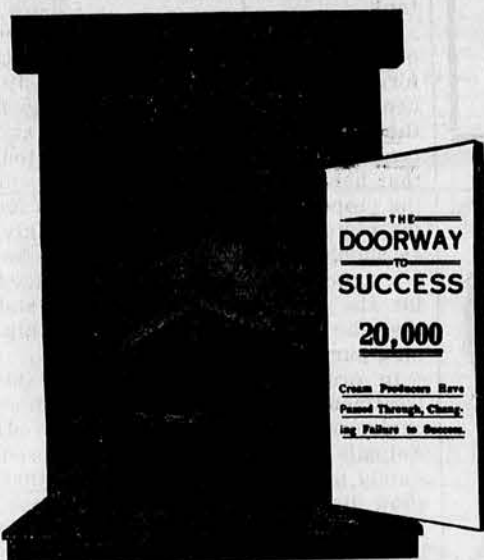
Doesn't harden in the sun, or crack in the cold.
Doesn't shrink at the seams. Always waterproof—always tight.
Light in weight; low in price; no imperfect rolls. Absolute satisfaction always.
Congo Roofing makes a fire-resisting, durable roof. Any one can lay it.
A Sample is the best proof. Write today and we will send it to you free.

BUCHANAN-FOSTER CO.

537 West End Trust Bldg., Philadelphia

CHICAGO

SAN FRANCISCO



This Week We Pay 23 cents for butter - fat

Watch for our announcement next week. Write to the "Pioneers" of the system that pays the highest price.

BLUE VALLEY CREAMERY CO.

- ST. JOE, MISSOURI

See The Southwest TEXAS, OKLAHOMA and INDIAN TERRITORY.....

The price of good, rich land in the Southwest is so low that you can own a big farm there without investing much money or mortgaging the place. Land that is the equal of land in the older states now sells for a fraction of the cost of land in your locality.

VERY LOW RATES

are in effect on the first and third Tuesday of each month to Texas, Oklahoma, and Indian Territory

VIA THE M. K. & T. RAILWAY

For information about the Southwest, as well as about the rates, address

W. S. ST. GEORGE

General Passenger & Ticket Agent

Wainright Bldg., ST. Louis.

chocolate, or liver, color. The longer the solution boils the more the sulfur is dissolved, and the less caustic the ooze becomes. Most writers advise boiling from thirty to forty minutes, but a much better ooze is obtained by boiling from two to three hours, adding water when necessary. Pour the mixture and sediment into a large tub or barrel, placed near the dipping vat, and provided with a bung hole about four inches from the bottom, and allow it ample time (from two to three hours or more if necessary) to settle. The use of some kind of a settling tank

Ruffled Muslin Curtains

Through our Kansas mail order service you can buy these good curtains, and have them sent, mail or express paid in Kansas. Try it. You'll learn where to send to save money on all your dry goods orders.

30c pair Muslin Curtains with one-eighth inch solid stripes cord edges. Stripes in ruffle.

42c pair Muslin Curtains—one-eighth inch stripes alternating with clusters of cords. Striped ruffle.

The Mills Dry Goods Company,
Topeka, Kansas

DON'T BUY GASOLINE ENGINES

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

UNTIL YOU INVESTIGATE "THE MASTER WORKMAN," a two-cylinder gasoline, kerosene or alcohol engine, with greater durability. Costs Less to Buy—Less to Run. Quickly, easily started. Vibration practically overcome. Cheaply mounted on any wagon. It is a combination portable, stationary or traction engine. SEND FOR CATALOGUE. THE TEMPLE PUMP CO., Mrs. Mcagher and 15th Sts., Chicago. THIS IS OUR FIFTY-THIRD YEAR.



"Best By Every Test."

U. S. GOVERNMENT REPORT.

Why?

Because they are durable, constructed of the best materials; dependable, no small parts to get out of order; strong, because they are designed by a corps of competent engineers. If quality interests you, write us about your needs. Built for over twenty-five years—sizes 2 to 50 horsepower for all kinds of farm and stationary power.

Send for our folder, "How to Make a Living Without Working."

OLDS GAS POWER CO.,

920 Seager St., Lansing, Mich.
1226 W. 11th, Kansas City, Mo.

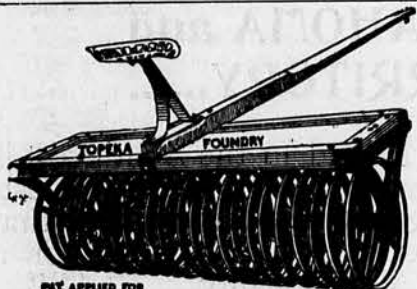
How To Successfully Grow And Handle Your Bean & Pea Crop

Is the title of our **NEW 1907 CATALOG**

which tells about the market, selling and feeding value of Beans and Peas. It also tells all about the

OWENS Bean and Pea Threshers

How they thresh Beans and Peas from the vines and pods quickly and easily without splitting the grain. They are made in 4 sizes, for the large and small grower. Send for a FREE copy of our book today. J. L. Owens Co., 650 Superior St. S. E., MINNEAPOLIS, Minnesota.



OUR SUB-SURFACE PACKER

A card will bring full particulars.

The Packer Company,
TOPEKA, KANSAS

You Ought to Learn Shorthand

Do it at home, if you wish. Dougherty's Brief Shorthand is the simplest, most legible, most rapid system. Primer, 25 cents. Complete Manual, \$2.00. Our school is unlike others. Mention this paper and send 6 cents in stamps for 25 lessons in Dougherty's Brief Shorthand, with other printed matter.

Dougherty's, The Actual-Business Training School,
Eight and Jackson, Topeka, Kansas

Campbell's Soil Culture Manual

Indispensable for the Dry Country. Indorsed by scientists and practical farmers. All about it in simple language and plain directions. Success demonstrated in every part of the Semi-Arid West. Crops absolutely sure and much better than by haphazard farming, without irrigation. No betting against the weather, sure thing farming; for small or large farms. Send for free circulars and find out how to keep up with the times, or 10 cts. for Soil Culture Almanac worth 100 times as much.

Prof. H. W. Campbell, Lincoln, Neb.

For Over 60 Years

Mrs. Winslow's Soothing Syrup

has been used for over FIFTY YEARS by MILLIONS of Mothers for their CHILDREN while TEETHING, with perfect success. IT SOOTHES the CHILD, SOFTENS the GUMS, ALLAYS all pain, CURES WIND COLIC, and is the best remedy for DIARRHŒA. Sold by Druggists in every part of the world. Be sure and ask for Mrs. Winslow's Soothing Syrup and take no other kind. 25 Cents a Bottle.

An Old and Well-tried Remedy

We Will Pay Men \$85 Per Month to travel, collect names, advertise and give away samples. Expenses advanced. Write today. H. O. Elder Company, Chicago.

provided with a bung-hole is an absolute necessity, unless the boiler is so arranged that it may be used for both boiling and settling. An ordinary kerosene oil barrel will answer very well as a small settling tank. To insert a spigot about three to four inches from the bottom is an easy matter. Draining off the liquid through a spigot has the great advantage over dipping it out in that less commotion occurs in the liquid, which therefore remains freer from sediment. When fully settled, draw off the clear liquid into the dipping vat and add enough warm water to make 100 gallons. The sediment in the barrel may then be mixed with water and used as a disinfectant; but under no circumstances should it be used for dipping purposes. A double precaution against allowing the sediment to enter the vat is to strain the liquid through ordinary bagging as it is drawn from the barrel or settling tank.

The above directions are for the quantity of dip given in the preceding formula. Any multiple of the constituents may be used, depending upon the capacity of the boiler, vessels, and tank to be filled, but let it be repeated, that here should be no guessing about the proportions; that the directions for the preparation of the dip as here given should be closely followed, care being taken that boiling be continued for the full time recommended, and that the sediment is not used for dipping purposes.

In order to attain success in the treatment of mange, care and thoroughness of method must be observed. Animals that have been exposed should be dipped as well as those that show distinct evidences of the disease. After the lapse of a few weeks following the first dipping, the animals should be subjected to a second dipping, in order that parasites which may have survived the first treatment, or that may have gotten on the animal from corrals, sheds, buildings, or elsewhere, may be destroyed. Several thousand cattle were carefully examined by our inspector forty days after being put through the dip for the second time and he failed to find evidence of scabies on any of them. These animals commenced to improve soon after being subjected to the first dip, as the dip killed the lice as well as the scab mites, and owners of cattle adjacent to the dipping plants have declared their intention to dip in future years to kill lice, even if scabies does not exist. The dip liquid in the tanks during the whole dipping process should be kept at a temperature of from 102° to 110° F. Each animal should be kept two minutes in the dip, and be put completely under twice during that time. All bad cases should be hand-rubbed and kept in the dip four minutes.

Pregnant cows have been treated, as well as cattle of all ages, from calves to full-grown steers, with the loss of but one animal in one of the swimming tanks. This was a steer which for some reason seemed to be unable to swim and was drowned. It would appear that the dipping of cows has no appreciable effect upon abortions, as a comparison with previous years showed that the dipping had not increased the average number of abortions regularly occurring among these herds before dips were used.

For information about other preparations used effectively for the purposes for which the lime-sulfur dip is used consult advertisers in THE KANSAS FARMER.

National Corn Exposition Prizes.

The cash prizes to be awarded at the National Corn Exposition in Chicago, October 5-19, 1907, have been apportioned. The sum total amounts to \$14,259. This amount may be augmented to a considerable extent by special cash prizes which are being arranged for, but the sum named will be distributed without regard to what may be done hereafter touching other prizes. This sum is exceedingly liberal and is so distributed that every corn-growing section will receive a

large reward for participation in the show.

OPEN TO THE WORLD.

The prize list open to the world was prepared with a great deal of care, and the sum for which any corn-grower in the United States can compete amounts to slightly over \$6,000, distributed as follows:

Yellow.	590
White.	590
Any.	330
Any.	330
Reid's or Funk's.	330
Leaming.	330
Boone County White.	330
Silver Mine.	330
Yellow Flint.	195
White Flint.	195
Yellow for Boys.	419
White for Boys.	419
Any for Boys.	260
Yellow for Women.	157
White for Women.	157
Yellow for Farmers' Daughters.	157
White for Farmers' Daughters.	157
White Popcorn.	31
Red Popcorn.	31
Best display popcorn.	70
Two largest ears corn.	72
Two smallest ears corn.	72
Freak.	52
Early Sweet.	60
Late Sweet.	60
Display.	675

Total. \$6,069

It will be noted that this consists of 25 lots. There are from eight to fifteen prizes in each lot. It will be further noted that an exceedingly liberal sum, amounting to \$675, has been offered for the best display of corn. In this lot \$250 is the first prize, and is a handsome reward for the man who makes the best display. Liberal prizes are offered for sweet corn, popcorn, and for the largest and smallest ears. The women on the farm, also receive liberal compensation for exhibits and ought to be very much interested.

STATE PRIZES.

Separate cash prizes are offered for fourteen different States, each State to receive a total of \$585. The amount that will be distributed to these States will be \$8,190. By means of these State prizes it will be possible to reward the progressive corn-growers in each State. This distribution makes it impossible for the big corn States like Iowa, Illinois, Kansas, etc., to capture the most of the money. Michigan growers will receive \$585 and is on par with Iowa. Consequently every corn-growing section has an incentive to compete.

SPECIAL PRIZES.

A most excellent committee, consisting of some of the best business men in Chicago, has been appointed to secure special prizes. From the present outlook the value of these will reach at least \$20,000. Automobile manufacturers, makers of farm implements, merchants, real estate men, etc., have expressed a desire to contribute, and before very long it will be possible to announce the results of this committee's work. It is not saying too much to state that the special prizes will be much more attractive than the cash prizes, liberal as the latter are.

WORK PROGRESSING.

The work of the exposition is progressing rapidly and in a very satisfactory way. The Coliseum, with its roomy annex, has been rented, and prominent architects and decorators are outlining plans for making the building unique and of the deepest interest; special attractions are being provided for, industrial exhibits planned, and, what is of particular interest, special educational features will be elaborate and complete.

Any corn-grower, or other person interested in the forthcoming National Corn Exposition, who is desirous of obtaining any special information concerning the event should address Curt. M. Treat, secretary, Great Northern Bldg., 77 Jackson Boulevard, Chicago.

The Real Condition.

The teacher of grammar and rhetoric wrote a sentence on the blackboard, and then called upon William.

"John can ride the horse if he wants to," read the teacher. "Rewrite the sentence in another form."

William surveyed it dubiously for a moment; then a flash of inspiration showed him his path.

"John can ride the horse if the horse wants him to," he wrote.—Youth's Companion.

Horse Owners! Use GOMBAULT'S Caustic Balsam

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



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.

—USE—

KRESODIP

NON-CARCINOGENIC. STANDARDIZED.

Prepared in our own laboratories. Ask your druggist for Kreso Dip. Write us for free booklets telling how to use on all live stock.

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.



It's Easy
to hatch them, but it takes the proper feed to raise them. Otto Weiss Chick Feed is scientifically prepared by a poultryman of 25 years experience. A trial will soon convince.



Products for stock and poultry as feed and conditioner. Guarantee everything we sell. Free circular.

The Otto Weiss Alfalfa Stock Food Co.

221-227 So. Santa Fe, Wichita, Kans., U. S. A

THOS. OWEN, 2801 West Euclid Avenue, Ind. Phone 6306, is Topeka agent for these goods.

Horse Owners

Do not let your horses work with sore shoulders. Harness, Saddle or Collar Galls positively cured with three or four applications of Beardslee's Gall Cure. Also a sure preventive for soft or green horses from becoming galled just when you need them to do your heavy spring and summer work.

I will send a full pint of Beardslee's Guaranteed Gall Cure postpaid to any part of the United States for 50 cents, with a guarantee to cure or money returned. Also other valuable information to horse owners free.

—Address—

The Beardslee Co.

37 Belden St., Boston, Mass.

Agents Wanted in Every Locality

DOWLING'S FISTULA AND LUMP JAW CURE.

A scientific remedy and cure for fistula, poll-evil and lump jaw. We send the cure on trial; use it carefully. If it cures your animal, send us \$2. If it does not, don't. State how long affected, or fistula, poll-evil or lump jaw; whether swollen, or running. Give particulars; also express office. W. T. Dowling Manufacturing Company, St. Marys, Kans.

Stock Interests

LIVE STOCK REPRESENTATIVES.

C. E. SHAFER, Eastern Kansas, Missouri and Iowa
L. K. LEWIS, Kansas, Nebraska and Oklahoma

PURE-BRED STOCK SALES.

Shorthorns.

May 28—Henry Kuper, Humboldt, Neb.
May 31—W. A. Forsythe, Greenwood, Mo.
June 4—Taylor & Jones, Williamsville, Ill.
June 11—T. J. Wornall & Sons, Liberty, Mo.
June 14—J. W. Leeper, Auburn, Neb.
June 14—Jos. Duncan, Osborn, Mo.
Nov. 6—E. D. Ludwig, Sabetha, Kans.
November 6 and 7—Purdy Bros., Kansas City.

Herefords.

May 15—Fair Acres Herefords. Mrs. C. S. Cross, Emporia, Kans.

Poland-Chinas.

May 24—Hebbard & Roy, Wichita, Kans.
June 12—J. W. Garvey, Thayer, Ill.
September 19—J. T. Hamilton, So. Haven, Kans.
October 8—M. Bradford & Son, Rosendale, Mo.
October 12—T. S. Wilson, Hume, Mo.
October 12—D. C. Stetson, Independence, Mo.
October 12—Sam Rice, Independence, Mo.
October 14—E. E. Axline, Oak Grove, Mo.
Oct. 15—John Blain, Pawnee City, Neb.
Oct. 15—Geo. Hull, Burdick, Neb.
October 17—Charlie W. Dingman, Clay Center, Kans.
October 17—J. T. Ellerbeck, Beatrice, Neb.
October 18—C. A. Lewis, Beatrice, Neb.
October 19—Geo. Falk, Richmond, Mo.
October 21—F. D. Winn, Randolph, Mo.
October 22—F. A. Dawley, Waldo, Kans.
October 22—W. N. Messick & Son, Piedmont, Kas.
October 22—A. P. Wright, Valley Center, Kans.
October 24—G. M. Hebbard, Peck, Kans.
October 24—J. R. Triggs, Dawson, Neb.
October 25—W. J. Honneyman, Madison, Kans.
Oct. 25—H. G. Chapman, Dubois, Neb.
October 26—Martin Lents, Atherton, Mo.
October 26—A. B. Hoffman, Reeco, Kans.
October 26—Bollin & Aaron, Leavenworth, Kans.
October 29—Leon Calhoun, Potter, Kans.
October 30—The Big 3, Centerville, Kans.
October 31—L. C. Caldwell, Moran, Kans.
November 1—Harry E. Lunt, Burden, Kans.
November 2—C. E. Shaffer & Co., Erie, Kans.
November 2—Thos. F. Walker, Alexandria, Neb.
November 2—Dietrich & Spaulding, Richmond, Kans.

November 4—C. S. Nevius, Chiles, Kans.
November 5—Lemon Ford, Minneapolis, Kans.
November 5—E. L. Calvin, Bolcourt, Kans.
November 6—W. E. Crowther, Golden City, Mo.
November 7—T. P. Sheehy, Hume, Mo.
November 8—D. E. Crutcher, Drexel, Mo.
November 8—U. S. Ison, Butler, Mo.
November 9—H. H. Harshaw, Butler, Mo.
November 11—Adams & Loran, Moline, Kans.
November 12—W. N. Messick & Son, Piedmont, Kans.
November 12—J. E. Knox and Wm. Knox, Blackwell, Okla.
November 13—J. C. Larrimer, Wichita, Kans.
November 14—C. W. Dingman, Clay Center, Kas.
November 16—C. G. Mills, Pleasant Hill, Mo.
November 18—J. J. Ward, Belleville, Kans.
November 19—A. & P. Schmitts, Alma, Kans.
November 19—C. E. Tennant, New Hampton, Mo.
November 20—Bert Wise, Reserve, Kans.
November 20—R. E. Maupin, Pattonsburg, Mo.
November 21—F. D. Fulkerson, Brimson, Mo.
November 21—Everett Hayes, Hiawatha, Kans.
November 22—C. E. Hedges, Garden City, Mo.
November 23—F. F. Oreley, Oregon, Mo.
October 7—T. S. Wilson, Hume, Mo.
October 15—Bernham & Blackwell, Fayette, Mo.
October 22—Jas. M. Coats, Liberty, Mo.
October 23—John M. Coats, Liberty, Mo.
February 6—C. E. Tennant, New Hampton, Mo.
February 6—R. E. Maupin, Pattonsburg, Mo.
February 7—F. D. Fulkerson, Brimson, Mo.
February 8—Wm. Wingate, Trenton, Mo.
February 8—Thos. F. Walker, Alexandria, Neb.

Duroc-Jerseys.

Oct. 15—Jno. W. Jones, Concordia, Kans.
October 16, 1907—Ford Skeen, Auburn, Nebraska
Oct. 16—G. W. Colwell, Summerfield, Kans.
November 2—Jos. Lynch, Independence, Mo.
November 26—Geo. Hannon, Olathe, Kans.
November 26—Marshall Bros. & Stodder, Burden, Kans.
January 21—Jas. L. Cook, Marysville, Kans.

O. I. C.

October 17—Frank Walters, Rockport, Mo.

Combination Sale.

May 1, 2 and 3, 1907—Aberdeen-Angus, Shorthorns and Herefords, South Omaha, Neb., W. C. McGavock, Mgr., Springfield, Ill.
May 14, 15, 16, 1907—All beef breeds at Sioux City, Iowa, D. R. Mills, Mgr., Des Moines, Iowa.
February 18, 19, 20, 21—Percheron, Shorthorns; Herefords, Poland-Chinas at Wichita. J. C. Robinson, Towanda, Kans.

Horses.

May 8—Dr. Axtell and C. B. Warkenstein, Wichita, Kans.

Foreign Demand for American Stock.

EDITOR KANSAS FARMER:—From the extensive inquiries and investigations the imperial government of Japan has been making in the United States it is apparent that we will enjoy after a while a most extensive trade in live stock with the flowery kingdom. Every one will admit that the Mikado never does anything by half. When Mutsuhito determined to drive the Russian bear out of Manchuria he went at it in such shape that the Russian supremacy in that great province of the Chinese empire is now a thing of the past, and Japan the dominant power. It was the Jap on foot, however, that did the business. The cavalry and transport horses of the Mikado were a wholesale joke. When England fought the Boers, mounted infantry was the thing. The first thing Lord Robert did on reaching South Africa was to requisition 40,000 horses. The Japs whipped the Russians substantially without horses, but that did not close the eye of the Mikado to the usefulness, if not necessity of the horse in war. Japan is going to breed horses, primarily for army uses, and if we can prove to them that our horses

are the thing, a lot of money will come our way.

For years Japan has been buying our stallions in a small way. The Japs never plunge till they know they are right, and history tells us that they go forward in jig time then. So far, I am informed, the American stallions have done very well in the island kingdom. In France last year her commissioners spent \$60,000 for French Coaches, their individual selections ranging from \$1,400 to \$6,000 in price. They will need drafters as well as lighter horses, and if we can show them the goods we can get their trade and we will not have to erect a bargain counter either. Seattle is about one-half nearer in point of time to Kokohama than any British or French port. No one seems to recognize just how close—in an ocean-going way—Seattle is to Japan. Even compared with San Francisco it is nearby. Let any one try this. Take a string and on the ordinary school globe pin one end of it at Yokohama. Then let him stretch the twine in a straight line on the globe to San Francisco. There place another pin in the string. Now run the string northward on the globe so that it strikes a straight line from the Japanese port across Seattle and it will be found that the pin marking the distance to San Francisco comes half way between Seattle and St. Paul. That is a comparatively easy way of showing why we should be able to command most of the Japanese livestock trade when the Mikado gets ready to buy, and it will not be long. Incidentally, if any one wants any farther lessons in measuring world's distances let him see what a very little way the string stretched between Yokohama and Seattle will reach to any French or British port.

But the Japanese buyers will want the best. They will want Percherons undoubtedly. They will pay well for them. Horses bred in Kansas should be well qualified to do good work as breeders in Japan. There are plenty of good mares in the Sunflower State. Horses like Casino, with which McLaughlin Brothers won first at St. Louis in 1904; Fronton, which was champion at the exposition there the same year; Rosenberg, their 1905 champion; or Etrageant, the champion of 1906; and others that might be named are required. Casino you still have doing a great work in your State. You need more like those others named.

All horses are high in price just now. The highest-class draft geldings have soared to a level not contemplated by any one in the trade a few years ago. There seems to be nothing on the National horizon to indicate a lowering of prices. In the breeding of grade drafters the use of the best stallions is profitable. Kansas breeds many good horses. She should breed more of them, both pure bred and grade. The progeny of such high-class stallions as I have named far out-sells the get of the medium getters. This, in view of the present demand and the roseate prospects ahead of the breeders, should be the handwriting on the wall conveying to the wise the word, which the proverb tells us is sufficient.

JAS. HOPE.

Dupage County, Illinois.

Corn and Oil-Meal.

What is the value of feeding oil-meal to work horses where corn is the only grain available? Would it pay to feed it when it costs \$2.50 per hundred; if so, in what amounts to each horse?

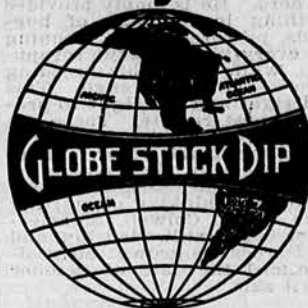
C. B. EVANS.

Stafford County.

You failed to state in your inquiry what kind of hay you are using for your horses, so that it will be impossible to answer as definitely as if that information were at hand. I presume, however, that the hay used is prairie.

For work horses, especially in the summer time, corn alone and prairie hay are not as satisfactory as hay and oats. In fact, oats are generally regarded as the standard grain feed for horses, especially in the warm weather. The difficulty of raising oats, and their high cost when purchased, makes it necessary, however, to substitute

Always Gives Satisfaction



ADDRESS DEPT. K.

That's why GLOBE STOCK DIP is always re-ordered after it is once used. Why use a dip prepared by a novice when you can buy it direct from a company that has had years of experience, and are making a dip that always gives satisfaction. Globe Dip will be shipped you at the following prices: Half gal. can 80c; gallon cans \$1.50; express paid. 5 gallon cans \$5.50; 10 gallons \$10.00; freight prepaid. 20 gallons, 90c per gallon; 25 gallons, 85c per gallon; 50 gallons, 70c per gallon; F. O. B. Kansas City. WHY NOT ORDER NOW.

O. Robinson & Co.,

409 GRAND AVENUE,

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.



Developed on Stong's Stock Food.

Order Your Stock Food Direct

Stong's Stock Food promotes health and vigor, and will cure mange, scurf and worms in hogs, cattle and sheep. Is being used by some of the largest stock raisers in the country. Three days' feed for one cent. 25 lbs. \$5.00, 50 lbs. \$7.50, 100 lbs. \$15.00, f. o. b. St. Joseph, Mo.

Stong-Roats Mfg. Co., 201 N. 2d St., St. Joseph, Mo.

TEN REASONS WHY

You Should Buy the Jawhawk
in Preference to Others. . .



1. Because you can do the same amount of work with less help.
2. Because you lose no time setting, as they are always ready.
3. Because you can make ricks as long as you wish. No limit.
4. Because you can re-top your ricks without any loss of time.
5. Because you can place hay in any spot on a rick of any length.
6. Because you can build stacks that settle evenly and keep.
7. Because there is not a pulley on the machine and only 18 feet of rope.
8. Because the load can be dumped or carried at any point of elevation.
9. Because you can move the stacker as readily as a sweep.
10. Because you want the only Up-to-Date Stacker made. We also manufacture Sweep Rakes. Write for catalogue and prices.

F. WYATT MFG. CO.
Salina, Kansas.



LIGHTNING HAY PRESSES

meet all demands in Hay Baling. Used over 20 years

SIMPLE, STRONG, DURABLE, RAPID
The Best is most Profitable.
Send for catalogue showing all styles. Horse Power and Belt Power

Kansas City Hay Press Co., 129 Mill Street, Kansas City, Mo.

SHIP YOUR WOOL, PELTS

Roots, Feathers,
Goatskins, Etc., to

M. SUMMERFIELD & CO.,

For thirty-six years a representative house of the BEST WOOL MARKET in the States. TOP PRICES. HONEST GRADING. PROMPT RETURNS. Price lists, Sacks, Tags, etc., on request.
214 NORTH MAIN STREET, ST. LOUIS, MO.

The Blossom House

Kansas City, Mo.

Opposite Union Depot. Everything first-class. Cafe in connection. Care 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.

When writing advertisers please mention this paper.

Make More MONEY on Fruit

Everyone who grows fruit should be interested in getting MORE PROFIT from his FRUIT crops

THE FRUIT GROWER

ST. JOSEPH, MO.

is a handsomely illustrated, 76-p. monthly. Treats of fruit growing, gardening, poultry raising, on a large or small scale. Every farmer needs it. \$1 a year, but will be sent 3 months FREE on trial if you will notify us to stop or subscribe after trial.

The Fruit-Grower, Box 145, St. Joseph, Mo.

some cheaper ration for feeding our work horses. A grain ration of corn and oil-meal in the proportions of about nine pounds corn to two pounds oil-meal will supply feeding nutrients in amounts very nearly equal to fifteen pounds of oats. In actual practice, however, it does not seem to be quite so satisfactory a ration, and undoubtedly the physical character of the oats has something to do with their high value as horse feed.

A grain ration of corn, bran, and oil-meal, substituting about two pounds of the bran for one pound of the oil-meal will give better satisfaction, or bran alone may be fed with the corn as the main ration, making two-fifths to one-third of the ration bran.

You do not state the cost of bran, but if bran can be purchased at \$1 a hundred, it would be cheaper to use than oil-meal at \$2.50. This grain ration is one which we are using as our standard grain ration for our animal husbandry work horses. The greater part of the time prairie hay is the roughage, with occasionally alfalfa as a portion of the roughage as a change.

G. C. WHEELER.

Last Call for Mrs. Cross's Hereford Dispersion.

All up-to-date Hereford breeders should not fail to carefully inspect the catalogue of the dispersion sale of Hereford cattle owned by Mrs. C. S. Cross, to be sold Wednesday, May 15, 1907, at Fair Acres Farm, Emporia, Kans.

It is a regular treasure-house of queenly offerings. The breeding, as shown by the pedigrees, is certainly blue-blooded enough to suit the most discriminating and ambitious breeder of whitefaces. It is certainly the chance of the season to secure correct foundation stock and show animals.

The cows are sired by such noted bulls as Wild Tom, the bull that made Sunny Slope Farm famous, for the late C. S. Cross, Imported Keep On and Imported Albion, Java, Lord Saxon, Tranquility by a Beau Brummel sire and a Wild Tom dam, Theodore, the famous son of Wild Tom, Major Beau Real, Banner Bearer, a son of Lamplighter, and Andrew, a son of Don Carlos, out of a Beau Brummel dam. This represents a grand array of herd sires that have become justly famous by their get.

The bulls, a splendid lot of herd-headers and show animals, are sired by such bulls as Tranquility 152380, Keep On 2d and Major Beau Real. The young calves at foot are sired by the young herd and show bull, Christy 234417, a great snap for some breeder who has a good herd or wants a show bull to head a herd. He was sired by Keep On 2d and out of Clarchen, a Lord Saxon dam. The offering also includes two pure bred steers Cleo and Matchless, sired by Major Beau Real.

Regarding the condition of the offering Mrs. Cross says: "The cows are in what I consider perfect breeding condition. As I only decided late in March to sell the herd, there has been no time for fitting. The young things of both sexes are in fine condition to go on feeding for next fall's show."

Mrs. Cross extends a cordial invitation to the Hereford breeding fraternity to be present at this her first and last public sale. Any inquiries either by letter or in person will be cheerfully answered and catalogue furnished on request.

Colwell's Durocs Are Good Ones.

THE KANSAS FARMER is starting the card of G. W. Colwell, Summerfield, Kans., in this issue, in which he advertises a few choice gilts and proven sows, either by or bred to A. B. Top Nother for early fall farrow; also a boar of September farrow by A. B. Top Nother and out of a Corrector dam, that is fit to head a good herd. This is a show boar and way up in quality, and if not taken soon Mr. Colwell will fit him for his show herd this fall. He is perfect in proportion, measuring 42 inches from crest to tail, 42 inches heart girth, and 42 inches around the flank. His herd-boar, A. B. Top Nother 47323, is a worthy grandson of the great Top Nother 3803A. His dam is Queen of Ringgold 54378 by Red Model 8897. A. B. Top Nother is a show hog and a breeder of wonderful merit. He weighs 600 pounds at 23 months, and promises to weigh 1,000 pounds at maturity. He is one of those smooth, mellow fellows, with strong arched back, great blugging hams, well-sprung ribs, very long and deep, good underline, fine masculine head, and stands up on his toes like a pig. He is possessed of wonderful vigor, which he imparts to all of his get. Mr. Colwell will fit him and a number of his get for the fairs this fall, and he is bound to be a winner. A. B. Top Nother is assisted by Pawnee Chief and Liberty Challenger, two outstanding young boars of the best breeding. Pawnee Chief is by Nebraska Wonder 33927, he by Crimson Wonder 26355, I Am Nancy Bell 2d by Red Chief W. C. Liberty Challenger was got by Challenger 43631, he by Duroc Challenger 11163. These boars are as good individually as they are well bred, and are producing some excellent results in the herd. The herd sows are an outstanding lot of the smooth, roomy type, prolific, and good sucklers, and are raising a crop of spring pigs that are hard to beat. The sires of some of them are Tom Thick-set, Red Chief W. C., Banker's Wonder by Red's Banker, Challenger, Horning's Corrector by Corrector, Young Grant by Grant, and other noted ones. Mr. Colwell has a Nebraska Wonder gilt with a litter of nine pigs by A. B. Top Nother that is one of the best that the

writer has seen this year. They are show prospects and are remarkable for size, form, and color. While comparatively new in the pure-bred stock business Mr. Colwell has shown the judgment of a veteran in selecting and caring for his herd. He is amply provided with everything in the way of hog-houses, yards, pastures, shade, running water, and everything is kept scrupulously clean, while all of his breeding stock has access to free range. This herd is bred right and fed right to produce the very best results. There are no poor feet, and the stock are remarkable for their thrift and vigor. There is a fine crop of spring pigs coming on, and if you need new blood for your herd, or if you are thinking of starting a herd write G. W. Colwell, Summerfield, Kans.; or better still, visit him and see how his Durocs are grown. Mr. Colwell has claimed the date of October 16 for his fall sale.

H. J. Northrup's Poland-Chinas.

H. J. Northrup, of Frankfort, Kans., starts a card in this issue of THE KANSAS FARMER, in which he calls attention to the Vermillion Valley Herd of Poland-Chinas, with which a large number of breeders over the State are already familiar. Mr. Northrup is an old-time breeder and needs no introduction for animals of his breeding can be found in many of the best herds in the State. Mr. Northrup breeds for both size and quality, and it would be hard to find a better class of sows than he is now using in his herd. They are an outstanding lot, very productive and of the smooth, roomy type that never fail to bring the best results, and that invariably transmit the highest qualities to their offspring. The spring crop of pigs that are arriving will ably bear out this statement.

A partial list of the good ones are: You Need Us, with a fine litter of 10, by Bell Metal, an Expansion bred boar; Lady You Tell 4th. This is a show sow, combining great size and lots of quality. She will give in full flesh close to 300 pounds, but is smooth and active as a pig, and a great producer. She is the dam of Prince You Tell, A. B. Garrison's 1,000-pound show boar. She recently farrowed a litter of 18 pigs, by Gold Metal (Mr. Garrison's young herd-boar), that are hard to beat. Laura Jones, bred by W. A. Jones, of Van Meter, Iowa, is another good one. She has a show litter, by Creston Dude, who won second in class at the Iowa State Fair 1906.

This is one of the choicest litters the writer has seen this spring. Dawley's Dream, a line-bred Perfection, and a litter sister to Lail's Perfection (Howard Reed's herd-boar), was got by Elight Perfection, he by Mischief Maker, dam Amy Perfection, by C's Perfection, a litter brother to Corrector. This is a very choice sow. She has a fine litter of pigs by Spring Expansion. Another good one is Fay Perfection, sired by the 1,000-pound Over Chief. She has a promising litter by Redemption Chief. This sow is a great breeder of good pigs.

Mr. Northrup is an up-to-date breeder, and has everything arranged to produce the very best results, he has an abundance of alfalfa pasture, fine shade, and living water. His herd has access at all times to free range, and are developed along lines that produce the very best. His spring farrow is a choice one, and he will be prepared to fill all orders in their season.

Watch his card in THE KANSAS FARMER for what he may have to offer you.

Elk Valley Durocs, Choice Sows of the Best Breeding.

M. Wesley, of Bancroft, Kans., is starting his card with THE KANSAS FARMER this week. He owns one of the best herds of its size in the State. He is a careful breeder and a good feeder, and is obtaining splendid results. His stock has access at all times to free range, with abundance of pasture, shade, and water, and are fed to produce the very best results.

At the head of the herd is Doty Boy, a prize-winner, and from the famous litter of the champion sow. Dotie. He was sired by the Chicago show champion boar, Goldfinch. Doty Boy won first in class and sweepstakes at the Missouri State Fair 1905. The following year he was second in class, being defeated only by his litter brother.

Mr. Wesley also owns Fancy John 38087, a grandson of Ohio Chief, got by Top Nother, and out of Fancy Xenia. The herd sows are a choice lot, and among them can be found as good blood lines as can be found anywhere. One of the cows purchased was Miss McFarland, out of Rosebud 3d. This sow is dead, but she left a number of daughters that are hard to beat. Among these are Wonder Girl by Oom Paul 2d; Grace Wonder and Red Lady by Red Tour G. Wonder Girl is a litter mate to Oom's Wonder, a boar that was used some in this herd.

Mr. Wesley also owns Bessie H. 3d, out of Bessie H. by Trott's Choice, and several of her daughters. Another good one is Model Girl, by Hunt's Model, and out of Missouri Girl. This is an outstanding sow and was one of the bargains at J. O. Hunt's sale in February, 1905. Lady Goldfinch is another excellent sow. She was sired by Lord Goldfinch and out of Lady Mc, by Oom Paul 3d.

Kansas Queen, got by Eclipse, he by Improver 2d, and out of Paulina, by Duroc King 2d is also owned by Mr. Wesley. She won first under a year at Nebraska State Fair. This sow has a choice litter of nine pigs by Oom's Wonder.

This is only a partial list of the good sows owned by Mr. Wesley. Most of the sows are bred to or have pigs by Doty Boy.

Fancy John and Crimson Wonder I Am 45249 are being used some in the herd, and there are a number of choice litters to their credit. Crimson Wonder I Am is a son of Crimson Wonder 26355 and is out of Havelock Lady 2d by Surprise 11878.

Mr. Wesley's spring pigs are arriving daily, and they are a fine, even lot.

Considering the quality his prices are very reasonable.

Buyers who want fancy individuals of the best breeding should write Mr. Wesley, Bancroft, Kans., at once. When writing please mention THE KANSAS FARMER.

The Prospect Farm Shorthorns.

One of the most beautiful farms in Kansas lies about four miles west of Topeka on the West Sixth Avenue road. It is also one of the best farms and supplies its owner with practically everything needed in his business of raising Shorthorn cattle, Poland-China swine, and Clydesdale horses.

Located on gently rolling land, with abundance of pure water, much native timber, plenty of pasture, and wide fields of alfalfa, this farm is equipped by nature for an ideal home and breeding farm. Upon it are located comfortable farm buildings and what is believed to be the largest barn in Kansas with ground dimensions of 110 by 120 feet. Prospect Farm, owned by H. W. McAfee, is well known for its Shorthorn cattle, and its owner is prominent in the councils of the American Shorthorn Breeders' Association, of which he is a member.

Visitors to Prospect Farm who are attracted by the Shorthorns are numerous, and buyers frequent. The herd-headers of late years have largely been Butterflies of the highest Scotch type, and females are of such good old families as the Phyllis, Young Mary's, Moss Roses, Flora's, etc., with plenty of Scotch blood. That this breeding and the animals themselves attract buyers is shown by some of the notable sales that have been made recently. Mr. J. E. Joines, of Clyde, Kans., thought so well of these Shorthorns that he bought nine head last week as foundation stock for his new herd. He took the straight Cruickshank bull, Kansas 275675, who is, at 15 months, an extra fine calf and a mighty good prospect. He then added five head of Butterfly cows and calves and one Young Mary cow. This makes a total of nine mature animals of good breeding that go into the herd of Mr. Joines, from whom we shall expect to head good things in the future.

Mr. McAfee also sold a straight Cruickshank bull to Matti Brothers, the big cattle-breeders, of Saffordville, Kans., and another of the same kind to E. Bauman, Union Stock Yards, Kansas City, Mo. While not advised as to the prices received for these cattle we know that they were satisfactory to Mr. McAfee, and we consider this a pretty good business for one week even on Prospect Farm.

G. F. Hart's Shorthorns.

We wish to call especial attention to the advertisement of G. F. Hart, of Summerfield, Kans., which starts in this issue of THE KANSAS FARMER, in which he offers some remarkably fine Scotch-topped yearling bulls, and a few choice heifers. Mr. Hart breeds Shorthorns and Poland-Chinas, and has a herd of cattle of which any breeder can well be proud. He has about fifty head at the present time, thirty of which are producing females, the balance are young things of both sexes. His herd-bull is Secret Prince 206547, got by British Prince, dam imported Strawberry 4th. Secret Prince is a straight Scotch bull of great scale and quality. He is a roan of the thick fleshed, blocky, early-maturing type, with a remarkably strong back, good quarters, well-sprung ribs, a fine underline, and beautiful head and hams. He is proving himself a sire of wonderful merit, a large number of his get being of showyard type, and all of them possessing remarkable feeding qualities. Secret Prince won first in class at Nebraska State Fair 1906, and Mr. Hart is fitting a show herd of his get, which he will exhibit at the different State fairs this fall. The herd cows are all Scotch tops of the heavy milking kind, and are from some of the most useful families of the breed, such as Village Rose, Rose of Sharon, Raspberry, Annabella, Golden Galaxy, Duchess of Gloster, and Young Mary. Some of their sires are, 10th Scottish Lord, a Cruickshank of the noted Orange family, that produced the show cow, Orange Blossom 18th; Oxford Prince, got by the pure Scotch bull, Quaker Prince; Imp. Hampton Prince, a Missile Bull; and Straight Cruick, a pure Scotch.

There are some fine individuals among them, and all are sure breeders and excellent milkers. Mr. Hart has a number of topy yearling bulls by Secret Prince, out of some of the best of these cows that are fit to head good herds, and will be sold reasonable if bought soon. Here is your chance to get something good. Write at once to G. F. Hart, Summerfield, Kans., or you may be too late. Mention THE KANSAS FARMER.

Kupper's Shorthorn Sale.

We wish to call the attention of our readers to the sale of Henry Kupper, which occurs at Humboldt, Neb., Tuesday, May 28. Mr. Kupper's herd is known as one of the best in the West, and his offering on this day will be an unusual opportunity to secure the best there is in breeding and individuality. Among the attractions in the female stuff is the cow, Scottish Daybreak, who holds the world's record as a milch cow, she in one day giving 8½ gallons of milk. One-fourth of this was run through an Empire separator, from which was secured two pounds of cream that tested 48 per cent of butter-fat. This is a pure Scotch cow and some one will get her on sale day. It would take a lot of space to tell about the other good cows in the offering, for they are all good ones. If you want to know about them send for catalogue and mention THE KANSAS FARMER. The nine young bulls in this sale are excellent individuals and any of them are herd-headers. See in his advertisement how they are sired. The females will nearly all be bred to the great bull, Secret Champion 245142 by Baron Secret 188228 and out of the great cow, Champion Duchess, a granddaughter of Imp. 8th Duchess of

Potato Harvest

The Best Tools **TRUE TEMPER** **Bear This Label**

WHEN it comes to digging potatoes, you surely want a potato fork or hook. Both are good. Other tools can be used, but they make the work much harder. Now the question is whether you will have a genuinely good fork or hook—one solidly constructed of dependable materials, that works just right for you—or one that is awkward and weak and causes you to waste time and energy?

When you buy True Temper Potato Forks and Hooks you get "The Best Tools You Have Ever Bought At the Same Prices You Have Always Paid."

Because special tests and inspections prove all True Temper tools to be correct in quality, construction, "hang" and temper. Forks, Hoes, Rakes, Hooks, Weeders. Cultivators—every kind of Farm and Garden Hand-Tool. Ask your dealer to show them to you.

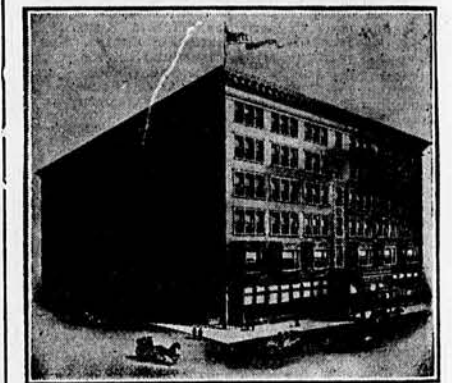
Our FREE BOOK, "Tools and Their Uses," will tell you all about special-purpose tools. Write for it today.

AMERICAN FORK AND HOE CO.,
1236 Am. Trust Bldg.,
Cleveland, Ohio.

HOTEL KUPPER

11th and McGee St.

Kansas City, Missouri



One of the newest and most centrally located hotel in the city. Absolutely modern in every detail.

European Plan, \$1 per day and up.

Work When You Work

Double Action Cutaway Harrow



enables you to double results over the ordinary disk. Especially adapted for orchards and alfalfa fields, but equally as advantageous for general purposes. Alfalfa sod chopped every 3 inches instead of 6. Orchards left level instead of ridged. The above cut shows machine extended for orchard work. For further information write

J. C. CONLEY, Gen. Agt.,
Wichita, - - - Kansas

Organized in 1868.

Bank of Topeka

CAPITAL, SURPLUS, PROFITS

\$400,000.00

RESOURCES JAN. 26, '07

\$2,369,593.16

DIRECTORS

J. R. Mulvane, Pres. A. W. Knowles, Vice-Pres.
J. W. Thurston, Cashier.
T. B. Sweet A. Washburn
Joab Mulvane M. A. Low
J. P. Griswold Chas. Wolff
J. W. Farnsworth W. H. Davis

Established 1880.

Southward & Johnston

Dealers in—

Hides, Wool, Furs, Pelts.

WICHITA, KANS.

Branch houses—Lyons, Kans., Guthrie, Okla.

Shipping tags and price lists free on application. Write us, try us, and mention THE KANSAS FARMER.

Worms-Taylor's Stock Tonic \$3.75 per 100 lbs.

drives the worms out of your hogs. We know it. Thousands of our customers testify that it is the surest and cheapest remedy ever used.

Farrowing Sows put in prime condition—the whole litter thrives on account of it.

Blackleg in Calves is absolutely prevented—grass cattle make 20 per cent more growth if Taylor's Stock Tonic is kept in the pasture.

Send me the COUPON attached
and I will send you

50 Pounds on Trial

Gloster. Secret Champion is proving a great sire, and a cow bred to him will be a money maker for its owner. Don't forget this sale.

Haith's Herd of Durocs.

We take pleasure in introducing to our readers Mr. H. W. Haith, of Vesta, Neb., who came into prominence in Duroc circles when he purchased Banner Top, the great Tip Top Notcher sow in Murray Putman's sale last spring. Banner now has five fine pigs by Kant Be Beat, and if you want to see how highly he prizes them make him an offer of five hundred for one of them and see how quickly he refuses it. Banner Top is one of the greatest sows we ever looked at, but she is not the only good one in the Haith herd for he owns a gilt sired by Ohio Chief with seven fine pigs by Tip Top Notcher Jr., De Zenta 128210, who is the mother of Murray Putman's boar, Lincoln Top, that is one of the brightest prospects for first honors at the State fairs that we have seen; one gilt by Red Chief I Am with a fine litter by Billy K's Model; Handsome Pride 150410, a granddaughter of Orion, with a fine litter by Ed Improver, and a score of other good sows. Any one who wants some good stuff this year should not fail to put H. W. Haith's herd on their list, for it is one of the outstanding herds of Nebraska. Look up his advertisement in this paper and keep his name in mind along with the other good Nebraska breeders.

The Englewood Live-Stock Show.

On May 23 and 24 next there will be held a big exhibition of pure-bred live stock at Englewood, Kans., on the Santa Fe. So far as present knowledge reaches, this is the first considerable attempt that has been made to hold a show of this kind so far to the south and west in Kansas. A large number of entries have been made, and the show promises to be a success.

This show is to be held in connection with an auction sale of city lots in the new town of Englewood, that will be made by the Englewood Improvement Company, of Englewood, Kans., and 501 Dwight Building, Kansas City, Mo. Nothing in the history of the great Southwest is so indicative of the wonderful progress that has been made in this region as the conditions which make this great auction sale of lots and this live-stock show possible. At least 20,000 people are expected to be present at this time and, while the auction sale of lots will be the principal attraction, the live-stock breeder will be sure to benefit by the opening up of this new territory for his surplus stock. The sale of lots grows out of the necessity of moving the town of Englewood to adjacent land where the titles are perfect, as is not the case where the town now stands.

Lamb's Herd of Durocs.

Johnson County, Nebraska has long been noted for the good quality of its live stock and especially for the number of good Duroc-Jersey herds that it affords. Among these is one owned by Elmer Lamb, of Tecumseh, Neb., who has about fifty head of nice pigs this spring. Among these are some that deserve special mention. Aggie 131192 by Big I Am, has a fine litter by Ambition, among them being two outstanding boars; Estella Pride has three by Buddy I, a son of Buddy K. 4th; Banner Lady has seven by Crimson Jim; a granddaughter of Crimson Wonder has ten by Tip Top Notcher Jr. Mr. Lamb has also a litter of seven by Lincoln Top, seven by Hanley, and a number of other good litters by prominent sires. Mr. Lamb has one of the best Buddy K. 4th boars we have seen, and he is a great sire, imparting lots of size and quality to his get. When you are in need of anything in the line of Durocs call on Mr. Lamb and mention THE KANSAS FARMER.

Golden Queen Herd of Durocs.

Last week it was our good fortune to visit the good Duroc-Jersey herd of W. M. Putman, at Tecumseh, Neb., who is one of the young breeders of Nebraska that has already made more than a local reputation. Mr. Putman now has one of the best herds in Nebraska and will be able this season to furnish a number of herd-headers to any one in need of them. His two herd-boars, Crimson Jim 47995 and Lincoln Top 55287, have no superior in the State, and with such an array of sows as Lady K. 4th 20681; Paul's

Best by Paul's Banker; Van's Model by Improver 2d; Tessie Bateman 105376, who is a granddaughter of the Lad for Me; Bell's Chief, who is out of a Crimson Wonder dam; and a score of other good sows, he will have something unusually good to offer this year. Notice his advertisement in this issue of THE KANSAS FARMER.

Gossip About Stock.

H. G. Chapman, of Dubois, Neb., has a hundred fine Poland-China pigs sired by King Do Do. Mr. Chapman will hold a fall sale October 25.

John Blain, the veteran Poland-China breeder, of Pawnee City, Neb., has a thrifty lot of spring pigs, and if no ill luck befalls them he will have a fine lot of animals for his customers next fall. Mr. Blain asks us to claim October 15 for his sale.

C. A. Lewis, of Beatrice, Neb., claims October 17 for his sale, at which time he will offer the public a fine draft of stuff from his show herd. Mr. Lewis is one of the young breeders who is fast gaining recognition among the best breeders of the county.

J. T. Ellerbeck, of Beatrice, Neb., will hold his next sale October 18. He enjoyed a fine patronage last year, and has greatly strengthened his herd this season by the addition of new stock. Don't forget Mr. Ellerbeck when you need a good Poland-China.

Transfers of Holstein-Friesian cattle reported for Kansas last week were: Wayne Prince Netherland, M. E. Moore, Cameron, Mo., to J. S. Sumner, Lane. Aaggie Dorinda Netherland 4th, M. S. Babcock, Nortonville, to Walter Pleasant, Ottawa. Pauline Kruger De Vries, M. E. Moore, to John S. Sumner.

Perhaps there are no farms in Kansas that have so many and such good mules as has Prospect Farm, owned by H. W. McAfee, of Topeka. Two years ago he bought the first-prize mule team at the American Royal. Last year he bought the prize-winning mule team at the Kansas State Fair at Hutchinson, and last week he bought an extra fine team at Kansas City, which tipped the beam at 2,100 pounds, and an extra large 4-year-old that measures 16.1 hands, and weighs 1,400 pounds. The writer does not know just how many mules there are now on Prospect Farm, but he has seen Mr. McAfee make all of these purchases except the last one, and ventures the statement that there are few farms in the West that are better equipped with these Missouri motors than is this one.

Crude Oil Power Company.

The page announcement of the Crude Oil Power Company in this issue is of special interest to our Kansas readers, owing to the close relation to the Kansas oil industry and the practical utilization of the product.

The chief promoters in this enterprise are E. E. Richardson, who for thirty-two years has been the secre-



E. E. RICHARDSON,

Vice-president and Manager of the Crude Oil Power Co.

tary and treasurer of the Kansas City Stock Yards Company, and his able assistant, Major F. C. Vincent, a successful financier and organizer of a

number of the large and successful industrial institutions in the West.

The plant of the Crude Oil Power Company is located at the junction of the Missouri Pacific and Mexican and Orient Belt Line Railways in Kansas City, Kans. Already \$100,000 has been expended in establishing this industry, as shown in their page announcement.



MAJOR F. C. VINCENT,

Fiscal Agent of the Crude Oil Power Company.

The Crude Oil Power Company is building an up-to-date, first-class foundry for the manufacture of cast steel and malleable iron castings, and by so doing is filling a long-felt want in this community. The company is already assured of orders that will tax the full capacity of this department of its works. The Crude Oil Power Company will undoubtedly be of great benefit to the West. Kansas City needs industries of this character. The officers of the company are: President, G. W. Fitzpatrick; vice-president, E. E. Richardson; treasurer, W. C. Howe; secretary, A. A. Osborn. Mr. F. C. Vincent is acting as financial agent for the company, and is in charge of the offices. In justice to its readers it is the policy of this paper not to accept advertising of this character, without first thoroughly investigating the legitimacy of the enterprise. This paper is personally acquainted with the officials of the Crude Oil Power Company, and does not hesitate to give this enterprise its fullest endorsement and co-operation.

For further information address F. C. Vincent, 400 Gibraltar Building, Kansas City, Mo.

Aids to Intensive Cultivation.

With the rapid adoption of more intensive cultivation and scientific methods of agriculture, there is need of tools that are suited for the work involved. "Special purpose tools" are shown and their particular uses described in a valuable and attractive 48-page book, published by the American Fork and Hoe Company, Cleveland, Ohio.

Our readers are offered free copies while the present edition lasts. Write soon and mention this publication.

New Advertisers.

M. Summerfield & Co., wool.
J. L. Owen & Co., catalogue.
Witchey Land Co., artesian valley land.
H. J. Northrup, Poland-Chinas.
M. Wesley, Duroc-Jerseys.
J. H. Hasenyaeger, Duroc-Jerseys.
H. W. Haith, Duroc-Jerseys.
Elmer Lamb, Duroc-Jerseys.
G. W. Colwell, Duroc-Jerseys.
Miner & Aithen, Duroc-Jerseys.
M. K. & T. Railway, see the Southwest.
Geo. E. Dougherty, learn shorthand.
J. F. Chandler, Duroc boars.
Henry H. Kupper, Shorthorn sale.
G. F. Hart, milking Shorthorns.
D. W. Hutton, Clay County farms.
W. M. Putman, Duroc-Jerseys.

When writing to THE KANSAS FARMER always give your name and address.

F. J. TAYLOR.

361 Live Stock Exchange, Kansas City, Mo.
Please ship me a 50-pound sack of your STOCK TONIC which I agree to use at once according to your directions. If satisfactory I will send you \$2.00 for the same. If not satisfactory I will return the empty sack within 30 days and you will balance my account.

I have cattle, hogs, and Sheep.

Name,

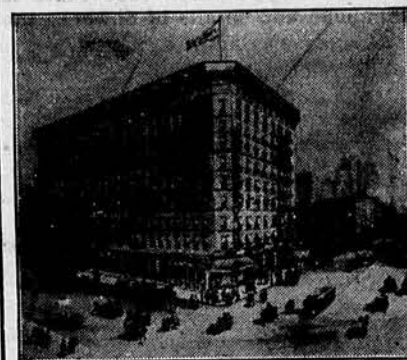
P. O. address,

Shipping address, F

Remodeled, Handsomely Furnished New Throughout.

THE ALBANY

41st Street and Broadway, New York.



Absolutely Fire Proof. In the Heart of the City. 500 rooms, 300 bath rooms European plan. Cuisine unexcelled. Gentlemen's cafe. Ladies' restaurant and Moorish rooms. Popular prices. Plenty of life—but home-like. Single room and suites with and without bath \$1.00 per day and up. Send for booklet.

ROBERT P. MURPHY.

Money Back

BE SURE AND WORK THE HORSE.

We will refund the money if Bickmore's Gall Cure does not cure collar and saddle galls while the horse works.

Bickmore's Gall Cure

is guaranteed to cure all chaps, bruises, cuts, grease heel, scratches or torn or scratched teats, etc., in cows. Take no substitute. See trade mark. Every horse owner can have our illustrated Horse Book and large sample box Gall Cure for 10 cents for postage on both. Write today, or ask your dealer.

Bickmore Gall Cure Co.
Box 916
Old Town, Maine.



Why Lose Calves from Blackleg?

They constitute the future herd. VACCINATE NOW WITH THE ORIGINAL PASTEUR VACCINE (Cord form) PASTEUR VACCINE (Pellet form) PASTEUR VACCINE (Powder) Produced by the Discoverers: Prof. Arloing, Cornevin and Thomas. Successfully used on over 35,000,000 Head. PASTEUR VACCINE CO., LTD. 305-8 W. 11th St. 7 Rue Meyerbeer 44-5 Wabash Ave. NEW YORK PARIS CHICAGO Sole Concessionaries Institut Pasteur, Paris, Biological Products Our Rat Virus is the only Scientific non-poisonous rodent exterminator.

TAPE-WORM

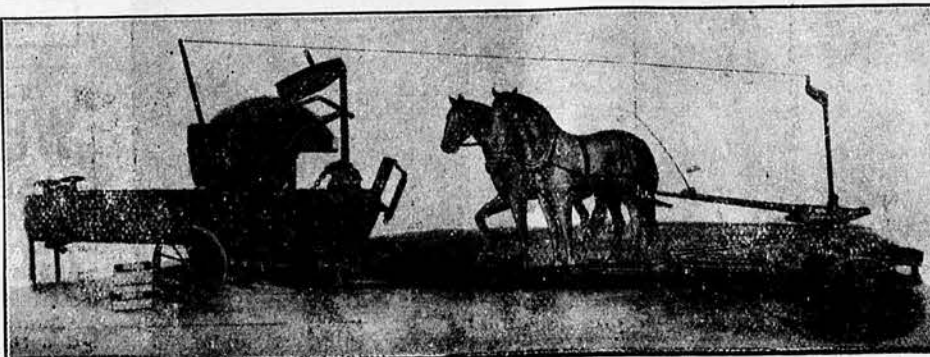
Expelled alive in 60 minutes with HEAD or no charge. No fasting, no sickness, no pain. Medicine pleasant and perfectly harmless. Medicine sent to any part of the country. Large booklet containing valuable information free. Illustration shows segments (joints) of common tapeworm in different stages of contraction and expansion, these joints pass in the stool, also crawl away from one troubled with tapeworm.

DR. M. NEY SMITH, SPECIALIST.
Office, 809 Pine Street, ST. LOUIS, MO.

Free Trip To See This Hay Press

THE NEW CENTURY

has a two or three stroke. Positive plunger withdraw. No taking off of wheels. 7-inch step over. High baling chamber.



If you are going to buy a hay press we will pay your railroad fare to some point where you can see the New Century. Full circle, all steel, self feed hay press, and all other makes on sale. It would cost us as much, or more, to send a salesman to see you as to pay your railroad fare. Then buy the press that suits you best. We pay your railroad fare, no matter which one you buy. When you see the New Century, and how easy it is on the horses, how well it is made, what smooth bales it turns out and how many of them, you will see why we make such an offer. We have issued 1,000 transportation cards which entitle the holders to their railroad fare to one of our many agencies. Send us your name at once for one of these cards. You can use it any time. 10 Day's Free Trial. If you cannot come to see the New Century we will send one for ten day's free trial. Send it back if you don't like it, and we pay the freight.

Western Steel and Wire Company

101 Osage Avenue, Kansas City, Kansas

Agriculture

Commercial Seeds of Brome-Grass, and of English and Kentucky Blue-Grasses: Adulterants and Substitutes and Their Detection.

KANSAS EXPERIMENT STATION BULLETIN 141, BY H. F. ROBERTS AND GEO. F. FREEMAN.

(Continued from last week.)

English blue-grass has rather a narrow, slender panicle when young, becoming, on reaching full bloom, open, spreading, and somewhat light and feathery in appearance (see Plate X for panicle and details of flower); the

seeds of Hungarian brome-grass and cheat, there need not be the slightest difficulty. The individual spikelets of Hungarian brome-grass are narrow and linear, with the flowers and finally the seeds lying closely pressed against the rachilla, while in cheat the spikelets are broad, with spreading flowers. (See Plate XIII.) The seeds of *Bromus inermis* are long, very flat, with prominent ribs or veins on the flowering glumes, and the latter are without awns or beards. Cheat-seeds are commonly not more than two-thirds as long as those of *Bromus inermis*, are fuller and plumper, and the glumes are bearded, although in thrashing the awns are frequently rubbed off. (Plate XIV.) Comparison of Plates XV and XVI and of the higher magnification in Plates XVIII and

those of English blue-grass, and have bearded glumes, while the latter have not. Under a lens magnifying about fifteen diameters, it will be seen that the cheat-seed is greatly swollen about the middle, due to the flaring out of the flowering glume, which is strongly curved to form a very deep furrow on the inner face of the seed, and is pro-

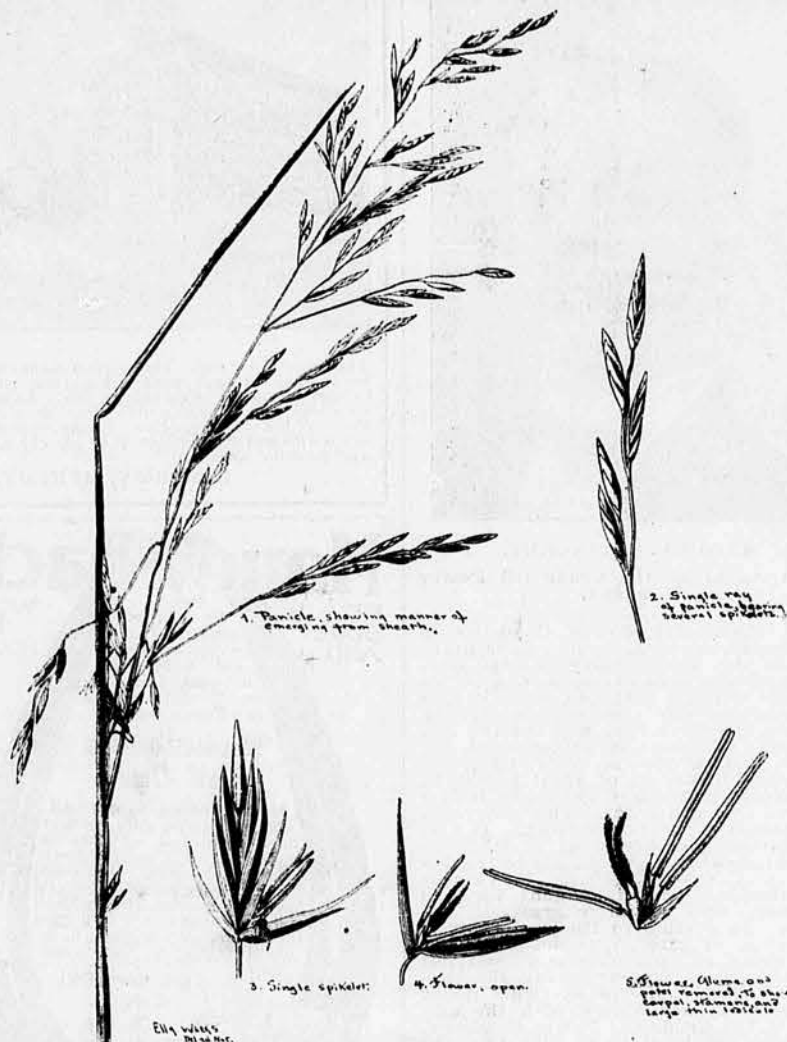


PLATE X.—*Festuca elatior* (English Blue-grass). 1. Panicle, showing manner of emerging from sheath. 2. Single ray of panicle bearing several spikelets. 3. Single spikelet. 4. Flower, open. 5. Flower; glume and pale removed to show carpel, stamens, and large, thin lodicules.

different ray branches being long, slender, and nodding. While young, the lowermost rays of the panicle usually are appressed against the main axis, and stand upright (Plates XI and XII). Being also a perennial grass, the nature of the underground propagating system will also serve to distinguish the plants of English blue-grass from those of an annual like cheat.

With respect to the commercial

XIX, will suffice for the point in question.

The real difficulty lies in distinguishing the commercial seeds of cheat from those of English blue-grass, which they certainly at first sight, and superficially, greatly resemble. It is on this account that cheat has been so often and so successfully sold for the seed of this species. As a matter of fact, the seeds of cheat are somewhat larger and very much plumper than

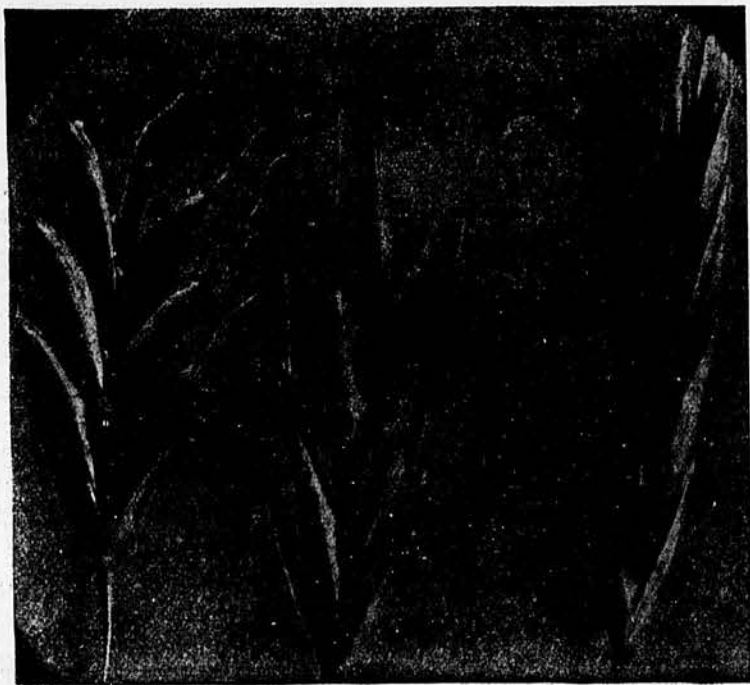


PLATE XIII.—Spikelets of *Bromus inermis* (right); *Bromus secalinus* (left); (in center, a spikelet of another species of *Bromus* not referred to in this bulletin). Magnified 3 times.



PLATE XI.—*Festuca elatior* (English Blue-grass). Panicle at commencement of blooming period.

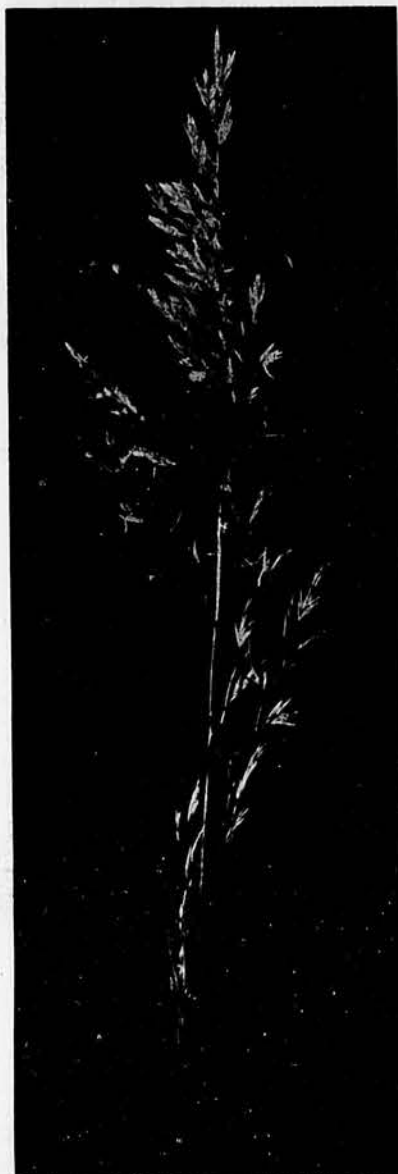


PLATE XII.—*Festuca elatior* (English Blue-grass). Panicle in full bloom.

MICA

Axle Grease

takes miles off the road, and weight from the load.

Helps the team and pays the teamster.

Practically destroys friction. Saves half the wear that comes from jolting over rough roads, and lengthens the life of a heavy vehicle more than any other one thing.

Ask the dealer for Mica Axle Grease.

STANDARD OIL COMPANY
Incorporated

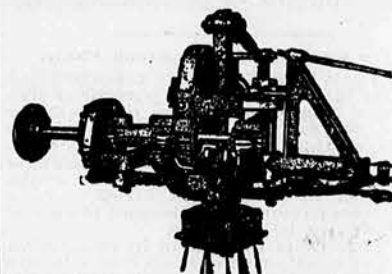
THE BRAINS

of the Windmill

That's what the windmill head is to the windmill—"the brains;" and that's why we make it so good.

It is compact, strong, down close to the work, and has but few wearing parts.

See that outer bearing for wheel shaft, you know that's good. Note the Center lift crank with Double bearings. It's good, too.



The Bearings are interchangeable throughout. They can be easily and quickly changed, too.

Large Oil Boxes,
Stroke Easy to Change,

and the best of all are the

Roller Rim Gears.

They stop the noise and lessen the wear. Are the best of everything in windmills.

And all other parts are as good as the Head.

See nearest agent or write

Dempster Mill Mfg. Co.

Factory: Beatrice, Neb.

Branch Houses:

Kansas City, Mo.

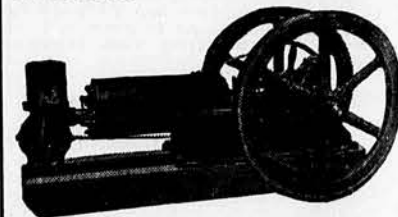
Omaha, Neb.

Sioux Falls, S. D.

Mention Dept. B when you write.

WATERLOO VAPOR COOLED GASOLINE ENGINES

The only horizontal vapor cooled gasoline engine in the world. Absolutely frost proof and cannot freeze.



(Patented May 15, 1906.)

The king of all gasoline engines. Our catalogue will tell you all about them, also our power and sweep feed grinders. Send to-day.

WATERLOO GASOLINE ENGINE CO.

1014 3d Avenue West

WATERLOO,

IOWA

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

When writing advertisers please mention this paper.

vided with a row of curved teeth running upward along the edge of the flowering glume. Compare Plates XVI and XVII, and the higher magnification in Plates XIX and XX; and see also Plate XIV. It seems unlikely that any difficulty need arise in distinguishing cheat from Hungarian brome-grass and English blue-grass that may not be solved by referring to the illustrations of the species herein as explained by the text.

KENTUCKY AND CANADIAN BLUE-GRASS.

In bulletin 84, Bureau of Plant Industry, United States Department of Agriculture, appears the statement (page 10): "The seed of Canada blue-grass is the only kind used as an adulterant of Kentucky blue-grass in this country. During the year 1904, 649,451 pounds of Canada blue-grass seed were imported from Canada practically none of which is being sold under the true name. Among the samples of seed sold for Kentucky blue-grass, and sent to the Seed Laboratory for examination, a large number have contained from 3 to 5 per cent of Canada blue-grass seed, and several have been entirely composed of the Canada seed."

Poa compressa is cheaper than *Poa pratensis*, the price of seed of the former in the New York market being \$10 per 100 pounds, as against \$14 per 100 pounds for that of the latter. In view of these facts, and of the general

inferiority of Canadian blue-grass to the other species, it is advisable for Kansas farmers to be placed on their guard with respect to the seed sold for Kentucky blue-grass.

From the 14th Biennial Report of the Kansas State Board of Agriculture, Vol. XIX, 1903-'04, pp. 992-3, is derived the information that the acreage in blue-grass in 1903 was 311,418, and had risen in 1904 to 388,961, an increase of 77,543 acres, or 25 per cent. Such a rapid increase in the blue-grass acreage in this State necessitates vigilance on the part of the Experiment Station with respect to the genuineness and quality of the seed sown.

The two species of blue-grass are not difficult to distinguish in the field. Both are perennial from horizontal creeping rootstocks or underground stems. Kentucky blue-grass has cylindrical, smooth, rather stout stems, from 12 to 24 inches, rarely 4 to 48 inches in height, its panicle being from 2.5 to 8 inches, usually about 4 inches long, pyramidal in shape, usually loose and open, with spreading ray branches which grow from the main axis in half-whorls of from three to six in a place, and which are densely flower-bearing in the upper half of the panicle.

Canadian blue-grass is generally of pronouncedly shorter habit than other species. The flowering stems may be from 12 to 24 inches tall, which is indeed the average range of height for

Handy ALL STEEL FRAME Silo

Send for our free catalog that tells all about Silos and Silo making. How to raise and gather silage crops, how to feed silage and make the silo pay. A money saving book for any farmer. THE FARMERS HANDY WAGON CO., Saginaw, Mich. Largest mfrs. of Silos in U. S. Makers of Farmers Handy Wagon. Branches: Kansas City, Mo., Des Moines, Ia., Madison, Wis.

Kentucky blue-grass. In most cases, however, Canadian blue-grass is noticeably shorter, usually about six inches tall, perhaps because it is more often found growing on poor, dry soils, on which Kentucky blue-grass would not grow. The habit of growth of the flowering stems is different, since they have quite a marked tendency to prostrateness at first, and are very much flattened instead of cylindrical. The color of the plants is distinctly of a dark blue-green, and contrasts quite sharply with the brighter "grass green" of Kentucky blue-grass. The flowering heads or panicles are usual-

ly somewhat compressed or contracted, somewhat narrowly oval in outline, 2 to 4 inches long, and bearing the lower rays in pairs or singly, the middle ones being in 2's or 3's. The rays are moreover spikelet-bearing nearly to their bases.

Plates XXI, XXII, and XXIII show successive stages in the development of the panicle of *Poa pratensis*, while Plate XXIV shows an early stage in *Poa compressa*; the later flowering stages differing but little in their general aspect.

(To be continued.)

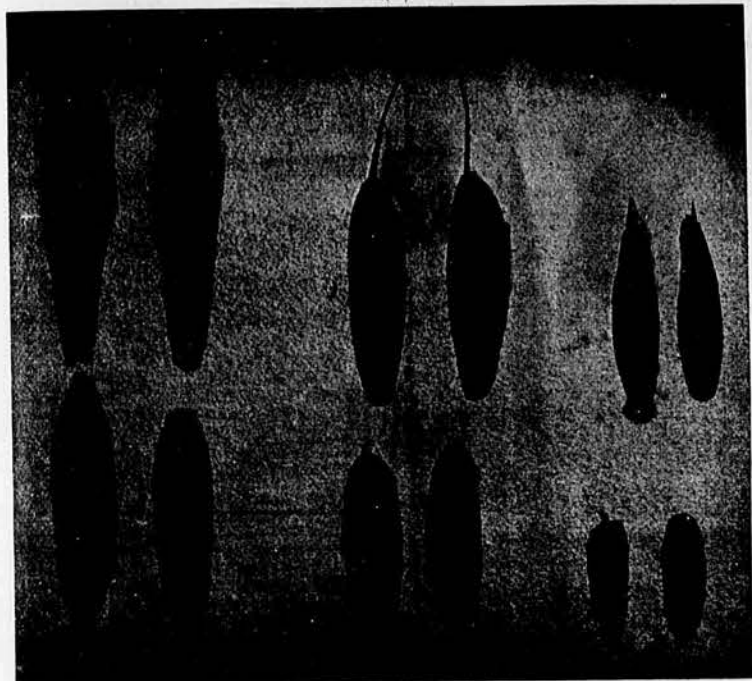


PLATE XIV.—Seeds of *Bromus inermis* (left); *Bromus secalinus* (Cheat) (center); *Festuca elatior* (English Blue-grass) (right). Upper row of seeds enclosed in glumes (the commercial "seed"); lower row, the seed proper removed from the glumes. Magnified 4 times.



PLATE XV.—*Bromus inermis*, commercial seeds. Magnified 4 times.



PLATE XVI.—*Bromus secalinus* (cheat) seeds. Magnified 4 times.



PLATE XVII.—*Festuca elatior* (English blue-grass), commercial seeds. Magnified 4 times.

Burning Stalks From Corn-Field.

Is it profitable to burn corn-stalks in your State in preparing the land for the present crop of corn where corn was raised last year? About how much, if any, fertilizer is there in an acre of corn-stalks, say the corn went sixty bushels to the acre?

Cedar County, Ia. Geo. H. ESCHER.

A sixty bushel crop of corn ought to yield about two tons of stover per acre, provided the corn is cut up and put into shocks in the fall. If the stalks are left on the ground and pastured some they will waste away at least one-half in weight and perhaps more. I should say that fifteen hundred pounds of corn-stalks per acre would include all the stalks that would usually be raked and burned. Prof. Harry Snyder in his book on "The Chemistry of Plant and Animal Life,"



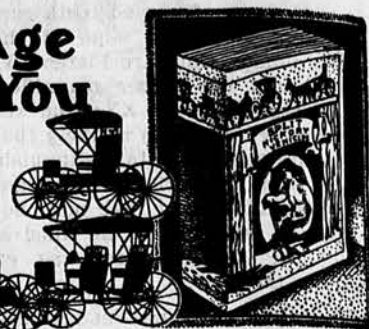
H. O. PHELPS
President

Let Me Pay The Postage on My Big Free Book to You

These Books cost me 25c each in thousand lots—yet I will send you one FREE, because I want you to know about SPLIT HICKORY BUGGIES—Made to Order—Sold Direct From Factory on 30 Days' Free Trial—Guaranteed 2 years. Over 100,000 SPLIT HICKORY VEHICLES now in use. My Direct Factory Price SAVES YOU BIG MONEY! This Book gives descriptions and prices of over 125 styles of Vehicles and Full line of BUSINESS.

Address me: **H. O. PHELPS, President,**
The Ohio Carriage Mfg. Co., [Station 251] **Cincinnati, O.**

Write For Split Hickory Buggy Book Today Free



states that a thousand pounds of corn-stalks without leaves, will contain on the average about 4 pounds of nitrogen, 6.3 pounds of potash and 0.5 pounds of phosphoric acid, thus an acre of corn-stalks, figuring fifteen hundred pounds of stalks per acre, would have a fertilizing value equal to six pounds of nitrogen, nine and a half pounds of potash, and three-fourths pounds of phosphoric acid per acre. As chemical fertilizers are sold on the market, the essential plant-food elements may be valued as follows: Nitro-

gen, 15 cents, phosphoric acid 7 cents, and potash 4½ cents per pound respectively, thus the total fertilizing value of an acre of corn-stalks, using the figures given, would be \$1.38. However, if the corn-stalks are raked and burned the potash and phosphoric acid will remain in the ashes, and only the nitrogen will be entirely lost. Since the nitrogen is the most expensive ingredient of commercial fertilizer, the loss by burning the stalks would be about 90 cents per acre.

Aside from their fertilizing effect, corn-stalks may have a beneficial effect upon the soil in restoring humus and thus helping to improve the physical condition of the soil, and in my judgment this waste of humus



PLATE XVIII.—*Bromus inermis*, seeds in glumes. Magnified 15 times.

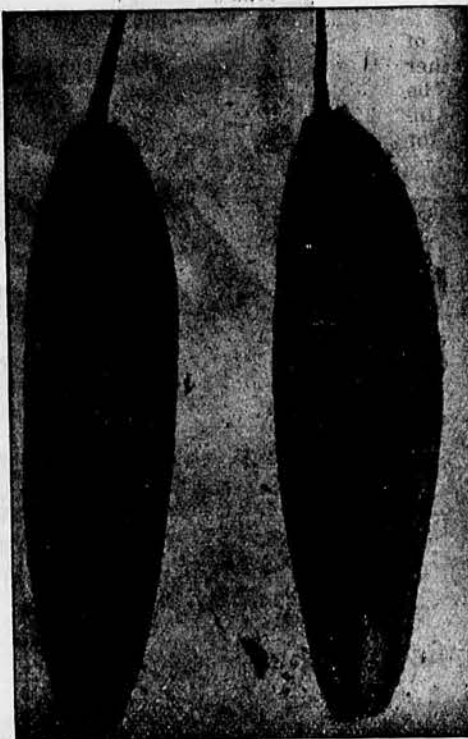


PLATE XIX.—*Bromus secalinus*, seeds in glumes. Magnified 15 times.



PLATE XX.—*Festuca elatior* (English blue-grass). Magnified 15 times.

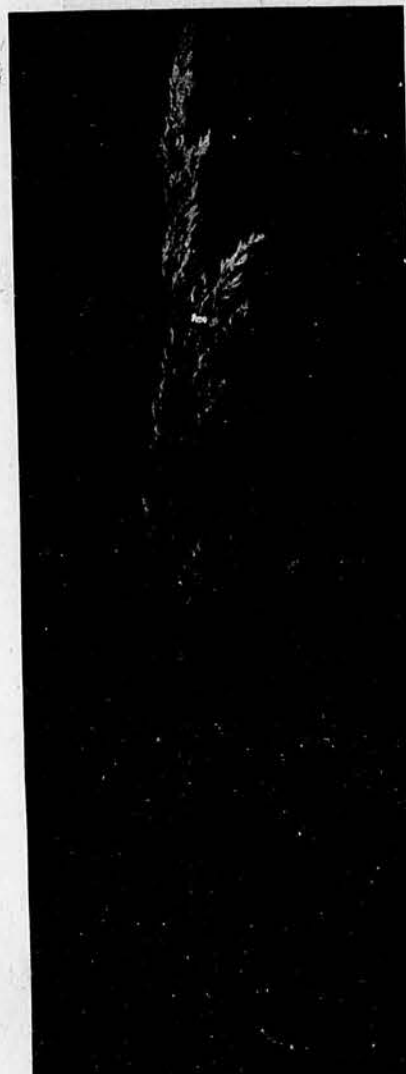


PLATE XXI.—*Poa pratensis* (Kentucky blue-grass). Panicle in early bloom; rays still upright. Slightly reduced.

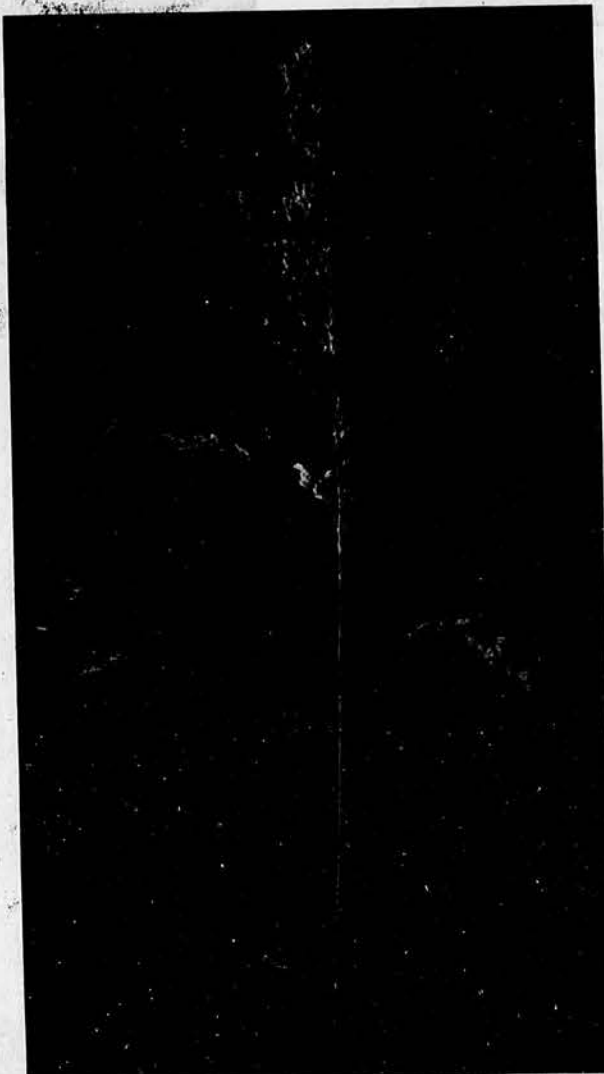


PLATE XXII.—*Poa pratensis* (Kentucky blue-grass). Lower rays of panicle spreading, panicle approaching full bloom. Slightly reduced.

New Wheat Lands In the Canadian West



5,000 additional miles of railway this year have opened up a largely increased territory to the progressive farmers of Western Canada, and the government of the Dominion continues to give one hundred and sixty acres free to every settler.

The Country Has No Superior

Coal, wood and water in abundance; churches and schools convenient; markets easy of access; taxes low; climate the best in the Northern temperate zone. Grain-growing, mixed farming and dairying are the great specialties.

For literature and information address the Superintendent of Immigration, Ottawa, Canada, or the authorized Canadian Government Agent

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

YOU CAN KEEP DRY AND COMFORTABLE IN THE HARDEST STORM BY WEARING



**TOWER'S
FISH BRAND
WATERPROOF
OILED
CLOTHING**

Clean Light Durable
Guaranteed Waterproof
Low in Price

WRITE TODAY FOR FREE
BOOKLET DESCRIBING MANY
KINDS OF WATERPROOF
GARMENTS

A. J. TOWER CO. SEASIDE, N. J.
TOWER CANADIAN CO. LIMITED TORONTO, CAN.

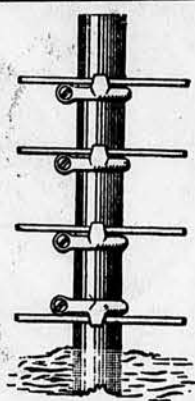


\$10.00 Sweep Feed Grinder. \$14.00 Galvanized Steel Wind Mill.
We manufacture all sizes and styles. It will pay you to investigate. Write for catalog and price list.

CURRIE WIND MILL CO.,
Topeka, Kansas.

Stock & Poultry FENCE

Many styles and heights; Diamond or Square Mesh; prices low. Sold direct on 30 days free trial, freight prepaid. Catalogue free. **KITSELMAN BROS.** Box 61, Muncie, Ind.



Tubular Posts

Last a Lifetime

Manufactured by

THE M. K. FENCE

COMPANY

St. Joseph, Mo.

Write For
Free Circular

BEEF PRODUCTION

The New Book on the Feeding of Beef Cattle, by Professor Herbert W. Mumford, Professor of Animal Husbandry, Illinois College of Agriculture. The subject is presented clearly and concisely from the cattle feeder's standpoint. The conclusions of experience and experiment have been combined in such a way as to present the latest thought on all phases of cattle feeding. It is authoritative and accurate. The teachings of this book will materially aid cattle feeders in making cattle feeding profitable. Price \$1.50, postage paid.

—ADDRESS—

The Kansas Farmer Co.
TOPEKA, KANSAS.

will ultimately have a much greater injurious effect on the soil than the waste of fertility.

It is also true, that a heavy growth of corn-stalks, plowed under often gives unfavorable results in the succeeding crop, especially if the season proves dry. The stalks prevent the

ing the land continuously to corn. The plan in this experiment has been to list the corn each year. I herewith enclose a table giving the composition of barnyard manure compared with wheat straw and corn-stalks, in order that you may compare the fertilizing value of these several materials. The

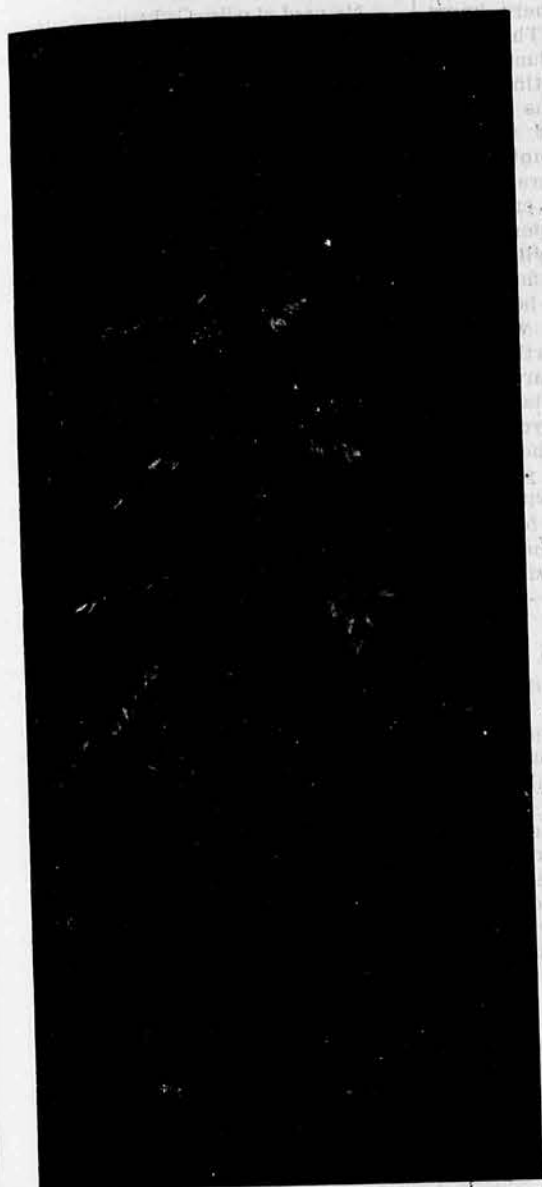


PLATE XXII.—Poa pratensis (Kentucky blue-grass). All the rays of the panicle spread and in full bloom. Slightly reduced.

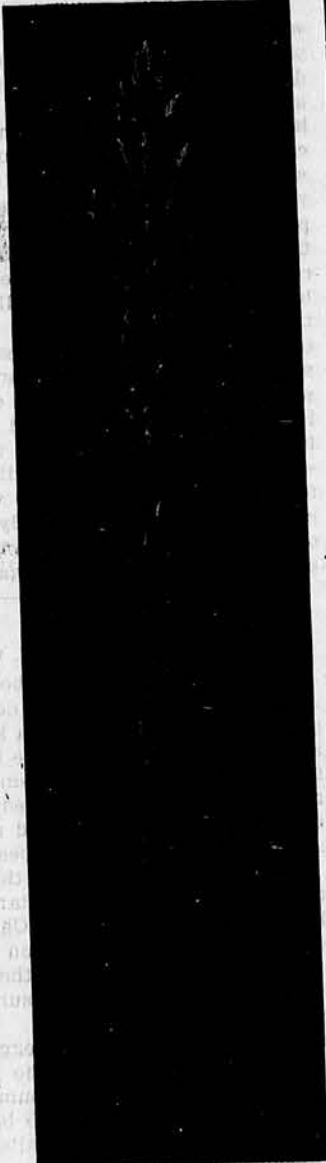


PLATE XXIV.—Poa compressa (Canadian blue-grass); panicle about half in bloom. Note the shorter rays and the close, narrow, compressed habit of the head, as compared with the loose, open, spreading panicle of Kentucky blue-grass.

soil from settling and making a good union with the subsoil and there is a tendency for such land to remain loose and dry out during a drought. Again the stalks may interfere in cultivating the corn.

It is more practicable to leave the stalks on the ground when the corn is listed than when the ground is plowed and planted with the surface planter. By cutting the stalks up with a stalk-cutter and listing between the rows of the previous season the stalks are partially covered, leaving the furrows clear and the corn is planted in the firm soil so that there is no injurious effect such as may result by plowing corn-stalks under and planting the corn in the surface soil above the stalks. Our plan, at this Station, has been to plant the corn with the lister and the stalks are usually left on the ground. However, I believe it is often advisable to rake and burn the stalks when there is a heavy growth, provided the land is to be plowed previous to planting. Every farmer however, should endeavor not to follow corn with corn, but to rotate crops, following corn with small grains or late forage crops, when it may not be necessary to plow at all, but the seed-bed may be prepared by disking or if the land is plowed and planted to late crops, sufficient time should be allowed after plowing so that the soil may settle and get into good seed-bed condition before planting.

figures given in the table are calculated from analysis published in Professor Snyder's "Chemistry of Plant and Animal Life," and Professor Robert's "Fertility of the Land."

A. M. TENEYCK.

Sow Alfalfa in the Fall.

Is it too late to sow alfalfa and get a good stand? Ed CODY, Clay County.

It will depend entirely upon the weather conditions following this. It may not be too late to sow alfalfa provided favorable weather conditions follow. However, I would not advise you to plant until the weather changes. Alfalfa-seed put into the ground now can not sprout and will be entirely dependent upon rain. It will be safer to plant after the rain than before it. It may now be considered late for spring sowing. The Good Book says, "There is always a time to sow," and since we have not yet had such a period of weather, we should still have a favorable time to sow alfalfa this spring. However, unless the seed-bed is in good condition and unless favorable weather comes in a short time, I would prefer to wait and sow in the fall rather than to seed this spring. A. M. TENEYCK.

Keeping the weeds entirely eradic-

TABLE GIVING AMOUNTS OF FERTILIZING INGREDIENTS.

Material.	Water lbs.	Ash lbs.	Nitrogen lbs.	Phosphoric acid lbs.	Potash lbs.
Barnyard manure (partly rotted).....	750	58.0	5.4	2.6	6.3
Wheat straw.....	143	46.0	4.8	2.2	6.3
Corn-cobs.....	120	13.0	2.0	0.4	6.8
Cornstalks (without leaves).....	150	13.5	4.0	0.6	6.3
Cornstalks (with leaves and husks)....	150	45.3	4.8	3.8	16.4

We are just beginning an experiment to learn the value of burning versus leaving the stalks on the ground, keep-

cated and the ground mellow is work that if slighted in the least will curtail the expected crop yield.

Where Sun, Land and Water Blend

DEVELOPMENT of the PRIEST RAPIDS of the COLUMBIA

Great Irrigation and Power Works Under Construction by the

Hanford Irrigation & Power Company

In Central Washington.

Machinery is being built and one hundred and fifty teams and two hundred men are on the ground constructing canals to irrigate 32,000 acres of the finest land under the sun.

Here is a happy joining together of an exhaustless soil of basaltic ash, an extra mild climate and a never-failing supply of water for irrigation. These perfect conditions will grow apples, pears, cherries, peaches, grapes, apricots, almonds, nectarines, plums, and all other large and small fruits of such superior quality that they will return profits for their fortunate owners far exceeding their greatest hopes.

A Centering Point For Railways.

Four lines of railways, electric and steam, pointed for the Hanford Irrigation and Power Company's lands.

The town of Hanford, trading point for thousands of acres of lands to come under irrigation, is now being laid out for orchard homes.

Five, ten, twenty and forty acre fruit lots soon to be placed upon sale.

Our "Question and Answer" circular, with map, tells all about it; sent free. Address,

Hanford Irrigation & Power Company

E. C. HANFORD, Manager.

Dept. 12, Seattle National Bank Bldg.

SEATTLE, WASHINGTON

(Ten acres enough)

NEW SOUTH WALES, AUSTRALIA

OFFERS A WELCOME

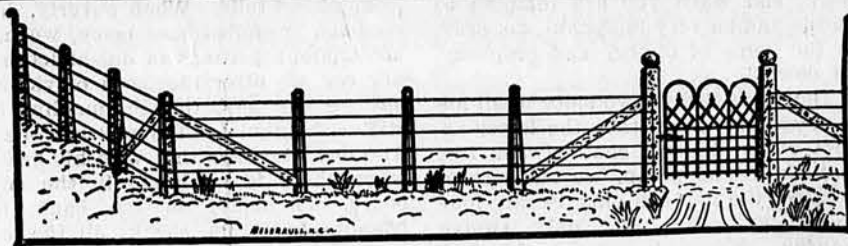
To the Emigrant Settler, to the Rural Laborer and to the Capitalist. Emigrants sound in health, and skilled in any industry, will be assisted.

The New South Wales climate is kind to the farmer, and wheat is produced there more cheaply than in any other country in the world. The great range of climate possessed by the State, permits almost every known crop to be raised.

A young country, close to the teeming East, with a fast growing population and rapidly expanding industries, and the converging point of many important trade routes, New South Wales offers many avenues of activity for the capitalist.

New South Wales produced last year \$230,000,000. The men engaged in the Primary Industries produced \$875.00 per head. New South Wales has many entrancing tourist resorts, great natural wonders in the limestone caves, and the oldest land surface on the globe in Mt. Kosciusko.

Full information, handbooks, etc., may be obtained free on application to THE DIRECTOR, Intelligence Department, SYDNEY, N. S. W.



Build Your Fence with Concrete Posts Made of Cement Mortar

There are from TWO to THREE MILLION wood posts going to decay in each county. Make them of CONCRETE reinforced with steel cables and they will last FOREVER. Cost no greater than best wood posts. FIRE, nor the elements of time will not destroy. Protects stock against lightning. One county will build you a profitable business. We furnish equipment for a factory. Address

THE PARAGON CONCRETE FENCE POST CO., 417 Portsmouth Bldg., Kansas City, Kans.

ALFALFA SEED

Kansas grown. Highest award at St. Louis for best alfalfa seed in world. Crop of 1906. Also Cane and Millet. Macaroni Wheat and other Field Seeds in carload lots. Garden City, Kans.

less. Write for prices. McBERT & KINNISON,

Home Departments

CONDUCTED BY RUTH COWGILL.

When Earth's Last Picture Is Painted.

When earth's last picture is painted and the tubes are twisted and dried, When the oldest critics have faded and the youngest critic has died, We shall rest, and faith, we shall need it—lie down for an hour or two Till the Master of all God's workmen shall put us to work anew!

And those that were good shall be happy—they sit in a golden chair, They shall spash at a ten league canvas with brushes of comet's hair; They shall find real saints to draw from—Magdalene, Peter, and Paul; They shall work for an age at a sitting and never be tired at all!

And only the Master shall praise us and only the Master shall blame; No one shall work for money, and no one shall work for fame, But each for the joy of the working, and each in his separate star Shall draw the thing as he sees it for the God of all things as they are.

—Kipling.

Our Testing Times.

CORA BULLARD.

With life's daily rounds; in the field, in the home, in the office, in the street, inevitably there comes a multiplicity of things to vex, annoy, and perturb. In the field, grasshoppers, gophers, green bugs, rust, and smut destroy the fruits of our labor and rob us of our peace and rest. In the home, rats, mice, flies, bedbugs, roaches, peddlers, or perhaps neighbors' bad boys conspire to make us wish, at times, that the date of our birth might have been postponed another millennium, or at least until all such pests could have been eliminated from the general scheme. In the office, the deadbeat, the bore, the man who promises but never pays, the negligence of hired help make heavy draughts upon nerve-force and brain tissue, and we wish with all our hearts for the moment that we might have had our lots cast in another sphere of activity. On the street, the heat, the cold, the dust, the mud, the wind, the rain, all in their turn bring physical discomfort and disarrange our plans so much that even the wisest, the most patient, the most religious wonder in an undertone if the universal order of things might not be changed to human advantage. And in almost every community or place there is one, at least, to be found who is so much of a bigot that he or she thinks by getting angry and fizzling himself or herself to death over immutable things that he or she may therefore keep the universe itself from toppling over. It is sometimes ludicrous and astonishing to see what uncontrollable paroxysms of earnestness certain people will get into over the unavoidable, their manner of throwing away emphasis is interesting and instructive; conjunctions, adverbs, and prepositions, all important in their places, are made to carry such disproportionate burdens that the whole mother tongue loses its balance and falls far short of the requirements. In the matter of providence, nothing depends upon our anger. It is sheerest waste to rail at Supreme equity and order. It was Joseph Cook, the great philosopher and divine, who thus admonished: "The wrath of man can contribute nothing to the righteousness of God. Let God have space to work, and when you are tempted to get up and be very indignant, do, pray, in the name of history and prophecy, sit down."

There are always two sides in all human affairs. If we take the lower aspect of our life we shall always fret and chafe and groan, we shall rebel because the day has only twenty-four hours, and the year only twelve months. We shall bemoan the fact there can not be two harvests within the extended circle; our hand can never have enough, our imagination can only be tempted, not to satisfaction but to new ambitions of despair. But if we take the upper view of life; that is to say, to poise ourselves on goodly heights and look down, we shall see that all things are striving to work together for our good. We shall see

how the elements combine one with the pavements grow iron-hard under

another, how marvelously the lines run—cross and return, see how mistakes are made account of, and how disappointments become the beginning of larger happiness, and how the things that crushed us most at the time were among the greatest blessings of our life.

We should not be ungrateful for petty annoyances and perplexities. They make us what we are; they have been our school masters, disciplinarians, and but for them we should not be half grown to-day; we should be mere babies still—they forced us to think, to strive; they drove us to action; they tested our quality. A wise Providence gives us many things to do, not so much for their own sake as for the sake of their strengthening effect upon the body, mind, or character. No man goes through gymnastic exercises, for example, merely for their own sake. It is hardly supposable that any man plays with dumb-bells simply because he finds in the play amusement to satisfy his idea of pleasure. He goes through gymnastic engagements and exercises to harden himself, to train his body that he may become agile, active, and capable of finer resistance and endurance. The object is not in the thing itself; it lies beyond the exercise. And so in many of the things we are compelled to meet and do from day to day. The things themselves, strictly looked at, may be of very little use to us, but they leave behind them influence which will tell in the temper and tone of our after life. In all the higher concerns of being the events which crowd around us should be studied in their moral bearing. Are we suffering to-day? It is perhaps to prepare us for still keener agonies that await us to-morrow. All the little worries and vexations of daily experiences are but to prepare us for nobler martyrdoms and deeper tragedies which lie beyond. There is no particular object to be served, perhaps, in the special affliction which we are now undergoing. It looks to us as if it were mere worry, things which we might have been spared at least, and we say, "I could give my right hand without a murmur to be taken off for the sake of human advancement and human betterment. But these flies, these bugs, that boy, these people, to be worried and fretted and chafed by the ten thousand little ills of everyday experience, oh, this is a thing I can not endure." But let us not forget all these things have a higher educational value. True, we may pass through them without learning anything, or we may so accept them that when the next trial comes we shall be better fortified to bear it and better qualified to find sweetness and joy in unexpected places—and comfort in storm and darkness and distress.

It is in the days of adversity our testing time comes. We do not know what we are; we can not read our hearts until we have fallen into diverse temptations. It is when the wind beats upon us from all points of the compass and life's sea becomes rough and unmanageable that manhood or womanhood tells. When poverty, desolations, friendlessness come, we can not triumph perhaps in our afflictions, nor can we utter the psalm of victory but we can say, though our lips be stiff with anguish, "Thy will be done!" And one who says that with his heart, when there is no bread in the cupboard, no money in the bank, no friends about him, speaks all the lessons that the cross on Calvary can teach the heart of man.

The Call of the Country.

The first warm days alter the city's voice. The stronger sunlight hardens the lines of brick and stone. A bit of green flung out from a brave-hearted tree in a company of back-yard fences and ash-barrels, suggests a contrast which widens and fills your heart until

foot, and the streets become narrow and oppressive. Some men include these unhappy changes in the general diagnosis of spring fever, and go their way to their desks to struggle through lengthening days until custom has whipped them back into the rut from which they had been unconsciously rising.

So it is with some. Others know when first the voice alters. The warm sunlight strikes through dusty window panes on to desk or writing table, and wavers tantalizingly as though beckoning. Work palls and so does city play. It is only the country that will satisfy the awkward craving of your spring appetite. You envy the plowboy, the husky farmer, who trudges to his work with daylight and returns weary at night. The fields will be greening. Gardeners will be laying their plans. Plowshares will be turning the rich dark earth from which the frost will have scarcely departed. If you are of this class—and if the country has claimed you once, it will call you always with the Spring—you will be unhappy until you turn to time-tables and conspire with yourself to answer the call if only for a day of tantalizing inspection of other men's gardens.—Metropolitan Magazine.

Eggs.

HENRY W. ROBEY, M. D.

What do you know about eggs? Anything? You probably do know a good deal about them. You know that some are good and some are bad, some are large, and some are small, some are white, and some are red, or blue, or speckled, some are round as a ball, and some are pointed and pear-shaped.

One celebrated egg has the reputation of knowing how to stand on its head. But that was when Christopher Columbus gave it a crack on the head and told it to stand up on the table or he would do something surprisingly bad to it.

Very likely, the oldest eggs in the world now are those of the Dodo, to be seen only in a few museums. They are not only old enough to be rotten, or as Senator Ingalls called them, "discouraged" eggs, but they are petrified, (turned to stone).

The largest live, fresh eggs to be found now are laid by the *Alipornis* of Madagascar, and weigh 24 pounds each. And next to them in size are the eggs of the emu and ostrich which weigh about six pounds each. How many of my readers would like to be ordered by the count to eat just one ostrich egg for supper? What would your dream be like? You would not "eggs-actly" like it, would you?

Not all the edible eggs in the world, come from Brother Coburn's "helpful hen," though she gives the people of Kansas a goodly supply. Last year she gave us over nine million dollars worth of eggs and egg-products, for every chicken we eat is the product of an egg.

But hen's eggs are only a small fraction of the egg crop of the world. Do you know a living thing in the whole universe that is not the product of an egg? I don't. But the eggs are not all laid in nests and crowded and cackled over. Countless millions and billions of them never know a hen's nest or a bird's nest.

All the fishes in the sea, and all the insects in the air originate in eggs, and the arithmetic including quatrains would be staggered if called upon to express their number in figures. A diligent hen has been known to lay 200 eggs in a year, while the white ant lays 80,000 eggs in a day, and an oyster is credited with producing 1,800,000 eggs in a season. Would you like the job of counting the eggs in an oyster-bed?

In a single twenty-pound cod fish 4,872,000 eggs have been found, and they form a considerable part of the food of our jolly French cousins.

Reptiles are less prolific in their production of eggs. A snake lays from 16 to 20 eggs in a season, a crocodile 25 to 30, a turtle 150 to 200.

Scientists have classified and named about a million kinds of insects, with uncounted numbers of each kind, and they all came from the egg basket. How many flies and mosquitoes do you suppose there are in the world? Each

Grandfather's Cure for Constipation

GREAT medicine,—the Sawbuck. Two hours a day sawing wood will keep anyone's Bowels regular.

No need of pills, Cathartics, Castor Oil, nor "Physic," if you'll only work the Sawbuck regularly.

Exercise is Nature's Cure for Constipation and,—a Ten-Mile walk will do, if you haven't got a wood-pile.

But, if you will take your Exercise in an Easy Chair, there's only one way to do that, because,—there's only one kind of Artificial Exercise for the Bowels and its name is "CASCARETS."

Cascarets are the only means to exercise the Bowel Muscles without work.

They don't Purge, Grip, nor "upset your Stomach," because they don't act like "Physics."

They don't flush out your Bowels and Intestines with a costly waste of Digestive Juice, as Salts, Castor Oil, Calomel, Jalap, or Aperient Waters always do.

No—Cascarets strengthen and stimulate the Bowel Muscles, that line the Food passages and that tighten up when food touches them, thus driving the food to its finish.

A Cascaret acts on your Bowel Muscles as if you had just sawed a cord of wood, or walked ten miles.

Cascarets move the Food Naturally, digesting it without waste of tomorrow's Gastric Juice.

The thin, flat, Ten-Cent Box is made to fit your Vest pocket, or "My Lady's" Purse. Druggists—10 Cents a Box.

Carry it constantly with you and take a Cascaret whenever you suspect you need one.

Be very careful to get the genuine made only by the Sterling Remedy Company, and never sold in bulk. Every tablet stamped "CCC."

Excursions to California Daily



Low Rate.
Long Limit.
Liberal Stopover Privileges.
Diverse Routes.
Tickets accepted on the California Limited and all other trains.

Side Rides to
Grand Canyon of Arizona
and Yosemite Valley
for small additional sum.

\$50

April 28 to May 18

Let me send you—free—copies of
California Summer Outings.
The Mystic Shrine.
The German Baptist Brethren.

J. M. CONNELL, Gen. Pass. Agt.
The Atchison, Topeka & Santa Fe Ry. Co.,
Topeka, Kansas.

LAWRENCE Business College
LAWRENCE, KANSAS.

Elegantly illustrated catalogue sent free.
Send for a copy.

Address Look Box F.

one of them hops out of an egg shell. So does every grasshopper and cricket, every wasp, and beetle, and butterfly. There are more eggs than stars in the universe, and we think the stars rather numerous. We also think the spears of grass on the prairies rather abundant, but there are more eggs in the meadow probably than spears of the grass. And they are not all Easter eggs either, nor are they all used in making egg-nog, or custard pie. The question is often asked, as to what becomes of all the pins that people buy and loose, but a far greater problem is, to know what becomes of all the eggs in the world.

The city of Emporia, Kans., shipped out ten car-loads of hen's eggs in two days last week—over ten thousand dollars worth. What will become of them? Somebody will eat most of them, as they will whole train loads of other eggs from other parts of the State.

Then we shall eat some turkey eggs, and goose eggs and ducks eggs, and guinea eggs, and pigeon eggs, and the cats will eat some birds eggs. So will the dogs and some other birds. Even a skunk likes good eggs. In Central America the eggs of the waterbug are made into bread for rich epicures and the aristocracy to feast on. Many millions of fish eggs are eaten by gastronomic sports under the name of Caviare, in nearly all parts of the civilized world. What then is an egg? Do you know what it is made of? A fowl's egg, such as emu, ostrich, turkey, duck, goose, bird, hen, etc., is composed of lime, (for its shell), plus all the sixty-five chemical elements that make up the human body as well as the bodies of most animals. And strangely enough, those chemical elements are found in eggs in almost the same identical quantities and proportions as they are found in the human body.

So that an egg is the purest and most concentrated natural food of mankind. And on that account, we accept the situation and eat eggs when we want to live long and be happy. Of course we do not live wholly on eggs, for along with them we must have wheat, corn, meat, and fruit. But the most perfect element in our dietary is an egg. And could we have but one article of diet, it is likely that we could live longer and better on eggs than any other single article of food, though we should soon tire of it, as we would of any other single article of food. We would tire of honey, or bread, or potatoes, if confined to any one of them too long, just as men have done who tried to eat one quail at each meal for thirty days. Very few men can do that, as delightful as it might seem, before trying it.

But, all things considered, there is no more wholesome or nourishing article of food in the world than eggs, so don't be afraid to eat them. The good housewife will find numerous ways of preparing them, ham and eggs, bacon and eggs, eggs on toast, in omelets, in custards, in cakes and pies, in egg-bread, salads, soups, and dressings, boiled, fried, baked, escalloped, scrambled, and many other wrinkles in cookery. Then many people delight in raw eggs and eggnog, and various other drinks. There are other "egg-amples," that need not be mentioned. We even use highly seasoned and scented eggs when we wish to drive a very obnoxious fellow out of town. And the scheme generally succeeds, for the scent of a rotten egg differs widely from that of attar of roses.

There is a mythological story to the effect that a long time ago, the crocodiles became so numerous on the Nile that they threatened to out-number all the other animals in old Pharaoh's dominions, and a convention of all the other animals was called to decide on measures for keeping down the crocodiles. The matter was discussed at great length, but no one had a practical solution of the problem to offer. And when they were about to adjourn like so many other political conventions do, without having done anything but talk and pass harmless resolutions, a little animal about the size of a rabbit, took the platform and told the delegates that if they would all do as he did there would never be any trouble from surplus alligators or cro-

codiles. And when asked for his remedy, he told them that while they were wrangling over the problem, he had eaten a thousand crocodiles for his breakfast. And when asked how that could possibly be, he said, "I simply ate that many crocodile eggs, and each egg held an unhatched crocodile, so I ate a thousand crocodiles for breakfast. Go thou and do likewise." And they called him the little egg-sucker after that. But we call him the Ichneumon, and give him credit for lots of sagacity. But I don't advise you to eat a thousand eggs for breakfast, unless they are the size of crocodile or fish eggs, though I do advise you to eat eggs and plenty of them.

I only know of one place in the world where eggs are tabooed instead of chewed, and that place is the island of Moriseki, one of the Japanese group. In that island, no hen old or young, no crowing cock or pecking chick, and no egg, sweet or stale is ever seen. And no picture or graven image of them are allowed. Should you go there with a chicken feather in your hat, you would be mobbed and thrown into the sea. If you should even chuck or peep in imitation of a hen or chick, the officers would see to it that you did not get a mouthful of food or a sip of water on the island though you should die for want of them. If you should try to land there inside of twenty-four hours after eating an egg, the mob would give you the biggest hustle you ever got into. So you see there is one exception at least, to the rule that eggs are prime favorites with all men.

The Young Folks

The Harp's Song.

All day, all day in a calm like death
The harp hung waiting the sea wind's breath.

When the western sky flushed red with shame
At the sun's bold kiss the sea wind came.

Said the harp to the breeze, Oh, breathe as soft
As the ringdove coos from its nest aloft.

I am full of a song that mother's croon
When their wee ones tire of their play at noon.

Though a harp may feel, 'tis a silent thing
Till the breeze arises and bids it sing.

Said the wind to the harp, Nay, sing for me
The wall of the dead that are lost at sea.

I caught their cry as I came along
And I hurried to find you and teach you the song.

Oh, the heart is the harp, and love is the breeze,
And the song is ever what love may please.

The Civilized Squirrel.

Whether or not it will presently be necessary to put steam heat into the squirrel houses in the trees of Central Park, New York, is an interesting question. These popular little animals are now so thoroughly pampered by the public that they have abandoned their old self-dependent habits. They no longer sleep a great part of the winter away, as is natural to them in this latitude. As their usual partial dependence upon a state of semi-torpor to protect them from the effects of the cold is broken up, it may be that they suffer a good deal from the temperature of such nights as these.

To determine whether all the public pampering of the park squirrels is good for them, or whether they are being cut off in their prime by a not sufficiently simple life, the park authorities are going to take a census of the little animals and keep track of them. The squirrels are certainly getting peanuts by the bushel. Some of them have grown so critical that they refuse to accept single nuts, and insist upon having access to the bag in order that they may make their choice. Other scorn peanuts altogether, and search the pockets for candy and other dainties.

They have grown tame even beyond squirrel precedent. Experience has



Simpson-Eddystone Black & Whites

The standard for over sixty years. Absolutely fast color. Every year has added to their quality. Some designs have a new silk finish.

Ask your dealer for Simpson-Eddystone Black-and-Whites.

Three generations of Simpsons have made Simpson Prints.

The Eddystone Mfg. Co. (Sole Makers) Philadelphia.



Central Business College

YOU CAN SAVE \$15, and secure home instruction in Penmanship or Shorthand free until you enter college by writing at once. Central Business College, 1812-14 Grand Ave., Kansas City, Mo. 94-page catalog free.

Topeka Business College

The School that always gets you a good position in

BOOKKEEPING
SHORTHAND
TELEGRAPHY
CIVIC SERVICE or
PENMANSHIP

J. D. Strickler

Address

TOPEKA BUSINESS COLLEGE, Topeka, Kansas

PREPARATORY SCHOOL FOR BUSINESS

WHITMORE

BUSINESS COLLEGE

Book-keeping, Shorthand, and Business Courses. 107's of positions, big wages, pleasant work for young men and women. Don't delay—Start now. Special Rates. Write A. R. Whitmore, Pres., St. Joseph. For Particulars & Catalogs.



Going to School or Learn a Trade?

If so, write for our fine new catalogue giving complete information about the special opportunities offered for obtaining an education in almost any subject and learning some of the best trades. Address O. H. LONGWELL, Pres. Highland Park College, Des Moines, Ia.

Finlay Engineering College

126 Boston Bldg., Kansas City, Mo. Teaches steam, electricity, gas, refrigeration, architecture. The only school of the kind in the West. Machinery in actual operation. Students enroll any time. Assisted to positions. Have not been able so far to fill positions. Reference: National Bank of Commerce.

St. Joseph Business University

Established in 1879; thousands of students employed; the most thorough instruction; fine catalogue free.

R. E. GARD, Prop., 811 Edmund St., St. Joseph, Mo.

NORMAL COMMERCIAL SHORTHAND TELEGRAPHY

961 Annual Enrollment. POSITIONS SECURED or tuition refunded.

Our Fare Paid by the school. Send for full information and free catalogue. State: corrected. Allen Moore Chillicothe, Mo.

When writing advertisers please mention this paper.

C. W. PECKHAM, President.
Haven, Kans.

R. H. BEALL, Manager,
Kansas City, Mo.

The National Grain & Elevator Co.

Receivers and Shippers of Grain.

This Company is conducted on the cooperative plan by the Independent Cooperative Elevators. We are the terminal for Farmers and Independent Elevators and solicit your membership and patronage.

ARE YOU POSTED

on the recent developments in the Grain Trust investigation by the Interstate Commerce Commission? IF NOT, ASK US. Why don't you farmers fight the Trust? We will help you, if you will help yourselves.

DO YOU KNOW

that the President of the Kansas City Board of Trade admitted in his testimony at the hearing of the Interstate Commerce Commission that they had boycotted The Independent Farmers' Terminal Co.?

The National Grain & Elevator Co. Kansas City, Mo.

References—The Editor of this paper.

Sugar Beets in the Arkansas Valley

1000 Laborers for Thinning and Cultivation
Needed Very Shortly.

25000 acres of beets grown for the American Beet Sugar Company by farmers near Fowler, Manzanola, Rocky Ford, Las Animas, Prowers, Damar and Amity. Several thousand men and boys needed for work in the beet fields. Farmers will pay 15c per hour for day-labor, but contracts by the acre or for the thinning, cultivation and harvesting preferred and more profitable to the laborers. Work will probably start early in May. Laborers provide their own board. Individual parties or families coming to the Arkansas Valley about the middle of May will find plenty of remunerative work.

For further information write to

American Beet Sugar Co.,
ROCKY FORD, COLO.

American Beet Sugar Co.,
LAMAR, COLO.

Dairy Interests

Feed and Care of the Dairy Cow.

When the cow is on full feed of grass we get good results from almost any cow, even if she is not of a pure-bred milking strain. And this must prove conclusively that at other times of the year we are not doing by the cow as we should, to get all out of her that there is in her.

The flush or full feed of grass many seasons lasts only about two or three months, and the rest of the year the cow is in too many cases allowed to shift for herself, and of course the results are not very satisfactory from a financial standpoint.

GREAT RECORD.

When we read of the great records made by some of the famous cows, we naturally wonder how one cow can eat and assimilate feed enough to produce the amount of milk in the time given. Take, for instance, the record recently made by Mr. Gillett's cow, Colantha 4th Johanna, at Rosendale, Wis., and it seems almost incredible that this cow's digestive organs could be equal to the emergency. Without going into figures as to the amount of protein, carbohydrate, and fat needed to produce this amount of milk, or to see if the ration analyzed would correspond with the milk when analyzed, she must have had a great digestive capacity to assimilate the ration, 30 pounds of silage made from well-eared and mature corn, 10 pounds clover hay, 30 pounds sugar-beets, 21 pounds of a mixture equal weights of bran, ground oats and gluten feed, with 3 pounds of oil-meal. It will be noticed that the grain feed is all very rich in protein and, in fact, the very best obtainable and consisted of a variety. According to the best authorities there was an excessive amount of protein as the ration would figure out very narrow. The hay also, clover, was rich in protein, the silage and sugar-beets were richer in carbohydrates and fat, but those feeds were of a succulent nature.

THE LESSONS.

There are several object lessons that can be drawn from this illustration. First, to get results we must have feed rich in protein; second, for a winter feed we must have something of a succulent nature. These wonderful results could never have been obtained if these rules had not been carried out, and the question naturally arises, could this cow have continued

this forcing without reducing her weight? In making this great record Mr. Gillett has departed from the ratio established by the best authorities, and has fed a ration of 1 to 4.9 and not 1 to 5.6 as has been the opinion of good authorities.

The grain ration fed by Mr. Gillett, with the exception of oats, was a purchased ration and was not raised on the farm, which of course is not good, sound agricultural doctrine, because we should aim to raise as far as possible our own feed.

To give the dairy cow a good working ration then, we must select such feeds as will contain the necessary amount of protein. Of the grains we raise upon the Minnesota farm, oats are the most valuable, barley next, and corn last, so far as the protein content is concerned. Of the fodders, I will name in the order of their value, alfalfa hay, clover, oat hay, oats cut when in the milk and cured into hay, red top, millet, timothy, fodder-corn, corn-stalks, and silage. It is impossible to compound a ration of home-grown crops, with a sufficient amount of protein. And to get the best results, it is economy to buy some concentrated feed even at what may seem to be a high price. When it comes to roughage, clover hay is of itself a balanced ration according to the best authorities, but it is impossible to get best results from the cow, or even paying results, when fed on roughage alone. And when we take our farm grains, and make a mixture or feed either alone, we throw our ration out of balance.

SILAGE.

Silage is very low in protein, and yet is a very valuable food. In fact, silage has not as much protein ton for ton as oat straw. It is valuable because of its succulence and as an aid to digestion. Everything that the cow eats the silage helps to digest it. Mr. Gillett understood this or he would not have fed Colantha 4th Johanna thirty pounds per day of it during the sixty-three days' test, but he realized that he could not feed a cow as much grain as he was feeding without having some succulent food with it, to keep the digestive organs in a healthy condition.

But how shall the man care for his cows under the farm conditions, and conveniences that are at the command of the ordinary farmer?

When the cow is on full feed of grass little thought need be taken of her, but this is comparatively a small part of the year, and in fact some practise feeding something the entire year. I am of the opinion that a small amount of grain fed even on the flush of feed will repay the owner; in fact, some farmers practise feeding hay also when on grass. Most cows crave a little dry feed, when coming from the pastures where there is plenty of feed, and when it comes a little later in the season, the weather gets hot and the flies are troublesome, it is absolutely necessary to feed something in connection with pasturage, to maintain anything like a full flow of milk. This is of the utmost importance to cows that have freshened in the spring, for if allowed to run down in milk at this time nothing that can be done later will bring them back.

SUPPLEMENT THE PASTURAGE.

Some seasons pastures remain fresh right through when rains are abundant and well distributed. The first available crop for soiling or to supplement the pasture is clover. This the farmer should always have, and if pastures begin to get dry about the first of July, feed the cows some wilted clover or new clover hay. You will be surprised to see what it will do for them, and in fact there is nothing better than a succession of clover cuttings until the fodder-corn is ready for the knife, for of course if you are dairying you are prepared for any emergency with a good patch of fodder-corn—but generally this crop is not far enough along for economical feeding before the last part of August or first of September. To those who have silos, the summer ensilage is excellent feed to supplement the pastures and

much more convenient to feed than any soiling crop. In fact, it would be a great economy of land to reduce the pasture and provide ensilage for the whole year. But many have not yet built silos, in fact, a small per cent of farmers have them. Now is the time to prepare for the soiling crops for the coming summer—at least the fodder-corn. And there is no place in Minnesota, North or South Dakota that can not raise good fodder-corn. Before leaving this subject I want to give in a few words my way of raising fodder-corn, both to feed as a soiling crop and also to fill the silo.

I prepare the ground thoroughly, and work it until about June 1, having first put what manure from the barnyard I can spare on the land. I prefer a clover sod if I can get it. I plant about June 1, in rows drilled north and south and plant about three pecks per acre. I use the drill attachment to a common corn-planter. It is much preferable to plant not earlier than the date given as the corn planted at that time makes a very rapid growth, and the thickness of the planting makes the stalks small and easily masticated by the animals. Cultivate as much as necessary to keep clean.

Harvest when the lower parts of the stalks begin to turn yellow, or the ears show signs of denting, if there are any ears on it. Let the bundles wilt for one day before shocking, or if designed for the silo put it in as fast as cut and while green.

The soiling crop should be fed until the cows go into winter quarters or onto winter feed, and this should be as soon as cool nights come in the fall. Commence to give the cows winter care and feed, especially the cows that freshen in the fall, before they shrink on their milk. If a cow once goes down, it is hard to get her back again.

THE COW'S RATION.

The ration for a cow should be governed, of course, according to the ability of the cow to assimilate her food and convert it into milk. I do not think it is possible to lay down any rules to go by, but feed your cows all they will take and make proper use of. Some contend that eight pounds of grain per day is enough for an average cow, but Mr. Gillett would not have obtained this great record if he had

TRADE IN YOUR INFERIOR SEPARATORS

Many users who would like to change their inferior machines of various kinds for a new

DE LAVAL CREAM SEPARATOR

do not understand that while such second-hand machines have no salable value the De Laval Company makes very fair "trade" allowances for them, just to get them out of the way and by means of this practical illustration of the difference between good and poor separators stop the sale of others like them in the neighborhood. Nobody is injured by the re-sale of these old machines as they are simply "scrapped" at their old metal value.

Then there are many thousands of DE LAVAL users who should know that they may exchange their out-of-date machines of ten to twenty years ago for the very much improved and larger capacity ones of to-day. These old machines are re-finished and sold over again to those who do not think they can afford the price of new ones.

Write in a description of your old machine—name, size, serial number, and date purchased—or else see the nearest DE LAVAL agent about it.

THE DE LAVAL SEPARATOR CO.

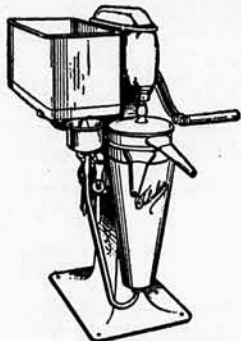
Randolph & Canal Sts.,
CHICAGO.
1825 Filbert Street,
PHILADELPHIA.
9 & 11 Drumm Street,
SAN FRANCISCO

General Offices:
74 CORTLANDT STREET,
NEW YORK.

106-118 Youville Square
MONTREAL
75 & 77 York Street,
TORONTO.
14 & 16 Princess Street
WINNIPEG.

Because You Need The Money

It's your business and if you don't attend to it, who will? You cannot afford to keep cows for fun. That isn't business, and, furthermore, it isn't necessary. There is money in cow keeping if you go at it right, and besides there is more fun in going at it right than there is in staying wrong.



You need a Tubular Cream Separator because it will make money for you; because it saves labor; because it saves time; because it means all the difference between cow profits and cow losses.

Look into this matter; see what a Tubular will do for you and buy one because you need it.

How would you like our book "Business Dairying" and our catalog B. 165 both free. Write for them.

The Sharpley Separator Co.
West Chester, Pa.
Toronto, Can. Chicago, Ill.

We Manufacture the Davis

WRITE US FOR A PRICE

In a letter or a postal card, "Send your money saving catalog and prices on your 1907

Improved Davis Cream Separator

with the wonderful cone bowl, made perfect so that it is never necessary to balance it with soft metal. Low down supply tank, simple enclosed gearing, easily regulated to produce heavy or thin cream and bowl easily flushed of cream at the end of the run. In all the separator world there's nothing to equal the Improved 1907 Davis. It won't take you long to see its good points. And we will sell it to you at

Wholesale Factory Prices

Saving You 20 to 50%

Please note cut of new model in this ad. We call your especial attention to this as it is the result of many years' experience. Our 1907 free catalog illustrates and explains our new model; we want you to have it so don't neglect to drop us a line today, right now, ask for money saving catalog No. 128. It will come postpaid by return mail.

Fully Guaranteed. Davis Cream Separator Co.
54-0 North Clinton St., Chicago, U. S. A.

fed only that much. I would suggest as a rational way to feed a cow, to commence when she freshens with five or six pounds a day, and after one week or perhaps ten days, begin to increase the feed and gradually do so as long as you can increase the flow of milk and are sure that she is properly digesting her food. In this way you can not make any mistake. It always pays to feed the cow all that she can convert into milk without waste, provided you have a grain ration that balances up on a ratio of 1 to 5.5 or thereabouts.

Take your farm-grown grains and buy enough wheat-bran, oil-meal, or some of the protein feeds to balance up your ration. What is a balanced ration? It is the proper amount of feed to sustain the animal for twenty-four hours and furnish the nutrients for her to do her work on. We have repeatedly had formulas of balanced rations published, and they are valuable as guides to go by, but the average farmer is not going to weigh each cow's milk each day and then weigh each cow's ration and make them ex-

actly correspond. It makes some difference as to the individual animals; the breeds enter into this to a certain extent, the condition under which the cattle are kept, etc. If Mr. Gillett's Colantha 4th Johanna had been exposed to the cold, had been compelled to drink cold water, and had been under poor farm conditions, she could not have thrived for those sixty-three days. With the excessive amount of protein that he was giving her, she would have required more carbohydrates to furnish heat and energy. But Mr. Gillett knew that if she was to make a record-breaking amount of butter, he could not afford to have this noble cow digest any food to produce heat and energy, that would be necessary from unfavorable conditions. He supplied everything possible for the cow's comfort. He kept her in a warm box stall, covered with a blanket, and warm water always accessible, and under these circumstances she was made to remain in a thriving condition and consume an excessive amount of protein. And here is an object lesson again; it does not pay to expose a cow to inclement weather and uncomfortable surroundings, and then feed carbohydrates to keep the cow thrifty, for while she is using her digestive organs to make heat, she could not use them to digest protein and make milk. Hence, the necessity of making the cow comfortable to get the best results.

Here is a table showing correct rations for a 1,000-pound cow, giving twenty-five pounds of 4 per cent milk, compiled by Professor Glover, of Wisconsin:

Feed stuffs	lbs.	Dry matter	Protein	Carbohydrates	Fat
Silage	40	10.6	0.53	5.60	0.28
Clover hay	7	5.9	.48	2.51	.12
Ground corn	4	3.6	.32	2.67	.17
Bran	4	3.5	.50	1.54	.12
Total	23.6	1.83	1.232	0.69	

Professor Glover adds, that for every three pounds of milk increase over the twenty-five pounds, add three pounds of the grain mixture. If timothy hay had been used in this ration, then it would have been necessary to have increased the bran in order to have the necessary amount of protein, as seven pounds of timothy hay would only have had nineteen pounds of protein. It would have given a total amount of protein of 1.54 pounds, and to have made the protein content the same it would have been necessary to have added at least two pounds of bran.

Here is another object lesson and teaches the importance of growing clover for roughage for the dairy cow. These few figures are given simply to help in determining the ration for the cow and not to be followed absolutely.

ALFALFA.

If we are able to grow alfalfa in Minnesota and can have at least a part of the roughage alfalfa, then it will be possible to dispense altogether with boughten protein feeds. But so far alfalfa is in the experimental stage, in most parts of Minnesota at least. In some parts of the State it has been successfully raised, and possibly some time will be grown over the entire State. But for the present, at least, we must depend on clover as being our best crop for roughage.

The success of the dairyman must depend on his intelligence, his love for the work, and his ability at all times to judge of the condition of his herd. Make the cow comfortable at all times of the year; give her a sufficient and well-balanced ration; have pure water always accessible; give her kind treatment, and she will repay in an abundant flow of milk.—J. R. Morley, in Northwestern Agriculturist.

Kansas Dairy Commissioner.

"If at first you don't succeed, try again." So thought the dairy men of Kansas, and they have been trying, patiently and persistently, for many years to induce their State Legislature to create the office of State Dairy Commissioner. At last they have succeeded, and already their new departmental head has been selected—Prof. J. C. Dendall, of North Carolina.

Of course, it is not our "put in," and we want it distinctly understood that we have no objections, personal or

general, against Professor Kendall—we wish him all manner of success and hope he may fully realize the expectations of his friends—but the query suggests itself, why wasn't a Kansan (or a Western man) selected? "Out there in Kansas" they have a lot of big, broad-gauged, progressive, and hustling dairymen who know Kansas dairy conditions, needs, and possibilities; Missouri, Iowa, and Nebraska all have good material from which to make a Dairy Commissioner and, because of their location and intimate acquaintance with Western ways, are second cousins to those Kansans—why, in view of these facts, was it deemed necessary to go "way down East" to find a man? Eh, Brother Graham? Why this whiffiness?

With all their tremendous energy, hustle, and progressiveness, we've always marveled at the submissive, tolerant spirit manifested by these same Kansans. Here, they've been meekly and patiently trying for a dozen years to coax their State legislators to recognize their dairy industry. For almost the same time they have pleaded with the same body to give them a State fair and, apparently, their State fair is as far in the future as ever. Neighbors, stop this humility business; stop your supplicating and go up to Topeka with clubs, "bat" those chuckle-pated mules over the head—if need be, take a few of the chief blockheads by the nape of the neck and bossom of the trousers and chuck 'em into the Kaw—and demand that your reasonable requests be granted. Look over this way and we'll "show" you. Missouri's stockmen and dairymen did not have to resort to such extremes to secure the recognition they sought—but they were imbued with the spirit and energy to do it had such tactics become necessary.—Editor M. V. Carroll, in the Ruralist, Sedalia, Mo.

The Poultry Yard

CONDUCTED BY THOMAS OWEN.

Poultry Notes.

A laying strain of hens is more profitable than one with a long pedigree. In other words, prolificacy is worth more than pedigree. Now is the time to note your most persistent layers and to raise chicks from such layers for next season's work.

Table scraps and vegetable parings chopped fine, make the best of poultry feed. Don't throw such things into the garbage cans or even to the hogs, for it will pay much better to feed them to the laying hens.

Sulfate of iron, or as it is better known, copperas, is cheap and a solution of it sprinkled around the poultry yard will keep the air pure and sweet.

Beak for beak pure-bred poultry eat no more than mongrels. Pound for pound the meat breeds cost no more to raise. Bird for bird they cost more; they are worth the difference. Egg for egg the laying breeds cost no more to feed, but double, triple, and quadruple the profits derived from scrubs. Everything is in favor of the pure-bred birds.

A farmer would hardly believe that a goose requires only about sixty hours to prepare it for the footlights and a critical audience, and that a common pig will in thirty hours be competent to blossom forth as an actor. According to W. Clyde Powers, a trainer of wide experience and much patience, it takes a duck about three days to learn how to march on the stage, to follow the chorus, and to march off again at the proper time, it takes a chicken a week or more, and a turkey can not grasp the art of acting before six months' time. Mr. Powers has tried to train a pea fowl, but he finds that it is impossible. A goose is the most intelligent of all the feathered tribe, and a goose also is the only one of the domestic fowls that shows affection for others than its own kind. The phrase,

PLYMOUTH ROCKS.

Evans' Barred Rocks—Superior winter-laying strain, noted for size and quality. Eighteen years careful, exclusive breeding. Eggs \$1 per fifteen, \$1.75 per thirty. E. J. Evans, Route 4, Fort Scott, Kans.

FOR SALE—Pure-blooded Plymouth Rock eggs; \$1 per sitting. N. H. Wolf, 429 Kansas Avenue, Topeka, Kans.

WHITE PLYMOUTH ROCKS—Exclusively pure white birds, farm range. Eggs \$1 per 15, \$1.75 per 30. R. J. Yust, Route 2, Sylvia, Kans.

BARRED PLYMOUTH ROCKS—Pure Bradley strain. Eggs from pens \$2 per 15. R. Harmstrong, Route 6, Newton, Kans.

BARRED AND W. P. ROCK EGGS—Hawkins and Bradley strains; 15 for \$2, 45 for \$5. Chris Bearman, Route 9, Ottawa, Kans.

BLUE BARRED ROCKS—Large, vigorous, farm raised stock, \$1.50 per 15; \$3 per 30; \$5 per 100. Minnie K. Clark, Route 9, Lawrence, Kans.

BARRED ROCK EGGS—\$1 per 15, \$5 per hundred. Mrs. R. L. Parker, Lincoln, Kans.

BARRED PLYMOUTH ROCKS EXCLUSIVELY—Eggs \$1 per 15, \$1.50 per 30, \$4 per 100. T. B. Wilson, Route 7, Osage City, Kans.

BARRED PLYMOUTH ROCKS as good as the best. Eggs 50 cents for 15. Write D. N. Hill, Route 5, Lyons, Kans.

FOR SALE—Pure-bred B. P. Rock eggs. 75 cents for 15 or \$5.50 per hundred. Hillcrest Fruit and Poultry Farm. Address A. C. Merritt, North Topeka, Route 4; Ind. Phone 4351.

30 WHITE PLYMOUTH ROCK EGGS FOR \$3—From prize-winning pens, line bred, large size and pure white. I pay the express charges. J. C. Bostwick, Hoyt, Kans.

BUFF ROCKS—High scoring, vigorous, farm raised, bred for size and laying qualities. Eggs \$1 to \$2.50 per 15, \$5 per 100; circular free. Sunny Slope Poultry Farm, Box 406, Edinburg, Kans.

College Hill Barred Rock and Scotch Collie Farm. Many first prize winners in Kansas and Oklahoma. 12 females scoring 91 to 94½ by McClave, Emery & Helmick. Hens and eggs to order. Pedigreed Collies from imported prize winners. Fine young stock for sale. Mrs. J. T. Woodford & Son, 3600 E. Central, Wichita, Kans.

BARRED PLYMOUTH ROCKS EXCLUSIVELY (Bradley Strain.)

Pullet-mating pen headed by a 93½ point cockerel. Cockerel-mating headed by a 98 point cock. The females score from 90 to 93½. Barring extra strong. Eggs \$1.50 per 15, \$7.50 per 100. Mrs. Chas. Osborn, Eureka, Kans.

EGGS! EGGS!

I feel confident from the Steel Blue Barred Plymouth Rocks will be produced some prize-winning chicks for you, whether you wish them for show birds or on the farm. Let me have your order and the chicks will speak for themselves. It costs no more to raise fine birds than inferior ones, and the extra small expense of starting should not be considered for the results and satisfaction you would get out of this Famous Strain would overcome all. Try them. Write for catalogue, it's free. JOE B. MOORE, originator and breeder of the renowned Steel Blue Barred Plymouth Rocks, Mexico, Mo.

EGGS! EGGS! EGGS! Toulouse Geese eggs, \$1 per sitting. Rouen and Pekin duck eggs, 15 for \$1. Muscovy duck eggs, 9 for \$1. Bronze turkey eggs, 9 for \$2. Peacocks, Barred and White Plymouth Rocks, Houdans, Buff Cochins, Silver Spangled Hamburgs, Cornish Indian Games, Buff Orpingtons, Rhode Island Reds, Brown, Buff and White Leghorns, Buff, White and Silver Laced Wyandottes, Pease and White Guinea, Golden Seabright Bantams, Buff Cochins Bantams. Eggs 15 for \$1. Also sell by the 100. All kinds of fancy pigeons for sale. Also hunting dogs. Satisfaction guaranteed. Write for circular. D. L. Bruen, Platte Center, Neb.

BUFF PLYMOUTH ROCK EGGS.

I have bred Buff Rocks exclusively for six years; have purchased eggs and birds from the best blood I could find in the west and now have as fine a lot of birds as I ever saw. I took both first and second on pen at the Republic County fair last fall. Eggs from 1st prize birds \$2.50 for 15, \$5 for 45, \$10 for 100. Eggs from 2d prize birds \$1.50 for 15, \$3.75 for 45, \$8 for 100. H. M. STEPHENS, - - - Munden, Kans.

White Plymouth Rocks EXCLUSIVELY

Good for Eggs. Good to Eat. Good to Look At. W. P. Rocks hold the record for egg laying over every other variety of fowls; eight pullets averaging 289 eggs each in one year. I have bred them exclusively for twelve years and have them scoring 94 to 96½, and as good as can be found anywhere. Eggs only \$2 per 15; \$4 per 45, and I prepay expressage to any express office in the United States. Yards at residence, adjoining Washburn College. Address THOMAS OWEN, Sta. B. Topeka, Kans.

RHODE ISLAND REDS.

RHODE ISLAND REDS—My pen now ahead of all pens at state laying contest at Manhattan. Won at State shows and Topeka show. R. B. Steele, Sta. B. Topeka, Kans.

RHODE ISLAND REDS—Cockerels, S. C. R. I. Reds from prize winners. Red to the skin. Eggs in season. Good Hope Fruit & Poultry Farm, Troy, Kans.

ONE DOLLAR buys 15 eggs of either Rose Comb R. I. Reds or Barred Rocks from prize-winning stock at the College show. Mrs. A. J. Nicholson, Manhattan, Kans.

S. C. RHODE ISLAND REDS—Won at State Show, 1907, 1st, 2d, 4th. Eggs \$1.50 per 15, \$5 per 100. Mrs. D. A. Sheaks, Walton, Kans.

Rose Comb Rhode Island Red eggs for sale. Circular free. G. D. Williams, Inman, Kans.

FOR SALE—Rose Comb Rhode Island Red chickens. High grade Red Polled bull calves. J. W. Poulton, Medora, Kans.

Rose Comb Rhode Island Reds PRIZE WINNERS

Eggs from select matings, average score 92 points. The second and third pullet and third hen at State Show 1906, and first cock and first, second and third pullet at Topeka 1907, are in these matings. Eggs, \$2 per 15. Pen No. 7, males score 91½ and 91 points. Select unscored females; eggs \$1.50 per 15. Utility pen, all good, pure stock; eggs, \$1 per 15. Special prices on large quantities. A few good cockerels yet for sale. LEON CARTER, Asherville, Kans.]

LEGHORNS.

SINGLE COMB BROWN LEGHORNS from world's most famous strains. Eggs, 25 for \$1, \$2.50 per 100. Day chicks \$10 for 100. Col. Warren Russell, Odessa Farm, Winfield, Kans.

S. C. B. LEGHORN EGGS—Cockerels from state prize winners. \$1.50 for 34, \$3.75 for 100. Mrs. D. M. Evans, Edgerton, Kans.

BUY EGGS from S. C. W. Leghorns that lay, and that hatched 202 healthy chicks out of 225 eggs this year. Pen headed by Snowflake, a winner at Pond Creek, Kans., and Oklahoma State shows. Pen scoring 94 to 95½. Circulars free. Mrs. R. T. Wolfe, Conway Springs, Kans., Route 2.

S. C. B. LEGHORNS—Best laying strains in the west. Eggs for hatching, \$1 per 15. Special prices for large lots. L. H. Hastings, Route 1, Quincy, Kans.

CHOICE R. C. B. Leghorn and Pekin duck eggs \$1 per 15. Reductions on incubator lots. J. E. Wright, Wilmore, Kans.

S. C. B. LEGHORN EGGS, 30 for \$1; 100 for \$3. Mrs. P. E. Town, Route 3, Haven, Kans.

ROSE COMB BROWN LEGHORNS, ALSO BARRED ROCKS—Best selected and fresh eggs \$1 per 15, \$5 per 100. Leghorn cockerels \$1. Bertha Evans, Lyons, Kans.

ROSE COMB BROWN LEGHORN EGGS—From stock scored to 98 by Rhodes. \$1 per 15, \$4 per 100. Exhibition pen cockerel bred \$2.50 per fifteen eggs. Frank Dunable, Clay Center, Kans.

ROSE COMB BROWN LEGHORNS EXCLUSIVELY—Farm raised. Eggs \$1 per sitting of 15, per fifty \$2, per hundred \$3.50. Prompt shipments made. P. H. Mahon, Route 3, Clyde, Cloud Co., Kans.

SINGLE COMB BROWN LEGHORNS—Best laying strain in the world. Eggs \$1 per sitting, 8 sittings \$2.50, \$5 per 100. Everett Hayes, Hiawatha, Ia.

PURE SINGLE COMB BROWN LEGHORN eggs, 30 for \$1, 100 for \$3. Jos. Caudwell, Wakefield, Kans., successor to F. P. Flower.

FOR SALE—Single Comb White Leghorn cockerels. Wyckoff laying strain. Price, 75 cents and \$1. Henry Martin, Newton, Kans.

ROSE COMB BROWN LEGHORN EGGS—15 for \$1.50, 30 for \$2.50, 100 for \$4. Mrs. John Holzhay, Bendena, Kans.

STANDARD BRED SINGLE COMB BUFF LEGHORNS—Headed by first prize pen. Chicago show 1903 and took six first prizes and first pen at Newton 1904. Eggs \$3 for 15. S. Perkins, 801 East First Street, Newton, Kans.

STOCK AND EGGS.

Silver Sp. Hamburgs: 1 cockerel, 1, 2, 3, 4 pullet, 1 pen, at great Wichita show. S. C. W. and Brown Leghorns; Black Minorcas; 15 eggs Blue Ribbon pens \$5, 2d best \$2; utility pens headed by high scoring males \$1.00; M. Bronze turkey eggs \$2 per 9, selected 50c each. Vira Bailey, Kinsey, Kans.

STAY WHITE

S. C. W. Leghorn and Buff P. Rock eggs \$1 per 15. At Nickerson show 1907 (Helmick Judge) I won incubator on highest scoring cock, cockerel, hen, pullet in Mediterranean class. On Rocks took 1 cock, 1, 2, 3 hen. Mrs. J. W. Cook, R. 3, Hutchinson, Kas.

POULTRY BARGAINS

Having to move at once, owing to the sale of my property, I will sell 65 R. C. White Leghorns hens 1 year old, 4 cockerels, 60 S. C. White Leghorns hens 1 year old, 3 cockerels, 1 cock bird, at \$1 each, if 15 or more are taken at one time. Cock and cockerels, \$2 each. These are my 1907 breeding pens and well worth \$2 all around, but as I have to move soon, will sacrifice half rather than to move them. If you want some don't wait, for they will soon go. This offer is for immediate sale.

W. S. YOUNG,

McPherson, - - - Kansas

WYANDOTTES.

INCUBATOR EGGS from prize-winning White Rocks and White Wyandottes at \$5 per 100. W. L. Bates, Topeka, Kans.

BROWN'S WHITE WYANDOTTES—Ahead of everything; stock for sale; eggs in season. I have the English Fox Terrier dogs. Write me for prices and particulars. J. H. Brown, Clay Center, Kans.

WHITE WYANDOTTES—Pen No. 1, score 94 to 96½ by Atherton. Eggs \$2 per 15. 100 others bred to lay high scoring eggs \$1 per 15; \$4 per 100. J. L. Moore, Eureka, Kans.

WHITE WYANDOTTE EGGS from choice matings; \$1.50 per fifteen. S. W. Arts, Larned, Kans.

White Wyandotte Eggs per sitting \$1, or 100 for \$5. Mrs. E. F. Ney, Bonner Springs, Kas.

WHITE WYANDOTTE

eggs \$1.50 for 15 from choice pens, \$5 per 100 from selected free range stock. Indian Runner duck eggs \$1.50 for 11; Mammoth White Holland turkey eggs \$1.50 for 9; White African guinea eggs \$1.50 for 17; a few pairs of guineas yet for sale. Order now. Mrs. L. D. Arnold, Enterprise, Kans.

BUFF ORPINGTONS.

S. C. Buff Orpington eggs until July 1. Fifteen for \$1.50, fifty for \$3.50. Fred and Edward Stark, Abilene, Kans., Route 7.

S. C. BUFF ORPINGTON EGGS—Extra fine flock, headed by an 11 pound cockerel. 15 eggs \$1.25. C. B. Owen, Lawrence, Kans.

SINGLE COMB BUFF ORPINGTON AND BLACK MINORCA EGGS for setting, \$1 for 15. A. J. Stratton, Reading, Kans.

S. C. BUFF ORPINGTONS—Eggs from the Cup-winners at the biggest show in the country at a low price. Write for prices Frank Hill, Sabetha, Kans.

BUFF ORPINGTONS AND BUFF LEGHORNS—Won first pen State Show; catalog free. W. H. Maxwell, 1924 McVicar Ave., Topeka, Kans.

CHOICE Buff Orpington and B. P. Rock cockerels, Collie pups and bred bitches. Send for circular. W. B. Williams, Stella, Nebr.

S. C. Buff Orpingtons EXCLUSIVELY.

Winners at four shows. Bred for winter layers. Eggs for sale. Send for free circular and show winnings. B. D. Hungerford, Canton, Kans.

What Two Lice Can Do



They can virtually go right down in the poultry keeper's pocket and take the money. If left undisturbed the natural increase is so great

that they soon multiply to a swarm that will sap the life of young chicks, breed disease in the pens and ruin profit.

Instant Louse Killer

(Powder or Liquid)

kills lice on poultry, lice on stock, and ticks on sheep. It is harmless to use, and will effectively destroy cabbage worms, slugs on rose bushes, and bugs on cucumber, squash and melon vines. Instant Louse Killer is the original powder louse killer put up in round cans with perforated top. Look for the word "Instant" on the can—then you won't get an imitation.

1 lb. 25c { Except in Canada and extreme West and South
3 lbs. 60c

If your dealer cannot supply you we will forward 1 lb. by mail or express prepaid, for 50c.

Manufactured by
DR. HESS & CLARK,
Ashland, Ohio

BLACK LANGSHANS.



Write us for our free illustrated 20-page catalog quoting prices on stock and eggs of Buff, Black and White Langshans, 5 varieties of Leghorns, 4 of Wyandottes, 3 of Rocks, Hamburgs, Minorcas, Reds and others, including ducks, geese, guineas and peacocks. Only finest blood obtainable introduced into our pens. Our prices are low considering quality of stock. Satisfaction guaranteed.

J. A. LOVETTE, Prop., MULLINVILLE, KANS.

BLACK LANGSHAN EGGS from fine stock; \$1.50 for 15, or \$7 per 100. Baby chicks, 10 cents each. Mrs. Geo. W. King, R. 1, Solomon, Kans.

BLACK LANGSHAN EGGS—\$1.50 per 15. From World's Fair winning strain. Mrs. E. Forward, Bayneville, Kans.

PURE-BRED WHITE LANGSHANS for sale. Hens \$1.25, pullets \$1 each; also a few Silver Spangled Hamburg cockerels. Mrs. John Cooke, Greeley, Kas

BLACK LANGSHANS

Of best breeding. Eggs for sale at \$1.50 per 15 or \$2.50 per 30.

Mrs. E. S. Myers, Box 174, Chanute, Kans.

BRAHMAS.

Light Brahma Chickens
Choice pure bred cockerels for sale. Write or call on Chas. Foster & Son, Eldorado, Kas., Route 4

MISCELLANEOUS.

TRY Forbes Bros. Chick Food, also Baby Chick Grit. 115 West Laurent Street, Station A, Topeka, Kans.

AGENTS—To sell and advertise our Poultry Com-pound; \$35 weekly; rig furnished. Franklin Manufacturing Company, Norwalk, Ohio.

FOR SALE—White Plymouth Rock eggs. Stock from two excellent strains, careful selection for years. 1907 eggs hatching as high as 95 per cent strong chicks. After May 10th, \$5 per hundred, \$1.75 for 50. Address Elizabeth M. Willett, Lawrence, Kans., Route 1.

Buff Leghorns

Pure-bred eggs \$1.25 per 30, \$3.25 per 100. J. A. Reed, R. 3, Wakefield, Kas

GILT EDGE POULTRY CO.

Eggs for sale from 24 different varieties of poultry, including Toulouse geese, Pekin ducks and M. B. turkeys. Each breed on separate farm. Write for catalogue.

Walter Hogue, Fairfield, Neb.

TOPEKA POULTRY BREEDERS

The fifty members of the Topeka Poultry Breeders Association raise all varieties of pure-bred poultry. Transactions of members guaranteed. Send for list of breeders and varieties.

W. H. MAXWELL, Secretary,
1990 McVicar Ave. Topeka, Kansas

SCOTCH COLLIES.

Scotch Collies.

Fifty-seven Collie puppies just old enough to ship. Place your orders early, so you can get one of the choice ones.

Walnut Grove Farm, Emporia, Kans.

"as silly as a goose," ought certainly to be revised or obliterated from our vocabulary.

The best condition powders for the poultry consists of clean quarters, good feed, and pure water. Scald out the drinking vessels every few days and keep them as clean as possible. Feed no sour feed to young or old chickens or they will be apt to get sick.

You should see that your little chicks are shut up tight every night to prevent rats or other animals, such as skunks, weasels, etc., from getting them. Even cats get away with a great number of chicks, and they should be carefully watched and the chickens so placed that they can not be molested.

Providing Shade for Poultry.

Plant plum-bushes in the chicken-run. These are low and make good shade. They grow wild along creeks and rivers in the Western States, but would probably not do for Eastern and Southern States. There a low, spreading bush adapted to one's particular climate is the best for shading the poultry-yard.—E. W. Caywood, Washington County, Kansas.

Plant either mulberry- or plum-trees for shade in the chicken-run. Apple-trees do very well, too, and also furnish fruit for the owner as well as his fowls. I let my fowls run in the orchard, and I have been raising fancy fowls for fourteen years.—Mrs. Sallie Bass, Gibson County, Tennessee.

I consider the most satisfactory way of shading a chicken-run is to plant sunflowers in it. These grow quickly, make good shade, and when ripe, provide food for the chickens.—D. Burr Snell, Delaware County, New York.

The most satisfactory way to provide shade for poultry is to use that already provided in the orchard, building the run there, if possible. Most farms have shade-trees or orchards that can be utilized in this way. If you have not these, proceed at once to plant rapid-growing fruit- and shade-trees in your chicken-run. The advantage of fruit-trees is that they feed the poultry and add to the profits. Temporary shade can be provided by covering frame work with canvas or ducking, or even sheeting. Shade is a necessity in poultry-raising.—T. J. Mawhorter, Noble County, Indiana.

For permanent shade in the poultry-yard plum-trees suit me best. If I want shade for small chicks, I cut small evergreen-trees, such as spruce, three or four feet tall. Trim these about one foot and set them in the chicken-run. They provide shade to last half the summer through. Try it.—A. B. Tirrell, Hampshire County, Massachusetts.

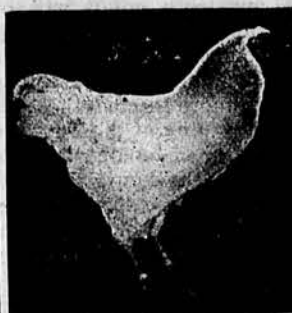
Build the chicken-run near growing trees, so that you may have at least two trees in each run. I believe plum-trees are considered best, but I get satisfactory results from apple- and pear-trees. In runs where we have no trees we cover a portion of the run with a mat made of old feed-sacks, cut up and sewn together with a sail needle.—A. Gray, Essex County, New Jersey.

Plant plum-trees in the run. The fowls will eat the insects that eat the trees, and the plums will provide food and shade.—E. M. Bunt, Lorain County, Ohio.

A few years ago I transplanted several wild Canadian plum-trees from the roadside to my poultry-yard, at the same time sawing off the top three feet from the ground, and grafting with scions of Lombard plum. It paid well. All lived, but only one scion to a stock was allowed to grow. These made large tops, and are perfectly hardy annual bearers of larger and better plums than grew on the trees from which the scions were taken.—Frank Currier, Sullivan County, New Hampshire.

To be truly happy is a question of how we begin, and not of how we end; of what we want, and not of what we have.—Stevenson.

Better to have grass than weeds along the fence-rows,



White Plymouth Rocks

STOCK AND EGGS FOR SALE.

My first range consists of 100 large white hens weighing from 8½ to 10½ pounds, headed by eight large, white cockerels from my first pen. Stock—100 eggs \$10; 15 eggs \$2. Second range—100 eggs \$5; 15 eggs \$1. First pen—100 eggs \$25; 15 eggs \$5. Second pen—100 eggs \$15; 15 eggs \$3. You run no risk when you buy eggs of me. Satisfaction guaranteed.

G. R. Davis,

VALLEY CENTER, KANSAS

The Talbott Poultry Farm

Breeders of the best in the world. Strain of Buff, Brown and White Leghorns, Barded Rocks and White Wyandottes. My birds have won at Chicago, Galesburg, Moine, Illinois, Fremont, Nebraska and State Poultry Show of Nebraska, and they will win for you. 500 old birds for sale at \$1.50 each; also 1,000 youngsters at \$1.00 and up.

W. R. TALBOTT, Prop.

Hebron, Nebr.

Markers White Plymouth Rocks

Our stock won more premiums and specials at Hutchinson State Fair, Great Bend, Salina, Wichita State Poultry Show and Nickerson than any breeder in the west which is positive proof that they are

"Better Than Any."

Buy eggs from these birds, improve your flock and win the prizes at the coming shows. Safe arrival and fertility guaranteed. Prices, \$1, \$2 and \$3 per 15; \$5, \$10 and \$15 per 100.

We More Than Please **Marker Bros., Great Bend, Kans.** Satisfaction Guaranteed

INCUBATORS AND BROODERS.



THE SAFETY HATCH INCUBATOR

Leads for 1907 because it has not been cheapened in quality. The copper hot water heating system is perfect. Simple end regulator with double brass thermostat. Double cases packed with a fibrous material filled with innumerable dead air spaces. Double clear table top packed the same as the walls. The cloth nursery tray, so nice for newly hatched chicks to rest on. Two doors, one of glass, the other solid lumber. Easy to clean safety lamp. And guaranteed perfect ventilating system. No better machine can be built at any price. Others claim the best hatches, but we get the largest averages and healthiest chicks. We pay the freight. Our 1907 catalogue tells it all. It's free. Address

THE CLAY CENTER INCUBATOR CO.
CLAY CENTER, KANSAS.

The Apiary

Spring Bees.

During March and April bees have consumed more honey than common. The temperature has been such as to permit them to be in the open air much of the time in search of forage, and to stimulate brood-rearing freely. Pollen was the most that was obtainable. The fruit bloom was injured to such an extent by the frost as to render the honey yield from this source very light, which, coupled with several days that were too cold to permit bees to be out of the hives, caused the loss of the greater part of the fruit-bloom nectar. Brood-rearing has caused much of the honey carried over winter to be consumed, so that most colonies will require feeding or they will cease to rear brood, and will destroy their drones before alfalfa blooms. While destroying the drones is not detrimental, in case of increase of colonies it is not desired. The drones perform no useful duty but that of fertilizing the young queens. The cessation of worker brood-rearing will cause numerical strength of the colony to be so reduced that they can not collect and store honey as if they were strong in numbers. To prevent this depletion of numbers and have the same on the increase should be the paramount object of the beekeeper. A good grade of granulated cane sugar is probably the best feed for bees. Beet sugar may be quite as good, but as to the certainty of this I know nothing from experience. I usually take two parts of sugar to one part of lukewarm water and stir until the sugar is dissolved. It can be fed to the bees by putting it into a pint or quart can and tying a thin cloth over the mouth of the can and turning it mouth down over the cluster of bees on top of the comb frames; or the empty combs may be lifted out of the hive and laid on their

INCUBATORS AND BROODERS.



Hatch Chickens by Steam with the EXCELSIOR INCUBATOR Or WOODEN HEN

Simple, perfect, self-regulating. Hatch every fertile egg. Lowest priced first-class hatches made. GEO. H. STAHL, Quincy, Ill.

\$7.50 Incubator
Everybody's incubator. Holds 125 eggs. Self-regulating, needs no moisture, powerful double heater, egg tray and new removable sanitary nursery tray. Has everything high-priced hatches have. Four walls, packed, not affected by heat or cold. Cat. Free



Gouverneur Incubator Co., 911 Main St., Gouverneur, N. Y.

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,
7th and Quincy, Topeka, Kans.

ZIMMERMAN'S STEEL CUT

BABY CHICK FOOD

Cleanest, Purest and Best. Absolutely No Waste.
50 lbs. \$1.15. 100 lbs. \$2.20.
Prompt Shipment.
Lee's Lice Killer 35c per qt. One-half gal. 60c. Germozone 50c.

ZIMMERMAN SEED CO.,
TOPEKA, KANS.

CEMENT STONE

Build your buildings with cement stone. We can sell you a down face outfit complete for \$30 F. O. B. Wichita. Write for particulars.

J. H. TURNER, Wichita, Kans.

RHEUMATISM AND NEURALGIA



ST. JACOBS OIL

The Proved Remedy
For Over 50 Years.

Price 25c and 50c

Headache Sufferers

Do you want relief—in just a few moments and no bad after-effects.

If so, you have only to take, Dr. Miles' Anti-Pain Pills.

If subject to headache, have them with you always. No harm can come from their use, if taken as directed, as they contain no opium, chloral, morphine, cocaine, chloroform, heroin, alpha and beta eucaine, cannabis indica or chloral hydrate, or their derivatives.

Ask your druggist about them.

"It gives me great pleasure to be able to refer to the Dr. Miles Anti-Pain Pills as the best remedy we have ever had in our house for the prevention and cure of headache. My wife who has been a constant sufferer for years with the above complaint, joins me in recommending Dr. Miles' Anti-Pain Pills, hoping they may fall into the hands of all who suffer."

J. I. BUSH, Watervliet, N. Y.

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

HENRY W. ROBY, M. D.
SURGEON
730 Kansas Avenue.
Topeka, Kansas

side and the sirup can be poured into the cells. Langstroth comb will on one side hold about one pint of sirup. Two to four combs filled on one side will hold sufficient to sustain a colony for one week or more in case the bees are collecting anything at all from the fields. This matter of feeding is highly important until the honey flow actively begins, for if neglected many colonies will become weak and comparatively worthless during the honey flow or starve outright.

Farm Notes.

N. J. SHEPHERD, ELDON, MO.

A young animal gains in meat, bone, and fat.

Oats makes a good feed for breeding animals.

The management and care of stock largely determines its profitability. Work so as to have everything done in the best season.

Rotation utilizes all of the elements of plant-food in the soil.

Keeping good stock helps to market the bulky products to the best advantage.

The fleece, carcass, and increase all have strong claims on the shepherd's attentions.

Grass crops can be cultivated by preparing the soil in a fine tilth before seeding.

Corn that is too thick will not ear well nor will the ears develop properly.

The older and heavier an animal is the larger must be its ration of support.

With a horse high feeding is a positive injury unless the animal is used nearly every day.

It requires more careful feeding to fatten a growing animal than it does a matured one.

A little grain each day with a little pasturage will insure the hogs making a very rapid growth.

As long as an animal is not growing its keep is expensive no matter what it is fed.

No one ever failed in farming by doing work too well, or expending too much labor, if done judiciously.

It is much better to use for breeding, animals of average size, smooth, round, plump, and intensely active and vigorous.

It takes food to maintain muscular activity, and food must also be used as a fuel to keep the animal warm.

It is better to underfeed than to overfeed a horse. The first is only a temporary evil but the last often permanently injures the animal.

The churn should never be filled much over half full, and then if the temperature is just right it will churn most easily.

It is always discouraging to be constantly raising inferior animals for which a less price must be taken than others receive for stock which cost no more to raise.

Good tillage is not keeping down the weeds, it is stirring the soil deeply and often enough for the direct benefit of the crop.

So far as could be done the crops should be grown of such varieties as will enable the farmer to formulate a

balanced ration from the products of his own farm.

The farmer who succeeds in farming would be a success in almost any of the other pursuits.

Without size and bone, blood is of little value. A horse must have something else besides a long string of ancestors to recommend him; he must possess individual merit.

Volume 67 of the American Short horn Herd-Book, containing pedigrees of animals calved before July 4, 1906, follows its predecessor at an interval of about three months. Like that and the rest, it is a bulky volume of 1133 pages; it carries the bull numbers from 257709 to 263114, and gives pedigrees of some 7000 cows. The price to non-members is \$3.30 postpaid. It may be ordered from Secretary John W. Groves, Chicago.

Expansion of Tillable Area.

However one may explain it the fact has recently been forced to the attention of the world that vast areas formerly listed as unfit for general farming because of supposed shortage of moisture have become immensely profitable. Former scant grazing lands are dotted with white cottages and red barns. A farmer here and there has solved some of the problems which baffled the pioneers; neighbors were let into secrets, special experimenters have seen the fruition of years of earnest labor, and to-day the West is rich with those who can honestly say they have had many successful crops. By their energy and genius, making intelligent study of conditions, and especially and finally by adoption of the Campbell system for treatment of the soil and modernizing their methods in every possible way—these men have worked a miracle in the dry country. Everywhere there is increasing and permanent prosperity and we are only at the beginning of the development.

In the so-called semi-arid region, where rainfall is not such that the farmer may indulge in waste of water, the adoption of the Campbell system of soil culture has been more potent in effecting this wonderful transformation than anything else, and it has done more to establish confidence than any other agency. It is one thing to break up and plant the prairies; quite another to make sure of crops, the very best the soil is capable of, and this every year—yet this is in fact being done and it is resulting in prosperity far beyond anything possible even in more favored climates where farming methods are not so advanced. Land values have advanced measurably because of the certainty, now amply demonstrated, that there are indeed few sections that can not be made to yield good crops by intelligent application. The area made profitable in this way is much more vast than the area reclaimed by irrigation. Farming has been popularized as never before by this making of crop failures only a matter of history and reminiscences for the old timers, and it has added greatly to the comfort of innumerable farm homes in regions where comfort has been scarce.

Practical results have proved that farming in the semi-arid region or so-called dry country is no longer an experiment. In a great region in Eastern Colorado, for instance, where many have been following this system, sometimes imperfectly, results have been truly wonderful. From 30 to 55 bushels of best wheat per acre without irrigation on land formerly supposed to be of no use for farming. Near Holdrege, Neb., in 1906, on summer tilled land, Professor Campbell got 51½ bushels of wheat testing 64 pounds. From a dozen different States reports equally as encouraging have been gathered.

This wonderful expansion of the area of tillable soil by reason of newer and better methods of farming makes for the permanent prosperity of the country as nothing else can.

Have You Got Yours?

Have you received the splendid free picture of the 1907 Girl? After much trouble and expense, the Sharples Separator Company succeeded beyond their hopes in reproducing from life, in the softest and daintiest colors, the sweet-



No "Ordinary" shell will bring down the thick quilled grouse. **U. M. C. SHELLS WILL.** They are luxury—quality at necessity—prices. Primer, Powder, Shot, Wads and Crimp—just right for quick kills.

Game Laws Free

THE UNION METALLIC CARTRIDGE COMPANY
BRIDGEPORT, CONN.
Agency: 313 Broadway, N. Y.
Sales Office: San Francisco, Cal.

DR. COE'S SANITARIUM.



BEST INVALID'S HOME IN THE WEST. Organized with a full staff of physicians and surgeons for treatment of all Chronic Diseases. **THIRTY ROOMS** for accommodation of patients.

Difficult Surgical Operations Performed with Skill and Success when Surgery is Necessary.

DISEASES OF WOMEN Well equipped for treatment of diseases of women. Many who have suffered for years cured at home. Special book for women FREE.

PILES PERMANENT CURE. Without knife, ligature or caustic. No money accepted until patient is well. Special Book FREE.

VARICOCELE Radically Cured in Ten Days, under a Positive Guarantee. Send for Special FREE Book.

New restorative treatment for loss of Vital Power, Hydrocele, Rupture, Stricture, etc.

CRIPPLED CHILDREN CURED by improved methods. Trained attendants.

WRITE FOR FREE BOOK ON Club Feet, Curvature of Lung, Eye, Skin, Spine, Hare Lip, Kidney, Bladder, Epilepsy, Catarrh, Blood and Stomach Troubles, Nervous Diseases.

Patients successfully treated at home by mail. Consultation free and confidential, at office or by letter. **Thirty years' experience.**

170 page Illustrated Book Free, giving much valuable information. Call at office or write to

OFFICE, 915 WALNUT ST.

DR. C. M. COE, KANSAS CITY, MO.

SALT RHEUM

QUICKLY CURED FOR 50 CENTS.

SPOT CASH GUARANTEE WITH EVERY BOTTLE.

DR. BELDING SKIN REMEDY

Is an External, Colorless, Instantly Absorbed Liquid Remedy that quickly cures Salt Rheum (Eczema), Tetter (Herpes), Scald Head, Scaly or Scabby Eruptions of the skin, cures Chafing, Cracked Hands, Rough Skin.

Strongly endorsed by Doctors, Nurses and all Users. Thousands have been cured of terrible suffering who were afflicted from 10 to 50 years. If your druggist cannot supply you, name this paper and write direct to us for our test offer and illustrated book. Address

DR. BELDING MEDICINE CO., Minneapolis, Minn.

Kupers Sale of Shorthorns

Humboldt, Nebraska, Tuesday, May 28, 1907.

The offering will be the tops from the largest pure Scotch herd in Nebraska. Send for catalogue and look at the breeding of the following animals, which go in this sale.

COWS AND HEIFERS.

Mysie Grace by Commodore 118477.
Scottish Daybreak by Imp. Prince Oderle 136398.
Victoria Rosabella by Scottish Knight 136371.
Red Butterfly by Chief Lavender 139145.
Duchess by Goldie 152238.
Propheters by Scottish King 100743.
Prides Beauty by Cumberland 188480.

Pleasant Hill Victoria 2d by Godwin 115676.
Beauty 17th by Glosters Duke 210764.
Silvia by Poynter 164166.
Constance by Baron Mysie 176261.
Bessie Belle by 10th Duke of Knightwood 232616.
Lady Londondale 11th by Nebraska Canute 183210.
Fannie Belle by Baron Surmise 146885.

BULLS.

Baron Count 269592 by Imp. Prince Oderle 136398.
Baron Starlight.
Duke of Gloster 274469 by Golden Prince 218532.
Knight of Humboldt 266034 by Imp. Red Knight 157136.
Knight of Pleasant Hill 266770 by Baron Surmise 146885.
Mysie's King 274470 by Dalmency Star 212973.
Onward 269593 by Imp. Prince Oderle 136398.
Roseberry 274471 by Baron Surmise 146885.

This is only a partial list of the good things that go in this sale. In richness of breeding and individuality we believe we have an unusually strong offering and invite all lovers of good Shorthorns to be present on sale day. Send for catalogue and mention Kansas Farmer.

Col. Geo. Bellows, Auctioneer

HENRY KUPER, Humboldt, Nebraska

Weather Bulletin

For the Week Ending May 6, 1907

DATA FOR THE WEEK.

	Temperature.			Precipitation	
	Maximum.	Minimum.	Mean.	Departure from normal.	Total.
WESTERN DIVISION.					
Cimarron.	78	15	45	1.93	.....
Colby.	60	5	37	0.32	.....
Coalgate.	68	9	38	1.00	.....
Dodge City.	67	20	41	1.52	+0.99
Dresden.	63	14	38	0.45	.....
Farnsworth.	66	15	43	1.79	.....
Garden City.	85	18	46	2.40	.....
Goodland.	60	14	37	0.52	.....
Lakin.	67	19	43	2.23	.....
Liberal.	76	20	45	1.80	.....
Norton.	62	14	36	0.55	.....
Scott.	65	12	41	2.45	.....
Wakeeney.	64	15	40	0.21	.....
Wallace.	62	8	39	0.25	.....
Division.	62	5	41	1.24	.....
MIDDLE DIVISION.					
Clay Center.	65	20	44	0.33	.....
Coldwater.	80	23	46	1.03	.....
Concordia.	63	22	40	0.89	+0.21
Cunningham.	83	25	46	1.30	.....
Eldorado.	70	25	48	1.58	.....
Ellinwood.	61	20	42	1.45	.....
Ellsworth.	63	17	43	1.05	.....
Harrison.	63	15	40	0.59	.....
Hays.	64	13	40	0.93	.....
Hutchinson.	73	24	45	1.45	.....
Jewell.	66	19	40	1.75	.....
Larned.	62	13	41	1.19	.....
Macpherson.	64	26	43	1.38	.....
Minneapolis.	63	19	42	0.60	.....
Newton.	88	26	48	1.98	.....
Norwich.	63	19	39	0.17	.....
Phillipsburg.	63	19	40	0.33	.....
Republic.	86	36	50	2.00	.....
Rome.	62	11	40	0.72	.....
Russell.	74	24	46	0.68	.....
Salina.	67	28	44	1.34	+0.50
Wichita.	88	11	43	1.06	.....
Division.	68	24	45	0.32	.....
EASTERN DIVISION.					
Atchison.	68	24	45	1.31	.....
Burlington.	69	24	46	2.53	.....
Columbus.	66	22	46	1.20	.....
Cottonwood Falls.	64	25	46	1.02	.....
Emporia.	64	28	47	1.18	.....
Eureka.	67	26	47	1.67	.....
Fall River.	72	32	42	2.30	.....
Frankfort.	66	27	46	1.08	.....
Grenola.	76	29	50	2.14	.....
Independence.	68	28	45	4.28	.....
Iola.	71	27	44	2.49	.....
Kansas City.	70	27	44	-0.40	.....
Lawrence.	70	27	44	-0.45	.....
Lebo.	67	27	46	1.05	.....
Manhattan.	80	27	46	0.61	.....
Moran.	72	26	48	2.16	.....
Oswego.	74	29	50	2.80	.....
Ottawa.	71	21	46	1.38	.....
Paola.	74	24	45	1.77	.....
Pleasanton.	73	25	48	3.02	.....
Sedan.	67	29	48	1.94	.....
Topeka.	66	28	44	-0.14	.....
Wainut.	74	27	51	0.80	.....
Division.	80	21	46	1.85	.....
State.	88	5	44	1.42	.....

DATA FOR STATE BY WEEKS.

Week ending—	87	18	54	0.12	.....
April 6.	93	15	49	0.06	.....
April 13.	80	12	44	0.15	.....
April 20.	89	16	51	0.27	.....
April 27.	88	5	44	1.42	.....
May 4.					.....

GENERAL SUMMARY.

The past week was not only the coldest (with one exception) this season, but the minimum temperatures on the 4th were the lowest May temperatures recorded in the State. The minimum temperature of 5° is the lowest since March 1. The mean temperatures for the week range between 36° in the extreme northwestern counties and 51° in the extreme southeastern. The minimum temperatures occurred on the 30th of April in the western half of the State and in the northern counties eastward to Marshall, and on May 4th in the rest of the State. The precipitation generally fell on two days it was fairly well distributed over the State, except in a few northwestern counties. On May 3d a general snow storm prevailed in all but the extreme southern and southeastern counties, followed by a killing frost on the 4th.



"Out-of-doors" with a STEVENS—
best thing for a growing boy!
Learning to shoot well and
acquiring qualities of

SELF-CONTROL, DECISION, AND
MANLINESS.

are all due to STEVENS FIREARMS EDUCATION.

Ask your Dealer for Stevens Rifles—
Shotguns—Pistols. Insist on our time-
honored make. If you cannot obtain,
we ship direct, express prepaid, upon
receipt of Catalog Price.

Everything you want to know about the STEVENS
is found in 140 Page Illustrated Catalog. Mailed
for four cents in stamps to pay postage. Beautiful
Ten Color Hanger—fine decoration for your
"den" or club room—mailed for 6 cents in stamps.

J. STEVENS ARMS & TOOL CO.
P. O. Box 4097,
Chicopee Falls, Mass., U. S. A.

KILLS TICKS

ZENOLEUM

CURES SCAB

The Purest Coal-Tar Dip

The successful shepherd watches his sheep as a cat watches a mouse. He dips in Zenoleum to keep the sheep free from ticks and lice. He dips to cure scab, if by accident scab infests his flock. He disinfects the pens to keep them clean and the sheep healthy, because healthy sheep grow into good fleeces and more mutton. This makes a flock profitable. *ZENOLEUM is recommended as a remedy for stomach worms.*

The Principal Sheep Breeders in America

USE ZENOLEUM

They find it the best of all dips after many years' experience. *Forty-two Agricultural Colleges* say "Zenoleum is best." It is equally good for many ailments and diseases of cattle, horses, swine, and poultry, and has a hundred uses of interest to good housewives.

No Strings to the ZENOLEUM Guarantee

Here it is: If Zenoleum is not all we say it is, or even what you think it ought to be, you can have your money back. No talk, no letters—just money.

The Zenner Disinfectant Co.,
161 Lafayette Avenue
Detroit, Mich.

Free Booklet Veterinary Adviser
64-page book for Stockmen written by Agricultural College Authorities. *Positively free for the asking. Send postal quick.*

Prices At All Dealers
Small size, 25 cts; Quart, 50 cts; Half gallon, 90 cts; One gallon, \$1.50. Five gallons, \$6.25—or we will deliver one gallon or more, charges paid, to your station. Ask Your Dealer First.

OAT NUTRIMENT

An invaluable feed in the developing of young stock.

A Bone Maker, A Muscle Developer, A Flesh Producer, Prevents Scouring in All Kinds of Young Stock.

Oat Nutrimint is a cooked product of our cereal mill and is guaranteed to contain no drugs. It contains 20 per cent of Protein and 8 per cent of Fat. Stock breeders will find its use invaluable in fitting their show herds. Price \$2 per hundred, F. O. B. Atchison. Special prices on car lots.

Atchison Oat Meal & Cereal Co.,
ATCHISON, KANSAS.

A STRONGER FENCE

Can be made of whole wire than of cut wire. That's why Advance is the strongest fence. Our stay wire is NEVER cut, but runs continuously up and down across the fence for many rods without an end. Thus we preserve ALL the strength of the wire, fully half of which is wasted in cut stay fences—sacrificed to convenience and speed in manufacture.

30 DAYS APPROVAL. Let us ship you what fence, etc. you need, on approval. After careful examination and comparison with other makes, if you don't like it, return it at our expense and get your money back. We have sufficient confidence in Advance Fence to make this offer.

WE PREPAY FREIGHT and guarantee safe delivery of your shipment. Write today for our Fence Book and Freight Paid Prices.

ADVANCE FENCE CO.,
37 Old St., Peoria, Ill.

ADVANCE

LUMBER

1/2 Price

Ten million feet, all sizes, also one million feet iron pipe, machinery, plumbing goods of all kinds, roofing, etc. Reference, Merchants Laclede National Bank. Satisfaction guaranteed or your money refunded. Write to-day for complete catalogue and prices.
ST. LOUIS WRECKING & SUPPLY CO 3884 MANCHESTER AVE., ST. LOUIS

STANNARD'S PROCESSED CRUDE OIL Kills Lice and Cures Mange. There is no Remedy on the Market as Good or as Cheap. It not only kills all lice on cattle and hogs, but all nits, and one application does the work. Does not injure hair or skin. Can be used in vats or with brush. Also kills lice or mites on chickens. Put up in new 52-gallon barrels and sold for \$5 per barrel. I have used nearly all dips on the market and I say to you, from experience, this oil is better and more effective than any of them. Why pay \$50 per barrel when you can get a better article for \$6? I also sell a heavy Pure Crude Oil as it comes from the well that is a good lubricating oil, 82 gallons for \$5.50; an excellent grease to keep plow-shares and cultivating sheaves from rusting. Try these oils and you will always use them. When ordering, state plainly whether you want the Processed Oil or the Pure Crude. Send remittance with order. **C. A. STANNARD**, Emporia, Kans., Sunny Slope Farm. Please mention Kansas Farmer.

SAM JONES' LIFE AND SAYINGS

BY HIS WIFE

AGENTS WANTED Agents are coining money. Send 50c for Canvassing Outfit and Contract for territory.
Big Book, 7x10, Price \$2.50
Circulars Free. **A. N. Jenkins & Scott,** ATLANTA, GA.



When writing Advertisers please mention this paper

Special Want Column

"Wanted," "For Sale," "For Exchange," and small want or special advertisements for short time will be inserted in this column without display for 10 cents per line of seven words or less per week. Initials or a number counted as one word. No order accepted for less than \$1.00.

CATTLE.

FOR SALE—Registered Hereford bulls sired by Beau Jr. 135568. Will price right. Come and see or write. H. B. Clark, Geneseo, Kans.

FOR Red Polled bulls or heifers, write to Otto Young, Uteca, Ness County, Kans.

DOUBLE-STANDARD POLLED DURHAM BULLS—Extra good quality, well bred, good color. Address C. M. Albright, Overbrook, Kans.

SPECIAL SALE—5 straight Cruickshank Short-horn bulls for sale at bargain prices for quality. H. W. McAfee, Topeka, Kans.

FOR SALE—One carload of high grade Red Polled cows with calves by side. Bowman Bros., Lebo, Coffey County, Kans.

FOR SALE—Four yearling Shorthorn bulls. All are read, low down, blocky fellows. One is pure Scotch, two are out of show cows and sired by prize-winning bulls. They weigh from 1000 to 1200 pounds and are first-class individuals. Parties wishing to see them will be met at the train in Abilene. C. M. Garver, Abilene, Kans.

ABERDEEN-ANGUS CATTLE and Percheron horses. Stock for sale. Garret Hurst, breeder, Peck, Sedgewick County, Kans.

SEEDS AND PLANTS.

GREEN HOUSE PLANTS—Sample dozen 50c (by mail) embracing Carnations, Roses, Geraniums, etc. T. Montgomery, Larned, Kans.

SWEET POTATO PLANTS—8 varieties; also tomatoes and cabbage, \$2 per 1,000; less than thousand, 25 cents per hundred. Have the famous Southern potato "Pumpkin Yam." Prompt shipment. W. A. Schreier & Son, Argonia, Kans.

PLANTS, Cabbage, Early Jersey Wakefield, Winingstadt, Early Summer Succession, Tomato, Early Dwarf Champion, Early Dwarf Stone, Matchless, Stone, Beauty; 30 cents per hundred, \$2.50 per thousand. Sweet potato, Yellow Jersey, Yellow Nansemond 20 cents per hundred, \$1.50 per thousand Red Jersey, Red Bermuda, Black Spanish, Southern Queen, 25 cents per hundred, \$1.75 per thousand. E. P. Rude & Son, Ind. Phone 4003, North Topeka, Kans.

Trees At bargain prices. List now ready tells all about our cleaning-up sale of choice trees. Send for it to-day. Easterly Nursery Co., Cleveland Ohio.

and Missouri, taking Kansas City rates, \$25.50 per ton in carlots.

Castor Beans.—In carlots, \$1.25 per bushel. Ground Oil-Cake.—Carlots, \$25; 2,000-pound lots, \$28; 1,000-pound lots, \$13.50; 100-pound lots, \$1.40.

Seeds.—Timothy, \$3.04 per cwt.; red clover, \$3.02 per cwt.; Kafir-corn, \$2.74c per cwt.; cane, \$1.12@1.18 per 100 lbs.; millet, German, \$1.15@1.20 per cwt.; common, \$1.05@1.12 per cwt.

Broomcorn.—Quotations: Choice green, self-working, \$80; good green, self-working, \$75; slightly self-working, \$70; red tipped, self-working, \$60; common self-working, \$50.

South St. Joseph Live-Stock Market.

South St. Joseph, Mo., May 6, 1907.

For the opening of the week, the number of cattle arriving at this point was about the same as a week ago, but in the total at five leading markets there was a falling off of ten thousand. This proved agreeable to trade conditions, and the market for the week got a good active start with prices ruling strong to around a dime higher for steers and steady to strong for she stock. The most strength in steers was shown on the light and handy weights of good quality, these selling mostly around a dime higher, while heavy weights were hardly more than strong. The good heavies sold largely at \$5.40@5.55, with the best here making \$5.75, although strictly prime heavy weights would readily sell up to \$6.25. Bulk of light weights sold in a range of \$4.90 @5.40. The market for butcher stock was fairly active at steady to strong prices. There are not enough stock cattle here to establish quotations, but fairly liberal receipts would be welcomed at steady to strong prices.

The market for hogs was only moderately supplied at the leading points but with Chicago having a very large proportion of the total in sight the market at that point broke, and this break was reflected at all outside points. Locally the opening was slow but later in the forenoon the trade became active on a basis of 2 1/2@5c reduction. Hogs were generally heavy in weight and of quite good quality, so that the range in prices was very narrow, there being but 7 1/2c between the bottom and top. The nice smooth bacon and light butcher weights are now the favorites with the trade, as the lighter cuts of pork are wanted, and the proportion of heavy weights is very large. The bulk of hogs to-day sold at \$6.30@6.32 1/2, with tops making \$6.35, although any prime 200-pound butchers might have sold a little above the latter figure.

The market for sheep was moderately supplied and trade active on a basis of steady prices. There is now a spread of about \$1.40 between lambs in the fleece and shorn stock of the same quality. Top woolled lambs to-day sold at \$8.55 and about the same grade of shorn stock went at \$7.25. The outlook continues to favor high prices for live muttons until the opening of the grass season.

WARRICK.

Kansas City Live-Stock Market.

Kansas City, Mo., May 6, 1907.

The loss of 10@20c on killing cattle last week had the effect of checking the receipts to-day, supply 6,000 head, only a little more than half the run of any recent Monday. Another cause for the small supply to-day is laid at the heavy run in April, cattle sent in ahead of time, which, if it has any merit, would indicate continued moderate marketing. Heavy steers suffered most of the loss last week, medium grade heifers and yearling steers also heavy losers, while handy weight steers and good cows almost held their own for the week. The market to-day is naturally higher, steers selling generally 10c above the close of last week, but nothing topky included, highest price \$5.65, bulk of steers at \$5.25@5.50, including quite a number of Nebraska steers at good prices, one string of 12 cars of 1,250-pound steers from Alma, at \$5.55. Heavy cows sell at \$4.25@4.90, medium class cows \$3@4.25, prime heifers and yearlings \$5@5.40, bulk \$4@4.55, bulls strong as compared with last week, at \$3.25@4.50, veal calves unchanged \$4.25@5.50, stock calves 50c higher, \$3.25@5. A large percentage of the supply to-day is stock and feeding grades, market on them strong to a shade higher. A good gain was made on country grades last week, and prices to-day are practically as high as the best time before the recent break, desirable feeders selling at

HORSES AND MULES.

\$150 OFFERED

for each mule colt bred from J. Sheneman's Jack, 1/4 mile east and 2 miles south of Agricola. P. R. G.

FOR SALE—A Jack Daw stallion, dam Happy Heir; 4 years old, color dark brown and nicely marked. Good disposition, stylish driver, time 2:38. Can be seen for a short time at 538 Van Buren St. Topeka, or write F. R. Baker. A bargain.

FOR SALE—Rubini, Jr. Bay, perfectly sound. Colts took first and second premiums in roadster class last year at Osage County Fair. A bargain if taken soon. County Clerk, Lyndon, Kans.

PERCHERON STALLION FOR SALE—Owing to circumstances I am forced to sell my 7-year-old registered Percheron stallion. He is sound, kind, big, has fine action and is a perfect show horse. Will fully guarantee him. Terms: Cash, approved notes, or will trade for cattle. J. B. Weldon, Eureka, Kans.

TWO JACKS FOR SALE—3 and 4 years old. Missouri bred. Address S. C. Hedrick, Tecumseh, Kans.

FOR SALE—At reasonable prices, Black Imported Percheron stallions. E. N. Woodbury, Cawker City, Kans.

FOR SALE—One black team, 6 and 7 years old weight 2800 pounds. Mr. and Mrs. Henry Schrader Wauweta, Kans.

SWINE.

FOR SALE—Duroc-Jersey sows with litters, and bred sows and gilts. S. J. Steinmetz, Alden, Rice County, Kans.

DUROC-JERSEYS—A few snaps in fall boars; also choice R. C. Rhode Island Red eggs, \$1 per 10; \$5 per 100. J. F. Chandler, Frankfort, Kans.

LATE FALL POLAND-CHINA BOARS—Good as Old High Price. Sells for twice the money, for \$25 net. Will trade for gilts as good as they are. Don't wait. F. H. Barrington, Spring Creek, Chautauqua County, Kans.

FOR SALE—Forty Duroc sows and gilts, bred for March and April farrow. Also sows with litters R. O. Stewart, Alden, Kans.

MISCELLANEOUS.

RUBAL BOOKS—Send for descriptive list of book for farmers, gardeners, florists, architects, stock raisers, fruit-growers, artisans, housekeepers and sportsmen. Sent free. Address The Kansas Farmer Company, Topeka, Kans.

DRUGS AND PHOTO SUPPLIES—Eastman's Kodak, Remo Cameras, Velox and Sollo paper. Films for all cameras and kodaks. Fred T. Walker, 825 Kansas Ave., Topeka, Kans.

WANTED—Experienced man and wife (no children) to manage small farm near Topeka. Address Position, care Kansas Farmer.

"CORRECT ENGLISH. HOW TO USE IT"—A monthly magazine devoted to the use of English; Josephine Turk Baker, editor. Partial contents: Course in Grammar. How to Increase One's Vocabulary. The Art of Conversation. Shall and Will; Should and Would; How to Use Them. Pronunciations (Century Dictionary). Correct English in the Home. Correct English in the School. What to Say and What Not to Say. Course in Letter-Writing and Punctuation. Twenty Day Drill. Business English for the Business Man. Compound Words; How to Write Them. Studies in English Literature. Agents wanted; \$1 a year; send 10c for single copy. Correct English, Evanston, Ill.

ORCHARD FOR SALE—Twenty acres in Pegette Valley, Idaho, just outside New Plymouth, a thriving town, with churches, schools, stores, bank, newspaper, railroad, etc. This land grows the best apples, peaches and prunes, 800 bearing trees. Address F. A. Carrier, 100 Washington St., Chicago, Ill.

FOR SALE—Special bargains in rebuilt engines and separators. They will make you money. Write us quick before they are all sold. The Gelsner Manufacturing Co., 1410 Union Ave., Kansas City, Mo.

WANTED—A secondhand traction engine, not less than 16 horse power. Dr. W. E. Barker Chautauque, Kans.

HONEY—For Kansas, Missouri and Oklahoma. Two 5-gallon cans, 120 pounds net—Amber \$3.40; white \$3.90. Also small cans. Comb honey in one pound sections 12 1/2c. Write for price list. Nothing but genuine bees honey. Reference Kansas Farmer Co. Address Cheek & Wallinger, Props., Arkansas Valley Apiaries, Los Animas, Colo.

Stray List

Week Ending May 2.

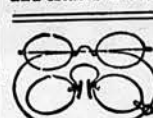
Crawford County—Fred A. Gerken, Clerk.
HORSE—Taken up by F. W. Witter, in Baker tp., March 19, 1907, one gray horse, 14 1/2 hands high, branded A. J. and O and O, valued at \$10.

LEGAL.

FRED C. SLATER, Lawyer.

Topeka, Kansas.

Collections made in all parts of the country. Advice given on matters by mail. Inheritances collected and estates investigated in all parts of the world.



Gold, Any Style, FREE.

Send for our new system to test your eyes then send \$1.00 and receive a pair BB lenses to fit your eyes; set in solid gold filled frames (not plated). Secure 5 orders and get yours free. R. H. Baker, Mfg. and Wholesale Optician, Topeka, Kans.

Well Drills and Drillers' Supplies

The best on the market. Manufactured by THATCHER & SONS, Stillwater, Oklahoma.

Write for circulars and prices.

\$4.75@5.40, stock steers \$4.25@5.25, a few common steers downwards to \$3.50, stock cows and heifers \$3.25@3.75.

Hogs closed last week stronger than the middle of the week, but there was a net loss of 6c for the week. Run is 7,000 to-day, market weak to 5c lower, heavy hogs especially weak. The spread between light weights selling at \$6.35@6.40, medium weights \$6.30@6.37 1/2, heavy hogs \$6.25@6.32 1/2. Pigs usually sell in with loads without sorting, odd lots of common pigs \$5.25@5.75. Supply last week 64,000, against 61,400 same week last year.

Mutton and lamb prices show very little change from a week ago, receipts 27,000 last week, against 45,000 same week last year. Supply to-day is 9,500, market firm, and there is small prospect that the supply will reach a volume sufficient to embarrass salesmen. Woolled lambs to-day sold at \$3.25@3.50, clipped lambs \$7@7.40, common clipped lambs \$7, ewes worth \$5.50, wethers \$6@6.25, woolled ewes \$6.50. First shipment of Texas muttons this season arrived last week, 93 pounds, at \$5.10.

J. A. RICKART.

AN IDEAL

Hereford Dispersion Sale

The Fair Acres Farm Herd

OWNED BY

Mrs. C. S. Cross, Emporia, Kans.,

Wednesday, May 15, '07

At the Farm Adjoining Sunny Slope Farm.

The entire Fair Acres Farm Herd consisting of 71 choicely bred Herefords, including 25 grand cows, 8 with calves at foot; 12 extra fine yearlings heifers; 16 yearling bulls; the remainder calves; also the young show and herd-bull, Christy 234417 by Keep On 2d and out of Fashion by Lord Saxon.

This is a dispersion extraordinary for the reason that there has never been an inferior or undesirable breeding animal on the farm. The foundation stock were all selected because of their known value.

The catalogue will reveal significant values to the breeding fraternity. Send for it. All are welcome and especially invited to be present at the sale.

For further information address

Mrs. C. S. Cross,

EMPORIA,

KANSAS

Auctioneers: Cois. F. M. Woods and George Bellows.

Shorthorn Dispersion Sale

By the estate of Henry Haub, including an offering by Herbert Haub,

Holton, Kans., Sat., May 18, '07

60 HEAD 60

These cattle are Scotch-topped and from the best standard American families, consisting of 30 cows with calf at foot or in calf to our Scotch-topped herd bull, Good Enough 260149. Ten bulls 1 and 2 years old, including herd bull Good Enough. Also twenty head of young females from 10 months to 2 years old. Cattle will be presented in thrifty, well kept condition.

We will also sell eight head of Poland-Chinas, both sexes. Sows are bred. Will sell share of stock in Standard Poland-China Record including 16 volumes.

For catalogue write to

Herbert Haub, :: Holton, Kans.

Res. Tel. 775.

Office Tel. 192.

L. M. PENWELL,

Funeral Director and Licensed Embalmer.

511 Quincy St.

Topeka, Kansas

USE OUR MONEY

We helped 10,000 Agents last year. Goods shipped on 30 days' credit; deliver and collect before paying. Portraits 35c; frames 15c; sheet pictures 3c; stereoscopes 25c; views 1c; all art goods at lowest wholesale prices. Big catalog and sample outfit free. CONSOLIDATED PORTRAIT & FRAME CO. 290-134, West Adams St., Chicago, Ill.