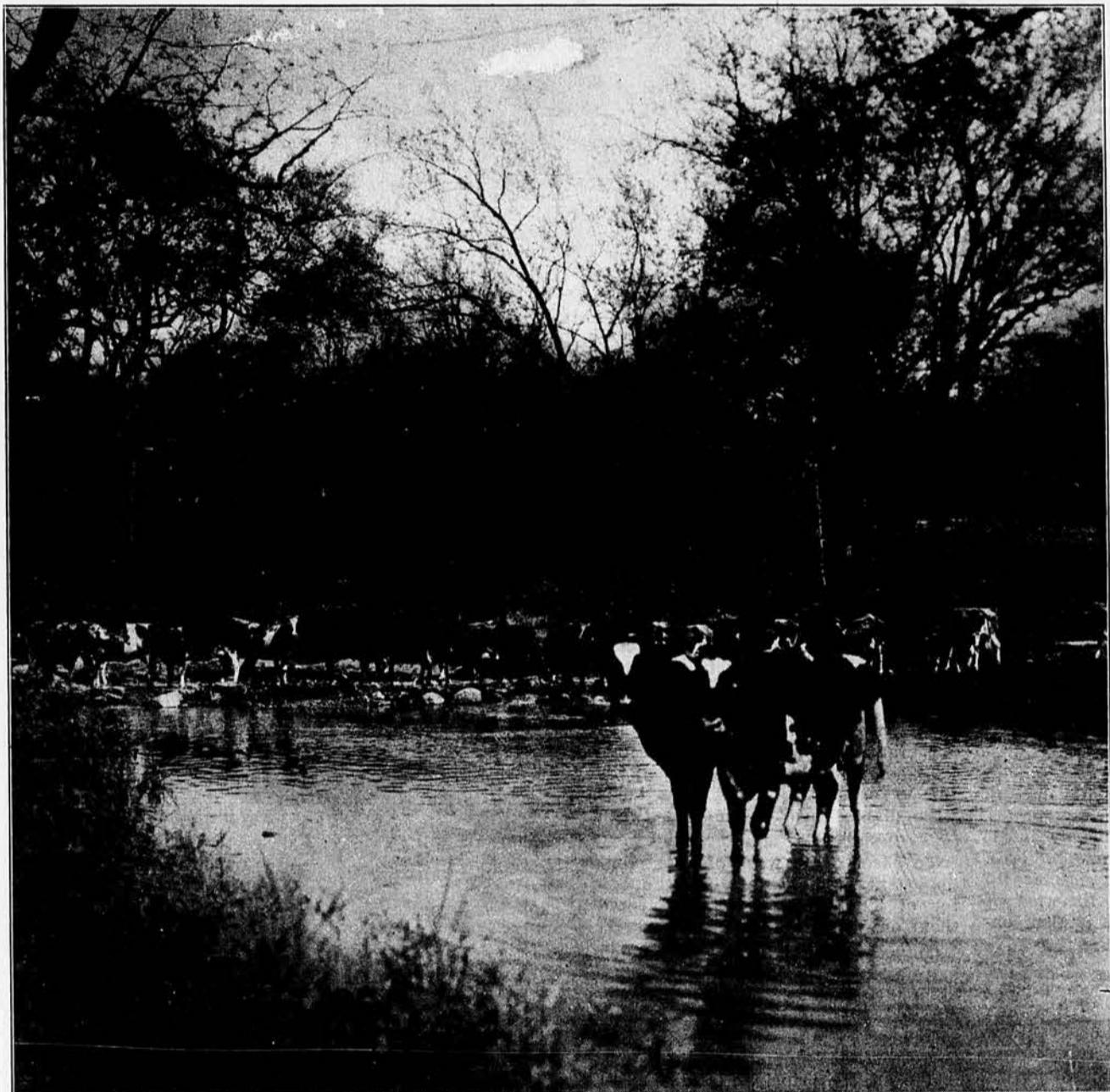


# KANSAS FARMER

Volume XLVI. Number 20

TOPEKA, KANSAS, MAY 14, 1908

Established 1863. \$1 a Year



ONLY ONE OF MANY SOURCES OF KANSAS' WEALTH.

## Principal Contents of This Week's Paper.

Alfalfa, curing and caring for.....	577
Alumni for regents of the Kansas State Agricultural College.....	571
American carriage horses, classification for.....	575
Bees? who should keep.....	587
Borers, protecting trees from.....	583
Boys' corn contest.....	578
Boy, know your.....	580
Children two thousand years ago.....	581
Club department.....	582
Codling moth, spraying for.....	583
Cookery, hygienic.....	580
Concrete floors in corn cribs.....	572
Corn, cultivating a crop of.....	577
Creamery, the cost of building a.....	584
Crop report, Government.....	572
Farmers saved a business house, how.....	590
Girls.....	582
God is good (poem).....	580
Hog, health of the.....	574
Hog questions.....	574
Japanese girls, two.....	581
Pasture for horses and cattle.....	577
Potato cultivation in Colorado.....	583
Potatoes, storage of.....	578
Poultry on the farm.....	586
Poultry notes.....	586
Rain, old man (poem).....	581
Rooster up to crow? who wakes the (poem).....	582
San Jose scale.....	583
Seashore, Margaret and Paul's.....	582
Seed corn, graded.....	577
Spraying.....	579
Substitute for skim-milk in feeding calves, some good.....	584
Thistles in pasture.....	577
Veterinary department.....	590
Weather bulletin.....	588
Western State Normal and the State Experiment Station at Hays, the.....	570

## KANSAS FARMER.

Established in 1868.

Published every Thursday by  
THE KANSAS FARMER COMPANY  
(Incorporated, January 1908).  
Topeka, Kansas

SUBSCRIPTION PRICE: \$1.00 A YEAR

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

### OFFICERS.

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

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

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

### SPECIAL AGENTS.

New York.

J. C. Bush.....	1110 Potter Building
Chicago.	
Stilwell Special Agency.....	801-804 Unity Building
Kansas City.	
J. A. Davidson.....	402 Century 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, 16 cents per agate line.

Special reading notices, 30 cents per line.

Special rates for breeders of pure-bred stock.

Special Want Column advertisements, six words per line, 10 cents per week. Cash with the order.

Electros should 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

The rains of the last ten days have been so copious as to incline farmers in many parts of Kansas to think, if they do not cry, "hold enough" for the present.

It is stated that of all the immigrants who located anywhere in the world during the year 1907, more located in the United States than in all other countries combined.

Car-window observations of the growing wheat along the U. P. R. R. from Topeka 223 miles west to Hays impressed the writer with very optimistic views as to the promise of bread for the eater who has Kansas as his base of supplies.

If any one considers it his duty to wear an elongated face during the next twelve months he will probably find it expedient to give Kansas a wide berth. Kansas people's conditions promise to produce the elongation crosswise of the countenance, and this is also contagious.

Bradford Miller, chairman of the committee in charge of the Shawnee County boys' corn-growing contest, test, has not yet received full returns of the contestants entered, but he estimates that over 200 have already enlisted and that a good many others will follow.

The Arizona Experiment Station has made careful experiments to determine what seeds retain their power to grow after submergence of the soil in which they have been planted. It was found that amber cane or common sorghum is about the only useful crop that may be successfully sown before a protracted flood begins. About 45 per cent of this germinates after 50 days submergence by the overflow of the Colorado River.

"The Colonizer," a London, Eng., publication says in its March issue: "If you will take a map of North America, you will see at a glance that the United States, particularly the Southwestern States, wherein over 80 per cent of all the farm products are raised, are so geographically situated that the farmer has nature and climate working with him every day in the year; climatic conditions, great diversity of crops, nearby markets, a short

haul to the seaboard, with consequently low freight rates, a big and growing demand for what he produces, being a few of the many things that make for the great prosperity of the fortunate agriculturist located in the Southwest States of America."

### THE WESTERN STATE NORMAL AND THE STATE EXPERIMENT STATION, AT HAYS.

Two very important Kansas State institutions are located at Hays, in Ellis County. These are the Western State Normal School and the Hays Branch Experiment Station.

When the country was new and frequented by hostile Indians, an important United States military post was

added to diversified experience in experiment station work. Preliminary to marking out the line of instruction, Professor Pelham visited other institutions in which similar work is undertaken. There are not many text books that are well adapted to this work in the public schools. One of the best is that by Professor Burkett, director of the Kansas Experiment Station. The instruction at Hays very properly extends much further than it will or should in the common schools. It is intended that the teachers shall be equipped with exact information well selected from the vast field of scientific and practical knowledge with which modern agriculture is concerned.

A model district school is conducted

essary. The writer's prediction is that future growth will make it necessary that the Legislature continue its liberal policy towards this school.

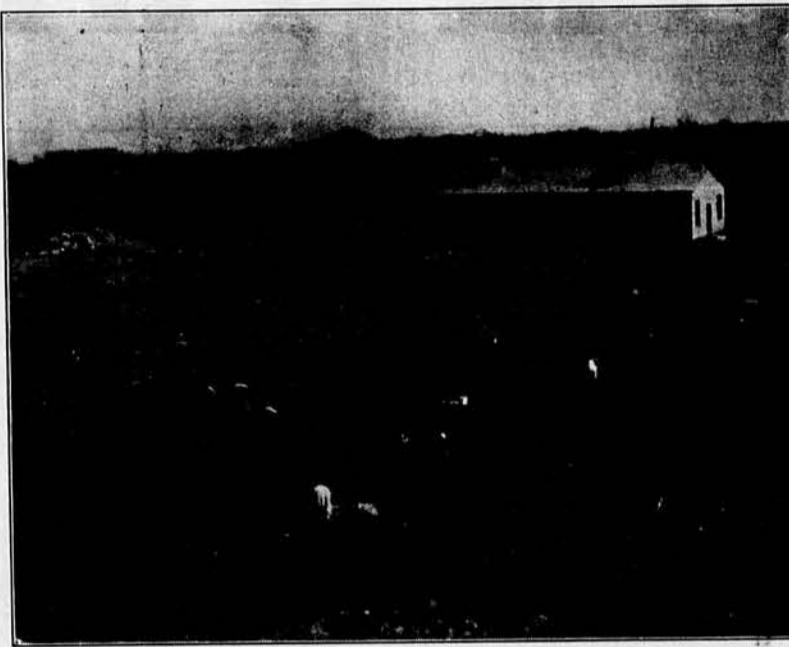
The fine land which fell to the normal in dividing the old military reservation is a profitable endowment. The rents last year amounted to about \$4,000. Plants for development of the school include some fine landscape work. For this the location of the buildings near the edge of the tract close to the town and not far from the creek offers rare opportunities. Indeed, the effects are now very pleasing in a country where the only native timber is along the banks of this creek which carries the only surface water of the region.

The afternoon was devoted to a drive over the Experiment Station with the superintendent, C. K. McClelland.

It means a great deal to Western Kansas agriculture to have here a farm of nearly 4,000 acres devoted to experimentally solving the problems that confront the farmer and stock-raiser in a country where conditions differ considerably from those which prevail further east. It is not intended here to attempt an enumeration or a description of the many experiments that are in progress. Very many of these are with wheat; a good many are with corn; some are with alfalfa; some are with feeding. Times and methods of plowing, planting, and cultivating are under experiment. Experiments to determine the results of irrigation, experiments with methods of modifying the effects of the wind in moving the soil; experiments in the eradication of pernicious weeds and grasses; experiments in feeding; experiments with implements of various kinds are conducted and recorded. These experiments are expensive, but they are performed and reported upon by trained experimentors at the expense of the State so that the information derived by experience is available to every farmer, and no individual need pay the price of this costly experience. In size the experimental plots range from one-tenth of an acre to large fields.

Most of the plowing is done by steam power attached to a gang of plows. This outfit is capable of turning over 35 acres per day.

The buildings of the old military post have been transformed and rebuilt until there is no longer much to suggest the bristling bayonets and other implements of war. The changes wrought on these 8,000 acres of beautiful Kansas prairie amount almost to



Model district school children at work on school garden.

maintained at Hays. About 8,000 acres of land was reserved for this post, elaborate buildings were erected, and a considerable force was kept in readiness for outbreaks. As the Indian troubles subsided with the removal of the hostiles to the Indian Territory the need of a military post passed and the establishment was presently abandoned. Congress finally by an act approved March 27, 1900, ceded the entire property to the State of Kansas for use of an agricultural experiment station and a normal school. The State of Kansas by act of the Legislature approved March 1, 1901, accepted the grant and provided for the establishment of both the normal school and the experiment station. The lands were divided nearly equally between these institutions.

To observe the work of these very important public enterprises the editor of THE KANSAS FARMER visited them on Wednesday of last week.

On account of the heavy rain which had fallen on Tuesday and Tuesday night the forenoon was devoted to the normal. The general work of this school under the efficient direction, oversight, and leadership of Prof. Wm. S. Picken, the principal, is fully up to standard.

The students, several hundreds in number, are nearly all the sturdy sons and comely daughters of Western Kansas farmers. They are preparing for the noble profession of the teacher, and in doing this they are of necessity acquiring good educational training for themselves. The class work witnessed by the writer was excellent.

Recent years have developed a growing demand for agricultural instruction in the schools. Conceptions of what this instruction should include and how it should be conducted have been rather indefinite. The writer has heard some rather impassioned appeals for such instruction and was anxious to be informed of the views of practical educators. The Western State Normal has recently opened a department for the instruction of teachers in the conduct of nature studies and studies in agriculture in the common schools. This department is in charge of Prof. J. L. Peiham, a graduate of the Kansas Agricultural College and a man of wide observation

in a separate building, having the usual appointments of a public school in an up-to-date community. This is conducted by Miss Anna Keller, whose work depends for its success upon the thoroughness with which she maintains the interest of every pupil. The agricultural side of nature studies is efficiently handled here. The plots on which the children plant and cultivate are shown in the illustration given herewith. An interesting and instructive series of lessons along this line has just been completed. Various seeds were planted in boxes which were kept in the school room. The children made drawings of the seeds



View of buildings from athletic field.

as they appeared when planted. Each seed was given the space of a line in the drawing book. After a seed had sprouted another drawing was made, and as the plants progressed other drawings were added so that a glance across the page shows a pretty complete record of the development both below and above ground. Many of the drawings examined by the writer were excellent.

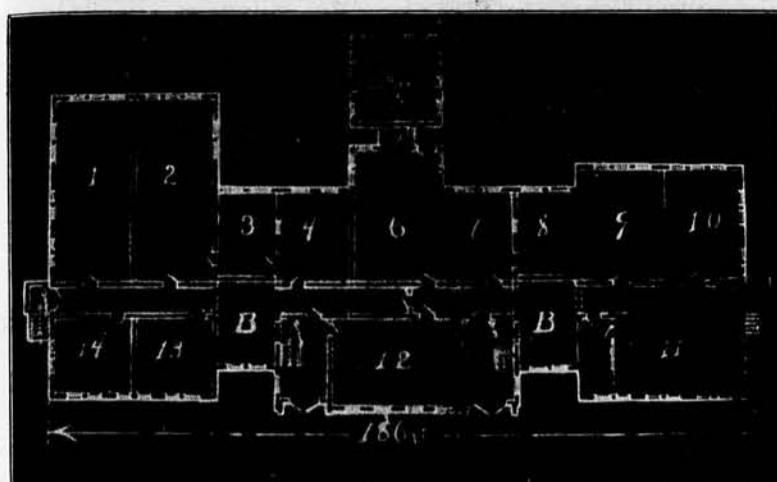
The growth of the Western State Normal has been such that large additions to the buildings have been nec-

essary. The management of so large a farm and the supervision of so many experiments requires executive ability of a high order. Whether for reinforcement of this ability or simply because it was not good for man to be alone, Superintendent McClelland has recently secured a helpmeet whom he brought from a distant State to become a Kansan. They had just moved into the new house provided by the State, and though settled scarcely as

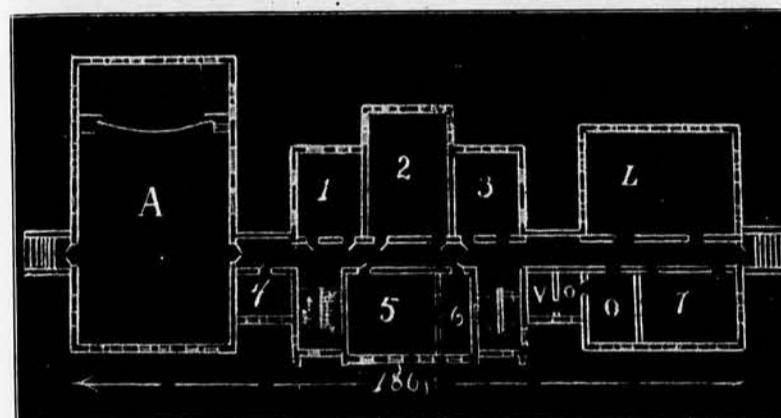
completely as a young bride would like to be before entertaining company, the writer can testify to his enjoyment of the true Southern hospitality of this daughter of Mississippi and her husband in their new home

overlooking the great experiment farm all around, the timber-skirted creek as it winds through the valley, the Western State Normal, and the city of the prairie a little to the north.

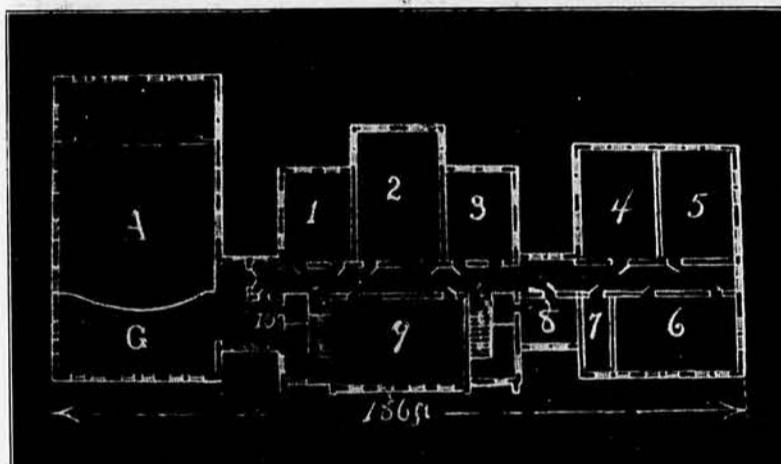
The impression gathered from a



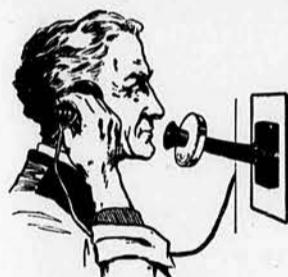
Basement Story: 1, Drawing and Art Room; 2, Ladies' Cloak and Rest Room; 3-4, 7-8, Toilet Room; 5, Boiler House; 6, Chemistry Laboratory; 9-10, Class Room; 11, Physical Laboratory; B-B, Bicycle Room; 12, Museum; 13-14, Model School Rooms.



First Story: A, Auditorium; 1, 2, 3, 5, 7, Class Rooms; L, Library; O-O, Offices; V, Fireproof Vault; 6, Reception Parlor; 4, Dressing Room.



Second Story: A, Auditorium; G, Auditorium Gallery; 1, 2, 3, 4, 5, Class Rooms; 6, 9, Society Halls; 7, 8, Typewriting Rooms; 10, Apparatus Room.



No more selling blind.  
No more sacrificing rather than haul back from market.  
A good telephone protects the farmer in a hundred ways. To be sure of getting a good telephone, get the best—that's

## Western Electric Co.

Apparatus and Equipment

Booklet, "Rural Telephone Equipments," Sent Free

WESTERN ELECTRIC COMPANY  
Standard "Bell" Apparatus  
New York Chicago Dallas  
Philadelphia St. Paul Denver  
Atlanta Des Moines Salt Lake City  
Pittsburg St. Louis Seattle  
Cincinnati Kansas City San Francisco  
Indianapolis Omaha Los Angeles  
Use Address Nearest You

day's observation is very strong that the State institutions at Hays are both conducted with ability and fidelity, and are doing excellent work whereof the people of Kansas are greatly profited.

### ALUMNI FOR REGENTS OF THE KANSAS AGRICULTURAL COLLEGE.

In a personal letter to the editor of THE KANSAS FARMER, Prof. F. A. Waugh, chief of the division of horticulture in the Massachusetts Agricultural College, writes:

"I have just been reading your editorial giving suggestions on the organization of a board of regents for the Kansas Agricultural College. I quite agree with everything you have said in this article but wish to add another observation which seems to have been generally overlooked in the consideration of this subject. I refer to the great desirability of having a certain number of graduates of the college on the board of regents. There are now many of the graduates resident in all parts of the State, well established in farming and other lines of business, well known in their home localities and some of them well known throughout the State. Many of these men are of notable ability and could be trusted with any of the largest affairs of the State. But most of all they are well acquainted with the history, the development, and the needs of the State Agricultural College. Moreover, they are intimately interested in the success of

# KANSAS FARMER

## SPECIAL OFFERS

The following combination offers are made as suggestions to our subscribers. If this list does not contain what you want write us. We guarantee the lowest publishers' price, postpaid to any address in the United States on any book or magazine published in the United States.

Remittances made for these combination offers cannot apply on back subscription accounts.

### Special Offer No. 1.

The Great Magazine Bargain of the year. - A saving of 40 per cent on the publishers' prices.

Review of Reviews.....	\$3.00
Woman's Home Companion.....	1.00
Success Magazine.....	1.00
The Kansas Farmer.....	1.00
Regular price.....	\$6.00

**Our Price \$3.75**

### Special Offer No. 2.

Another great offer which includes Country Life in America, the most beautiful magazine published.

Country Life in America.....	\$4.00
The Garden Magazine.....	1.00
McClure's Magazine.....	1.00
The Kansas Farmer.....	1.00
Regular price.....	\$7.00

**Our Price \$5.35**

### Special Offer No. 3.

Campbell's Manual Soil Culture.....	\$2.50
The Kansas Farmer.....	1.00
Regular price.....	\$3.50

**Our Price \$2.50**

### Special Offer No. 4.

Metropolitan Magazine.....	\$1.50
Reliable Poultry Journal.....	.50
Weekly Capital.....	.25
The Kansas Farmer.....	1.00
Regular price.....	\$3.25

**Our Price \$2.00**

### Special Offer No. 5.

Review of Reviews.....	\$3.00
Success Magazine.....	1.00
The Kansas Farmer.....	1.00
Regular price.....	\$5.00

**Our Price \$3.00**

### Special Offer No. 6.

Vick's Magazine.....	\$1.50
Green's Fruit Grower.....	.50
The Kansas Farmer.....	1.00
Regular price.....	\$2.00

**Our Price \$1.40**

### Special Offer No. 7.

The American Magazine.....	\$1.00
Review of Reviews.....	.50
Woman's Home Companion.....	1.00
The Kansas Farmer.....	1.00
Regular price.....	\$3.00

**Our Price \$3.75**

### Special Offer on Dailies.

The Kansas Farmer one year and any one of the following dailies for the price named.

Topeka Daily Capital.....	\$4.50	Kansas City Daily Star and Times.....	\$5.50
Topeka Daily State Journal.....	4.60		

### Special Offer on Weeklies.

The Kansas Farmer one year and any one of the following weeklies for the price named below:

Breeders' Gazette.....	\$2.00	Inter-Ocean.....	1.25
Scientific American.....	4.00	Western Swine Breeder.....	1.75
The Commoner.....	1.60	American Swine Herd.....	1.00
Hoard's Dairyman.....	1.60		

### Special Long Time Offer.

The regular subscription price of THE KANSAS FARMER is One Dollar per year. Some prefer to take a cash discount by paying for a longer time in advance. To meet the views of such we will send:

Two years' subscription, in advance, to one address.....	\$1.50
or, five years' subscription, in advance, to one address.....	\$3.00
or, subscription for life, in advance.....	\$9.00

We will accept as payment for all arrearages and one or more years in advance, your check, your note, postage stamps, or currency, which ever best suits your convenience.

### ADDRESS

**The Kansas Farmer Co.,  
TOPEKA, KANS.**

the institution. Their knowledge of the situation and their interest in it must necessarily be very much greater than that of ordinary citizens. Under these circumstances the importance of their representation on the board can not be urged too strongly.

"In a very few instances alumni of the college have been appointed to the board in the past and have always done good service, but such appointments have been altogether too rare. It is greatly to be hoped that future governors will take this matter into account when appointments are to be made."

Professor Waugh is one of the alumni of the Kansas State Agricultural College and has made an enviable record as an instructor and organizer in the East and has written many valuable books which have become standards on the subjects treated. His interest in his alma mater and the sincerity of his views are unquestioned. He has been suggested as suitable material of which to make a president of the great Kansas school.

There seems to be some real force behind a movement to drop the word "agricultural" from the name of the Kansas State Agricultural College. The editor of an agricultural paper finds it hard to perceive any but puerile reasons for desiring the change. The writer recently made a business trip to Chicago. The fact that he is an editor made little impression until it was stated that his is an agricultural paper. The business man immediately takes notice when anything agricultural in Kansas is mentioned. It seems not to have penetrated some craniums that the day is rapidly approaching when the word "agricultural" will be the most desirable adjective in the language. But do these people really wish to eliminate agriculture as the leading and distinctive feature of the great institution at Manhattan? The agitation for the change appears to come from students. If these things are as they seem, some students have surely been misinformed by somebody. Who is guilty?

The Governor of Kansas complains because farmers do not buy enough of the binding twine manufactured by the State at the penitentiary. At the suggestion of the Governor, THE KANSAS FARMER and a great many other papers published, free of charge, an elaborate reader advertising the penitentiary twine. This was to show our good will. But private producers of useful articles find it not only profitable but necessary to advertise persistently the goods and wares they have for sale. They set forth repeatedly the merits of their goods and their guarantees of the same. If the State is to succeed as a competitor with private producers it will probably be found wise for it to pursue some of the business man's methods of acquainting patrons with the merits of its product.

### Miscellany

#### Government Crop Report.

The Crop Reporting Board of the Bureau of Statistics of the United States Department of Agriculture finds, from the reports of correspondents and agents of the Bureau, that the area of winter wheat standing on May 1 to be harvested was about 29,751,000 acres, which is 4.2 per cent, or 1,318,000 acres, less than the area reported as sown last fall, and 5.8 per cent, or 1,619,000 acres, more than the area of winter wheat harvested last year.

The average condition of the growing winter wheat on May 1 was 89 per cent of a normal, as compared with 91.3 per cent on April 1, 82.9 per cent on May 1, 1907, and 85.8 per cent the mean of the May 1 averages of the past ten years.

The average condition of the rye crop on May 1 was 90.3 per cent of a normal, as compared with 89.1 on April 1, 88 on May 1, 1907, and 89.5, the mean

of the May 1 averages of the past ten years.

The following table shows for the principal winter wheat States the per cent of the area sown last fall which has been abandoned, the area remaining on May 1, and the condition of winter wheat on the dates indicated:

States.	Per cent abandoned.	Area remaining to be harvested	Condition May 1	
			1908	1907
Kansas . . . . .	2.5	5,782,000	84	82
Indiana . . . . .	2.1	2,721,000	94	74
Illinois . . . . .	2.4	2,524,000	94	88
Nebraska . . . . .	4.0	2,285,000	87	91
Missouri . . . . .	2.0	2,226,000	93	84
Ohio . . . . .	2.0	2,083,000	91	77
Pennsylvania . . . . .	2.2	1,690,000	88	82
California . . . . .	35.0	987,000	60	79
Oklahoma . . . . .	2.3	1,347,000	92	73
Texas . . . . .	6.5	924,000	88	43
Michigan . . . . .	2.5	874,000	90	76
Tennessee . . . . .	2.5	819,000	95	83
Kentucky . . . . .	2.5	758,000	98	88
Maryland . . . . .	1.0	765,000	88	91
Virginia . . . . .	2.5	651,000	95	82
North Carolina . . . . .	2.5	568,000	91	87
Washington . . . . .	4.0	449,000	97	95
New York . . . . .	2.5	443,000	88	76
Oregon . . . . .	2.5	388,000	97	96
West Virginia . . . . .	2.1	361,000	91	80
All over . . . . .	3.6	1,424,000	90	84
United States . . . . .	4.2	29,751,000	89.0	82.9

The average condition of meadow (hay) lands on May 1 was 93.5 per cent of a normal, as compared with 83.6 on May 1, 1907, and 89.5 the mean of the averages on May 1 of the past ten years.

The average condition of pastures on May 1, was 92.6 per cent of a normal, as compared with 79.6 on May 1, 1907, and 87.8 the mean of the averages on May 1 of the past ten years.

#### Concrete Floors in Corn Crib.

I would like to know through the columns of your paper the experience of some farmers who have put corn into cribs with cement floors. Will it dry out as well? If not can it be arranged so as to let the air pass through on top of the floor with tile or troughs made of planks? I am planning to build a crib by the side of my granary with a driveway between, and would like to cement the floor in the driveway and corn crib, if as good as plank. I will build the crib 40 or 50 feet long and 12 or 14 feet wide. I would rather have it 14 feet if the corn will dry out. Is 10 feet wide enough for the driveway if I should want to set a sheller in these and run the shelled corn in the granary?

I have another plan for a side hill. I am going to remove the dirt as you would for a basement barn (I have such a barn 40 by 80 and I like it fine), then build cement walls high enough on the west and north that cattle and hogs can run under the crib, have an implement shed on the north and cattle shed on the east. I could use walnut posts, one foot in diameter, under the east and south part of the crib, then put wire netting on the ground under the crib to keep the hogs from rooting. I have plenty of sand and rock hauled and good frame timber for sills and studding. If I build a plank floor I had thought of using three sills lengthwise under the crib then use two-inch flooring crosswise nailed to the sills. What is the best siding and how is best to put it, perpendicular or the other way? CHAS. T. THUMA.

Brown County.

#### Farm Advertising.

The modern farmer is a business man just as much as is the merchant. They both have something to sell and both desire to sell at a profit. The merchant advertises his wares and makes quick sales. The farmer too often does not advertise and is obliged to peddle or wait for a possible customer and so sells at a disadvantage or does not sell at all.

The farmer must have a market and to get this he must advertise. This he can do in various ways. He may distribute handbills; he may peddle his farm products; he may tell his neighbors, or he may use the papers. Many years of experience have shown that the latter method is by far the most effective if rightly used. Naturally, when either a merchant or a farmer has something to sell he should advertise it among that class of people who need such articles and will be possible buyers. The merchant uses the dailies with profit because

## LOFTIS SYSTEM Diamonds on credit

YOU CAN EASILY OWN A DIAMOND OR WATCH, or present one as a gift to some loved one. Send for our illustrated descriptive catalogue. Whatever you select therefrom we send on approval. If you like it, pay one-fifth on delivery, balance in eight equal monthly payments. Your credit is good. Our prices are lowest. As a good investment nothing is safer than a diamond. It increases in value 10 to 20 per cent annually. Catalogue is free. Write for it today.

LOFTIS, BROS. & CO., Dept. E 209, 92 State St. Chicago.

they are read by the very people whom he desires to reach. The farmer uses the farm papers to announce his surplus breeding animals, seed corn, or eggs for hatching because they are read by the people who want those things. By so doing he at once increases the number of possible purchasers by many thousand and has the advantage of a competition among buyers which would be impossible otherwise.

Advertising in the good farm and live stock papers is much cheaper than is advertising by handbills or any other method named above.

To illustrate: Suppose a farmer has only a few animals to sell or suppose he wishes to sell chickens for breeding or eggs for hatching. He does not feel like spending much money in advertising and so gets out handbills. These may cost him two dollars. Then he uses one day for himself and team to travel about and post them up. For this we add \$4 or a total outlay of \$6 incurred to announce his selling offer to perhaps 1,000 people. Suppose we double this and say his handbills are read by 2,000 possible buyers. His advertising will have cost him \$3 per 1,000 people.

On the other hand. Suppose he invests this \$6 in an announcement in the Special Want Column of THE KANSAS FARMER for four weeks, or at the rate of \$1.50 per week, and he immediately secures a vastly greater audience and reduces the cost ten times. Try it.

#### Shawnee County Horticulturists.

On May 7 the representative fruit growers of Shawnee County and vicinity met in the rooms of the State society by invitation of the State secretary of horticulture, Walter Wellhouse. The first number on the program was a paper by Mrs. Chubbs of the Chalito Club of Highland Park, describing a trip to California which was so realistic that one imagined oneself in that much-advertised country. By special arrangement Dr. Roby read a paper in relation to civic reform, instead of Superintendent Carter, who could not be present. Dr. Roby was after the man who denudes a tree of its branches and the one who decapitates a beautiful tree and leaves an unsightly object, neither a tree nor a stump.

B. F. Smith of Lawrence, probably the best posted man on strawberries that we have in the West, read a very practical paper on small fruit. Papers of this kind are of great benefit to all engaged in raising fruit. This paper brought to Mr. Smith's memory some old time incidents in the business and he became reminiscent of the times when the first strawberries were shipped from Southern Illinois from a little station called Cobden and Cobden berries became famous on the Chicago market and sold for 75 cents and \$1.00 per quart box. Soon after other sections of that Egyptian country began raising and shipping berries in crates by express gradually enlarging the acreage until carloads were quite common and finally there were train loads of the strawberries were started for distant markets and this has all happened since the rebellion. Truly horticulture has made great strides in even our day. The president now called for reports on and the prospects for fruit.

Q. N. Dalton whose orchard is in Jefferson County, said: "Trees on low land would have very little fruit. Up-land apples and peaches would be a fair crop by indications to-day. Ben Davis and Jonathans were injured in the bud in March."

A. B. Smith, whose ten acres of cherry orchard is in low land and high land, reported low land badly damaged and might have one-fourth of a crop for the entire orchard. B. F. Smith said the

same effect was apparent with them as regards the high and low elevation. Ben Davis, York Imperial and Jonathan badly damaged though about two-thirds of a crop is promised.

Judge Wellhouse reported on his trees from Leavenworth County, as follows: Ben Davis and Grimes gave a promise of a fair crop. Jonathan full of bloom. If one-third of them set on and mature there will be a big crop. York Imperial all right. Missouri Pippins full of bloom, but is apt to drop later on as this is a fault of this variety.

Edwin Snyder, Ben Davis, and M. Blacktwig would be a failure. Jonathan and Missouri Pippin were full of bloom and promised well. Good prospect for peaches.

Mr. Mills from Wamego said he had a good prospect for apples, all doing well up to date. He had sprayed twice this year and expected to spray again.

B. F. Van Orsdale's orchard on up-land northeast of Silver Lake, shows good prospect for a full crop of both apples and peaches, while cherries show only one-half of a prospect. Near him in the Soldier Valley apples and peaches are all killed. Some other reports were made in same lineup. Land fair to good, but the bottom land was very seriously affected. This seems to apply to all of the fruits. Some localities may differ owing to warm or cold currents of air.

A social time of one-half hour was spent discussing the fruit situation after which the society adjourned to meet at M. Pullom's, June 4, where everybody will eat strawberries and enjoy our first all-day meeting for 1908. An invitation is extended to all.

O. F. WHITNEY, Secretary.

#### Pocket Gophers.

EDITOR KANSAS FARMER:—Have been troubled with the pocket gopher for the last twenty years, and tried poisons, by dropping the poison through a hole made by the rod of the wagon endgate, but they kept on digging, so that I had the trouble of scattering the pile they made, about two months ago. Knowing that as a general rule gophers work more about early morning or about 5 or 6 o'clock in the evening, I concluded to try my gun with them. I had them digging in two separate fields. I started in the early morning and found them at it. I found at a distance which way they threw out the dirt, so I went nearer and behind them, so they could not see me without looking back, but before they could do that they were shot. I shot one in each field and it only cost me an hour's time and I have not been bothered since. I shall try my hand again in case they appear.

J. SAUNDERS JONES.

Osage County.

#### Advertising in Austria.

The American advertiser's enterprise seems to have spread to Austria, where the railroads are taking up all sorts of schemes to boom travel. The newest device is that adopted by the Southern railway, which has had some magnificent pictures prepared of the scenery in the Dolomites and at Abbazia and other points along the Austrian Riviera. Dr. Richard Muenal, chief inspector of the railway, is now giving illustrated lectures in Vienna, Berlin, and other cities, with a view to attracting tourists.

## BINDER TWINE

	Free on board cars	F.O.B. Kansas City
SISAL 500 ft. per bale 50 lbs.	\$3.93	\$4.07
STANDARD 500 ft. per bale 50 lbs.	3.93	4.07
MANILA 550 ft. per bale 50 lbs.	4.43	4.50
MANILA 600 ft. per bale 50 lbs.	4.94	5.00

Orders accepted for one bale or more. Terms cash with order or C.O.D. Prompt shipment and satisfaction guaranteed. Ask us for price on car lots. COOPER CORDAGE CO., Minneapolis, Minn.

## Field Notes

## LIVE STOCK REPRESENTATIVES.

L. K. Lewis..... Kansas and Oklahoma  
A. L. Hutchings..... Northern Kansas and Nebraska  
Geo. E. Cole..... Missouri and Iowa

J. S. White, owner of the Capital Herd of Duroc-Jerseys, Topeka, says: "Stop my advertisement; am sold out of everything, but the spring crop of pigs is coming along fine and I shall have more business for you later."

The Union Pacific Railway has just issued a handsomely illustrated folder descriptive of the North Platte Valley in Wyoming. The hot spring mineral waters, mining interests, grain growing, orcharding, cattle and sheep farming, hunting, fishing, camping, and railroad connections make up some of the items of interest in this folder which can be had from agents of the Union Pacific.

In changing his advertising card so as to make some new announcements, Mr. J. H. Becker, Route 7, Newton, Kans., calls attention to the fact that he is having remarkable success with his crop of spring pigs. He already has 35 head sired by Dandy Rex and Trouble Maker 2d, his principal herd boars. He has sold nearly all of his bred sows and is now breeding for August and September farrows. He still has a few bred sows and several good boars for sale. These young boars are fine. He has just added to his herd 2 sows by Acme Perfection (44059), dam Bessie Faultless (110927) by Faultless Jr. and Ina Wilkes. This is good Poland-China blood. He also bought another fine gilt by Big Dude by Stylish Dude out of Kansas Girl. Her dam is Paynter's Dream by Elite Perfection out of Amy Perfection. This is the stuff of which good Poland-China herds are made and with these additions Mr. Becker thinks he will have a herd the equal of any in the State. Write him about those young boars and bred sows.

## The Deep Creek Herd of Durocs.

C. O. Anderson, owner of the Deep Creek Herd of Duroc-Jerseys at Manhattan, Kans., has about two dozen extra fine fall gilts for sale. They are of October farrow and are large, mellow, and well grown. Cherry red in color and sired by King I Am 61817, whose sire was a grandson of Kant Be Beat. The former herd boar in the Deep Creek Herd, King I Am, was an outstanding individual, especially good in the feet, back, and head. His dam was a granddaughter of O'Ryan the note prize winner.

Mr. Anderson says that he is pricing these gilts sired by King I Am at farmers' prices, and guarantees satisfaction on any animal bought from him or money refunded.

The dams in the Deep Creek Herd are the very best that Mr. Anderson could secure and their breeding is of the best. Two of these sows were sired by Lincoln Top 55207 the first and sweepstakes winner at the 1907 Nebraska State Fair. These two sows have litters by Gold Finch 7549 who won first in class at the International Live Stock Exposition, Chicago; first and champion at St. Louis in 1903. He is the sire of Lord Gold Finch first and champion at the Missouri State Fair 1906, also of Surprise who was first and champion at the American Royal and of Kruger herd header owned by J. M. Morrison, College View, Neb. He also stood second to Ohio Chief at St. Louis and has won a great many other prizes.

Mr. Anderson states that his spring pigs are growing very finely and that he has an especially fine litter farrowed in March from M. P. Kant Be Beat dam. As the Deep Creek Herd owns a number of good herd boars Mr. Anderson is prepared to meet the requirements of almost any kind of a buyer. Mention THE KANSAS FARMER and write him your wants.

## J. U. Howe's Durocs.

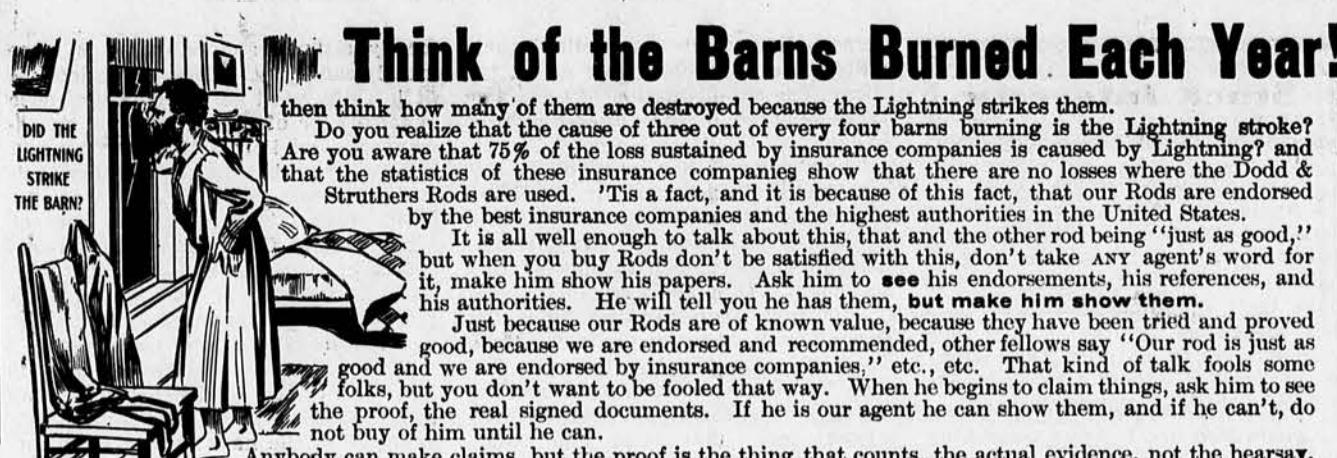
A representative of THE KANSAS FARMER recently visited J. U. Howe's well known herd of Durocs near Wichita, Kans., and felt well repaid for his visit with what he saw.

Mr. Howe is noted among Duroc-Jersey breeders all over the State for the high class animals that can always be found in his herd, and for the extra quality of his pigs. But he has surpassed himself in this spring's farrow and has decidedly the best bunch that he has ever raised; he has eighty pigs at the present time with enough sows yet to farrow to bring the number up to over one hundred.

Royal Improver, one of the best breeding sons of the great Improver 2d, has been the chief herd boar, and is the sire of some of the best mature stock on the place, but his son, Perfect Improver, has supplanted him, and now fittingly heads the herd. Perfect Improver will be remembered by the many admirers who saw him as the boar who won first in the senior yearling class at the Hutchinson State Fair last fall and first in class, champion, and grand champion at Wichita. As an individual he can easily take his place at the head of the long list of show hogs and herd headers in the State, and as a sire he is exceeding Mr. Howe's most sanguine expectations. A large part of the spring farrow is by him, and as we have stated they are in the lead of anything we have seen this year.

Perfect Improver is remarkable for his finish as well as his size and possesses those rugged outstanding prepotent qualities that characterize him as a great sire. Mr. Howe expects to show him and some of his get at some of the leading fairs this fall.

The herd sows are an outstanding lot with plenty of size, bone, and finish, and are great producers. Mr.



then think how many of them are destroyed because the Lightning strikes them.

Do you realize that the cause of three out of every four barns burning is the Lightning stroke? Are you aware that 75% of the loss sustained by insurance companies is caused by Lightning? and that the statistics of these insurance companies show that there are no losses where the Dodd & Struthers Rods are used. 'Tis a fact, and it is because of this fact, that our Rods are endorsed by the best insurance companies and the highest authorities in the United States.

It is all well enough to talk about this, that and the other rod being "just as good," but when you buy Rods don't be satisfied with this, don't take ANY agent's word for it, make him show his papers. Ask him to see his endorsements, his references, and his authorities. He will tell you he has them, but make him show them.

Just because our Rods are of known value, because they have been tried and proved good, because we are endorsed and recommended, other fellows say "Our rod is just as good and we are endorsed by insurance companies," etc., etc. That kind of talk fools some folks, but you don't want to be fooled that way. When he begins to claim things, ask him to see the proof, the real signed documents. If he is our agent he can show them, and if he can't, do not buy of him until he can.

Anybody can make claims, but the proof is the thing that counts, the actual evidence, not the hearsay.

Our Rods are made of Pure Lake Superior Soft Copper; our points are perfect; our couplers are as good as can be produced, and our entire system is so good that it received the highest award at St. Louis and Jamestown.

You can tell our Rod by the trade mark, D & S, burned on every spool, the D & S on every coupler and on all the balls we are putting out this year. Look out for imitations, steer clear of "just as good," and insist on the Dodd & Struthers—the father of them all.

Remember, every agent has an agent's certificate, every spool is branded with our trade mark, every agent is taught by us how to scientifically erect the Rods, and every job is guaranteed.

You don't want to lose your barn; you don't need to; it can be protected and made perfectly safe. We can do it for you or tell you where our agent is.

Our book by Prof. Dodd, "The Laws and Nature of Lightning and How to Control It," is so good it has been copied by nearly every rod concern in the country and sent out as their own under slightly different names. We will send one of these books free if you want it. Just write and say you want to read Prof. Dodd's book about Lightning and you will get one by return mail free. Address

## DODD &amp; STRUTHERS,

Makers of Lightning Rods That Keep Out the Lightning

## DES MOINES, IOWA

Howe breeds his sows for only one litter of pigs each year, and we believe this accounts largely for the quality and vigor of his pigs.

Mr. Howe is offering Royal Improver for sale, for he does not need him. He is only 4 years old and just in his breeding prime and will do some other breeder just as much good as he has Mr. Howe. He is being priced at \$50 at the farm. There should be a dozen breeders in the State anxious to get a great breeding son of Improver 2d at that price.

Mr. Howe is also offering the young boar M. R. G. by Success, and bred by Morton & Co., at a reasonable figure. Look up his advertisement in THE KANSAS FARMER and write him.

## Stewart's and Downs' Shorthorns.

Prospective buyers should be interested in the four Shorthorn bulls that are being offered for sale in THE KANSAS FARMER by Stewart and Downs, of Hutchinson, Kans. These bulls are good ones, well grown, with plenty of bone, scale, and quality and range in age from 18 to 24 months. They have been grown in the open and developed in a manner to insure rugged constitutions and strong breeding qualities.

Scottish Sybil, 2 years old, by Scot-

2d; there are many other good ones that we have not got space to mention.

Stewart and Downs are surely laying the foundation for a good herd of Shorthorns, everything that is inferior is carefully weeded out, and everything that comes into the herd is the best that money can buy. They have a very fine line of Forest Knight heifers, that are worthy granddaughters of Gallant Knight. They might be induced to part with a few of these, but would rather keep them for use in the herd. Everything sold is guaranteed as represented, and priced worth the money.

Dr. Stewart, the senior member of the firm, lives in Hutchinson, and will see that visitors who wish to inspect the herd are taken to the farm.

Write for prices on these young bulls or better still go and see them and kindly mention THE KANSAS FARMER.

## Crow's Durocs.

Riverside Durocs owned by W. R. Crow of Hutchinson, Kans., rank high among the many good herds of the State. Probably no breeder has made more progress in the same length of time than Mr. Crow. He started in a very modest way only a few years ago, and now has one of the largest herds

a show litter of ten pigs by Crow K. The best of these will be shown at the fairs this fall, and all can see what this combination of prize winning blood produces.

Mr. Crow has a few good, strong, vigorous males from 6 to 12 months old for sale at right prices. His spring crop of pigs will be ready to move about August 1. Watch for his advertisement, which will appear in THE KANSAS FARMER at that time.

## Cheyenne Valley Percherons.

F. A. Schrepel, the veteran Percheron breeder of Ellinwood, Kans., reports unusually good sales this spring, and states that he still has some extra good ones on hand, that will be sold at right prices.

His offering at the present time includes a number of extra good Percheron stallions, one coach stallion, some choice Percheron mares of different ages, and a few head of jacks and jennets. Prospective buyers should be interested in what Mr. Schrepel has to sell, for he always has the goods, and his horses are priced right.

Mr. Schrepel is also offering his harness shop in Ellinwood for sale. He invites your correspondence and inspection. Write him and kindly mention THE KANSAS FARMER.

## Robison Still Offers Percherons.

Although sales have been good and the demand unusually heavy since the February dissolution sale, J. C. Robison, proprietor of the Whitewater Percheron stud at Towanda, Kans., is still offering some good ones for sale.

Mr. Robison announces through his card in THE KANSAS FARMER that he has two extra good 2-year-old stallions, and some good young mares bred to sell at right prices.

Every one knows the quality of Whitewater Percherons and that they will get a square deal when they buy of Mr. Robison. There can be no better investment than some of these good young mares bred to the great Casino. They can do the work on the farm and at the same time raise a colt that is worth three times as much as a colt would be from a scrub mare.

A good stallion is always a profitable investment. One of these stallions could easily earn the amount of his initial cost in service fees in one season.

Whitewater Percherons have constitution, vigor, and breeding qualities far in excess of many of the horses that are shipped into the country, and can be bought at more reasonable prices.

Mr. Robison invites correspondence or inspection at any time. Address him at Towanda, Kans., and kindly mention THE KANSAS FARMER.

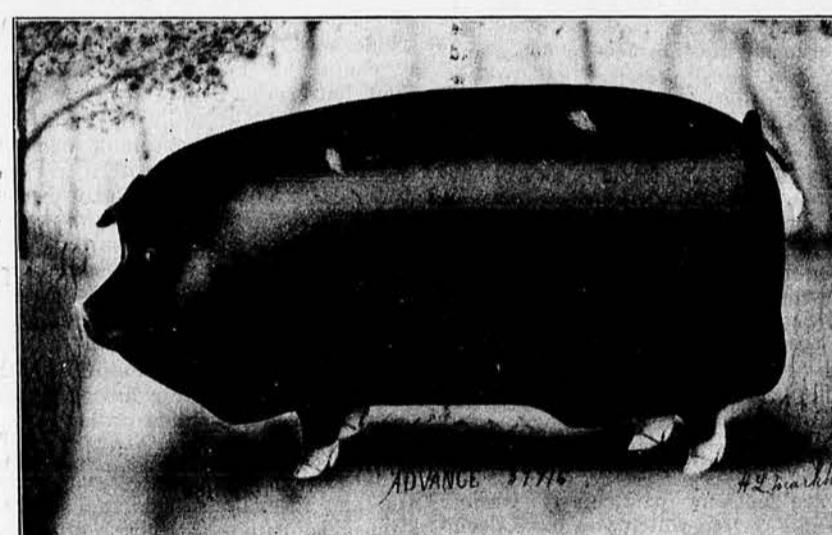
## Johnson's Herefords.

Attention is called to the change of advertisement of A. Johnson, of Clearwater, Kans., who is offering for sale, at prices that will move them, five bulls from 13 to 16 months old and a few choice Anxiety-bred heifers.

The bulls that Mr. Johnson is offering are the tops of that year's large crop of bulls and are extra good with not a poor one in the bunch. They have heavy bone, plenty of scale, good strong backs, fancy head and hams, and are well grown out, weighing from 1,000 to 1,200 pounds each. These have been grown in the open and developed in a manner to insure the most robust constitutions and rugged qualities, and are guaranteed in every way by Mr. Johnson.

The chief stock bull of Maplewood Herd, the 2,400-pound Dale Duplicate 2d, a son of the great Columbus, is the sire of four of these bulls, and one is by March On Model. Their dams are some of the best Anxiety-bred matrons in the herd.

The females that are for sale are a choice lot from 15 to 18 months old; they are largely by Dale Duplicate 2d and out of good dams. Maplewood Herefords are well known for size, bone, finish, rugged constitutions, and strong breeding qualities. Dale Duplicate 2d, twice a winner at the American Royal, has headed the herd for a number of years and has proved a



Advance 39415 by Chief Perfection 2d, chief herd boar of R. M. Buck, Eskridge, Kans.

tish Count, dam Long Branch Sybil 23d, by Victoria Baron, is very promising. In color, he is a beautiful roan, and will make a very large bull, with heavy bone, and as he develops he shows more and more finish. He has been used some in the herd and his calves show up remarkably strong.

Lord Ivan, 20 months old, by Forest Knight is another good prospect. He is a beautiful red and has that style and finish which characterize so many of the descendants of Gallant Knight. These two bulls are in every way fit to head good herds, and should be bought for that purpose.

Happy Pride 18 months old by Happy Knight and Clarence, 13 months old, sire Manager are both good bulls.

The chief stock bulls in service in this herd are Forest Knight by Gallant Knight, and Victor Archer by Archer, dam Elder Lawn Victoria. These are both outstanding individuals, that do credit in every way to the choice line of breeding they represent. Climax Wonder is the best Missouri Wonder boar that we have seen. He is a wonderful flesh carrier, standing on the best of legs and feet, with his strong arched back, and extra good boar's head, he impresses one with his vigor and rugged qualities. He has great scale, weighing close to 800 pounds at 22 months old.

Crow K. has not the scale of Climax Wonder, but he is beautifully finished, with one of the strongest and best backs that can be found anywhere. He is a show prospect and will head Mr. Crow's show herd this fall. The herd contains twenty-six females of breeding age among these are some good individuals of choice breeding, representing such noted sires as Ohio Chief, Silk Wonder 3d, Oom Paul, The Champions, and Boss Improver by Improver 2d.

Mr. Crow has been very fortunate in his spring farrow and has about one hundred and fifty choice pigs of early farrow that are growing like weeds. We were shown a beautiful daughter of Ohio Chief with

in that section, representing some of the best blood lines of the breed, and showing many choice individuals.

The chief herd boars in Riverside Herd are Climax Wonder 59953 by Missouri Wonder, dam Lady Climax, and Crow K. 67979 by Billie K. he by Buddy K. dam Fashions Improver by Improver 2d. These are both outstanding individuals, that do credit in every way to the choice line of breeding they represent. Climax Wonder is the best Missouri Wonder boar that we have seen. He is a wonderful flesh carrier, standing on the best of legs and feet, with his strong arched back, and extra good boar's head, he impresses one with his vigor and rugged qualities. He has great scale, weighing close to 800 pounds at 22 months old.

Crow K. has not the scale of Climax Wonder, but he is beautifully finished, with one of the strongest and best backs that can be found anywhere. He is a show prospect and will head Mr. Crow's show herd this fall. The herd contains twenty-six females of

breeding age among these are some good individuals of choice breeding, representing such noted sires as Ohio Chief, Silk Wonder 3d, Oom Paul, The Champions, and Boss Improver by Improver 2d. Mr. Crow has been very fortunate in his spring farrow and has about one hundred and fifty choice pigs of early farrow that are growing like weeds. We were shown a beautiful daughter of Ohio Chief with

(Continued on page 576.)

## Stock Interests

### Hog Questions.

I would like to know if the Jersey Reds and Tamworths exist separate from the Durocs? If they do is there enough demand for their lean meat to make their attention profitable? Are they large and healthy or are they poor and slow to mature? Does it pay to buy sows of either of these breeds and cross them on Poland-Chinas?

I would also like to know something about the Berkshires. Are they of good size? I just read an article on the Berkshires in which it was claimed that mature males could easily be found weighing from 900 to 1,000 pounds and sows from 600 to 700 pounds. This article also claimed that the Berkshires were the largest of all breeds? Is it true? It is commonly claimed here, however, that the Berkshires easily become small boned and weak. Is this true?

Now I wish to know something about our own hogs. They are nearly full blooded Poland-Chinas and are of fair size, very sleek and fat, mature early, and are easily fattened. They are somewhat small boned and inclined to chunkiness. The sows are separated along in the fall, the largest and rangiest being selected, and the old sows if they have proved successful the first time, are kept again. They have run on blue-grass, clover, and timothy all summer and are immediately put into a small pasture of the same kind. They have plenty of shelter, corn enough to keep them in good condition, though not too fat, plenty of fresh water and Kafir-corn with the seed taken off. They like the Kafir-corn and chew it up and then spit out the pith. They also get all the cob-charcoal they will eat, about once a week. They are bred to farrow at about one year of age when they are in good condition. They seem to get along all right, but farrow only three or four pigs. The pigs are healthy and grow very well. Now can you tell me what is the matter? The male is a good yearling Poland-China a pure-bred, and is in good condition. Neither he nor the sows are too fat and I can not find out what is the matter. We bought two pure-bred Duroc-Jersey sows and crossing them on a good 2-year-old Poland-China male got no better results.

The pigs get three ears of corn per feed. Is this too much corn? If it is what would be advisable to substitute? How many head per acre will rape support? Would slop help to increase the number of pigs?

What is the Irish Grazier and is he still bred in this country? What will increase the size of the hogs?

We are about to build a new barn and would like to know if cement with planks laid in it will be a good floor for the hog house?

Jefferson County. S. CURRY.

The red, or sandy colored, hogs have been known in America for many years and it is supposed that the present Duroc-Jersey hogs are descended from these. It is quite probable that some of the first red hogs brought to America came here from Western Africa during the time of the slave trade. Youatt describes these pigs as being large in size, square in form, and of a reddish color, and it has been stated that these red pigs from Guinea first reached this country as early as 1804. About 1852 Daniel Webster imported from Portugal pigs that were dark red in color and in form resembling quite closely the Chinese hog, and in 1837 Henry Clay imported four pigs from Spain that were taken to his farm at Ashland, Ky. They were described as having erect ears and were of a sandy color. It is quite probable that a cross of the early Berkshire, this breed of hogs being more or less sandy in color at this time, was used in the development of the Duroc-Jersey.

In New Jersey there was a class of hogs weighing from 500 to 600 pounds, large, coarsely built, known as the Jersey Reds; and about the same time in New York a similar hog, somewhat finer in bone and character than the

Jersey Reds but resembling them quite closely in color, were called Durocs. The amalgamation of these two types resulted in the Duroc-Jersey of to-day.

The Tamworth hog is one of the oldest English breeds and it has been stated that they were introduced into England from Ireland, but it is rather hard to find evidence to support this statement. They are a hog of decidedly different characteristics than the Duroc-Jersey, being of the bacon type. Their color is not far from the Duroc's but they are a lean meat hog, being very deep bodied but narrow; long legged; long, slim head and snout, with a decided tendency to lean meat. There is little, if any, difference in the hardness of our various breeds of hogs if kept under the same conditions. The Tamworth never has the appearance of being finished and fat as do the lard types of hogs, but they will make nearly as many pounds of weight in the same time as any of our other breeds, and where there is a bacon market established, they do very well making an extremely fine quality of meat. It is doubtful whether they will ever be a profitable hog in the corn belt or not. But where feeds are grown that are conducive to the production of high-grade bacon, the Tamworth will give a good account of itself.

It is seldom if ever advisable to do much crossing with hogs, certainly never more than one cross. One cross of the Tamworth on Durocs or Poland-Chinas makes quite a satisfactory feeding hog, especially a good hog to follow cattle as they are a little more active and a little longer legged. It is seldom that one of them will be hurt by a steer in the feed lot.

The Berkshire is another old English breed of hogs that has been long and favorably known. The heaviest Berkshire hog that I recollect at present, weighed about 1,100 pounds, but it would be hard to state absolutely as to what would be the heaviest breed of hogs. There are several other breeds that have had hogs equally as heavy as this. This is not a question that is of any great value in dividing which is the preferable breed of hogs to handle for any of our common breeds are large enough. Our packers to-day are not wanting the big 500- or 600-pound hogs that were produced a half-century ago, and if one will study for awhile the market reports, he will see that it is the medium weight hog that brings the most money and any of our common breeds with proper care will grow large enough. I do not believe that there is any more danger of the Berkshire becoming smaller boned and weak than there is of any other breed. It is quite probable that any hog can be bred too fine and its constitutional vigor can be impaired by lack of care and improper breeding, but the Berkshires are not more, if as much, subject to this as some of the other breeds.

I see nothing particularly wrong with the system which you have been using in managing your hogs and better results should be obtained from such care. I would rather think that you have been unfortunate in getting a strain or family of hogs that are not prolific, rather than being the fault of your care. The quickest way to remedy this is to sell all the hogs you have and buy sows of a prolific strain. It is true of any breed that some families are much more prolific than others and in selecting brood sows, this is a matter that should be kept in mind.

The Irish Grazier is a hog that was used in making the Poland-China breed. I do not know that there are any of them in this country to-day. The size of any breed of hogs can be increased by proper feeding, that is, by feeding more of the feeds that are conducive to the growth of bone and muscle rather than by feeding a carbonaceous feed such as corn. Allowing hogs to graze alfalfa and feeding protein feeds will usually bring all the size that is required.

Cement is regarded by many as a good floor for hog houses, but many object to it on account of its being cold and damp, especially too cold for young pigs. It makes a floor that is

easily cleaned and one that is more nearly sanitary than any other floor. If it is to be used as a farrowing house a false floor of plank would be an advantage, and it is quite likely no bad results would be experienced if enough bedding were used to keep the pigs from coming into immediate contact with the cold floor. Many of the more recent hog houses that are being built have a covering of fine woven wire placed over the floor, stretched tight and fastened down, and this is covered with two or three inches of fine gravel. Dirt floors are usually preferable to cement or plank, but there is great difficulty with the hogs rooting them up. By stretching this wire over the floor and covering it with a little gravel it prevents rotting and those who have used it report good satisfaction.

R. J. KINZER.

### Health of the Hog.

F. S. SCHÖENLEBER, D. V. S., PROFESSOR OF VETERINARY SCIENCE, KANSAS STATE AGRICULTURAL COLLEGE.

Kansas has only 2,663,000 head of hogs. With her wonderful climate, her great corn-producing capacity, and her never failing fields of alfalfa, her high quality of pure-bred hogs, and her brainy men behind the whole enterprise, there is no valid reason why the output should not be at least double the present number. True, cholera has been quite prevalent in many parts of the State and works as a great drawback, causing much discouragement to many otherwise successful breeders.

While we have to date no reliable cure for hog cholera, we have some very good preventives and as the frontier of scientific achievement is ever advancing and constantly widening, we are safe in saying that the time is not far distant when this disease will be handled as easily as blackleg in cattle.

Cholera receives credit for killing many animals in which death is due to other causes. Many of these troubles can be guarded against or may be successfully treated. For example, during the fall of the year when the feed is changed to new corn too suddenly a form of diarrhea appears among the pigs first, and later may wipe out the whole herd, seemingly, but not actually contagious in the strictest sense. Sour buttermilk nearly always causes a loss of pigs with a diarrhea and other symptoms which resemble cholera. Feeding too much corn with a too limited variety of food frequently causes a constipated condition of the whole system of the animal resulting ultimately in a lack of thriftiness or even death. A hacking cough caused from a draught or dust may be the starting point of many conditions which result fatally, very much resembling cholera and for want of better names all of these troubles are called cholera.

### PREVENTIVE MEASURES.

In the way of preventive measures first and foremost stands the natural Kansas sunshine—the best antiseptic and germicide known. Here is where, other things being equal, the large, fancy hog house is less desirable than the small, individual farrowing house in which the sun can penetrate every nook and corner, drying, warming, and disinfecting thoroughly every inch of surface.

Second, the most natural food of the hog, alfalfa, is too much of a stranger to many hogs of the State. The porcine race in Kansas ought to be fed so much alfalfa in both its green and

## HORSE OWNERS! USE CAUSTIC BALSAM.

A safe, speedy and positive cure. The safest, best BLISTER ever used. Removes all bunches from Horses. Impossible to produce scar or blemish. Send for circular. THE LAWRENCE-WILLIAMS CO., Cleveland, Ohio.

**SCOURS** Cured in pigs, calves, colts and sheep by feeding ANTI-SCOUR. Send for circular. The Agricultural Remedy Co., Topeka, Kansas.

**ONSTAD'S "ONE APPLICATION CURE" LUMPY-JAW CAPSULES** GUARANTEED NO WRITE FOR PARTICULARS THE ONSTAD CHEMICAL CO. 104 Key Street Indianapolis, Ind.

## Alfalfa Meal

concentrates full protein value of alfalfa. Put up in 100 lb. sacks and sold in 500 lb. lots. Easily stored, easier to feed. Write for prices. Cheaper than bran.

The Eagle Alfalfa Milling Co., Emporia, Kansas.

ARTIFICIAL MARE IMPREGNATORS For getting in foal from 1 to 6 mares from one service of a stallion or jack, \$3.50 to \$6.00. Safety impregnating outfit, especially adapted for getting in foal so-called barren and irregular breeders, \$7.50. All goods prepaid and guaranteed. Write for Stallion Goods Catalog. CRITTENDEN & CO. Dept. 31, Cleveland, Ohio.

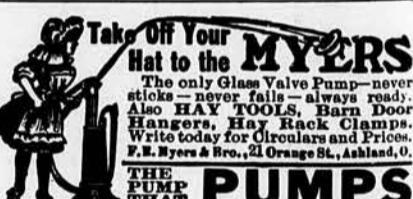
## CURE YOUR HORSE WHILE HE WORKS

No need for him to be idle. We guarantee the cure of Collar and Saddle Galls under the harness while the horse works or money refunded.

**Bickmore's Gall Cure** for Bruises, Cuts, Rope Burns, Mud Scalds, Scratches, Grease Heel or any wound on horses or cattle. Excellent for Mancs and Sore Teats. At all Dealers. Sample and Bickmore's Horse Book, 10c, giving important facts that every farmer should know. Bickmore Gall Cure Co., Box 916, Old Town, Maine.

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

Windmill on earth. Write for price list and catalog. Atlas Manufacturing Co., Ottawa, Kas.

Take Off Your Hat to the MYERS The only Glass Valve Pump—never sticks—never fails—always ready. Also HAY TOOLS, Barn Door Hangers, Hay Rack Clamps. Write today for Circulars and Prices. P. E. Myers & Bro., 21 Orange St., Ashland, O. THE PUMP THAT PUMPS

## The Blossom House

Kansas City, Mo.

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

**THE ROYAL HOTEL**, Lincoln, Neb. Modern, fire proof, only American Plan Hotel in the city. Centrally located, 15th and O Sts.

In writing The Kansas Farmer give your full name and postoffice address.

**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.  
**PARKER, 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.

cured state that a few generations hence the stomach of the hog should be so modified by nature and alfalfa that it would resemble more nearly that of the horse physiologically in that it would digest equally well the cured alfalfa in large quantities. The more alfalfa the less disease.

#### THE DIPPING PROCESS EXCELLENT.

It might be said to an almost equal extent that the more dipping the less disease, as the dipping process not only destroys the vermin but stimulates the action of the skin and reflexly the digestive organs.

During last fall and winter several outbreaks of true hog cholera were caused by the lack of a little foresight in not properly handling breeding and show stock. No hog or pig should be placed among strange animals without first being kept in quarantine for a few weeks and dipped several times. In buying breeding stock, or show stock, returning home they should always be dipped upon arriving and at the end of the quarantine period before turning in with the rest of the herd. By quarantining, in this instance, is meant the keeping of the animals entirely by themselves and cared for by an attendant who never goes near the main herd until such time as it is decided positively that they have not been infected with disease.

In the way of treatment the United States Bureau of Animal Industry has discovered a vaccine which saves about 80 odd per cent after cholera appears in a herd, and a larger per cent if vaccinated before the disease is introduced. Time will demonstrate the practicability of this method. The bacteriology department of the Kansas State Agricultural College is also working along these lines but is not yet ready to announce anything but progress.

When symptoms of cholera appear in a herd, it is wise to dip the whole herd, disinfect their quarters thoroughly, give them a slight change in feed, and add to this about five drops of tincture of prickly ash for each hundred pounds of hog once or twice per day. The old remedy of wood ashes and salt is good in many instances. A little powdered sulfate of copper, dried sulfate of iron, or charcoal given daily when the animals are not perfectly healthy frequently does much good. After all the old adage, an ounce of prevention is worth pounds of cure, holds good here.

#### Classification for American Carriage Horses.

The work begun in May of last year by the Department of Agriculture, in cooperation with the American Association of Trotting Horse Breeders, to provide a uniform classification for American carriage horses at State fairs, has been prosecuted vigorously since its inauguration, with encouraging results.

During 1907, the classification was offered at the Inter-State Fair and Exposition at Kansas City, and at the Kansas State Fair, at Hutchinson. The Iowa State Fair, held at Des Moines, and the Blue-Grass Fair, held at Lexington, Ky., independently offered a similar classification in 1907; the Iowa Fair has now adopted the Government classification, the Blue-Grass Fair keeping theirs as it was in 1907. The complete classification has been adopted by the State Fairs of Illinois, Indiana, Iowa, Kansas, and Wisconsin, and the classification has been adopted in part by the Michigan, Missouri, Ohio, and Tennessee State Fairs.

The exhibits made in 1907 under these classifications, although not in all cases everything that could be desired, were very encouraging and from the start made and the numerous additions for 1908, we may expect a better quality of exhibits and a better knowledge on the part of horse breeders as to the type desired and the purposes of the work. The attention of the owners of horses which conform to the type described in the specifications is called to this matter, and they are urged to exhibit their horses in these classes.

The committee in charge of this

work is organized to represent the Department of Agriculture, the American Trotting Register Association, the American Saddle Horse Breeders' Association, and the American Morgan Register Association. Mr. George M. Remmel, the Animal Husbandman of the Bureau of Animal Industry, is chairman of the committee, the other members being Mr. Maxwell Evarts, New York, N. Y., a member of the American Morgan Register Association and secretary of the Vermont State Fair; Gen. John B. Castleman, Louisville, Ky., a president of the American Saddle Horse Breeders' Association; Mr. A. T. Cole, Wheaton, Ill., a prominent breeder of Morgan horses of carriage type; Prof. Charles F. Curtiss, director of the Iowa Agricultural Experiment Station, Ames, Iowa, and a member of the horse purchasing board of this Department; and Mr. H. K. Devereux, Cleveland, Ohio, a well-known trotting horseman and secretary of the American Association of Trotting Horse Breeders. The committee held its annual meeting at Chicago, Ill., November 18, 1907, when the work of the year was reviewed and certain changes made in the specifications.

The specifications and classifications are now as follows:

#### TYPE.

The type desired for the American carriage horse is as follows: Not under 15 hands for mature horses; smooth, compact, and symmetrical conformation; neck of good length, inclined naturally to arch; sloping shoulders; well-set legs of medium length; sloping pasterns and good feet; short, strong back; well sprung ribs well ribbed up to coupling; smooth loins; full flanks; straight croup, with well-set tail; full, round quarters.

#### CONDITIONS GOVERNING ENTRIES.

Classes only open to horses of American blood.

Stallions in classes 1 to 5, inclusive, must be registered either in the American Trotting Register as standard, in the American Morgan Register, or in the American Saddle Horse Register, and certificate of such registry must be shown in the ring if required.

Entries in all classes for mares must be registered either in the American Trotting Register, as standard or non-standard, in the American Morgan Register, or in the American Saddle Horse Register, and certificate of such registry must be shown in the ring if required.

Entries as get of sire in Class 5 and produce of mare in Class 10, and entries in Class 11 must be sired by a stallion registered as above, out of mares registered as above.

No mare having any draft cross will be eligible.

Any exhibitor falsifying the breeding of entries will be barred.

Entries in all classes must be practically sound.

#### JUDGING.

Entries in all classes to be judged on conformation, style, action, and manners as a suitable type of carriage horse. Special attention will be given to trueness of action. Good knee and hock action are essential. Entries in all classes should trot and walk

## BLACK LEG VACCINE.

Pills, Cords and Powders—single and double. PRICES, single, 10 doses, \$1; 50 doses, \$4. Double, 10 doses, \$1.50. Largely and successfully used in America and abroad for 9 years.

### Sorby Vaccine Company,

Sole agents for

Pasteur's, Cutter's, Bruschettini's & Merck's Vaccines and Serums.

163 Randolph Street, CHICAGO.

#### CLASSES.

Class 1. Stallion 4 years old or over.  
Class 2. Stallion 3 years old and under 4.

Class 3. Stallion 2 years old and under 3.

Class 4. Stallion 1 year old and under 2.

Class 5. Stallion with three of his get of either sex; get need not be owned by exhibitor.

Class 6. Mare 4 years old or over.

Class 7. Mare 3 years old and under 4.

Class 8. Mare 2 years old and under 3.

Class 9. Mare 1 year old and under 2.

Class 10. Mare and foal of either sex.

Class 11. Foal under 1 year old, either sex.

#### Cure Eczema.

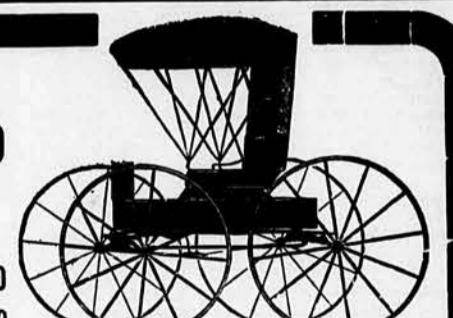
New York.—Evidences of the wonderful Eczema cure effected by Tarsen continue to pour into the International Laboratories from all over the country. This distressing malady seems to have met its master in Tarsen, the lately introduced specific which is applied on the parts thus effected.

It is the greatest cure that has ever been perfected for facial troubles, blackheads, pimples, and for itching and running eczema. The International Remedy Co., 1123 Broadway, New York City, will send a free trial treatment to all requesting same.

In writing The Kansas Farmer give your full name and postoffice address.

I Will Save You  
From \$30 to \$40  
on a Buggy

MY PRICES ARE \$39.80 TO \$53.80  
WHAT DO YOU PAY YOUR DEALER?



I used to be a traveling man. Used to sell to implement dealers. While I was on the road I often thought I would like to have a chance to sell buggies direct from factory to the farmers. Do you know why I thought this? I will tell you why. Because you paid too much for buggies. There were too many people between you and the factory.

Now I am selling Speelman Buggies direct from the factory to the man that holds the reins. I have sold buggies before and I have sold a lot of them, but I never before was able to make a price to the farmer that is better than I offered the dealers—but that is where I stand now.

I will sell you a buggy cheaper than your dealer can buy it. If you don't think so just write me and let me prove it. I don't get out a lot of expensive catalogs. I don't have to send a traveling man to see you. In fact my expenses are very little and I sell the Speelman Buggies under a positive, unlimited, binding guarantee. So you are taking no chances when you buy of me.

If you will drop me a postal card or letter I will tell you why I am able to sell you a buggy so cheap. I will go into particulars about the quality of these buggies. I will tell you about my legal binding guarantee. I will show you how much money I can save you. Now you are being offered this same line of buggies by your dealer, but of course they are under a different name. He buys them of a jobber who pays ten or fifteen dollars for the name plate alone. Do you think the name plate is worth that much to you? They only cost me about one cent each. The chances are your dealer has some of these buggies on his floor—but will ask you the old fashioned price me and say "I will save you a buggy." Address,

CHAS. SPEELMAN CO., 305 New Nelson Bldg., KANSAS CITY, MO.

**Johnson's Herefords.**

(Continued from page 573.)

great breeding bull. His sons and daughters have not failed to make good wherever they have been placed.

The matrons of the herd are noted for quality and great size, some of them weighing up to 1,800 pounds. They are largely Anxiety-bred and are by such sires as Beau Brummel, Lamp-lighter, Andrew, Doncaster, and other good ones.

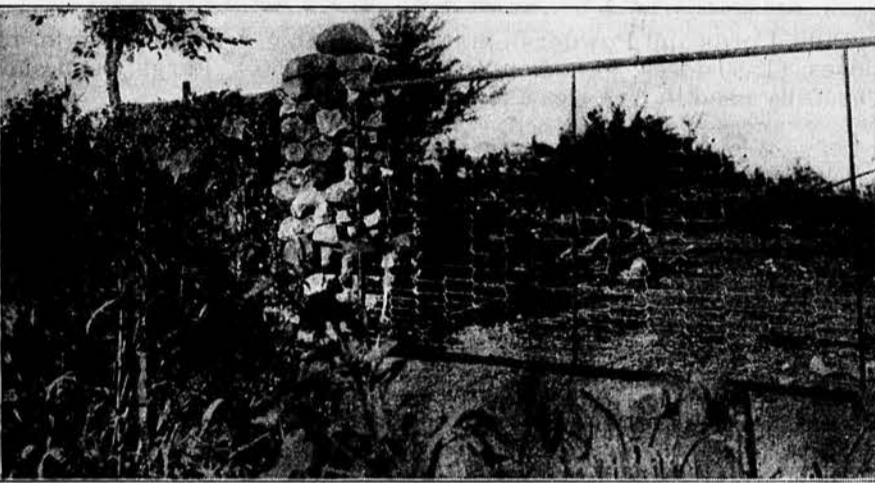
Prospective buyers should not fail to find what they want in Mr. Johnson's choice offering. Remember that everything is guaranteed as represented, and prices are reasonable. Write or visit the herd and mention THE KANSAS FARMER.

**Do Not Fail to Notice This.**

We would again call the attention of such of our readers as may be interested in Shorthorn cattle to the good young bulls that are being offered for sale by D. Ballantyne & Son, of Herington, Kans., through their advertisement in THE KANSAS FARMER. These have been inspected by the writer and are all that they are represented.

This young stuff has been fed and developed in a way to insure the best growth and the most rugged constitutions. They are the kind of cattle that will make good and do good, whether it be in the herd or on the farm or range.

The bulls are strong, vigorous young fellows with plenty of bone and thick, mossy coats. The Ballantynes will sell



them singly, or they have enough for a cariot, if a buyer should want that many.

The 2-year-old heifers that are for sale are among the best "buys" that we have seen. They are well grown and just the kind that will develop into first-class breeding cows. They are nearly all by Marshall Abbotts-burn 2d and are safe in calf to a good breeding son of Imp. Collyne.

There can certainly be no better time to invest money in good cattle than right now. The question of feed does not have to be considered this time of the year and there is every indication that prices will go higher. Write Ballantyne & Son or better still go and inspect the herd and see how these cattle are grown. Kindly mention THE KANSAS FARMER when writing.

**Harshaw's Coming Poland-China Sale.**

On May 30, H. H. Harshaw, the Poland-China breeder of Butler, Mo., will offer a draft of fifty-two head of swine from his popular herd of the big-boned Poland-Chinas. These hogs will come into the ring in the best of condition and carrying with them the possibilities of a profitable future in the pork-making herds of the country.

Mr. Harshaw is a breeder of no mean ability, and a man who puts his whole soul into any proposition he undertakes; a man of keen decision, distinct ideals, and works to them.

Some few years ago he dispersed his herd of Shorthorn cattle and for some time he seemed to drop out from public gaze and we wondered many times what had become of him and what he was doing, but all this time he was not idle but was laying the foundation of a herd of Poland-Chinas that would raise him to the front ranks in the breeding world.

A recent visit to this farm discloses the fact that his efforts have not been futile but on the other hand success is crowning his endeavors. While Mr. Harshaw is breeding the "big kind" of Poland-Chinas he has not lost sight of the fact that the profitable hog must have quality alongside of size and it is this type that he is producing.

Remember that he sells at Butler, Mo., on May 30, and watch these columns next week for a more complete review of the offering and in the meantime write him for a catalogue, mentioning THE KANSAS FARMER.

**Kansas State Agricultural College Students Looking for Work.**

The extension department of the Kansas State Agricultural College will act as a sort of bureau for aiding students to get good positions and in aiding farmers, thrashermen, ranchers, school officers, etc., in getting good workers and teachers.

1. A dozen students who have had instruction in running traction engines want permanent places for the thrashing season. These are juniors and sophomores, farmer boys who are not afraid to work.

2. Probably fifty young men want work for the summer, some with harvesting and thrashing crews, others on stock farms, and others on fruit farms and nurseries, others on dairy farms or in creameries. Their preferences are along the lines of their particular courses of study but the principal object is cash for next year's expenses.

3. Seniors. (1) Some want work on

stock, grain, fruit, dairy, and poultry farms, position that will pay reasonable salaries and give practical experience. (2) Some want positions to teach the sciences, including agriculture. (3) Others want to teach mathematics and manual training. (4) Twenty young ladies want positions in schools to teach domestic science and art. (5) Several who are able to teach the above subjects are also willing to take positions to teach other high school subjects or to teach in the grades.

Correspondence may be addressed to the president or to the superintendent Agricultural College Extension, Manhattan, Kans.

**The Warner Fence for Ornamental Grounds.**

The accompanying picture shows the farm gate and one gate post on a suburban place just outside of Topeka. The owner is very fond of flowers and has his grounds beautifully laid out and planted. Being outside the city limits he was constantly bothered by stray cattle and horses, which worked havoc among his flower beds, while every passing dog would take a run through them.

As his grounds are rather pretty he felt willing that his neighbors should enjoy them also. His problem, then, was how to secure protection to his grounds without obstructing the view of his neighbors who might like to look at his flowers or of himself when he looked at their passing automobiles. This problem was solved by

**Buy Your Hay Machinery Direct From Largest Factory at Wholesale Prices**

We've just bought out the Cascaden Mfg. Co.'s famous Alfalfa King Line of Hay Machinery. Get Galloway's free circular and catalog on the Best Hay Machinery made—sold direct to you from the largest factory—not mail order house—at actual lowest wholesale prices—Highest quality standard goods better than your dealer has to charge double our prices for. You know this famous line, so buy from this advertisement now and save time and buy while they last. Here are

**GALLOWAY'S****Prices to You on 30 Days' Free Trial**

Alfalfa King 2-Wheel Rake.....\$12.00 Alfalfa King 4-Wheel Rake....\$23.80  
Alfalfa King 3-Wheel Rake.....\$18.75 Alfalfa King Overshot Stacker....\$29.90  
Cascaden's Full Circle Steel Hay Press.....\$133.40

Deal with the biggest factory—Protected by \$25,000.00 Bond

Guarantee—Write today.

**Wm. Galloway Company**

Manufacturers

388 Jefferson St., Waterloo, Iowa

Only  
\$29.90

Can  
Ship  
Quick

Save  
33 to 60  
Per Cent

**FLINT-COAT ROOFING**

1-ply Flint Coat Roofing.....\$1.85 3-ply Flint Coat Roofing.....\$1.90  
2-ply Flint Coat Roofing.....1.65 4-ply Flint Coat Roofing.....2.25

BUY DIRECT FROM FACTORY.

**You Will Save 25 to 50 per cent.**

See our roofing on the Minnesota State Fair buildings. The best roofing on earth; that's all we claim. Write for samples and prices. Every roll guaranteed perfect.

**ROCK ASPHALT ROOFING CO.,**

1103 Y. M. C. A.  
Building

**CHICAGO**

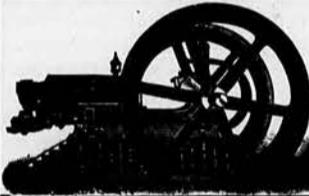
**LIGHTNING HAY PRESSES**

THE OLD RELIABLE IN USE 25 YEARS  
HORSE POWER AND BELT POWER

Our Various Styles Meet All Demands

SELF FEED WOOD OR STEEL PITMAN  
Quality Gives Best Results Send for Catalog

**Kansas City Hay Press Co., 129 Main Street, Kansas City, Mo.**

**WITTE GAS AND GASOLINE ENGINES**

All styles and sizes, any fuel. The most modern gas engine factory in America. Every valve vertical and self seating.

**FIVE YEAR BOND GUARANTEE.**

Easy starting, noiseless and economical. Quick deliveries, complete equipments. Automatic wiper oilers. Get catalog K.

**WITTE IRON WORKS CO., 527 W. 5th St. KANSAS CITY, MO.**

animals of both sexes for sale. He has a very fine crop of spring calves and is ready to satisfy almost any kind of a customer. Please mention THE KANSAS FARMER and write him what you want.

**The Prize Dress.**

"Yes, Charlotte Cameron always did show a lot of taste in dressing. She's always so fresh-looking and dainty. No wonder she's the idol of all the boys. Any fellow might be proud of such a girl as that!"

Thus spoke whole-souled Dorothy Griscom, in confidence, to the members of the Sedgewick Sewing Circle.

"But I never gave her quite as much credit as she ought to have. That dress was a perfect dream, wasn't it, Mane? She deserved the prize—and no mistake."

As an incentive to bring forth the best efforts of his members the Circle had offered a prize for the prettiest dress that should be made, not exceeding a certain amount. The handiwork of all the members was to be exhibited in competition on the first anniversary of the Circle.

For days every girl in the Circle racked her brain and contrived with all her might to meet the requirements of the contest in the best way possible.

It would have been easy to make a pretty but expensive dress; and equally easy to make an inexpensive but unattractive dress. But the combination of beauty and economy called for real genius; and every girl was nerved up to do her level best.

"What material shall I use?" thought Charlotte Cameron. "That's the first question to decide."

"There's peau de soie. That would make up well, but it costs too much. And mousseline, and organdy, and—no, they're all out of the question."

"Oh, I have it," she exclaimed, as though an inspiration had struck her.

"Mother, don't you remember those lovely new fine dress ginghams we saw the last time we were shopping? Simpson-Eddystone Zephyrettes, they called them. The dress that was made up—wasn't it sweet? And don't you remember how we were struck with the moderate price of such fine dress ginghams?"

"The biggest part of the problem is solved already. I'm going to select one of those beautiful fast-color Zephyrette patterns for my 'prize' dress."

It wasn't long before Charlotte's deft fingers and natural good taste had brought forth a creation that was destined to "astonish the natives."

The night came. The exhibit was marvelous, because of the talent it brought to light; but it was plain to be seen which dress would win the prize.

After it was all over, and Charlotte Cameron was being showered with congratulations, everybody was inter-

**HAY BALER MONEY MAKER SELF FEED**

SHIPPED ON TRIAL.  
**NEW CENTURY HAY PRESS CO.** Kansas City, Dept. 8, Kans.

**WANTED**

INFORMATION REGARDING

**A GOOD FARM**

for sale. Not particular about location. Wish to hear from owner only who will sell direct to buyer. Give price, description and state when possession can be had. Address, P. DARBYSHIRE, Box 1319, Rochester, N. Y.

ested to know how she came to make such a happy selection of material.

"Why, haven't you seen the advertisements in THE KANSAS FARMER of Simpson-Eddystone Zephyrette Dress Ginghams made by the Eddystone Mfg. Co., Philadelphia?" she asked. "I've noticed them for a long while; and when I saw those new dress ginghams at Cook & Sanborn's I was fully convinced that they would make the most economical afternoon dresses I had ever seen. So when I was considering what to use for my prize dress the thought flashed through my mind—Simpson-Eddystone Zephyrette fine dress ginghams. They solved the problem, and won me the prize."

**PURE-BRED STOCK SALES.****Shorthorns.**

June 11—H. E. Hayes, Olathe, Kans.

**Poland-Chinas.**

May 30—H. H. Harshaw, Butler, Mo. October 10—H. H. Harshaw, Butler, Mo., at Harrisonville, Mo.

October 19—Frank Michael, Erie, Kans.

October 30—Geo. W. McKay, Laredo, Mo.

November 10—H. H. Harshaw, Butler, Mo.

January 21—H. H. Harshaw, Butler, Mo., at Sedalia, Mo.

January 25—Frank Michael, Erie, Kans.

February 19, 1909—F. G. Niel & Son, Goddard, Kas.

February 21—J. W. Hoyle, Dwight, Kans.

February 25—H. H. Harshaw, Butler, Mo.

**Duroc-Jerseys.**

October 6—N. J. Fuller, Garnett, Kans.

October 7—J. F. Staadt, Ottawa, Kans.

October 8—H. R. Glrich, Wellsville, Kans.

October 9—C. R. Green, Spring Hill, Kans.

October 20—R. B. Adams & Son, Thayer, Kans.

October 26—Watts & Duxlap, Martin City, Mo., at Independence, Mo.

October 28—G. W. Cawell, Summarfield, Kans.

February 27—R. B. Adams & Son, Thayer, Kans.

**Agriculture****Pasture for Horses and Cattle.**

What would you advise for a permanent pasture in southeastern Sheridan County for horses and cattle?

Gove County. W. A. B.

The native prairie pasture is perhaps the only "permanent" pasture which may be recommended for Sheridan County. Of the domestic grasses, none except possibly Kentucky blue-grass and white clover can be considered as "permanent" in the sense that the pasture will continue to be productive for a long period of time without breaking and reseeding from time to time, and the Kentucky blue-grass and white clover are not adapted for growing in that section of the State.

A combination of *Bromus inermis* and alfalfa, when once a good stand has been established, should make good pasture in that section of the State for a number of years. Sow 12 to 15 pounds of the *Bromus inermis* with 6 or 8 pounds of alfalfa seed per acre. Other grasses which are recommended for Western Kansas and which are grown to some extent, are the Western rye grass and tall oat grass. Some seed of these grasses might be included with the *Bromus*-alfalfa combination.

A. M. TENEYCK.

**Thistles in Pasture.**

How is the best way to get rid of the common thistle, and at what time? The thistle is getting so bad on the pasture land that it seems about to destroy the grass.

SUBSCRIBER.

Ottawa County.

This is probably the pasture or field thistle, botanically known as *Cnicus undulatus*, a native of Central Kansas and common in pastures and meadows. The pasture thistle is a biennial; that is, it starts from the seed one year and grows the second year from the same root, producing seed, when the plant dies. Thus the plants spread only from the seed, and are really not difficult to control. It is only necessary to cut the thistle early enough to prevent it from seeding and continue this practise for several years in succession, in order to clear the pasture or meadow of this pest. Also in order to more readily exterminate the thistle the young plants may be dug out in the fall with a sharp spade or spud.

If any thistles are allowed to seed on this or neighboring fields there will be a continual reseeding of the land and the thistles will not be exterminated until the source of infection has been removed. The best time to cut the thistles is when they are coming into bloom, before there is a possibility of any seed maturing.

A. M. TENEYCK.

**Curing and Caring for Alfalfa.**

I would like some advice in regard to cutting and caring for alfalfa. I sowed twenty acres last fall on land that had been sown in wheat. I have a good stand but considerable volunteer wheat came up in it. Will this wheat have any effect on the curing and storing of the hay? I wish to put my hay in the barn which has a dirt floor. Would you advise storing this in the barn from the windrow or putting in cocks and allowing it to cure? In what stage of bloom will it do to cut?

J. D. GRAY.

Montgomery County.

Cut the alfalfa for hay just as it is beginning to bloom. The wheat will also probably make good hay by the time the first crop of alfalfa is ready to harvest. If there is any considerable amount of wheat and it seems advisable to save it for hay, the alfalfa may be cut a little earlier. However, it is not advisable to cut the crop before some of the plants begin to bloom. Less mature alfalfa makes a more watery and lighter hay.

I do not see that the volunteer wheat will interfere at all in the curing and handling of the alfalfa. Probably the wheat will cure more rapidly than the alfalfa and in order to cure

the crop evenly it may be raked rather green and placed at once in the cock or bunch and allowed to cure in this way. In any case the hay should not be allowed to cure in the swath, but rather it should be raked as soon as the alfalfa is well wilted and allowed to cure in the windrow or cock. I have mailed you a copy of circular letter giving more detailed information in regard to making alfalfa hay.

I would not advise you to store the green alfalfa from the windrow in the barn with the dirt floor. If the floor was raised so that the hay might be well aerated from beneath, than it might be advisable to put it into the barn rather green from the windrow as you have suggested. However, it is usually safer to cure the hay well before putting it into the barn or stack. You will find these points more fully discussed in the circular referred to. As stated above, it is advisable to cut alfalfa just as it is beginning to bloom; say about one-tenth in bloom. However, the crop in question might be cut a little earlier in order to make the best hay out of the wheat.

A. M. TENEYCK.

**Graded Seed Corn.**

EDITOR KANSAS FARMER:—Desiring to know the benefit derived from the use of a grader, as shown by the comparative drop of an edge drop planter, one box filled with graded corn, the other with corn nubbed back from each end, we recently made a series of tests and it may interest corn growers to know the result.

The machine used was a John Deere No. 9 edge drop planter, with plates for medium sized grains, and care was taken to secure ears with grains of medium size. The ears were shelled back from one to one and a half inches to where the grains were fairly uniform in size, and for one box they were run through a Boss grader fitted with a medium screen. The machine was elevated and a record kept for each side, of the number of times the machine missed dropping, the number of times two grains were dropped at once, and the number of broken grains. The averages of twenty experiments of one hundred grains due to be dropped is as follows: Missed grains, graded 1.1 per cent; ungraded 4.2 per cent. Broken grains, graded 1 per cent; ungraded 4.6 per cent. Two grains dropped at once, graded 1.2 per cent; ungraded 4.3 per cent. The broken grains were in almost every instance dropped alone, the number of times a broken grain and a good grain were dropped together being about one-half of 1 per cent. It may be that the work of the planter in actual planting would vary slightly from the above, but I see no reason why the difference should be very great.

Counting broken grains as misses, the per cent of a stand would approximate the following: Graded, 98 per cent, ungraded 92 per cent.

J. M. GILMAN,  
President Kansas Corn Breeders' Association.  
Leavenworth County.

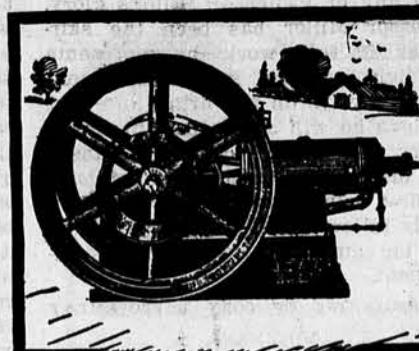
**Cultivating a Crop of Corn.**

Mr. Charles A. Rowe, a Jacksonville, Ill., farmer of a small place, has the following to say through the Illinois Farmers' Institute Press Bureau, from the practical side, about the cultivation of the corn crop:

It is of great benefit to stir the ground thoroughly with a harrow after planting and before the corn comes up. For this work, wire two sections of a harrow to a rail, placing them the proper distance apart for each to extend over two rows of corn. With this outfit four rows are harrowed at a time, and one man can harrow forty acres of corn in a day. Lengthen the checks and separate the horses, so that each will walk between two rows of corn. This harrowing, however, can not be well done when the stalks lie on top of the ground.

**INVENTS LITTLE HARROWS.**

This year we made some little harrows just to fit the corn row. Each consists of three cleats, 2 by 4 inches



# A Reliable Power as a Farm Help

established a new order of things. Any one who will carefully consider the matter must see that they are money makers and money savers.

They make short, easy, pleasant work of what always has been hard, slow work.

They save the farmer's strength, save him wages of hired men, save time, and enable him to do more work and make more money out of his farm than ever was possible before.

There is no doubt that on the average farm an I. H. C. gasoline engine will more than repay its first cost each year.

The nice adaptation of these engines to all farm duties is one of their most excellent features.

They are built in:

**VERTICAL**, 2 and 3-Horse Power.

**HORIZONTAL** (Stationary and Portable), 4, 6, 8, 10, 12, 15 and 20-Horse Power.

**TRACTION**, 10, 12, 15 and 20 Horse Power.

**AIR COOLED**, 1-Horse Power.

Also sawing, spraying and pumping outfits.

There is an I. H. C. engine for every purpose.

It will be to your interest to investigate these dependable, efficient engines. Call on the International local agent and get catalogues and particulars, or write the home office.

**INTERNATIONAL HARVESTER COMPANY OF AMERICA, CHICAGO, U. S. A.**

(Incorporated)

## Wire Fence 20c

48-in. stock fence per rod only  
Best high carbon coiled steel spring wire  
Catalog of fences, tools and supplies FREE  
Buy direct at wholesale. Write today.

MABON FENCE CO. Box 62, Leesburg, Ga.

## M. M. S. POULTRY FENCE

### HALF THE COST OF NETTING

Requires few Posts, no Rails; no soil or bag to it. Ask Dealers for it.  
Fence Catalog and Items of Value, FREE, write

DEKALB FENCE CO., 738 SHAWKET BLDG., KANSAS CITY, MO.

### BALL BEARING AUTOMATIC GATE

SEND FOR CIRCULARS OF ALL KINDS OF GATES  
GARANTEED THE SIMPLEST AND STRONGEST AND EASIEST OPERATED AUTOMATIC GATE ON THE MARKET  
MONEY REFUNDED IF NOT SATISFACTORY  
E. WADAMS STA. TOPEKA, KAN.

\$10.00 Sweep Feed Grinder.

\$14.00 Galvanized Steel Wind Mill.

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

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

## WORK WHEN YOU WORK and use

### DOUBLE ACTION JOINTED POLE CUTAWAY

CLARK'S  
No More Use For PLOW  
HARROW

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

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

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

TOWER'S FISH BRAND POMMEL SLICKERS \$3.50

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

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

cents per acre to cultivate corn, and the cultivators should be kept going.

#### CORN NOT "LAID BY" UNTIL AUGUST.

After the corn is too high to plow with a two-horse cultivator, the work is continued with the Planet Junior cultivator and one horse, two and sometimes three such shallow workings being given in July. The corn is cultivated until it falls down, and the bad weeds are hoed out of the field early in August.

We do not cultivate deep when there are no weeds to destroy. In all this cultivation we aim to kill the weeds when they are very small, and thus to save the necessity of plowing deep.

#### SIXTEEN RAPID WORKINGS.

There are sixteen workings of the ground to produce a crop of corn, but they are all of a kind that may be done very rapidly. This extra cultivation puts the ground in much better condition for oats or clover the following year. Besides cleaning out the weeds, all this stirring of bacteria and plant food in the soil seems to be a help to the crop. The work of cultivation should not be stopped until the fallen stalks make it impossible.

#### Boys' Corn Contest.

ADDRESS BY PROF. A. M. TENNEYCK, BEFORE THE BOYS' CONTEST ASSOCIATION MEETING, HELD AT THE KANSAS STATE AGRICULTURAL COLLEGE, DECEMBER 21, 1907.

To Prof. J. H. Miller, superintendent of Farmers' Institutes, belongs the credit of organizing and successfully carrying out the boys' corn contest work in this State. He is largely accountable for this splendid gathering of boys and young men from all over Kansas, who as a reward for their faithful work in growing and exhibiting corn have been sent to the Agricultural College without expense to themselves, by the generous premium donors of their respective counties, in order that they may take the ten-days' course in stock-judging and grain-judging and learn more about these subjects. We should not fail, however, to give much credit for the great progress of this movement to the local promoters, the county superintendents of public schools, institute officers, business men, and farmers who by their untiring energy and generous aid and cooperation, have made both the local and the State meetings a remarkable success.

The boys' corn contests were started in 1906. Contests were held in forty-seven counties in the fall of that year. The first annual meeting was held at the Kansas State Agricultural College, December 30-31, 1906. Only twelve boys attended this meeting and eighty-four samples of corn were entered for competition in the State show.

In 1907 contests were held in fifty-five counties of the State. More than three hundred boys are now enrolled for the short-course work and nearly two hundred samples of corn are now on exhibition, the largest and finest display of good corn ever seen in this State.

#### THE MOVEMENT FOR BETTER CORN.

This movement for better corn has made a remarkable and rapid growth. Interesting boys in corn has resulted also in interesting their fathers as well, with the result that the farmers all over the State are studying corn as never before and are taking more care in selecting seed and in planting and cultivating the corn, and this is resulting in larger yields of corn of better quality wherever improved seed is used and the better methods of culture are practised. The distribution of well-bred seed-corn to the boys has given a wide distribution to varieties and breeds of corn that are superior to the average corn of the State, which the farmers have been planting and growing, and this fact will eventually cause great improvement in the quality and grade of corn as well as an increase in the average yield of the corn crop of the State.

I do not wish to assume any honor or credit which is not due me or the department which I represent, or take

away any of Professor Miller's glory. Professor Miller has been the skirmisher in this work—he represents the "light artillery" in this movement—he is always on the firing line—but I believe he will agree that this great victory for "King" corn by Kansas boys might have been a sad defeat if the first advancement had not been closely followed and well supported by the "big guns" of the agronomy department.

#### THE BEGINNING OF CORN IMPROVEMENT MOVEMENT.

The present movement for corn improvement really began in the spring of 1903, when the agronomy department published press bulletin 120, "Better Bred Corn for Kansas," in which the farmers who had good corn were requested to send samples of the same to this department for planting in a comparative trial of varieties for the purpose of securing the promising varieties to be used as foundation stock for breeding and improvement. Seed of the purest bred and best-producing varieties recommended in other States was also secured and planted in this comparative trial. Several excellent varieties of "native" Kansas corn were thus discovered; a few of the imported varieties proved to be good producers, and several of the best-producing varieties have been still further improved by breeding, either at this station or by farmers, and hundreds of bushels of well-bred seed-corn have already been distributed throughout the State by the agronomy department of this college and experiment station and by farmers who have become interested in corn breeding.

#### THE IMPROVEMENT IN CORN.

There is little question but that the planting of this well-bred corn, together with the teaching of the Agricultural College on this subject to its students, and through farmers' institutes and boys' corn contests, experiment station bulletins, and the agricultural press, assisted also by progressive farmers and the Kansas Corn Breeders' Association, have already had a marked effect in increasing the yield and improving the quality of the corn crop of the State. In a year which was not especially favorable to the production of corn, and when partial crop failures were reported in localities all over the State, Secretary F. D. Coburn of the State Board of Agriculture reported the average yield of corn in the State in 1906 as 28.5 bushels per acre, or seven bushels above the average yield for the last ten years. In 1907, the average yield of corn in the State as reported by Secretary Coburn was only 21.33 bushels per acre. The very unfavorable season and the almost total failure of the corn crop in Western and parts of Central and Southern Kansas, account for this low yield. And yet in this unfavorable corn year magnificent yields are reported by a number of our corn breeders, ranging as high as 114 bushels per acre, and at some of the corn contests which I attended in Southern Kansas where the crop was unusually badly injured, some boys reported yields of 80 bushels per acre. So we may rightfully conclude that in this unfavorable season, "corn breeding" has had much effect in maintaining the average yield of the corn crop of the State.

In 1906 I personally judged the corn and made talks on corn at boys' contest institutes in thirty-seven counties of the State, and representatives of the agronomy department attended several contests in other counties. Hundreds of talks on corn have been made throughout the State during the last three years on the corn trains and at the various farmers' institutes. The agronomy department has published two important bulletins on corn judging and corn breeding and culture, which have been widely circulated and read and are really the authority on this subject in the State. Much work has been done and some progress has been made, but we are really only just beginning to improve corn. The last five years have seen some improvement in corn; the next five years will

see still greater improvement. When we consider the fact that individual ears of corn of one variety, the best seed ears which a good judge is able to select, will, when planted in separate rows under exactly similar conditions, give variations in yield and quality of grain produced in single season, of more than 100 per cent, we begin to realize some of the possibilities in corn breeding and the opportunities afforded to improve our present stock and secure much greater yields of corn of better quality than we are at present producing.

#### BREEDING AND SELECTION APPLY ALSO TO OTHER CROPS.

This important work will not stop with corn. The principles of breeding and selection which apply to corn, apply equally, also, to other crops: wheat, oats, barley, Kafir-corn, sorghum, grasses, alfalfa; and as great or even greater improvement may be made in many of these crops as is being accomplished with corn. In a "head-row" test of Kharkof wheat, conducted by the agronomy department last season, when thirty grains from each of twenty-four selected heads were planted in separate rows, we found variations in yield from different heads of more than 100 per cent, and a difference in grade of grain produced from the several rows, which ranged from almost soft and rejected to No. 1, hard, red winter wheat. This Experiment Station is carrying on breeding work with nearly all the crops named above, and we find with each that the possibility of improvement is as great as already published for corn, in bulletin 147. And the boys' contest work need not stop with corn.

I believe that Professor Miller intends next year to include wheat and possibly also Kafir-corn and Milo maize.

#### THE BOYS TO BE CONGRATULATED.

You boys are to be congratulated on being here and that you have these splendid educational advantages afforded you by the Agricultural College, and on being able to take part in these contests throughout the State, which shall be the means of great improvement in Kansas agriculture. You have greater opportunities to secure an agricultural education than your fathers had and you need to have more education in agriculture than your fathers had in order to succeed as well. Thirty, forty, or fifty years ago your fathers broke this fertile Kansas prairie and for all this long period on most of these farms the land has been cropped almost continuously to wheat and corn until the soil is becoming exhausted in fertility. The cream of our fertile prairie land has been taken away and shipped out of the State in train loads of corn and wheat.

The young farmer of the near future must be more skilled and better educated than the older farmer of the recent past, if he wishes to succeed as well as his father succeeded. The time is past when the uneducated and unskilled man can become a successful farmer and a man among men. It is not so easy to make a good living at farming to-day as it was forty years ago, or even twenty years ago. The soil is less fertile and competition is greater. There are many educated, hustling men engaged in the various lines of farming to-day, and if one wants to compete successfully with them he must be educated also. He must understand the soil and the great principles of cultivation, aeration, and soil moisture conservation; he must know the science of plant growth and propagation; must know the chemistry of the plant and of the animal; must learn the principles of animal nutrition and balanced rations in stock feeding; must study the animal and be practised in stock judging and crop judging in order to select good breeding stock; and he must know a thousand other things about agriculture, which he may not now know, if he hopes to successfully compete with those who have knowledge and training in these things.

Boys, this little instruction which

## Why This MOWER Beats Any Other ON EARTH



**WHETHER** you think of buying a mower now or might buy one ten years from now, we want to tell you how good a mower we've got for you. The Dain Vertical Lift Mower is the smoothest working, lightest running, easiest pulling machine on the market. You can thoroughly understand it at once and see its vast advantages of build. The high drive wheels, for instance, insure lightest possible draft and enormously increased traction. The cutting apparatus, carried on the wheels, by means of an adjustable coil spring, uses every bit of power, reduces useless friction and lessens pull for the team.

The long pitman gives a smooth, strong, unerring stroke. The gearing is all on the left wheel where it offsets the weight of the cutting-bar, altogether doing away with side draft. Many other desirable, exclusive features help make the

## DAIN Vertical Lift MOWER

easiest to run, surest in results, most perfect in construction, most durable, altogether most satisfactory and so simple a boy can handle it easily.

Built with utmost care, entirely of selected materials, withstands hardest wear and tear and sticks right to business all the time. The name "DAIN" on a Mower or any other hay tool is your guarantee of highest excellence. It is backed up by the perfected result of a quarter century's successful experience. Ask your dealer about this Dain Vertical Lift Mower, or write us for interesting descriptive booklet.

**Dain Manufacturing Co.**  
836 Vine St., Ottumwa, Iowa

you are receiving here in these few days is only a beginning; a start in the right direction. I wish that all of you might return to take a longer course in this great college. I hope that many of you will come back and I hope that you who may not be able to take a college course of instruction here or elsewhere, may continue the good work which you have begun and study agriculture by observation in your work on the farm, by attending farmers' institutes, and by reading agricultural papers and books and experiment station bulletins; so that you will not fall behind in this great forward movement for higher education in agriculture.

Every young farmer in the State should take the agriculture course in this or some other good agricultural college. It does not matter so much how long a man lives, as how he lives, and one can live so much more and accomplish so much more after spending four years in college than the time is never missed. Every young man can find means to carry himself through college. "Where there is a will there is a way."

## Horticulture

### Storage of Potatoes.

In a community that produces many potatoes, storage houses become a necessity. In Colorado the underground or dugout storage house has proved the most successful. Potatoes stored in an ordinary storage room lose weight rapidly and soon become shriveled and of poor quality. The underground storage combines all the qualities for keeping potatoes in the best condition.

Possibly the most important requisite is to keep down the temperature of the cellar. These cellars should be built lengthwise with the currents of air so that in the fall when the potatoes are put in, a draft through the cellar can be established at night to carry off the heat brought in with the potatoes during the day. The practise is to fill in the bins in layers of not more than one foot each day and let this layer cool down during the night. After the potatoes are all in, the ventilation is regulated so that the temperature is kept as near freezing point as possible without freezing the potatoes. This ventilation is necessary, not only to regulate the temperature, but to keep the air pure and dry. If the air becomes foul and damp, molds will grow and dry rot or Fus-

arium will develop. Many potatoes are spoiled in the stores and in the store rooms of dwellings. Frequently a load of potatoes is taken to a grocery and stored in an above ground store room where the air is warm and the room light. It is thought because the potatoes are in sacks or barrels that they will keep until sold out and used. Such is not the case, however; a very little light, especially where the air is warm, will make potatoes unfit for food in two weeks.

The same is true in the home. The potatoes are frequently stored near a furnace with more or less light. Before the sack or barrel is all used the potatoes become greened by the light and are not only unwholesome, but to a certain extent, poisonous.

E. R. BENNETT,  
Potato Specialist, Colorado Experiment Station, Fort Collins, Col.

#### Spraying.

E. F. STEPHENS, CRETÉ, NEB.

At this season of the year, the orchardist is deeply interested in the work of spraying his orchard. He hopes to guard against the work of the codling moth by spraying with some arsenical compound, like Paris green, or arsenate of lead.

The failure of the plum crop for two or three years, over a considerable portion of the State, seems to have turned the plum curculio into the apple orchards, and we now have in our apple orchards not only the apple curculio, but the plum curculio.

#### FUNGUS DISEASES.

The orchardist likewise contends with fungus diseases, of which the apple scab is one of the most prominent. Fungus diseases are most readily controlled by spraying with Bordeaux mixture. This raises the question, can the orchardist spray with a compound which at one application shall be effective in controlling the codling moth, and the apple curculio, and the apple scab? In this connection, perhaps a portion of a recent letter from Prof. L. R. Taft, professor of horticulture at the Experiment Station of the Michigan Agricultural College, will be found interesting. He says:

"I am very sure that the spraying which is given just before the blossoms open aids very much in the control of the curculio and when the fruit trees are sprayed at that time and again within a week after the fruit has set, we have very little trouble from this insect, even though the fruit on neighboring trees is very badly marked by it. For eighteen years, I have been very positive that by spraying the trees just before the blossoms open, it is possible, in seasons when the weather is cold and wet at blossoming time, to save the crop from what might be entire loss owing to the attack of the apple scab fungus upon the blossoms or upon the young fruits after they have set."

"Last year the sprayed orchards in Michigan gave a good crop, while as a result of the attack of the scab, the neighboring orchards either failed to set fruits or the greater part of it dropped later on. Very good results were secured from three applications, but our most successful growers are spraying four and five and even as many as six times in a season. Of course the number of applications would depend a good deal upon the season and varieties as well as the amount of injury done by the scab and the codling moth. I think it pays to spray four times under almost any condition, making a thorough application two or three weeks after the second and a fourth upon winter varieties of apples about the first of August, the latter being particularly for the codling moth.

"There is, of course, danger of russetting the fruit of some varieties with Bordeaux mixture. I use four pounds of copper sulfate and about six pounds of lime for the first two applications, but reduce the amounts to three pounds of copper sulfate and five pounds of lime for the third application and two pounds copper sulfate and three of lime for the August spraying. I would also use two

pounds of arsenate of lead to fifty gallons with each application.

"There has been a wonderful increase in the interest shown in spraying in Michigan in the last year or two, particularly in the case of apples and vineyards. In the vicinity of Lawton fully two hundred power vineyard spraying outfits have been sold this year in addition to all that they had previously, besides many barrel outfits.

"The well-cared-for sprayed orchards are bringing the owners from one to five hundred dollars net per acre every year."

#### USING BORDEAUX MIXTURE.

In discussing the same topic, Prof. S. A. Beach, professor of horticulture and forestry at Iowa State College, Ames, Iowa, under date of April 21, writes:

"In answer to your first question as to whether the Bordeaux mixture if used but once, or at most twice, should be applied before the buds open, will say that the spraying which is made immediately before the blossoms open is the most important treatment of the whole season for the control of apple scab and this is the fungus disease against which Bordeaux mixture is chiefly used in apple orchards in this region of the country. Farther south where the orchards are badly affected with bitter rot, I understand that later sprayings are more effective in controlling that disease than are the early ones. In spraying the apple trees with Bordeaux mixture just before the blossoms open, I would advise you to use arsenate of lead or Paris green as indicated in our bulletin No. 89, which I sent you under separate cover (4 pounds copper sulfate—blue vitrol—5 pounds of the best quick lime, 3 pounds arsenate of lead, to 50 gallons of water). This will be effective not only against all of the early eating insects, such as tussock-moths, tent caterpillars, bud-moths, case bearers, etc., but it will also do some good against the curculio.

"I notice that you mention using sulfate of copper and state that it causes some varieties of apples to become russeted. I suppose you refer to the use of sulfate of copper combined with lime so as to make Bordeaux mixture. In some seasons the use of Bordeaux mixture does cause apples to become more or less russeted, but the benefits which follow the proper and thorough use of this spraying compound so greatly outweigh the disadvantages of having some of the fruit russeted that there is no question as to the economy of making the treatment as indicated in the bulletin above referred to."

"With regard to the matter of spraying for curculio, will say that more thorough experiments have been conducted in fighting this insect by the Illinois Experiment Station than by any other station in the country with which I am acquainted. The results of the treatment as given in one of their recent bulletins, bulletin No. 108, are 'Four times spraying of Ben Davis apples with arsenate of lead at intervals of ten days, beginning May 6, increased the bulk of the crop by 54 per cent, number of apples 26 per cent and average size of fruit 21 per cent. It diminished the curculio injuries by 69 per cent, which is the measure of the protection due to the treatment.' The results of the experiment as might be expected were not uniform, but when carried through a series of years, the general conclusion was reached that spraying may properly be regarded as one of the efficient ways of fighting the plum curculio in apple orchards. It is an advantage if this can be supplemented by frequent tillage during July and August, stirring the ground to a depth of at least 2½ inches."

"There is no doubt but what the dropping of apple fruit early in the season may be caused by attacks of the apple scab fungus. I have personally seen the apple scab fungus appear on the stems of the blossoms before the blossom opened, although it should be said that it is not common for the disease to have progressed sufficiently at that period to be visible to the naked eye. In some cases the scab (Continued on page 588.)

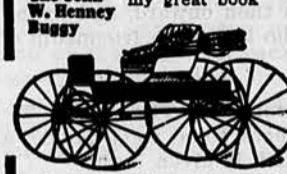
## A Genuine John W. Henney Buggy On 30 Days FREE TRIAL and a Written Guarantee For 2 Years

I am going to save you from \$15.00 to \$30.00 on the next buggy you buy if you'll let me. You know about the famous quality of my Original High-Grade Henney Buggies. I'm going to give you the first chance in forty years to buy my world-famous vehicles at factory prices.

For forty years I have sold the genuine High-Grade Original Henney buggies to dealers. I have changed my entire plan and for the balance of my life I shall sell my famous buggies direct to the user at factory prices, cutting out the jobber and the dealer and give you the old reliable genuine J.C. W. Henney, made by John W. Henney & Co., at real factory prices. Nearly every farmer in the great middle west has either owned or ridden in my make of vehicle. Over 200,000 have been sold—some of the first I made forty years ago are still in use.

Let me tell you all about the high quality and low prices of my Buggies. I stand back of every vehicle, giving you 30 days' free trial, and a written, ironclad Guarantee for 2 years with every vehicle. Genuine John W. Henney vehicles are known the world over for quality—here's a chance to buy direct from the factory.

A clear saving of from \$15.00 to \$30.00 on each vehicle who went into the pocket of the dealer—write me at once for The John W. Henney my great book Buggy



P. S. I want every one of the thousands who have ever owned or used my vehicle to write me at once. J. W. H.

## Forty Years OF BUGGY BUILDING Free

and let me tell you the secret of good buggy building.  
JOHN W. HENNEY, Pres.  
JOHN W. HENNEY & CO.,  
503 Taylor Ave.,  
Freeport, Ill.

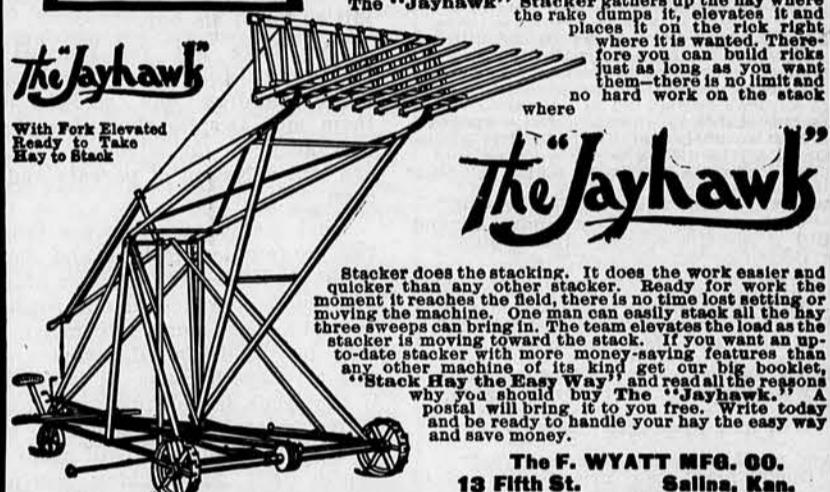


This Buggy, owned by Mr. J. H. Addams, Cedarville, Ill., has been in constant use over 36 years. It's a Genuine Henney.

## No Limit To the Length of the Rick... Build it as Long as You Please

### The "Jayhawk"

With Fork Elevated  
Ready to Take  
Hay to Stack



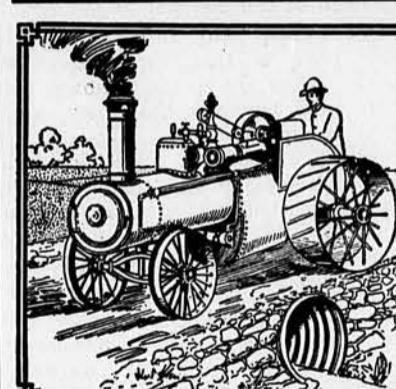
The F. WYATT MFG. CO.  
13 Fifth St. Salina, Kan.

## INSURE YOUR ROOF Against Water, Weather and Wear



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

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



## CORRUGATED METAL ROAD CULVERTS

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

Corrugated Metal Mfg. Co., Emporia, Kan.



## The Prairie Queen SEPARATOR

THE HARD WHEAT SPECIAL

Manufactured by the

Prairie Queen Mfg. Co.

NEWTON, KANS.

General Agents for the A. D. Baker Engine.

Write for Catalogue.

We have a few second-hand engines of different makes on hand for sale at the right price, or will trade for land.

## Home Departments

CONDUCTED BY RUTH COWGILL.

**GOD IS GOOD.**

Herbert Spencer says: "We are living in the midst of an infinite and eternal energy."

Lyman Abbott says: "That infinite and eternal energy is an infinite and eternal mystery, and can be defined in no less term than God."

Sin may bring death, and things untrue,  
Nay be a synthetic base alloy,  
But through it all I learn of virtue,  
I learn the road that leads to joy.

I may not love the tool that wrought,  
Nor heaps of compost in the field;  
Yet love I the part the tool hath  
brought,

And love the fruit the field doth yield.

Take weakness, ignorance from the  
race,  
And sin could scarcely find a place,  
'Tis true the vicious yet would be,  
But those quite plainly are not we.

A sweater paradise is won,  
Than that we once in Eden lost,  
Is this not so? Then God's undone,  
And all the count counts all to cost.

I would rather learn of virtues great,  
And find the secrets to them late,  
And find thereby how man did fall,  
Than not to find the fall at all.

I think this fact is granted so,  
Learn and know or you'll never  
know."

I think the pathway of the mind,  
Is onward, upward, God inclined.

Should some grow dizzy in the climb,  
Stagger, fall, and break the line,  
And carry others in descent,  
Does that destroy the plan's intent?

Is the stairway short, of little space?  
Is it so with God, and with His grace?  
Or is all in all on what we rest,  
And time the same to make the test?

We learn that time will never end,  
That good and bad each have a trend,  
But if my life should hapless go,  
Does fate decree it ever so?

O! endless quest how much we've lost!  
By letting others count our cost!  
How well 'twould be in Jesus' name  
If none had risen to explain.

If so, the stairway to these heights,  
Will bring us ever new delights,  
And every step that we ascend,  
Will new perspective to us lend,

And yield a joy not known before,  
God's plan! So great! So full of  
store!  
Ah! when the plan has all been told,  
We'll find much dross has turned to gold.

His words were simple, grand, and  
plain,  
His acts a sequel to the same,  
Ne'er said He, "I'm better than thou,"  
No secrets kept; doe's see it now?

On His own words my hope I'll plant,  
Not Peter's words, nor Paul's per  
chance  
For since the time of Peter's doubt,  
Some things have gone quite wrong  
side out.

He sought and found me in God's plan,  
A broken law the only ban,  
The law once kept, I keep my soul,  
That rule involves the mighty whole.

The law that's broken gives me pain,  
To force me back to truth again,  
To force me onward and above,  
And prove to me that "God is love."

Hark! God is good and good is God,  
There is nought else on earth's green  
sod,  
Some other things we think we've seen,  
Because our vision is not keen.

—A. B. Smith, Topeka, Kans.

**Know Your Boy.**

Too many fathers leave the bringing up of the boy to the mother. This is shirking responsibility and care, but while this is bad enough the worst feature is its effect upon the boy himself. We feel sorry for the fatherless boy, and he needs our pity. He misses much that a father can give to make him a man, but he feels keenly the lack of companionship that the father is privileged to supply. If the boy has a father and that father fails to take an interest in him, the boy feels the lack even more keenly and in his heart, at least, is inclined to resent it. Mothers are all right for a time, and all the time when supplemented with the father's interest and influence, but there comes a time in a boy's life—the time when he is growing into manhood—when he longs for the attention of father and would be delighted to have him take notice of him and his achievements, whether they be his lessons, or games, or wild projects, perchance, for many are the vagaries and imaginations of the boy's heart at this time. He fancies he is too big now for mother to pet and fondle; he resents too much attention from her. "I

am neither a baby nor a girl," he thinks, and he is apt to get the idea that she is the weaker vessel, and he does not want to be bossed by a woman. Happy is the boy who in babyhood and childhood has his father's hearty, good comradeship and companionship, but if there is a time when he feels the need of it and craves it, it is when he is merging into manhood and from then onward, and happy the father who keeps the friendship of his boy.

An editorial in *The World To-Day* gives fathers some good advice, a little of which is given here:

"The ordinary father could know his boy better if he chose. Not, indeed, just as he comes to know him in vacation; not, possibly, as his mother knows him; but none the less he can know his boy.

"If he takes time. And, as this is a lay sermon, after the manner of preachers, it should be added, he ought to take time. If a father is good for anything, he himself is the best gift to make his boy.

"We have not yet reached that blear-eyed Utopia in which parents breed children and society brings them up. Despite the polygamy and polyandry of the divorce courts we are still a Nation of parents and children.

"And just because we are thus settled in families, fathers and mothers ought to be friends of their children. The more complicated our social life becomes, the more imperative does this duty and—as all sermons say—this privilege become. It is not merely that such friendships make parents better parents and children better men and women; they will make more gentle that approaching usurpation which for a moment startled us when we saw our boys could run almost as fast as we, and could plan almost as wisely. For we shall surrender to friends."

Fathers, get acquainted with your boy. You will be surprised in many respects and at first may feel disappointed and may be discouraged, but if you find it a bad case it is most likely because you have postponed the acquaintance too long. Every father should know his boy. If he is hard to get acquainted with, persist. Study him. Study him from every point of view and do not be afraid to get down on a level with him occasionally. It will do you both good. President Roosevelt gets down on all fours and plays "Teddy Bear" with his boy and his playmates, and it does not rob him of his dignity nor lower him in the estimation of the boy nor of the people.

One reason why fathers fail with their boys is that they expect too much. They are so far removed from their own boyhood that they forget what to expect of a boy. Look at him from a boy's point of view. Put yourself in his place and remember that "Rome was not built in a day." Be patient and forebearing but keep close to him and get acquainted.

**Hygienic Cookery.**

MRS. HENRIETTA W. CALVIN, PROFESSOR OF DOMESTIC SCIENCE, KANSAS STATE AGRICULTURAL COLLEGE.  
COOKERY OF EGGS.

There are numberless ways of cooking eggs, either alone or in combination with other materials. Eggs are easily prepared, palatable, and easily digested. They rarely fail to agree with any person in health, and are especially valuable in the diet for the sick. They are typical protein food, and therefore are tissue builders. By putting a small portion of raw yolk of egg and raw white of egg in cold water and gradually heating each, certain interesting observations may be made. First, the yolk of egg hardens before the white hardens, and both

white and yolk harden—coagulate before the water reaches the boiling point. The longer the egg is subjected to the hot water the harder it coagulates. This principle of the coagulation of egg when heated must be borne in mind as the most important fact concerned in the preparation of all dishes in which eggs are used. Poaching is one of the best methods of cooking eggs, while frying is the poorest method.

**TESTING EGGS.**

A perfectly fresh egg placed in water will lay upon its side; if the egg is a few days old the large end of the egg will slightly rise in the water, the whole egg being tipped at an angle with the bottom of the dish. This angle increases with the age of the egg until an egg that has been kept some time will stand upright in the bottom of the dish. This does not indicate that the egg is spoiled, but that it is old or "stale." If it is spoiled it will float in the water. Another method of testing eggs is to hold them between the eye and a strong light, in which case the egg, if fresh, will appear transparent around the sides with the yolk showing dark in the center.

**MILK.**

Milk is one of the cheapest as well as one of the best foods found upon the farm. It is about 87 per cent water with a little less than 1 per cent mineral matter, the remaining 12 per cent being nearly equally divided between protein, fat, and carbohydrate (sugar of milk). Milk is the natural food of all the young of the higher animals. It is for them a perfect food. Properly used with other foods it rarely fails to be an agreeable and digestible constituent of the general diet. Milk is but slightly changed by heat, and, except for small children, is as valuable a food after cooking as before.

**SOUR MILK.**

The sourness which occurs in milk is due to the action of micro-organisms—living cells so small that they can only be seen by using a strong microscope. These micro-organisms live on the sugar of milk, lactose, and change it into lactic acid, so these small organisms are called lactic acid bacteria. These micro-organisms are more numerous and more active in summer than in winter, and they grow most rapidly when the milk is kept warm. Therefore if milk is to be kept sweet it is necessary to cool it as quickly as possible after it is drawn from the cow and keep it cool until needed for use. There are other micro-organisms which multiply in milk and injure it as a food for human beings. Some of these are found in the milk when freshly milked, but most of them find their way into the milk from the dirty barn, soiled hands of the milkers, or unclean milk-buckets, strainers, separators, and pans. All milk utensils should be rinsed in cold, clean water as soon as emptied, then washed in clean, hot soapsuds, scalded with boiling water, and placed free from dust but exposed to fresh air and sunshine if possible.

**COOKERY OF MILK.**

Sweet milk enters into the composition of many foods, as cream soups, chocolate, cocoa, custard, puddings, and many breads. It not only acts as a liquid, but adds to the flavor and the nutritive value of the product. Sour milk is used with soda in many breads, and thus used the bread is made light by the action of the soda with the acid of the milk. Clabbered milk gently heated separates into curds and whey which may be poured into a colander or cloth and allowed to drain. When drained and seasoned with cream and salt it becomes "cottage" or "Dutch" cheese. It is highly nutritious, and when spread between slices of bread makes an excellent sandwich for school luncheons.

Buttermilk is not only used as sour milk in cooking, but affords a cool and refreshing drink, often being more agreeable to the sick than sweet milk.

Whenever scalding-hot milk is combined with eggs it is necessary to pour the milk slowly over the eggs to avoid coagulation of the egg; the eggs

**Simpson-Eddystone**

**Zephyrette**  
**Ginghams**



should never be poured into the hot milk.

**CHEESE.**

Cheese is a product of sweet milk, the protein of which has been coagulated by the addition of rennet, a substance prepared from the lining membrane of the calf's stomach. The coagulated protein or curd is strained, pressed, and stored in a cool place until ripened, that is, altered by certain micro-organisms, when it is ready for use. When the curd is strained out the most of the water of the milk and the mineral matter, together with part of the fat, is lost in the whey, but the remaining curd or cheese is an extremely nutritious food.

**COMPOSITION AND COOKERY OF CHEESE.**

Cheese is composed of about 33 per cent fat, 33 per cent protein, and 33 per cent water, thus being what is known as a concentrated food. A concentrated food is one in which there is relatively a small proportion of water and little or no waste material. Because of the high nutritive value and the large amount of fat present in cheese, it is hard for those of weak digestion to use it in their diet. To render it more digestible it should be broken or grated into small particles and mixed with food of starchy composition. Prepared in such a manner it is a valuable addition to the diet and an economical source of food.

Cheese Pudding.—Two thin slices of bread, buttered, 1/2 cup of grated cheese, 1 egg, 1/2 cup of milk, 1/2 teaspoon salt. Butter baking-dish. Cut one slice of bread round to fit the bottom of the dish. Place in dish, add cheese and cover with second round of bread. Mix egg, milk, and salt and pour over contents of dish. Set the dish in a pan of water and bake in a slow oven until firm, browning top slightly.

Cheese Souffle.—One-fourth cup of milk, 1 tablespoon butter, 1 tablespoon flour, 1 egg yolk, 1/4 cup of grated cheese, 1 egg white, 1/2 teaspoon salt. Make the milk, butter, flour, and salt into white sauce. Add cheese and stir until melted. Cool slightly and add yolk of egg. Beat the white stiff and dry and fold into the mixture. Turn into buttered baking-dish. Set in a pan of water and bake in slow oven until souffle is firm when pressed on by teaspoon. Serve as soon as removed from oven.

Macaroni and Cheese.—Two tablespoons mararoni, 1 1/2 cups boiling water, 2 tablespoons cheese, 1/4 teaspoon salt, 1/2 cup white sauce, 6 tablespoons buttered crumbs. Break macaroni and wash thoroughly. Place water in upper portion of double boiler, add 1/2 teaspoon salt, and when boiling rapidly add the macaroni. Boil five minutes over direct heat, then place upper in lower portion of double boiler and cook one hour. Drain off surplus water. Cover the bottom of a buttered baking-dish with a layer of macaroni, add layer of white sauce

and sprinkle with cheese. Repeat until dish is full, omitting cheese from the top layer. Cover with buttered crumbs and bake until white sauce bubbles and crumbs are browned.

## The Young Folks

### OLD MAN RAIN.

Old Man Rain  
At the window pane  
Knocks and fumbles and raps again;  
His long-nailed fingers slip and strain;  
Old Man Rain at the window pane  
Knocks all night, but knocks in vain—  
Old Man Rain.

Old Man Rain,  
With battered train,  
Reels and shambles along the lane;  
His old gray whiskers drip and drain;  
Old Man Rain, with ragged train,  
Reels and staggers like one insane—  
Old Man Rain.

Old Man Rain,  
Is back again,  
With old Mis' Wind at the window pane  
Dancing there with her tattered train;  
Her old shawl flaps as she twirls again  
In the wildman reel and is torn in  
twain—  
Old Mis' Wind and Old Man Rain.

—Madison Cawein, in the Reader.

### Two Japanese Girls.

Children and young folks are the same the world over, in some things, and their difference lies principally in their environments and customs, and the way of their bringing up. They all want and need play, exercise, and amusement. The following was written by Mitsun Okada, a Japanese woman, and is interesting to any one:

My sister and I were the only children of the family, and we had no boy playmates save one gentle cousin who visited us now and then. As we never ventured to play out of our home, or rather were forbidden to do so, we were dependent upon one another's companionship all through our childhood.

Such timid creatures as my sister and I were! Standing within the latticed door at the entrance of our house, we, as noiseless as a pair of mice, watched the boys play in the street. When mother sent us on an errand, sometimes it happened that these urchins, seeing us approach, formed into a line and blockaded the passage-way. This was one of the most dreaded events. "Say 'Pardon!' and we will let you pass. Say 'Pardon!'" commanded the ring-leader. Distressed, yet proud, holding my sister by the hand, I tried to pass between the least guarding two boys; but they instantly stood closer together and baffled us. However, the ordeal, which seemed ages for us then, was over in a few moments. Either the piteous weeping of my frightened sister, or the approach of a grown-up person, scattered the whole band. More often, these boys stood afar and called out: "There goes a proud girl! There goes a crying-baby!"

Deeming it safer not to come across the boys, we always looked up and down the street when we started by ourselves from home, and took some roundabout way if we happened to catch a glimpse of them. If little Japanese girls at the present time suffer from the same tyranny of boys, they have my deepest sympathy, for to us, boys were the terror of those childhood days.

Our shy dispositions, then, along with the wishes of our parents, made us live almost exclusively indoors. There was a small, square piece of ground at the back of our house, which served for a garden. In it were planted a tall salisburia, and various shrubs, leaving hardly sufficient space for us to run about. Moreover, looking right down on the garden, was a two-story boarding house, from whose windows many men boarders watched us and often made comments. "Play indoors; don't be looked at!" Mother's mild command robbed us of even this strip of blue-sky playground.

No noise-making was allowed in the house. "Play quietly, children!" was what we heard all day.

"May we bounce a ball in the sitting-room?"

"No, I don't want the dust coming out of the mattresses."

"May we bounce it on the veranda?"

"Yes, if you don't make much noise."

The veranda was only three feet wide, and as the ball in our unskilled hands kept rolling off into the garden, we spent most of the time in running after it. Sometimes, taking advantage of mother's being busy, my sister and I started a limping-race in the house. Before five minutes had elapsed, mother's voice sounded, "Who is it that makes such a noise?" We then had to stop.

Do not judge, however, that our mother was unreasonable. She simply did not understand that children need action, and it was her utmost desire to train us up into gentle-mannered girls. For our part, we liked the forbidden games none the less, and started them as often as there were chances. To outsiders, I am sure, we appeared remarkably quiet children. I remember that a bald-headed neighbor, who always walked with his eyes fixed on the heavens and never appeared to notice when we bowed to him, praised the method of our parents in bringing us up as "the best he knew."

Disputes we two children had, numberless times, but also innumerable happy pastimes together. Many a summer morning when I—a child of eight—was getting ready for seven o'clock school, it was my sister's habit to rise early and have breakfast with me. No matter how sleepy she was, at a soft call from mother, "The morning-glories are waiting for you!" my sister crept out of her bed. In a cunning baby-nightgown, her hair rumpled, her eyes still half shut, she tottered into the kitchen, half-asleep. Grasping the little plate on which two tiny rice-balls had been placed for her, she wandered into the room facing the garden where I was eating breakfast. There she sat down, stretching out her feet, and looked at the new-blown morning-glories, while complacently eating her breakfast.

On my return from school, I shared with my sister the cake given me as the reward of attending school. Now the little red-cheeked sister was ready to play. But I was not. Almost all the rest of the day had to be occupied in doing arithmetic problems which father had prepared for me, practising penmanship, learning one thing or another. Until I did all these, I was not allowed to play! Father, too eager to make me a brilliant pupil, ignored or was ignorant of the necessity of play for children. And mother kept saying, "Do your study, child!" These words were constantly in my ears.

Whether or not my little sister's heart was moved with compassion, on a particular occasion of my having to review Chinese books, she sat before me to hold the book I read. Although she did not understand a word of it, she patiently fulfilled her part of being a desk. She knew that Chinese came the last of my studies, and that when the final page was read out, the time had come for us to play together.

"What shall we play? Dolls? A school?"

I always had my way, and my sister accepted my suggestion as authority. Down came a large toy-box, and playthings were piled pell-mell on the floor, ready to be divided. We decided to play house.

"Which of these two stoves will you choose?"

"The larger one, please," said my sister.

"No, you have always taken the smaller one. Take the smaller one now. I will let you have this pretty tea-kettle."

"All right; but let me have that dish, too."

"No, you can't have that."

"Why not? I want it—I do want it."

My sister began to cry.

"Don't cry; you may have it." The threatened shower was over.

All the toys—from dolls' bureaus, dresses, cups, knives, chop-sticks, to a half-broken plate—were divided, one by one. Then began the most absorbing part of the play—the arranging of the kitchen utensils, the decoration of

the sitting-room, the dressing of the dolls. But frequently the interest passed away before the visiting and exchanging of presents began.

"How would you like to play school, and get the note-books and writing paper ready for our dolls?" I would ask.

"Yes, let's do that."

In a moment the decorated miniature houses were deserted. Scissors, strings, and paper appeared, and two eager faces were bent over the desk, while two pairs of hands were cutting paper and binding it into tiny books. While yet we were at the height of our pleasure, mother would call: "Girls, put away your playthings. It is time for the evening sweeping."

Twilight was always an unsettled time of the day. As each room was swept, we were driven from one place to another; and the games we played during that time were very simple. One of our favorite pastimes was to divide a room into houses and streets; then we put on imaginary shoes and went out of imaginary doors into imaginary streets. Another game was to stand in an out-of-the-way corner and engage in "finger wrestling" and sundry other games which required only our hands or our feet.

The tenth and the twenty-fourth days of each month were looked forward to with a great deal of pleasure. The tenth was the fete-day of a Shinto god—an old-time emperor, deified by the people to appease his wrath—whose shrine was within a half-mile of our home. The twenty-fourth was the day of a Buddhist god whose temple was likewise quite near. On these days, father gave us ten sen (about five cents) each, and allowed us to buy anything we wished.

Accompanied by one of our parents, or quite by ourselves, we made a tour of the streets where shows and booths of eatables and playthings were arranged. Pushed and elbowed by the crowd, deafened by the din of shouts, yet eager and happy, we begged mother to let us look at the monkey theater or to buy a colored balloon or some cake. And our purchases in hand, how satisfied we came home to await another return of the day!

But to visit our aunt, who lived in another quarter of the city, was perhaps the most exciting event in those days of old. The visit, usually for a day, was made almost always in the season of the flower-festival. Father remained at home. We were unmanageably restless while mother cleared away the breakfast dishes. "Now, must you dust?" "When are we to change our clothes?" "It is nine o'clock already." Every few moments we rushed into the kitchen with anxious questions.

At last, the kitchen in order and luncheon ready for father, mother proceeded to arrange our hair, and then helped us dress. A few moments more we had to wait for mother to dress. "O, mother, hurry, you look all right." "Let me get your shoes." "Yes, we have our handkerchiefs." "Good-by, father!" And off we went like two little chickens after a hen. Such fun it was to have a long ride in a jinrikisha! So immensely we enjoyed the ever-changing scenes of the street that almost before we knew it we were at the aunt's door.

It was an excellent opportunity for us, six cousins, to spread our wings, for mother and aunt had much to say to one another. Being in an unfamiliar house was delightful; to play with more than one child was fun. But the crowning excitement came in the afternoon when the party of six children and three or four grown-up people started on the flower-excursion. We children chattered, laughed, made the elders laugh, ran, and had a capital time. It was usually late at night when we returned home, tired and sleepy after this greatest day of play in the whole year.

### Children Two Thousand Years Ago.

There has recently been put upon exhibition in the British Museum a new collection, or more strictly speaking, a rearrangement of certain old collections in such a way as to make an entirely new exhibit, representing

### A Bold Step.

To overcome the well-grounded and reasonable objections of the more intelligent to the use of secret, medicinal compounds, Dr. R. V. Pierce, of Buffalo, N. Y., some time ago, decided to make a bold departure from the usual course pursued by the makers of put-up medicines for domestic use, and so has published broadcast and openly to the whole world, a full and complete list of all the ingredients entering into the composition of his widely celebrated medicines. Thus too he has removed his medicines from among secret nostrums of doubtful merits, and made them *Remedies of Known Composition*.

By this bold step Dr. Pierce has shown that his formulas are of such excellence that he is not afraid to subject them to the fullest scrutiny.

Not only does the wrapper of every bottle of Dr. Pierce's Golden Medical Discovery, the famous medicine for weak stomach, pid liver or biliousness and all catarrhal diseases wherever located, have printed upon it, in plain English, a full and complete list of all the ingredients composing it, but a small book has been compiled from numerous standard medical works, of all the different schools of practice, containing very numerous extracts from the writings of leading practitioners of medicine, endorsing in the strongest possible terms, each and every ingredient contained in Dr. Pierce's medicines. One of these little books will be mailed free to any one sending address on postal card or by letter, to Dr. R. V. Pierce, Buffalo, N. Y., and requesting the same. From this little book it will be learned that Dr. Pierce's medicines contain no alcohol, narcotics, mineral agents or other poisonous or injurious agents and that they are made from native, medicinal roots of great value; also that some of the most valuable ingredients contained in Dr. Pierce's Favorite Prescription for weak, nervous, over-worked, "run-down," nervous and debilitated women, were employed long years ago, by the Indians for similar ailments affecting their squaws. In fact, one of the most valuable medicinal plants entering into the composition of Dr. Pierce's Favorite Prescription was known to the Indians as "Squaw-Weed." Our knowledge of the uses of not a few of our most valuable native, medicinal plants was gained from the Indians.

As made up by improved and exact processes, the "Favorite Prescription" is a most efficient remedy for regulating all the womanly functions, correcting displacements, as prolapsus, anteversion and retroversion, overcoming painful periods, toning up the nerves and bringing about a perfect state of health. Sold by all dealers in medicines.

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

Res. Tel. 775. Office Tel. 192.

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

AGENTS \$50 WANTED  
Per WEEK  
To sell the DR. HAUX famous "Perfect Vision" Spectacles—finest on earth. State present occupation. DR. HAUX SPECTACLE COMPANY, Dept. 276, St. Louis, Mo.

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

**SALT CITY BUSINESS COLLEGE**  
HUTCHINSON, KANSAS

ENTRIES SOUGHT FOR GRADUATES. STUDENTS ENROLLED EVERY WEEK. THOROUGH LESSONS. LIBRARY. READING ROOM. PENMANSHIP AND SHORTHAND TAUGHT BY MAIL. LEARNED AND CONDUCTED BY HONEST BUSINESSMEN AND PROFESSIONAL MEN. THE LEADING BUSINESS COLLEGE IN KANSAS. NO LESSONS IN SPANISH. A FULL FOUR PAGE CATALOGUE. WRITE TODAY.

**Emporia Business College**

Now in new building, with new furniture and in test office appliances. 27 years of successful work Board and room cheaper than any other place in the United States. No solicitors. Losers not wante Courses by mail in shorthand, penmanship, account bookkeeping. Address,

C. D. LONG, Principal, Drawer F.

**LAWRENCE Business College**  
Lawrence, Kansas.  
38th YEAR.  
Thorough Commercial and Short-hand Courses.  
GOOD POSITIONS for graduates. Write for FREE Catalog.  
Lawrence Business College, Lawrence, Kans.  
Address Lock Box F.

### The Club Member

A Monthly Magazine published for women by women. It contains these departments: Editorial, Schools and Colleges; The Club Woman; The W. K. D. C.; The D. A. R.; The W. R. C.; The Woman Who Votes; Notes on Bible Study; Children's Hour; Us Men; Among the Books. Subscription price, 50 cents per year. Send for sample copy to Club Member Publishing Co., Topeka, Kans.

the surroundings and houses of the Greeks and Romans two thousand years ago.

One sees here the dress, furniture, kitchen utensils, surgical instruments—all the paraphernalia of the life of the old peoples.

But among all the cases none is of more fascinating interest, none brings the far-away centuries more vividly before us than the case containing the toys of the children. Here are a tiny chariot with two prancing horses an inch and a half high, a leaden horseman, a Pomeranian dog, a fox-terrier with a collar—and also with a fine long tail—a monkey eating a bun.

Here are tiny mechanical toys, a doll's chair and a soft of some brown glazed ware with imitation rolled back and arms. There are also mugs painted with figures of children, and here, too, are the dolls. Most of them are carved, many with beautifully jointed legs and arms, and plainly very expensive, but the child of to-day would pass them by with no more than a curious glance. She would be right, for these dolls at least were never played with—they were discovered, nearly all of them, in funeral urns.

But among them there is one that no doll-loving little girl could fail to recognize—a little rag doll, faded and yellow and worn. That, there is no question, was loved and cherished by some child twenty centuries ago.

There are other things in the collection. Rattles of strange shapes, with glorious possibilities of noise, more soldiers, fish-hooks which the wise declare, save for a little rust, might have been made last year. All the libraries of the world could not prove so clearly the eternal kinship of childhood as this one case of battered toys.

But, as a writer in the London Spectator reminds us, although the children two thousand years ago were playing the same games as the children of to-day, childhood itself now holds a very different place in the world. It was only their own children whom the old Greeks and Romans loved and protected—the children of other Nations, the poor and the outcast, were either neglected or put to violent death. Children's homes, children's hospitals, children's courts, vacation societies of all kinds, free kindergartens and schools, these and uncounted other places and organizations are caring for the children of the twentieth century as they have never, in the history of the world, been cared for before.—Youth's Companion.

#### Success Mottoes.

"Work! Work! Work!"—Sir Joshua Reynolds.

"Never be doing nothing."—Walter Scott.

"Still I am learning."—Michael Angelo.

"Help yourself and others will help you."—Von Moltke.

"Whatever is worth doing at all is worth doing well."—Nicholas Poussin.

"There is but one method of attaining excellent, and that is hard labor."—Sydney Smith.

#### The Little Ones

##### WHO WAKES THE ROOSTER UP TO CROW?

Who wakes the rooster up to crow  
In summer time, I'd like to know?  
Before it's light, about half-past two,  
He gives his "cock-a-doo-dle-doo."

When outside howls the wintry storm,  
While I am sleeping snug and warm,  
At half-past four, with loud halloo,  
He wakes me with his "doo-die-doo."

Through all the year, lord of his flock,  
He calls the hens without a clock.  
Before daybreak he drums tattoo,  
And clarions, "cock-a-dood-dle-doo."  
—Dora H. Stockman.

##### Margaret and Paul's Seashore.

Margaret and Paul had lived in Kansas only a year. Their father and mother moved from Massachusetts, where they had lived all their lives only a little way from the big, rolling ocean. Every summer the family had

gone to the seashore for a few weeks, and oh, what splendid times these two little children had, playing in the sand and wading in the water. But now they were miles and miles from any great body of water, what were they to do? How they missed the fun as the hot days came on. They had brought with them their little pails and shovels, but had no use for them. Mama missed it too, but she began to think out a way for something to take the place of it for the children.

She took a shallow tub and had papa set it in the earth about half way up, and then had sand hauled and put all around the tub. Then she poured some water in the tub and this was the children's seashore. It was not at all like the ocean, but how much fun they had. They made boats out of halves of cucumbers, little green pumpkins, and gourds, by scooping out the centers. They put seats in them and sails on some, made oars for some and made them as much like the real ones they had seen as they could. They sometimes used walnut and peanut shells and one day they thought of a game on the water. They would have a war on ocean, like they had heard papa telling about. So each one had his own set of vessels and had their imaginary fight, one side against the other. It was great fun. They had storms at sea, making the waves dash high, causing terrible wrecks. Then they would get out their life-saving boats and save many from drowning. They had use for their little pails and shovels too. They could dig in the sand and make tunnels and bridges and castles and all sorts of things, just as they did at the real seashore, only there were no shells.

The first thing in the morning they were there but they came very quietly lest they frighten away the birds that came for their morning bath and drink. They loved to watch these happy creatures. The dog and kitten often went there for their drink on the hot days and they took their afternoon nap on the sand when Margaret and Paul were not using it.

R. H. C.

#### Club Department

##### Officers of the State Federation of Women's Clubs.

President	Mrs. Frances H. Brown, Olathe
Vice-President	Mrs. C. H. Trott, Juarez City
Sec. Secretary	Mrs. J. B. Wheeler, Pittsburg
Cor. Secretary	Mrs. Charles C. Shoemaker, Olathe
Treasurer	Mrs. C. W. Landis, Osborne
Auditor	Mrs. M. S. Munson, Edmond
General Secretary	Mrs. C. O. Goodard, Leavenworth
General Director	Mrs. W. A. Johnson, Topeka

##### Our Club Hall

Excelsior Club (1903)	Potwin, Butler Co.
Women's Literary Club (1903)	Osborne, Osborne Co.
Women's Club (1903)	Logan, Phillips Co.
Domestic Science Club (1903)	Osage, Osage Co.
Ladies' Social Society No. 1, (1903)	Minneapolis, Ottawa Co.
Chautauq Club (1903)	Highland Park, Shawnee Co.
Cultus Club (1903)	Phillipsburg, Phillips Co.
Litterateur Club (1903)	Ford, Ford Co.
Star Valley Woman's Club (1903)	Iola, Allen Co.
West Side Forestry Club (1903)	Topeka, Shawnee Co., Route 8.
Fortnight Club (1903)	Grant Township, Reno Co.
Progressive Society (1903)	Rosalia, Butler Co.
Pleasant Hour Club (1903)	Wakarusa Township, Douglas Co.
The Lady Farmer's Institute (1903)	Marysville, Marshall Co.
Woman's Country Club	Anthony, Harper Co.
Richardson Embroidery Club (1903)	Madison, Greenwood Co.
Frentiss Reading Club (1903)	Cawker City, Mitchell Co.
Cosmos Club	Russell, Kans.
The Sunflower Club (1903)	Perry, Jefferson Co.
Chaldean Club (1904)	Sterling, Rice Co.
Jewell Reading Club	Osage Co.
The Mutual Helpers (1905)	Madison, Kans.
West Side Study Club (1905)	Delphos, Ottawa Co.
Domestic Science Club (1906)	Berryton, Shawnee Co.
Mutual Improvement Club (1906)	Vermillion, Marshall Co.
Clio Club (1907)	Columbus, Kans.
Centrals Reading Circle	Namaha Co.
White Rose Branch (1907)	Syracuse, Kans.
Cedar Branch (1907)	Locke, Okla.
Girls' Fancy Work Club	Princeton, Franklin Co.
Silver Prairie Club (1907)	Wauwata, Kans.
The Ladies Mutual Improvement Club	Crawford Co.

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

##### Program.

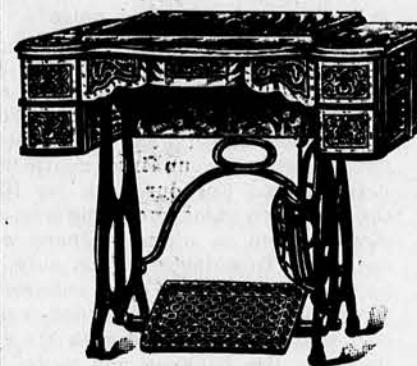
Responses—My summer outing.  
I. Vacation for the housekeeper.  
II. Some suggested outings.  
III. Picnics.

For responses, tell briefly what you are going to do for your summer's outing.

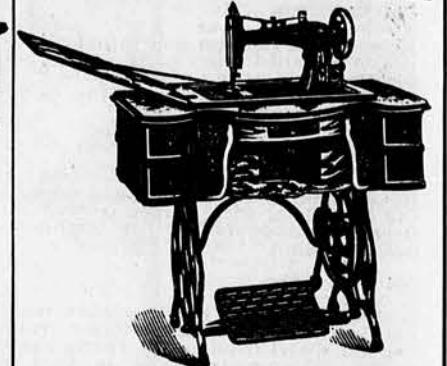
I. Does the housekeeper need a vacation—a change? If so, how shall she take it and where? Suggestions and encouragement are very much needed on this subject. The average house-

## Kansas Farmer Sewing Machines

No Better Machines Made. "The Machine of Merit." A Ten Year Warranty.



NO. 1.



NO. 2.

Automatic drop cabinet, quarter-sawn oak, a ball-bearing stand, fitted with automatic belt replacer.

A few features are: Disc tension with automatic release, cam driven, positive take-up, steel forged, double width, four motion positive feed, steel-capped needle bar, loose pulley device for winding bobbin, automatic bobbin winder, automatic stitch-regulator with nickel steel face plate.

The attachments are very complete consisting as it does of the following: Ruffler, tucker, binder, braider, four hemmers of varying widths, quilter, feller, shirring slide, cloth guide, twelve assorted needles, six bobbins, filled oil can, two screw-drivers and profusely illustrated book of directions.

Our offer—We deliver prepaid our No. 1 machine, including a year's subscription to the Kansas Farmer for only \$21.00; or we will deliver the machine free for a club of 40 subscribers and \$40. Address all orders to

Not so perfect as No. 1, but good enough. Automatic lifting mechanism, embossed drop front, polished oak case, ball bearing stand, improved high arm sewing head, solid steel foot attachment.

The steel foot attachments, furnished without extra charge, and packed in a neat, velvet-lined box, are complete in every detail, and with them one can produce any and all kinds of fancy work. A full set consists of the following: Ruffler, tucker, binder, braider, hemmer foot, feller, quilter, four hemmers of varying widths, cloth guide and screw, six bobbins, twelve needles, filled oil can, two screw drivers and well illustrated book of instructions.

Our offer—We deliver prepaid our No. 2 machine and a year's subscription to the Kansas Farmer for only \$18.00, or we will deliver the machine free for a club of 35 names and \$35. Address all orders to

THE KANSAS FARMER CO.,

Topeka, Kans.

keeper does not see how she can spare any time for the much-needed rest and change.

II. Under this subject plans for an outing for the neighborhood could be discussed which would bring good results and also other ways of having a change could be suggested.

III. This paper or talk should give ways and means of having picnics, telling how they may be made enjoyable, giving menus for the lunches, etc.

##### Girls.

Girls of all ages and countries pass through a phase of worshiping false gods. The false gods have nothing to do with religion. They are just fads and fashions of the moment. Girls "catch them," as they caught mumps and measles in the nursery.

Some girls recover completely from the attack. Others remain all their lives half-worshippers at the shrines of their particular false gods.

Hockey to some girls means as much as a carved heathen deity does to a Hindu. "Having a good time," represents the whole gospel of life to another girl.

Fashions and frocks are the fetishes of some feminine young persons, and none of these things matter in the least so long as they are "grown out of" in due time, and so long as the love of the favorite false god is not allowed to grow too strong.

Did you read that story the other day of an American girl who made a false god of muscles and her skill at wrestling?

She challenged her father to a fight, and in the first round she threw him down, broke one of his legs, and so badly injured him that he will have to remain in hospital for several months.

She worshiped at the shrine of a very false god indeed. Proud of the hardness of her muscles, her skill and

bodily strength, she forgot to worship the real god of womanliness, tenderness and kindness.

She sacrificed everything at the shrine of her particular false god. In the early religions and in the religions of some savage races to-day, human lives are offered up to please grotesque wooden idols.

She sacrificed the love and humanity she ought to have felt toward her father to the vain glory of showing off the power of her muscles.

The other day I went to see a number of girls learning ju-jitsu, which is the Japanese form of pugilism or prize-fighting. I asked one of the girls why she wanted to be a ju-jitsuite.

"Because it would be such a splendid thing to be able to knock a man down," was her astonishing answer.

Do you think it a very noble accomplishment for a woman to fell an unoffending man to the ground, girls? I don't.

One of the pupils in this remarkable class related to the other girls with the greatest glee how a big brother had laughed at ju-jitsu and said it was nonsense for girls to learn fighting.

"So I grasped him tight, and in another moment he came crash down on the drawing-room floor."

The other girls were green with envy. They were worshipers of false gods, and their idea of heaven on earth was to "crash" a big brother down on the drawing-room floor!

A woman's real strength lies in her tender feelings, her heart, and sympathies, in love, loyalty, courage, patience, and all other beautiful qualities which constitute womanhood.

If she attempts to match her muscles with those of a man in ninety-nine cases out of a hundred she will be beaten.

I dined the other night at perhaps the most fashionable restaurant in London. One other woman and myself

were the only members of my sex present who did not smoke after the meal. All those women who disfigured their mouths with cigarettes were worshipers of false gods. They wanted to be like men. But why on earth try to look like men when women are so much more adorable?

#### Spraying.

(Continued from page 579.)

attacks the blossom and causes much injury and it also attacks the young, newly developed fruits and as you have suggested injures the crop by causing a premature dropping of the fruit as well as disfiguring the fruit which remains on the trees."

In our own work, we began early enough to cover the major portion of our home orchards of eighty acres with this first spraying. From the fact that the Bordeaux mixture applied last season did some harm by russetting some varieties of apples, we, this year, are using only 3 pounds of sulfate of copper, 5 pounds of hydrated lime, and 2½ pounds of Eagle brand arsenate of lead.

The month of April has been so very warm and dry that the orchards have been forced into bloom with marvelous rapidity. This upset our calculations and we failed to get ready to spray six of our contract orchards early enough to cover them before the opening of the bloom.

When the blossoms commence to open quite freely, we have not thought it wise or safe to spray, and we are compelled to delay further work until after the petals of the blossoms have fallen, when we will spray the second time. We usually follow the second spraying a few days later with a third, which acts as a check on the second. About the middle of July, we hope to spray again and then to spray all our winter varieties from the 10th to the 15th of August, hoping in these later sprayings to check the work of the second brood of codling moth.

#### Spraying for Codling Moth.

I write you in regard to the latest formula for spraying all kinds of fruit trees. I have been using London purple, Paris green, and two years ago used white arsenic but failed to see any benefit from them. I have been spraying especially for codling moth. I sprayed twice two years ago with white arsenic and lime. The result was a failure as far as I could see. I would like to give this matter a fair trial, and would like to get the latest spray formula with which to make the test. Will you give me the desired information through the columns of THE KANSAS FARMER? J. A. BROWN.

Shawnee County.

For insecticides, Paris green, London purple, and arsenate of lead have been most used. Paris green has been found to be somewhat variable in composition, and liable to cause injury by burning the foliage and fruit. From eight to twelve ounces to one hundred gallons of water has been found to be effective, the larger amount used when canker-worms had attained considerable size before spraying. Four pounds of quicklime, well slaked, added to one hundred gallons of water has greatly decreased the danger of "spray burn."

Paris green has sometimes been found to be adulterated, in which case it is of no value.

London purple has been less uniform in composition and more liable to cause "spray burn." It is usually stronger in arsenic, and six ounces to one hundred gallons is about the maximum used.

Arsenate of lead has been the most satisfactory insecticide. It has been less liable to cause injury, and has adhered to foliage and fruit very much longer. It is rather more expensive than Paris green, but it has been well worth the difference in price. The commercial brands of arsenate of lead sold as "Disparene" and "Target Brand" have proved satisfactory. The cheapest, and at the same time a very satisfactory form of arsenate of lead was largely used at Hutchinson during the season of 1906, and was made by

combining acetate of lead with arsenate of soda in the proportion of three pounds of arsenate of soda to seven pounds of acetate of lead. This mixture was satisfactory in every way.

A good spray pump must have sufficient force to cover the plant treated with a very fine mist. The pump must have force and a good nozzle must be used. There are several good forms of nozzles. The Vermorel, Demorel, and Mistry have all given good service and satisfaction.

Spraying for the codling moth is begun when the petals are fallen, and should be given as soon as possible after that stage. The calyx leaves are well open and are uppermost, and it is essential that poison be deposited there as the greater number of the early brood enter the small apple at the calyx.

The small apple grows rapidly and the second spraying should follow the first in at least ten days. The larvae that escape the first spraying will be mature insects within a short time after the first apples drop, and a spray should be given to protect the fruit from the second brood. At intervals of about two or three weeks, spraying for later broods has proved profitable. —Extracts from Kansas State Agricultural College Experiment Station Bulletin on "Spraying."

#### San Jose Scale—Protecting Trees from Borers.

Will you please tell me what trees the San Jose scale works on? Will it hurt peach trees to keep them wrapped in bran sacks through the summer? J. VAN NORMAN.

Rice County.

The San Jose scale has been found on nearly all of our deciduous trees, on some species of shade trees, and the common hedge, or Osage orange. But it seems especially fond of fruit trees, peach, apples, and pear, with preference in order named.

The most effective way to avoid injury from borers seems to be to mound the trees with earth. In large orchards, this is done by throwing a furrow about the tree, going in four directions, and finishing the mound with spade or shovel. The only objection urged against cloth wrappings is that when the cloth is removed there is danger of sun scald for the lately protected wood. ALBERT DICKENS.

#### Potato Cultivation in Colorado.

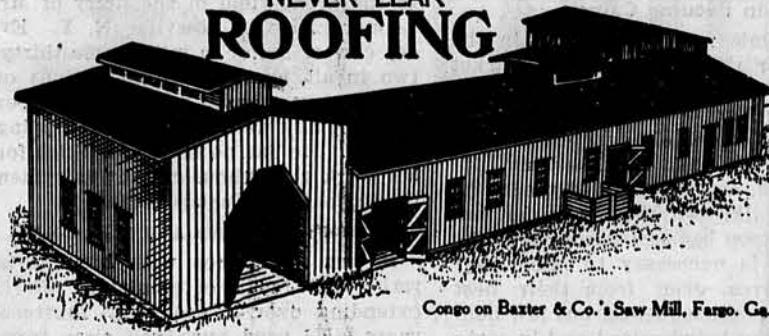
Use alfalfa sod whenever possible. Plow in the spring, from the latter part of April to the middle of May, usually about eight inches deep. Finish the day's work by harrowing all the land that has been plowed with a smoothing harrow. After the ground has been plowed see that it is well leveled so that there will be no high or low places. Harrow a sufficient number of times to put the ground in fine tilth; use a disk if necessary.

The seed is planted with one of the standard makes of planters. As four horses are commonly used on a planter, the ground will be pretty thoroughly packed. To relieve this condition the ground is cultivated immediately after planting. This will help to kill out weeds and alfalfa. A heavy four-shovel cultivator, drawn by four horses, is used. The shovels are set to throw the soil toward the rows and to run as deep as they will go. The depth will vary from eight to twelve or thirteen inches. This operation leaves the soil loose, but more or less lumpy, and with an uneven surface, especially on heavy soils. The smoothing harrows should immediately follow the cultivator to reestablish the soil mulch.

The number of cultivations depend upon weather conditions and upon the rapidity of the growth of the vines. The cultivator is used a second time as soon as the plants are large enough so that the rows can be easily followed. This time the shovels are not run quite so close to the row, but to the same depth unless the plants are much developed. Sometimes two cultivations are all that are given, but ordinarily a third follows the second by a week or ten days, and if the vines do not get too large or irriga-

# CONGO

"NEVER-LEAK"  
ROOFING



Congo on Baxter & Co.'s Saw Mill, Fargo, C. S.

## Send for Free Sample—To-day!

DOES your roof leak? Then get Congo.

Congo is the best ready roofing ever offered to the man who is looking for something good, reliable and not too expensive.

It is called "never-leak" Roofing. This sounds like a big claim to make, but we know Congo. Try it. Cover that old roof, which you have repaired for years, with Congo, and you'll find it the most durable, proof-against-everything kind of roofing made.

Economical? Yes, for your bills for repairs on other kinds of roofs in a few years would pay for Congo. It's not affected by heat, cold, rain or snow. It is soft and pliable—like rubber—but infinitely superior because it will not crack, buckle or shrink. Congo will give maximum service at minimum cost. Cheaper than shingles and will outlast them. Isn't Congo worth investigating?

Write for a Free Sample. Test it. Soak it in water as long as you like. Water can't hurt Congo. To heat, cold and acid fumes it is also impervious.

Congo is the roof you want. Let us hear from you.

### UNITED ROOFING AND MFG. CO.,

Successors to Buchanan Foster Co.,

537 West End Trust Bldg., Philadelphia, Pa.

Chicago

San Francisco

## Spasms St. Vitus' Dance

Many persons who suffered untold agonies from epilepsy, fits, spasms, and St. Vitus' Dance are today well. The strengthening influence of Dr. Miles' Nervine upon the shattered nerves having restored them to perfect health.

"I endured agony that words cannot express from St. Vitus' dance, which followed a very severe spell of rheumatism. I doctored with a physician; but the more I took of his medicine the worse I got. My mother's devotion saved me. After she had become almost heart-broken, as well as physically exhausted from constant care, by the advice of a neighbor she procured a bottle of Dr. Miles' Nervine. From the first dose to the last a continual change for the better was noticeable, and when I had taken eleven bottles I was well, and in robust health."

EDWARD D. REAM,  
North Manchester, Indiana.

"Our little boy Harry, had spasms for three years, and although we consulted with many physicians, he continued to grow worse until he had ten spasms in one week. About that time our attention was called to Dr. Miles' Nervine. We began giving it to him. His improvement seemed slow, but when he had finished the fourth bottle the spasms had disappeared, and when I had taken eleven bottles I was well, and in robust health."

MRS. EMILIE M. TINDALL,  
Hastings, Neb.

Dr. Miles' Nervine is sold by your druggist, who will guarantee that the first bottle will benefit. If it fails, he will refund your money.

Miles Medical Co., Elkhart, Ind.

### 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

## VARIOCOELE

A Safe, Painless, Permanent Cure GUARANTEED  
30 years' experience. No money accepted until patient is well. CONSULTATION and visitation FREE, by mail or at office.

DR. G. M. COOK, 916 Walnut St., Kansas City, Mo.

All of the gold produced in the entire world last year was worth \$390,000,000. Kansas in the same time produced \$468,648,606 worth of farm products and live stock.

So live that you may be remembered for something more than a loud vest.

## Dairy Interests

### Some Good Substitutes for Skim-Milk in Feeding Calves.

The number of cows used in the dairies for the production of market milk is increasing every year, especially in New York State.

It is unfortunately true that those producing market milk, selling the whole milk, as they do, and producing no skim-milk, feel that they can not afford to keep back from shipment the milk that is necessary to raise their heifer calves, even from their best cows. As a consequence, but few heifer calves are being raised and in some cases none at all on those farms where market milk is made.

#### THE EFFECT OF HEAVY FEEDING.

There are some dairies where the cows—usually the black-and-whites—are crowded to their utmost capacity, being fed from 12 to 14 pounds of grain a day in winter, and sometimes even in summer. This heavy feeding, very often of an unbalanced ration, and sometimes nearly the whole year through, except when pastures are at their flush, produces a great quantity of milk; but it also wears out the cow and too often results in her being a non-breeder.

Those who practise such heavy feeding and secure such large production are perfectly aware of the consequences which will inevitably follow such practises. They do not seek to maintain their dairies by raising their heifer calves from their best cows, but discard the cows just as soon as they become unprofitable, and buy in the open market to replace the worn-out cows.

This can have only one result: large producing cows are bound to become scarcer and higher in price each succeeding year. In fact, there is every indication of such a condition to-day. Large milk producers are scarce and high in price. They cost double what they did ten years ago. They can not be bought in those sections where market milk is made. They are procurable in large numbers only in sections so far from the railroads that it is impossible to ship milk. This source of supply is bound to become exhausted in time, unless some means is found of raising the heifers by a substitute for skim-milk.

#### SKIM-MILK OR A SUBSTITUTE NECESSARY.

Every thinking dairyman realizes that his wisest policy is to maintain the highest producing power of his herd by the use of a pure-bred sire from a deep milking dam and of a deep milking strain; to keep the heifers of his best cows and grow them into cows; but he is prevented from so doing by the fact that he has not the necessary skim-milk. In such dairies as I have referred to, you will usually find a pure-bred Holstein sire; but I regret to say that his selection is too often made because he can be bought at a low price, rather than because his dam was a great producer and was descended from a heavy-milking family. It is unfortunate that registry does not guarantee anything but purity of blood and is not a guarantee of superior ancestry.

A sire can reproduce only what he inherits; if his dam and female ancestors have been heavy producers, he will have that inheritance of production, and if prepotent he can transmit this characteristic to his offspring. Such a bull is invaluable. If, on the contrary, his dam and female ancestors were not large producers, then all that he inherits, and consequently all he can transmit to his progeny are qualities of a low order. He is no better than a scrub—and of all scrubs, the pure-blooded animal that merits that name is the worst.

If those using a pure-bred sire would only realize that the bull reproduces the qualities, good or bad, which his dam and female ancestors had for the pail or churn, in every heifer he sires, they would then appreciate the fact that he fixes his own inherited qualities, good or bad, in the dairy or herd

for at least five years. If the qualities are good, they will last longer than the five years; and if they are bad, it will take at least that length of time to eradicate them.

We have more than once referred to the great yield of the dairy of Mr. Leonard Rice of Lowville, N. Y. Every cow or heifer in milk, some thirty-two in all, averaged 10,236 pounds of milk last year and a return of \$140 per cow for milk delivered at his shipping station. He has no better facilities for his work than thousands of dairymen throughout the East possess.

#### METHODS OF L. RICE AND H. E. COOK.

It was no chance with him; it is rather the result of persistent effort, extending over a space of fourteen years. He used pure-bred sires from only deep-milking dams and of deep-milking strains, keeping the daughters of only his best and deepest milking cows. He not only bred them right, but he developed them by proper feeding and care, and he has one of the best, if not the best dairies of grade Holsteins that I ever saw. The average weight of the cows will be close to 1,400 pounds, and they start off giving from 50 pounds to 60 pounds each, a day, and in some cases even more.

Friend H. E. Cook averaged over 10,000 pounds per cow for his home dairy herd last year, including, if I am correct in remembering, six 2 or 3 year olds out of a total of seventeen. He has not so good a lot of cows as Mr. Rice, but he also has developed them by judicious feeding to their full capacity, not spasmodically, but from year to year and from heiferhood, each year increasing the production over the year preceding. Unless I greatly mistake, Mr. Rice will have to look to his laurels this year, or our friend Cook will wrest them from him.

Neither of these men sell their heifers from their best cows; they raise them.

There is hardly a farmers' institute held in the great market milk-producing sections where the question of how to "raise calves without skim-milk" does not come up. It is an all-important question to the future of the dairy interests of New York State and other States where the steady production of market milk is necessary from year to year.

In my own dairy, averaging 200 head of milking Jerseys, we not only sold milk in our own dairy stores, but cream and butter as well, so that as a rule we had plenty of skim-milk to feed the calves and pigs. There were, however, times when we ran short of skim-milk, as we raised from 100 to 150 registered Berkshires each year; and we then used as a substitute for skim-milk an old, tried, and well-established meal, "Blachford's Calf Meal." We found it a splendid substitute. The calves did well on it, made good growth, and grew into strong, rugged heifers and bulls. I have no hesitation in recommending it if the directions accompanying it are carried out. This meal has been on the market for many years.

#### SOME USEFUL CALF FEEDS.

The Schumacher Calf Meal is another substitute which many dairymen who have used it speak very highly of. I have never used it myself, but am told that the base of this meal is "pure" oatmeal, with the addition of wheat-meal heated in a vacuum to nearly 500°, pure flaxseed-meal, and dried milk, all finely ground." If this is correct, and I have no reason to doubt it, then I can readily understand that it should be a good substitute for skim-milk in raising calves. Its composition is of such a nature that it should be readily assimilated and should produce a healthy, vigorous growth.

While at Mr. H. E. Cook's, Denmark, N. Y., last winter, I saw a number of heifers coming a year old which had just been taken in for the winter. They had been raised without skim-milk through the use of powdered milk and Red Dog. They were a splendidly grown lot, looked unusually well, thrifty and growthy, and their skin and eyes indicated that they were in good health and doing well. They were by his pure-bred Holstein bull out

## Tubular Separators

**Are All Built Exactly Alike. The Best that Knowledge and Experience Can Build Alone Goes Out of This Factory. We Make No "Seconds."**

When you purchase a **Tubular Separator** you buy not only the best separator that is built, but also exactly the same separator that every other tubular purchaser gets.

There are no different grades of Tubulars built. The best that can be built is what the dairyman needs, and it's what he gets who buys a Tubular. Some "bucket bowl" manufacturers advertise and advocate two or three different qualities of separators, firsts, seconds, thirds, etc. They are bound to get a man's money if he has any. They don't furnish even their own best always, but try never to miss a customer. If the present-day sale is made these hucksters of different grades don't care for the dairy service of the future.

The Tubular looks to the future interests and profits of customers. Every buyer of a Tubular gets not only the best separator that the world knows, but he gets the kind he pays for, and it is exactly the same separator that every other purchaser gets.

There is only one grade of Tubular—the suspended bowl, bottom feed, enclosed gear, self-oiling, low-down supply tank, cleanest skimming machine. Each is perfectly built, all are alike, all are guaranteed the same.

You're always safe when you buy a Tubular. If several grades were made you would not be safe, and might have a mistake to pay for. Be safe and get the best at the start; the best is not too good for any dairyman—the best is always the cheapest. Write for catalog No. 163.

**THE SHARPLES SEPARATOR COMPANY,**

West Chester, Penna.

Toronto, Can.

San Francisco, Calif.

Chicago, Ills.

of his cows that had made an average of over 10,000 pounds each.

I wrote Mr. Cook to ascertain his exact mode of feeding and herewith append his reply, feeling that this is a matter that will appeal to hundreds of our readers as a means of raising calves from their best cows without using skim-milk:

"We feed 5 pounds of new milk twice a day from two to three weeks, depending upon the calf, then increase to 6 pounds for a short time, then add skim-milk powdered.

"How long this shall be fed will depend. For best results, not less than six months.

"We add grain as soon as the calf will eat it. For mixing with milk, nothing is better than Red Dog flour.

"I would not mix any solid food with the milk just to get the calf to drink it. Much indigestion follows this practice. When the calf will eat solid feed dry, then it is safe to put it in the milk.

"For grain feed, dry, the regular cow feed is about as satisfactory as any, or 4 parts of bran, 1 part of oil-meal, and 1 part of cornmeal.

"The whole danger lies, as I see it, in injuring the calf's power of digestion.

"The milk powder costs nearly 3 cents a pound, delivered, and we feed about 1 pound a day, three feeds.

"It will cost not far from \$15 to get a calf to 6 months, not counting care."

This powdered milk is put up at factories for the making of dried skim-milk, dried whole milk, and dried cream in many sections of New York State. As I understand it, this powdered milk which Mr. Cook uses has been discarded as not quite up to the standard set for that which is sold to the trade or bakers. But for feeding calves it is as good as the best.—Valancey E. Fuller, in Practical Dairyman.



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

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

## Peerless Cream Separator

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

Waterloo Cream Separator Company  
Dept. C, Waterloo, Iowa



FOR THIS  
\$10  
WAIST HIGH

## NEW LOW DOWN AMERICAN CREAM SEPARATOR

Guaranteed to skim closer than any separator in the world. Sold direct from the factory. We are the oldest exclusive manufacturers of hand separators in America. You save all agents', dealers' and even mail order house profits. We have the most liberal 30 DAYS' TRIAL freight prepaid offer. Write for it today. Our new low down, waist high separator is the finest, highest quality machine on the market; no other separator compares with it in close skimming, ease of cleaning, easy running, simplicity, strength or durability. It is our own manufacturer's guarantee product. Write for our great offer and hand some free catalogue on our new waist high model. Address, AMERICAN SEPARATOR CO., BAINBRIDGE, N.Y.



## \$26<sup>50</sup> SEPARATOR

HAVE YOU SEEN OUR LATEST IMPROVED 1908 MODEL ECONOMY CREAM SEPARATOR? Built on the low down order, easy running, simple beyond comparison. Skims to a trace. The easiest running, closest skimmers, strongest and by far the best cream separator ever made. Prices are low, they are for attention. Look in one of our latest Big Catalogues for cream separators. If you haven't a Big Book borrow your neighbor's; otherwise before buying a cream separator anywhere at any price, on a postal card addressed to us simply say "MAIL ME YOUR LATEST AND GREATEST CREAM SEPARATOR OFFER." Address, SEARS, ROEBUCK & CO., Chicago.

dependent upon the locality, the construction, and the cost of material and labor. Such a building usually consists of a main work room, engine and boiler room (including space for refrigerator machine), coal room, refrigerator, storeroom, and office.

Machinery for a hand-separator plant, consisting of 15-horsepower boiler, 10-horsepower engine, combination churn with a capacity of 600 pounds of butter, and other necessary apparatus, will cost approximately \$1,200. Machinery for a whole-milk plant will cost about \$1,850. This equipment will handle from 1,000 to 1,200 pounds of butter per day. If a refrigerating machine is included the cost will be from \$600 to \$1,000 more.

The total cost of a creamery would therefore vary from \$2,000 for a simple hand-separator plant without artificial refrigeration, where labor and material are cheap, to \$4,250 for a whole-milk plant including artificial refrigeration and a higher cost of labor and material.

The Department of Agriculture is prepared to furnish information for the proper organization of creameries and cheese factories, and upon request will supply plan of organization, list of machinery, and plan for creamery. Correspondence should be addressed to the Dairy Division, United States Department of Agriculture, Washington, D. C.

#### Farmers Caught on Separator.

EDITOR KANSAS FARMER:—Enclosed find clipping from the Cedarvale Commercial:

"Ida Groves, Ia.—[Special to the Des Moines Capital.]—A great sensation was created here when between sixty and seventy farmers in Ida County received notice from the United States Circuit Court of Appeals to the effect that the so-called Economy cream separator they had purchased of Sears, Roebuck & Company, had been declared an infringement and they were restrained from using the separator. The farmers who have received notice have consulted lawyers as to what they had better do and the lawyers advised them to break up and sell the old separator as old iron and then come to town and buy new ones. The mail order house has been restrained by the court from manufacturing and selling any more of the separators, and they were also forced to bring their books into court and show to whom they had sold the machine. The users are now being notified that they must not use them."

This crusade is being waged against innocent purchasers of Economy separators in Iowa. Is the same thing not liable to be carried on in Kansas, Oklahoma, Missouri, and other States?

Is there no recourse by which an innocent purchaser may be reimbursed for his investment? It does not seem just for the courts to restrain innocent purchasers without seeing that somebody should make good the outlay.

The clipping does not say what company Sears, Roebuck & Co. were infringing upon, but probably that is none of our business. It does seem right that they should pay the infringement and royalty enough so that what were sold should remain in the hands of the innocent purchaser and the use of the same should be allowed.

Cowley County. SUBSCRIBER.

The United States Circuit Court of Appeals is a court of appellate jurisdiction, not of original jurisdiction; it is therefore probable that the notices are merely copies of a decision of that court sent out to "scare" people. They are not issued by authority or direction of the court.

It is a rule that "an actual recovery of a full royalty for making and selling to others to be used, operate as an implied license to any purchaser of the thing thus made and sold, to use it to the same extent that he could lawfully have done, if the maker had been licensed to make and sell it" (Walker on Patents). On the other hand, nothing short of such full recovery will operate as an implied license.

The owner of a patent can collect from an infringing maker and seller of the patented article the full royalty above mentioned. Or he can collect

part from such maker and seller and part from the subsequent purchasers and users; thus he can collect from the maker and seller the profits which he, the maker and seller, has made; and also can collect from a subsequent purchaser and user the profits which he has made from such use; and he can enjoin both from further use.

If, therefore, Sears, Roebuck & Co. have been compelled to pay to the owners of the patent the full royalty, then the owners of the patent can not further prosecute the purchasers from Sears, Roebuck & Co.; but unless such full royalty has been collected, then the owners of the patent can further prosecute, by civil suit, each individual user of the infringing article.

Sears, Roebuck & Co. are not legally liable to the purchasers for the infringement, as all persons are bound to take notice of United States patents. Sears, Roebuck & Co. might, however, make themselves liable by agreement.

It is customary for the owner of an infringed patent to prosecute the principal infringer and collect full royalty from him; and it is also customary for the principal infringer to protect those purchasing from him, though not legally bound to do so in the absence of an agreement. Although technically there can be no "innocent purchaser" of an infringing article (except in a case not here involved), it is usual in the trade to settle the differences between the principal parties, without disturbing those who have purchased goods in the open market without actual notice of the infringement.

It is well not to cross a bridge until it is reached. I do not consider the showing sufficient to advise THE KANSAS FARMER readers to discontinue the use of their Economy separators, though it should put a prospective purchaser on guard. A statement from Sears, Roebuck & Co. would seem proper.

J. A. ROSEN,  
Attorney and Counselor in Patents,  
Trademarks, and Copyright Causes, Topeka, Kans.

This inquiry was submitted also to Sears, Roebuck & Co., who replied: "We bind ourselves to protect every customer in every way as to any claimed infringement of patents, trademarks, or copyrights on any goods bought from us in the past, present, or future."

#### The Wrong Boy.

A recently appointed woman supervisor of the public schools one day happened in a school where a young incorrigible was being punished.

"Have you ever tried kindness?" inquired she of the teacher.

"I did at first, but I've got beyond that now," was the reply.

At the close of the lesson the supervisor asked the boy to call on her the following Saturday.

A boy arrived at the hour appointed. The hostess showed him her best pictures, played him her liveliest music, and set him a delicious lunch, and then thought it time to begin her sermon.

"My dear," she began, "were you not very unhappy to stand before all the class for punishment?"

"Please, ma'am," broke in the boy, with his mouth full of cake, "it wasn't me you saw. It was Billy, and he gave me a dime to come and take your jawing."—Philadelphia Public Ledger.

#### India School Boy Patriots.

The boys of the Kishoreganj school football team recently refused to play for a cup on the ground that it was of foreign manufacture. As a result twelve of the head scholars are expelled.—Calcutta Statesman.

The average corn or wheat crop is worth about \$10 per acre, while the average alfalfa crop is worth \$25 if sold or \$47.50 if fed. Get busy with some alfalfa.

#### For Prevention of Blackleg.

"Lebanon, Ky., April 29, 1908.  
"Parke, Davis & Co., Detroit, Mich.  
"Gentlemen:—It gives me great pleasure to inform you that during the last six years, since using your Blacklegoids, I have not lost a single cow or calf. I vaccinate thirty or forty cattle each year, as soon as they appear



**"No Trusts"**  
**"No Catalogue Houses"**

# DE LAVAL

## CREAM SEPARATORS

First—Always Best—Cheapest  
For Thirty Years

### The World's Standard

As much better than other separators as other separators are better than gravity creamers.

Send for catalogue of 1908 Latest Improved Machines.

**THE DE LAVAL SEPARATOR CO.**

RANDOLPH & CANAL STS.  
CHICAGO  
1213 & 1215 FILBERT ST.  
PHILADELPHIA  
DRUM & SACRAMENTO STS.  
SAN FRANCISCO

General Offices:  
74 CORTLANDT STREET,  
NEW YORK.

178-177 WILLIAM STREET  
MONTREAL  
14 & 16 PRINCESS STREET  
WINNIPEG  
107 FIRST STREET  
PORTLAND, OREG.

on my premises. For the benefit of stock-raisers who have not used Parke, Davis & Co.'s Blackleg Vaccine, and who may not be familiar with it, I wish to say that I lost several hundred dollars' worth of cattle most every year before beginning its use. I heartily urge farmers to make use of your product, as it costs only a few cents for a vaccination and saves so much.

Very truly yours,

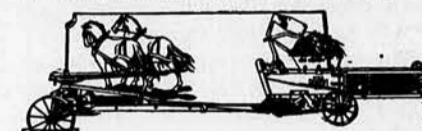
"F. J. ROBERTS."

#### Baling Hay is Profitable Business With the Right Sort of a Machine.

A farmer with a good team of horses can make some nice money during the summer months when the other work is light by running a hay baler. The New Century Hay Press Company are in receipt of a letter from J. G. Follis of Lenox, Iowa, in which he states that he purchased a New Century Hay Press in December, 1907, and in two months time had made enough money to pay for it and all the help to run it. He states in his letter that he cleared, above all expenses, \$130.00 in three weeks' time after getting the machine paid for. Mr. Follis seems to be decided in his opinion that the kind of a machine a man operates has a great deal to do with his profits.

If Mr. Follis can make \$130 in three weeks' time with his hay baler, how about the farmers who hired Mr. Follis to bale their hay? We believe it would be to the interest of the farmer who hires his hay baled to get into correspondence with the New Century Hay Press Company of Kansas City, Kans., who manufacture the machine bought by Mr. Follis, and whose advertisement appears on page 576. An all steel hay baler like the New Century will last a life time and most every farmer who raises any hay for the market could well afford to buy one. Such a machine will soon pay for itself in the difference between the price it would cost you to do your baling and the price you would have to pay some one else to do your baling.

The machine purchased by Mr. Follis is illustrated in the sketch below.



#### One Hundred Thousand Pairs of Spectacles Given Away by Dr. Haux Spectacle Co.

If you will send your name and address to the Dr. Haux Spectacle Co., St. Louis, Mo., they will send you their free home eye tester and full particulars how to get a pair of handsome rolled gold bridge spectacles without one cent of cost.

They want to prove to every spectacle-wearer on earth that the Dr. Haux famous perfect vision spectacles are really and truly ever so much better than any you have ever worn before, and therefore have arranged to give away at least 100,000 pairs of perfect vision rolled gold bridge spectacles in the next few weeks, in order to introduce their wonderful glasses to the largest number of spectacle wearers in the shortest possible time.

Write them to-day for their free eye tester and ten karat rolled gold bridge spectacle offer. Dr. Haux Spectacle Co., St. Louis, Mo.

U S U S

WHY DOES THE  
IMPROVED 1908  
**U. S.**

CREAM SEPARATOR  
Win So Many Laurels?

Because it has that solid, low frame; most simple yet efficient bowl, holding World's Record for cleanest skimming; so many conveniences; and the easiest running separator made.

If you have cows, you need a separator, you need the best separator. That one is the **U. S.**

Simply send for catalogue "No. 91" read it carefully, and we leave it to you, which is best.

ADDRESS ALL LETTERS TO  
Vermont Farm Machine Co.  
BELLows FALLS, VT.

DISTRIBUTING WAREHOUSES AT:  
Chicago, Ill.; La Crosse, Wis.; Minneapolis,  
Minn.; Kansas City, Mo.; Omaha, Neb.;  
Tucson, Ariz.; Salt Lake City, Utah; Denver,  
Colo.; San Francisco, Calif.; Spokane, Wash.;  
Portland, Ore.; Buffalo, N. Y.; Auburn, Me.;  
Montreal and Sherbrooke, Quebec; Winnipe-  
g, Man.; Hamilton, Ont.; Calgary, Alta.  
496

S U S U S

C U T S

Engraving Dept.  
of the  
Mail and Breeze  
(Dopey)  
makes our  
CUTS.

**The Poultry Yard**

CONDUCTED BY THOMAS OWEN.

**Poultry Notes.**

This wet weather admonishes us that dampness is fatal to young chicks. Better to confine them to their dry coops than to allow them to tramp through the wet grass. It is a good idea to have the coops quite large so that there may be room enough for the chicks to have some exercise while waiting for the ground to dry up.

Don't expect all chicks hatched from purchased eggs to develop into prize winners for they won't do it, and this is a blessing, for if they did, the purely fancy poultry business would be dead in two years.

As soon as the growing chicks are far enough advanced, carefully cull out all the off-colored, crooked backs, crooked toes, those that show a clearly defined disqualification; in fact, all that are inferior. These can be disposed for table or market purposes and their places allowed for those of greater value.

Whitewash the inside of the poultry house, and clean it out quite often. Open the doors and windows to air them frequently. It will be well to examine the legs of every fowl and chick on the place and if they are getting rough, wash thoroughly with soap and water. After drying them anoint with a mixture made as follows: Three ounces sweet oil, 1 ounce sulfur, 10 drops carbolic acid. Wait a week and anoint again.

A great many breeders start out with a fine lot of growing chicks, who becoming indifferent during the summer months, leave their stock to suffer in the hot sun, dry weather, or from insufficient and improper food, scarcity of water, and filthy coops and roosts, which results in retarding and stopping their growth, and it will be discovered in the fall that such stock is not as large, neither is it doing as well as that of some other more careful breeder.

We are an advocate of late-hatched chicks for as a rule they do not thrive. If they are kept in the shade during very hot weather, until they get their first feathers, they will thrive well, but if allowed to stand in the sun during the day they will appear dull and sleepy, chirp mournfully, make indifferent attempts to eat their food and finally roll over and die, and the cause will evidently be the effect of the hot sun.

In an experiment made to ascertain the cause, dissection of the dead chicks revealed nothing wrong with the body, but the brain was found to be full of blood, which was proof of the destructive effect of heat, and it also proves that there is a necessity for shade to keep young chicks healthy during the hot summer months.

Do not feed the little chicks slop or dough. A little care in this matter of feeding will save many valuable lives in your flock. Wheat, cracked corn, Kafir-corn, and millet seed are the staple foods. Corn, fed in the shape of a johnny-cake, made in the usual way, is also a good food. Feed plenty of green stuff, cut fine. If you have no cutter, a few clips with a shears will answer. Give them plenty of pure

water but in such shape that they can not get into it, for wet is death to chicks. Give grit and lots of it and plenty of charcoal. The care given at this time will ensure their being candidates for the show room or the family dining table.

**Four-Year-Old Eggs.**

Prof. Hendricks of the University of Aberdeen has this to say of his experiments in keeping eggs in water glass:

"Usually eggs kept in this solution when taken from it show a nice appearance when wiped off. The shells look clean and nearly like fresh eggs. Even those kept several years had the look of fresh eggs."

"Eggs kept other ways than in water glass nearly always show a shrinkage of their contents and rattle when shaken. Those kept in water glass do not shrink as these others by evaporation."

"When kept in this solution a few months they could scarcely, if at all, be distinguished from eggs laid but yesterday. The really fresh egg is not the day-old egg, but the egg laid an hour or two ago. The fresh laid egg holds a flavor distinct from what it will twenty-four hours after being laid. The air plays this part through its pores, taking off something, and adding something."

"But eggs which have been kept in water glass three or four years have made a change easily recognizable to eye and taste. The white has turned a pink in color and quite thin and watery, with a slight taste of soda. And yet the white coagulated by cooking and the taste was not unpleasant."

"Eggs kept four years in this solution were analyzed. There was little change in their composition. All the change found was due to the small amount of soda entering the egg, and increasing its alkalinity slightly. There was no decay, no entering of the composition of the shell into the egg, and, as analysis shows, but very little also of the water glass—sodium silicate—which fills the pores of the egg, hardens there, excluding air and all substance or life that would set up decay."

"The water glass proper is syrup thick and contains when prepared for preserving eggs 2.76 per cent silica (common but pure sand atoms), 1.20 per cent soda and 0.01 per cent potash.

"As it is rather a new preparation some people have not heard of it, despite its fast growing popularity in the preservation of eggs."

**Poultry on the Farm.**

MRS. M. S. FLEHARTY BEFORE CADMUS INSTITUTE.

Poultry on the farm as the farmer raises it, is, I think, what we are to take into consideration, and not the poultry fancier, with all his modern improvements and accommodations.

We might say a great many nice things about the raising of poultry if all we knew about it was hearsay. The actual experience is a far different matter. Better follow your own ideas, if you are making a success, than to try and follow some one else, and fail completely. The first of all things to be used is good common sense and grit to stay with the work even if things do get turned upside down occasionally, which they are sure to do in poultry raising.

The farmer (or his wife rather) does not have all the modern conveniences that is claimed by those who write on the subject, as necessary to make it a success, so the proper way will be to discuss poultry on the farm, as it is really raised by the farmer; its successes and failures according to the accommodations and general surroundings, as water, grass, buildings, and etc. As the poultry is usually raised and cared for by the women on the farm, the little I have to say will be from a woman's view of the subject.

**GEES.**

By poultry we mean the chickens, ducks, geese, and turkeys. These, or at least a part of them, we find on all farms. Chickens we find everywhere, ducks and turkeys are being raised by more farmers every year, but geese do not seem to be generally appreciated.

**Smooth, Firm Paint**

White Lead, if pure, mixed with pure linseed oil, makes paint which wears smooth and beautiful, not spotted and scaly.

If our White Lead were not pure and durable, we could not afford to tell you how you could show up adulterants which are frequently used in paint materials.

To demonstrate our confidence in every pound of White Lead marked with the "Dutch Boy Painter" trade-mark, we will send free to anyone who asks it, a blowpipe with instructions how to prove, without fail, the purity or impurity of any White Lead he may wish to test. To know this test is to know how to prevent throwing money away.

Ask for Test Equipment No. 93

**NATIONAL LEAD COMPANY**

*in whichever of the following cities is nearest you:*  
New York, Boston, Buffalo, Chicago, Cincinnati, Cleveland, St. Louis, Philadelphia (John T. Lewis & Bros. Co.); Pittsburgh (National Lead & Oil Co.)

**Incubators and Brooders**

If you want a good Incubator in a hurry write to the undersigned. He keeps the Old Trusty Incubator (hot water) and the Compound (hot air), two of the best Incubators made. Also the Zero brooder, no better made. It pays to buy a good brooder. No use hatching chicks without a good brooder to raise them. The Zero will raise every chick you put in it.

THOMAS OWEN, Sta. B Topeka, Kans.

**SPECIAL LOW PRICES!**  
  
As usual, Johnson, the Incubator Man, makes a further reduction of 10% on orders from May 1st to Nov. 1st. This reduction for 6 months makes the OLD TRUSTY the lowest priced good incubator on the market. 40 days trial allowed as usual. Big catalog, 300 poultry pictures and trustworthy poultry information FREE for the asking.  
Write for it today. M. M. JOHNSON, Clay Center, Neb.

The best breed for you is the one you succeed with the best. Your fowls must not be afraid of you. Go quietly among them, talk to them, and avoid any unnecessary excitement among them. They soon learn to trust you.

**SIZE OF FLOCK.**

The amount of poultry on the farm should be governed by the size of the farm and the amount of waste, that is on every farm where stock is raised and fed. A greater profit is realized where the expense of feeding is lessened. Overfeeding the hens does not pay. They become lazy and are more susceptible to disease. The busy hens are the laying hens and on the farm where they are not confined in pens and the weather conditions are favorable they will almost feed themselves, and are far more healthy than when they depend on being fed all they need.

**CARE OF THE YOUNG.**

When raising the young, one must have good protection against rain and vermin. Young poultry must be kept dry and comfortable. We often hear people remark if it is unusually wet that it is good weather for ducks. The idea that damp weather does not hurt ducks and goslings is a very mistaken one, and to be fully realized just try it. It will be an experiment only tried once if it can possibly be avoided. There must be a constant fight against lice and mites as they are at the bottom of a great many ills that affect our fowls. Use dirt, plenty of it, but it must be clean dirt and it must be used everywhere possible. Slaked lime is also good.

Spray often with pure kerosene or some good lice killer. It is necessary to do this every week, and sometimes oftener. Speaking for myself, I find it does not pay to undertake too much. Better have fewer in number and take better care of them.

**MARKETING POULTRY.**

I only raise chickens sufficient to keep up my flock of hens and for table use. If I do have a surplus I sell them. I sell my hens at two years old. I also cull out the small ones. I find my greatest profit comes from the eggs I sell.

My ducks and geese I raise without mothers, substituting myself and so

"THE OLD RELIABLE"

**DIETZ**  
LANTERNS

THERE ARE NONE "JUST AS GOOD"  
WHEN YOU BUY A LANTERN INSET ON A "DIETZ"  
MADE BY R. E. DIETZ COMPANY NEW YORK  
Largest Makers of Lanterns in the World  
ESTABLISHED 1840  
PIONEERS AND LEADERS

**PLYMOUTH ROCKS.**

EGGS from Toulouse and Emden geese; Pekin, Renan and Muscovy ducks; peacocks; Bronze and White Holland turkeys; Buff, White and Barred Plymouth Rocks; White, Brown and Buff Leghorns; Houdans; Buff Cochins; Cornish Indian game; Buff, White and Silver Laced Wyandottes; Rhode Island Reds; Buff Orpingtons, S. S. Hamburgs, Black Langshans, White Brahma, Buff Cochin Bantams, Sebright Bantams; Pearl and White Guineas; Dogs and fancy pigeons. I am going to make it a specialty in furnishing eggs this year by the setting; 50 and 100 eggs \$1 per setting. Duck eggs, 15 for \$1. Poultry eggs, 15 for \$1. Write for free circular. D. L. Brun, Platte Center, Neb.

**BARRED P. ROCKS EXCLUSIVELY**—High scoring, well barred, and bred to lay kind. Cockerel or pullet mating. Pens \$1.50 per fifteen; range \$1 per fifteen; \$5 per one hundred. Mrs. Chas. Osborn, Kureka, Kans.

**BUFF P. ROCKS EXCLUSIVELY**—Farm range, \$4 per 100; 75¢ per setting. Mrs. Wm. Lovelace, Muscotah, Kans.

**LINDAMOOD'S BARRED ROCKS** will surely please you. Pens mated now. Send for circular. Eggs \$3 per \$15, \$5 per 50. Incubator eggs \$3 per 100. No eggs from pens after May 15. O. C. Lindamood, Walton, Harvey County, Kans.

**DUFF'S BARRED ROCKS**—Choice standard stock by standard mating. We breed them now exclusively, and have the very best. Eggs and stock in season. Write your wants. A. H. Duff, Larned, Kans.

**SMITH'S BARRED ROCKS.** Smith's laying strain Barred Rocks. Close, clear, narrow barring. Strong and vigorous. Eggs \$2.00 \$1.50, \$1.25 per 15. My Pen No. 1 for sale. 6 hens, 1 cock. Write me. CHAS. E. SMITH, Route 2, Mayetta, Kans.

**BARRED PLYMOUTH ROCKS.** Prize winning cocks from the Kansas State Shows of 1907-8. Hens have good range and eggs hatch well. Eggs carefully packed for shipping. \$1.50 per setting. R. W. Goodman, St. John, Kans.

**Buff Plymouth Rock Eggs**  
I won 1st cock, 92%; 2d hen, 92; 3d pen, 184; at the Kansas State Show, 1908. Eggs from these birds for sale at \$3 per 15. Satisfaction guaranteed. GEO. H. GARRETT, 1308 Logan St., Topeka, Kans.

**Miller's Famous Barred Plymouth Rocks.**

Eggs now ready from the fanciest pens in the West. My pens are headed by my State Show prize winners. I have won many of the leading prizes for 4 consecutive years. My stock is as good as you will find in the West. Eggs \$2 and \$3 per 15. Satisfaction guaranteed. Send for circular. A. H. MILLER, Bonn, Kans.

**White Plymouth Rocks EXCLUSIVELY.**

For 16 years I have bred W. P. Rocks exclusively, and have them as good as can be found anywhere. I sell eggs from first-class, high-scoring stock at live and let-live prices. \$2 per 15, \$5 per 45, and I pay the expressage to any express office in the United States.

**THOMAS OWEN, Sta. B., Topeka, Kans.**

**RHODE ISLAND REDS.**

**NEOSHO POULTRY YARDS.** Rose Comb R. I. Reds, score 90 to 94%. Eggs for hatching. Angora rabbits, snow white, pink eyes. Prices reasonable on rabbits and eggs. J. W. Swartz, Americus, Kans.

**KANSAS PHEASANTRY, LAWRENCE, KAS.**, has R. I. R. eggs for sale. Circular free provided you mention this paper. Hens for sale after June 1.

**S. C. R. I. REDS EXCLUSIVELY**—Specials for shape and color. My birds won more premiums at State Shows than any other exhibitor. R. B. Steele, Station B, Topeka, Kans.

**R. C. RHODE ISLAND REDS**—exclusively. Eggs 75¢ per 15, \$4 per 100. D. B. Huff, Route 1, Preston, Kans.

**R. C. Rhode Island Reds**

Eggs from first pen headed by 8d prize cockerel at Kansas State Show, 1908. \$2 for 15; 2d pen, \$1.50; good range flock, \$1 for 15; incubator eggs, 50 or more, \$5 per 100. Mrs. Wm. Roderick, R. I., Topeka, Kans.

**BLACK LANGSHANS.**

**BLACK LANGSHANS AND TOULOUSE GEESE**—Absolutely pure. Stock and eggs for sale. T. H. Hutley, Route 2, Maple Hill, Kans.

**Tenneholm Black Langshans**

Surplus stock all sold. Eggs from the best of breeding stock at \$1.50 per 15 or \$2.50 per 30. Orders filled promptly.

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

**Black and White Langshans.**

Winning 1st pen 5 times in 5 shows this season, including State Fair and State Show; won 12 ribbons on 16 birds at Topeka. Eggs \$2 for 15. 18 years a breeder.

H. M. Palmer, Florence, Kans.

**WYANDOTTES.**

**SILVER WYANDOTTE EGGS**—From my noted prize winning strain, 100 for \$4, 50 for \$2. Orders promptly filled. Mrs. J. W. Ganse, Emporia, Kans.

**R. C. GOLDEN WYANDOTTES**—Eggs, 15 for \$1; 100 for \$3.50. Also R. C. Rhode Island Reds—15 for \$1. Mrs. John Jeffons, Wakefield, Kans.

**WHITE WYANDOTTE EGGS** for hatching \$1 per 15 or \$5 per 100. Mrs. E. F. Ney, Bonner Springs, 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.

**IMPORTED HARTZ MOUNTAIN AND ST. ANDREASBERG CANARIES** for particulars address D. E. R. LAKE PARK, SEVERE, KANSAS.

far have had excellent success, but do not raise very large flocks. I keep them through the summer, plucking their feathers, then get them ready for Thanksgiving or Christmas market as the price suits me, or rather take what I can get, as it does not pay to keep them after that time.

There are ups and downs in poultry raising as in anything else and pluck and luck go hand in hand. Who does not admire the flocks of healthy, happy poultry not for their beauty alone, but for their helpfulness in so many ways?

**The Apiary****Who Should Keep Bees?**

**EDITOR KANSAS FARMER:**—In reply to the above question, I will state that the person who does not read a bee journal and also own, and both read and study, a standard work on the habits and management of the honey bee, is in no sense qualified to keep bees. Their nature, habits, and wants must be understood by the bee keeper, and should receive his attention, and their wants should be supplied with quite as much care and regularity as those of domestic animals.

The fact that the last year has been one of the very poorest in the history of the United States for a honey crop is quite certain to afford abundant proof to substantiate the foregoing assertion, for very many strong colonies went into winter quarters with but a very scant supply of honey for the winter except in cases where this matter received due attention in September and October and were fed sufficient to carry them through the winter months. Just here, Mr. Editor, please permit me to digress sufficiently to state that all who have bees should look after them carefully from now until fruit blossoms come and the yield of honey has actively begun.

Now again, taking up the subject proper, I will also add that the person who does not keep his bees in a movable comb hive and give his swarms comb foundations in each frame so as to insure straight combs need not expect success in beekeeping. Without the movable combs the actual condition of the colony can not be ascertained; moreover every comb frame should fit every place for a comb in every hive. The Longstroth hive is in use among nearly all the oldest and most extensive beekeepers in the world, and as a rule the tenth frame hive is preferable among the masses. I have thought it proper to make the above statement for the reason that no industry is so poorly understood as that of beekeeping, and for more than forty years people have come to me to purchase bees, when I had them to sell, and have met with a failure, in many cases. As I deem it but just to all concerned to publish these facts, I will take this occasion to say to such as contemplate investing in bees, without adopting what I have herein recommended, had best give the money to some poor, worthy person or let bees strictly alone.

During the winter of 1876 and 1877 at the request of Prof. John Anderson, then president of the Kansas State Agricultural College at Manhattan, I delivered a lecture before the students of that institution, it being the intention to not only keep bees there but also to back the rudiments of beekeeping in that college. When Mr. Anderson left the college this interest came to a standstill, and I have often wondered why the regents of that college do not see that this industry is looked after and taught among other industries.

Kansas is every year becoming better adapted to the production of honey—as fruit trees, vegetables, and honey-yielding plants of every kind are rapidly on the increase, more especially alfalfa, which is probably the best honey-producing plant in all the world. I will, with your permission, Mr. Editor, state that Dr. Burkett, of the Agricultural College at Manhattan, has informed me that practicable beekeeping will be taught there during the

## THE KANSAS FARMER

**Take Care of the Chicks**

It is said there is a mortality of 50% among young chicks every spring. This means a tremendous loss. Think how great the poultry industry would be if even a fraction of these lost chicks were saved to become egg producers or fat market fowls. *Care and proper feeding* at the time of hatching and during the first days of the chick's life are absolutely essential to its well-being.

Begin as soon as the chick takes food regularly and give a little of Dr. Hess Poultry Pan-a-ce-a once a day in soft food. If you do this and chicks are kept dry and warm, your losses will be very slight.

**DR. HESS  
Poultry PAN-A-CE-A**

was formulated by Dr. Hess (M. D., D. V. S.) for the express purpose of meeting and overcoming the hundred and one ills that perplex the poultry man. While it is beneficial in many ways and also destroys germs, its greatest worth is as an assistant to the digestive organs. Its use makes the largest possible per cent of food available for healthy growth. Hence chicks mature early, hens lay many eggs, and market birds fat quickly. Endorsed by the most prominent poultry men in the United States and Canada. Costs but a penny a day for 30 hens.

**Sold on a written Guarantee.**

1½ lbs. 25c, mail or express 40c	}
5 lbs. 60c	
12 lbs. \$1.25	
25 lb. pail \$2.50	Except in Canada and extreme West and South.

Send two cents for Dr. Hess 48-page Poultry Book, free.

**DR. HESS & CLARK,**

Ashland, Ohio.

INSTANT LOUSE KILLER KILLS LICE.

**LEGHORNS.**

**SINGLE COMB WHITE LEGHORNS**—Wyckoff and Blanchard stock. Farm raised, heavy laying strain; eggs for sale \$1 per 15 or \$5 per 100; chicks six weeks old \$25 per 100, \$18 per 50, if taken soon. Mrs. Frank Sullivan, R. 7, Atchison, Kans.

**PURE-BRED Rose Comb Brown Leghorn eggs** \$1.00 per 15, \$2.50 per 50, \$4.00 per 100. Mrs. John Holzhey, Bendena, Kan.

**ROSE COMB BROWN LEGHORNS EXCLUSIVELY**—Pens score to 94%. Eggs \$1.00 for 15, \$5.00 per 100. Samuel Andrews, Kinsey, Kans.

**R. C. B. LEGHORNS**—Topeka winners 24 ribbons. Eggs \$1.00 for 15, \$2.75 for 50, \$5.00 for 100. Rufus Standifer, Reading, Kans.

**S. C. W. LEGHORNS** of exhibition quality, bred for heavy egg production from the best laying strain in America. 15 eggs \$1, 100 eggs \$5. Alice J. Lamb, Manhattan, Kans.

**EGGS from pure bred S. C. W. Leghorns and W. Wyandottes**, \$1 per 15, \$5 per 100. W. H. turkeys \$1.50, 9 Emden geese, 20c each. A. F. Hutley, R. 2, Maple Hill, Kans.

**S. C. BROWN LEGHORN EGGS**—30 for \$1.00 for \$3. Joe Caudwell, Wakefield, Kans.

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

**STANDARD-BRED S. C. Buff Leghorns** founded by stock of prize-winners of Chicago and St. Louis World's Fairs, and have taken first wherever shown. Stock for sale; eggs in season from pens scoring 90 to 95. No. 1 pen, \$2.50 for 15; No. 2, \$1.50 for 15. S. Perkins, 201 N. First St., Newton, Kans.

**S. C. B. LEGHORNS.**

Eggs from hens scoring from 90 to 95. This strain of birds are State Show winners and have been winning at the prominent shows for the last 17 years. If you want quality write me. F. W. Boutwell, R. 8, Topeka, Kans.

**R. C. B. Leghorns. 7 Years Highest Breeding** Topeka winners this year; 24 ribbons in 3 shows. Eggs, 16 for \$1.50 for \$2.75, 100 for \$5. Cockerels for sale. Rufus Standifer, Reading, Kans.

**Rose Comb Brown Leghorns Exclusively** Farm raised. Eggs per setting of 15, \$1; per 50, \$2; per 100, \$3.50. P. H. Mahon, R. 3, Clyde, Cloud Co., Kans.

**GALVA POULTRY YARDS**

R. C. W. Leghorn and White Wyandotte stock for sale. Eggs in season, 1st pen Leghorns headed by 1st cockerel Madison Square Garden, N. Y. Write your wants. JOHN DITCH, Prop., Galva, Kans.

**S. C. W. LEGHORNS and B. P. ROCKS**

Eggs now ready from our 18 mated pens. No more pullets or hens for sale. A few cocks and cockerels at reduced prices. Send for catalogue of S. C. W. Leghorns and B. P. Rocks. Eleonora Fruit and Poultry Farm, Centralia, Kans.

**S. C. Brown Leghorns**

Bred for beauty, size and heavy egg production. Eggs for hatching, \$1.50 for 30, \$4 per 100. Won all blue ribbons at Eureka fair, 1907, on S. C. Brown Leghorns. L. H. Hastings, Quincy, Kans.

**CORNISH INDIANS.**

**EGGS, CORNISH INDIAN**—\$1 per fifteen. The best general purpose fowl raised. L. C. Horst Newton, Kans.

coming season and let us all wish him abundant success for I know the people will not, in after years, regret that this permit has been taught there.

Rice County. G. BOHRER.

**BRAHMAS.**

**FOR SALE**—Light Brahma, B. P. Rock, and White Pekin duck eggs. Miss Ella Burdick, Emporia, Kans., Route 8.

**A LIMITED NUMBER OF EGGS** for sale at \$1.50 per setting from choice pen of Light Brahmams; perfect comb, dark points, and legs feathered correctly. Howard Gray, St. John, Kans.

**Light Brahma Chickens**

Choice pure-bred cockerels for sale.

Write or call on

Chas. Foster & Son, Eldorado, Ks. Route 4

**BUFF ORPINGTONS.**

**LARGE BUFF ORPINGTONS**—Eggs for sale. \$1.25 for 15. Mrs. Frank Henning, Route No. 1, Garnett, Kans.

**SINGLE COMB BUFF ORPINGTONS**—Eggs from the birds that have won the most prizes at State Shows; 57 prizes and 4 silver cups in 1907-08. Infertiles replaced free. Send for circular. Frank Hill, Sabetha, Kans.

**S. C. BUFF ORPINGTONS**—Prize winners, big shows. Best winter layers. Great money makers. Breeders, eggs, baby chicks. Catalogue tells. W. H. Maxwell, 1996 McVicar Ave., Topeka, Kans.

**CHOICE Buff Orpington and B. P. Rock cockerels**. Collie pups and barded bitches. Send for circular. W. B. Williams, Stella, Neb.

**BLACK SPANISH.**

**WHITE FACED BLACK SPANISH** at Kansas and Nebraska State Shows 1908. I won all first and second prizes offered. Eggs \$1.50 per 15, \$7.50 per 100. H. W. Chestnut, Centralia, Kans.

## Weather Bulletin

Following is the weekly weather bulletin for the Kansas Weather Service for the week ending May 12, 1907, prepared by T. B. Jennings, Station Director.

## DATA FOR THE WEEK.

Temperature.			Precipitation.				
	Maximum.	Minimum.	Mean.	Departure from normal.	Total.	Departure from normal.	Percent of sunshine.
<b>WESTERN DIVISION.</b>							
Colby.	70	30	48	.....	0.30	.....	..
Coolidge.	75	30	52	.....	0.22	.....	33
Dodge City.	87	34	53	-7	4.40	0	68
Dresden.	68	33	46	.....	0.87	.....	37
Farnsworth.	73	29	50	.....	0.41	.....	52
Gove.	73	36	50	.....	0.51	.....	43
Hoxie.	73	32	50	.....	0.66	.....	53
Liberal.	88	34	52	.....	0.21	.....	53
Lucerne.	.....	.....	.....	1.30	.....	.....	..
Norton.	67	30	46	.....	1.92	.....	33
Scott.	77	30	51	.....	0.26	.....	56
Wakeeney.	71	33	52	.....	0.93	.....	..
Wallace.	72	30	52	.....	0.39	.....	..
Division.	88	20	50	.....	0.68	.....	44
<b>MIDDLE DIVISION.</b>							
Alton.	68	32	50	.....	1.10	.....	43
Chapman.	74	37	52	.....	2.37	.....	93
Clay Center.	74	33	51	.....	1.68	.....	..
Coldwater.	88	31	54	.....	0.27	.....	43
Concordia.	68	36	49	-12	1.43	+0.56	47
Cunningham.	88	32	50	.....	0.10	.....	52
Eldorado.	82	34	56	.....	1.18	.....	57
Ellinwood.	88	32	51	.....	0.59	.....	42
Ellsworth.	73	31	52	.....	0.47	.....	..
Hanover.	73	34	50	.....	1.74	.....	43
Harrison.	67	32	47	.....	0.77	.....	43
Hays.	70	30	50	.....	0.90	.....	46
Hutchinson.	87	31	54	.....	0.47	.....	48
Jewell.	66	33	48	.....	0.92	.....	36
Kingman.	88	34	56	.....	0.22	.....	68
Larned.	82	29	51	.....	0.83	.....	..
Lebanon.	70	32	46	.....	0.58	.....	49
Macksville.	85	29	51	.....	0.69	.....	..
McPherson.	83	34	52	.....	1.34	.....	36
Marion.	75	35	54	.....	2.44	.....	..
Minneapolis.	72	34	51	.....	0.62	.....	39
Norwich.	83	37	53	.....	2.12	.....	51
Philipsburg.	69	34	48	.....	1.19	.....	40
Rome.	82	33	53	.....	0.41	.....	..
Salina.	73	33	52	.....	2.40	.....	..
Wellington.	86	35	55	.....	0.90	.....	..
Wichita.	82	37	54	-9	1.02	+0.27	48
Winfield.	81	34	53	.....	0.52	.....	..
Division.	88	29	52	.....	1.04	.....	46
<b>EASTERN DIVISION.</b>							
Atchison.	73	39	52	.....	1.47	.....	33
Burlington.	78	36	56	.....	1.84	.....	43
Cottonwood Falls.	78	34	55	.....	1.81	.....	43
Emporia.	74	37	54	.....	2.54	.....	..
Eskridge.	68	37	50	.....	4.01	.....	43
Eureka.	.....	.....	.....	.....	0.50	.....	..
Fall River.	79	35	57	.....	1.25	.....	71
Fort Scott.	78	35	54	.....	2.12	.....	45
Frankfort.	74	32	49	.....	2.33	.....	36
Garnett.	74	37	57	.....	2.75	.....	..
Independence.	78	39	58	.....	1.14	.....	35
Iola.	77	40	56	-5	1.57	+0.79	49
Kansas City.	67	42	52	-9	1.09	+0.08	42
Lebo.	73	39	55	.....	2.96	.....	57
Madison.	74	34	53	.....	1.92	.....	..
Manhattan.	72	33	53	.....	3.49	.....	..
Moran.	76	37	57	.....	1.50	.....	19
Olathe.	68	27	52	.....	2.16	.....	29
Osage City.	70	36	50	.....	2.48	.....	..
Osawego.	76	37	58	.....	1.31	.....	33
Ottawa.	72	34	52	.....	2.07	.....	43
Paola.	71	37	52	.....	2.00	.....	67
Pleasanton.	73	39	55	.....	2.48	.....	57
Sedan.	81	36	57	.....	0.94	.....	82
Topeka.	69	38	52	-10	3.08	+2.21	44
Valley Falls.	69	37	52	.....	2.05	.....	40
Walnut.	75	33	55	.....	1.73	.....	46
Division.	81	24	54	.....	1.97	.....	46
State.	88	29	52	.....	1.32	.....	47
<b>DATA FOR STATE BY WEEKS.</b>							
April 13.	89	19	55	.....	0.91	.....	54
April 20.	92	30	60	.....	0.79	.....	53
April 27.	92	37	65	.....	0.46	.....	60
May 2.	78	15	49	.....	0.08	.....	62
May 9.	88	29	52	.....	1.32	.....	47
<b>GENERAL SUMMARY.</b>							
The weather has continued unusually cool, tho with ample precipitation over much of the larger portion of the State. The mean temperature for the week was but little higher than that of the preceding week, which was the lowest this season. The maximum temperature for the week occurred on the 3d in the southern half of the State, and on the 9th in the northern half. The minimum temperature occurred on the 7th or 8th in the western half of the State, and on the 8th in the eastern half.	.....	.....	.....	.....	.....	.....	.....
The week was the wettest and cloudiest this season, the precipitation falling on the first two or three days in the western counties and the first four days in the eastern, and was greatest in the central northeastern counties and least in the extreme southwestern. Rain occurred in many of the Smoky Hill and Kaw river counties on the 3d and 4th, snow occurred on the 5th in the northwestern counties, while frosts were general on the 7th and 8th.	.....	.....	.....	.....	.....	.....	.....
Allen.—The first four days were cloudy and showery, but the last three were bright. The rainfall amounted to 1.57 inches, nearly all of which fell in the thunderstorms on the 4th. The temperature was slightly above normal during the fore-part of the week, but about 10° below normal during the latter	.....	.....	.....	.....	.....	.....	.....
<b>EASTERN DIVISION.</b>							
Allen.—The first four days were cloudy and showery, but the last three were bright. The rainfall amounted to 1.57 inches, nearly all of which fell in the thunderstorms on the 4th. The temperature was slightly above normal during the fore-part of the week, but about 10° below normal during the latter	.....	.....	.....	.....	.....	.....	.....
<b>MIDDLE DIVISION.</b>							
Barton.—Beneficial showers fell on five days and frost was noted on the 7th and 8th, the minimum temperature on those days was not low enough to permit of much damage.	.....	.....	.....	.....	.....	.....	.....
Butler.—The week was quite favorable. Beneficial rains fell on the 4th, 5th, 6th, and 7th, aggregating 1.18 inches. Temperatures were somewhat deficient, but were higher than those of the previous week.	.....	.....	.....	.....	.....	.....	.....
Clay.—Copious showers, amounting to 1.58 inches, fell on the 4th. The remainder of the week was somewhat cool, but favorable.	.....	.....	.....	.....	.....	.....	.....
Cloud.—The fore part was cloudy and showery and the total rainfall, 1.43 inches, was of considerable benefit. The latter part was clear, with warm and pleasant days.	.....	.....	.....	.....	.....	.....	.....
Comanche.—Light showers fell on the first five days, but the total, 0.27 of an inch, was insufficient.	.....	.....	.....	.....	.....	.....	.....
Cowley.—The week was cold and cloudy. Frost occurred on the 5th, with a minimum of 34°.	.....	.....	.....	.....	.....	.....	.....
Dickinson.—A soaking rain of 2.10 inches fell on the 4th and light showers on the 3d, 5th, and 6th. The week ended clear and warm.	.....	.....	.....	.....	.....	.....	.....
Wyandotte.—The week was cloudy and cool, with the temperature below normal each day. There was ample rain, but a decided deficiency in sunshine. Light frost occurred on the 7th and 8th.	.....	.....	.....	.....	.....	.....	.....
<b>WESTERN DIVISION.</b>							
Barton.—Showery weather prevailed during the early part of the week, followed by abnormally low temperatures after the 4th, with light frosts on the 7th and 8th. The sunshine was deficient.	.....	.....	.....	.....	.....	.....	.....
Smith.—Rains on the 4th, 5th, 6th, and 7th amounted to 0.53 of an inch and were of much benefit.	.....	.....	.....	.....	.....	.....	.....
Stafford.—The rainfall was about normal. Temperature extremes were 88° and 29°.	.....	.....	.....	.....	.....	.....	.....
Summer.—Moderately heavy rains fell on the 4th, 5th, and 6th, and light frost occurred on the 7th and 8th.	.....	.....	.....	.....	.....	.....	.....
Washington.—The week began cloudy and rainy and ended clear, with rising temperatures, the average temperature was considerably below normal. The rainfall, 1.74 inches, was ample.	.....	.....	.....	.....	.....	.....	.....
<b>RAINFALL FOR WEEK ENDING MAY 9, 1908.</b>							



### The Veterinarian

We cordially invite our readers to consult us when they desire information in regard to sick or lame animals, and thus assist us in making this Department one of the most interesting features of The Kansas Farmer. Kindly give the age, color, and sex of the animal, stating symptoms accurately, and how long standing, and what treatment, if any, has been resorted to. All replies through this column are free. In order to receive a prompt reply, all letters for this Department should give the inquirer's postoffice, should be signed with full name and a bond be addressed to the Veterinary Department, The Kansas Farmer, Topeka, Kansas.

**Examine Cow's Teeth.**—Will you please tell me through your paper what ails my cow. She slobbers quite badly when chewing her cud. She is constipated some and has run down in flesh. She has a good appetite. I have been feeding her alfalfa, clover, and millet hay. She has been this way for about six weeks and has fallen off in her milk. W. L. D.

Madison, Kans.

**Ans.**—Have a qualified veterinarian carefully examine her teeth and tongue.

**Lump on Stallion's Front Leg.**—I have a 4-year-old Percheron stallion which has a hard lump on the inside of the front leg, a little below the knee. The lump was first noticed last winter. It has not lamed the horse as yet. Is there any danger of his colts inheriting the trouble? What remedy would you advise? A READER.

**Ans.**—Take biniodide mercury 3 grams, cantharides 1 ounce, and hog's lard, 1½ ounces and mix. Apply the mixture with the hand once every ten days. The lump will leave in time. No, there is not much danger of it being hereditary.

**Mange in Hogs.**—What will cure mange in hogs? J. B.

Onaga, Kans.

**Ans.**—Dip or wash the hogs in Zenoleum, 1 part to 50 parts of water, twice a week for two or three times.

**Mare Has Fistula.**—I have a 5-year-old mare that has fistula. It runs across her neck just back of where the collar fits. It is open on both sides and a discharge runs from it. I had a veterinary surgeon treat her four months ago. He has been treating her once a month since but it does not seem to get any better. What would you advise me to do? A SUBSCRIBER.

Kirwin, Kans.

**Ans.**—Open up freely on the lowest side and you will probably find a pipe or a pocket going down in the center of the neck on the bone. Make a good, low drain and pack with absorbent cotton soaked in bichloride of mercury 1 part to 400 parts of water. Remove the cotton in twenty-four hours and oil once a day with sweet oil and then clean out well in a week and pack again as before. Keep it clean and wash with carbolic acid 1 part to 20 of warm water. If you can do so it would be better to get a qualified veterinarian to cut them out clean at once. Then heal up the wound.

#### How Farmers Saved a Business House.

An interesting case where a business house selling implements to farmers, and receiving four and six months notes in payment, was saved early this year by the makers of these notes, came recently to the knowledge of the writer of this. That business house found itself without sufficient ready cash to meet its maturing obligations, but was in possession of farmers' notes varying from \$100 to \$600, and amounting to almost \$45,000, all in all. The banks refused at that time to discount those notes received in payment for orders secured by advertising. When the advertising agent of that firm called for the payment of his monthly bill he was surprised to receive an offer of a four months note in payment of it; instead of the usual check with which the firm used to settle its monthly advertising account for a number of years. The advertising agent suggested to the manager of that firm to appeal to the farmers to take up their notes before maturity, by offering them a discount of 5 per cent. This suggestion struck the manager as a splendid one, with the result that within twenty-four hours a letter was mailed to the farmers whose notes the

firm held describing the conditions of the large cities, the difficulty of getting even good notes discounted by banks, and offering a discount of 5 per cent to all willing to take their notes up before maturity. Within one week every one of those notes but two amounting to \$650, were redeemed by the farmers. The replies came in quicker than expected. Not only this, but a number of farmers offered to buy more implements for cash if acceptable terms could be offered. Only two farmers did not reply and the reason of it was, as was learned later, that they had gone with their wives to California.

This case shows what wealth the farming population has accumulated; how eager it is to take advantage of conditions and what market there is just now for those seeking patronage for legitimate propositions by the right kind of advertising in desirable agricultural papers.—Guenther's Journal.

#### A Cynical View.

"When reverses come you find out who your real friends are."

"So?"

"Yes. They immediately proclaim that they knew you were an accident." —Kansas City Journal.

Instead of "To the Stars Through Difficulties," let us make the State motto read "To Success Through Alfalfa."

#### Farmers' Fairs in 1908.

The list of county fairs to be held in Kansas in 1908 is announced by Secretary F. D. Coburn as follows:

Allen County Agricultural Society—Frank E. Smith, secretary, Iola; August 25-28.

Barton County Fair Association—W. P. Feder, secretary, Great Bend; September 8-11.

Brown County, the Hiawatha Fair Association—George M. Davis, secretary; Hiawatha.

Butler County Fair Association—A. Shelden, secretary, El Dorado; August 25-28.

Butler County, Douglass Agricultural Society—C. R. Alger, secretary, Douglass; September 17-19.

Clay County Fair Association—Walter Puckey, secretary, Clay Center; September 1-4.

Clay County, Wakefield Agricultural Society—Eugene Elkins, secretary, Wakefield; first week in October.

Cloud County Fair Association—W. S. James, secretary, Concordia; September 15-18.

Coffey County Agricultural Fair Association—Charles N. Converse, secretary, Burlington; September 7-11.

Cowley County Agricultural and Live Stock Association—Frank W. Sidle, secretary, Winfield; September 1-5.

Cowley County—Eastern Cowley County Fair Association—W. A. Bowden, secretary, Burden; September 16-18.

Dickinson County Fair Association—H. C. Wann, secretary, Abilene; September 22-25.

Elk County Agricultural Fair Association—H. B. Terry, secretary, Gretna; September 23-25.

Finney County Agricultural Society—A. H. Warner, secretary, Garden City.

Franklin County Agricultural Society—E. M. Shelden, secretary; Ottawa; September 1-4.

Greenwood County Fair Association—C. H. Weiser, secretary, Eureka; August 18-22.

Harper County, Anthony Fair Association—L. G. Jennings, secretary; Anthony; August 4-7.

Harvey County Agricultural Society—L. G. Harlan, secretary, Newton; September 29, October 2.

Jefferson County Fair Association—Ralph Snyder, secretary, Oskaloosa.

Leavenworth County Fair Association—Stance Meyers, secretary, Leavenworth; September 15-19.

Linn County Fair Association—O. E. Haley, secretary, Mound City; first week in September.

Marshall County Fair Association—W. H. Smith, secretary, Marysville.

McPherson County Agricultural Fair Association—D. H. Grant, secretary, McPherson; September 22-25.

Midway County Agricultural and Mechanical Fair Association—George R. Reynolds, secretary, Paola; September 29, October 2.

Mitchell County Agricultural Association—Ira N. Tice, secretary, Beloit; September 16-19.

Montgomery County, Coffeyville Fair and Park Association—A. B. Holloway, secretary, Coffeyville; August 11-14.

Nemaha County Fair Association—Joshua Mitchell, secretary, Seneca; September 9-11.

Neosho County, Chanute Fair and Improvement Association—A. E. Timpane, secretary, Chanute; August 18-21.

Ness County Agricultural Association—Thomas Riney, secretary, Ness City.

Ness County, Utica Agricultural and Fair Association—R. C. Webster, Jr., secretary, Utica.

Norton County Agricultural Association—M. F. Garrity, secretary, Norton; August 25-29.

Osage County Fair Association—F. E. Burke, secretary, Burlingame; September 1-4.

Reno County, Central Kansas Fair Association—A. L. Sponsler, secretary, Hutchinson; September 14-19.

Republic County Agricultural Association—

### DUROC-JERSEYS

**Deep Creek Herd Duroc-Jerseys**  
Choice spring boar pigs and gilts for sale; also fall gilts. U. C. Anderson, Manhattan, Kans.

#### MADURA DUROCS.

BRLOOD SOWS—Some fine brood sows bred to Major Roosevelt and Miller's Nebraska Wonder, he by Nebraska Wonder.

FRED J. MILLER, Wakefield, Kans.

#### DUROC JERSEYS.

Good size with quality, good feet and pasterns, style and finish. A limited number of extra good sows and gilts constitute my present offering. All of the very best breeding, and will be sold bred. I can fit you out. G. W. COLWELL Summerfield, Kans.

**Vick's** DUROCS are bred for usefulness. Choice young stock for sale by such great boars as Vick's Improver 4785, Red Top 3224, Fancy Chief 24923 and other noted sires. Correspondence invited. Visitors coming to Junction City and telephoning me will be called for. W. L. VICK, Junction City, Kans.

#### DEER CREEK DUROCS

100 pairs of March and April farrow by sons of Ohio Chief, Tip Notcher and Kaut Be Beat. Ready for shipment after July 1.

BERT FINCH, Prairie View, Kans.

#### HILLSIDE DUROCS and HEREFORDS

Choice boars ready for service. Bred gilts and fall pigs, both sexes. Mc's Pride III, Com Paul V, and Crimson Knight 62579 in service. Six good Anxiety bred Hereford bull calves. Prices to correspond with the times.

W. A. WOOD, Elmdale, Kans.

#### PEERLESS STOCK FARM

##### DUROC-JERSEY HOGS FOR SALE.

R. G. SOLLENBERGER, Woodston, Kans.

#### Silver Lake Durocs.

Fifty fall pigs will be priced right, either sex. Bred gilts will be priced right on mail orders. Boars in service, Lone Jack 30291, Paul Jumbo 42209.

W. C. WHITNEY, Agra, Kans.

#### Howe's DUROCS.

100 early spring pigs, the best I ever raised. Improver, Top Notcher, Sensation and Gold Finch blood lines. Call or write.

J. U. HOWE, Wichita, Kans.

#### ELK VALLEY DUROCS.

Herd headed by Doty Boy 29279, a son of the champions, Goldfinch and Doty. My sows are by prize-winning boars. Choice pigs of both sexes for sale.

M. WESLEY, Bancroft, Kans.

#### Cummings & Son's Durocs.

100 toppy pigs of early March farrow, by Lincoln Tip, Junior Jim, Tip Top Notcher Jr., Kants Model, Beautiful Joe and our herd boar OH HOW GOOD, second prize winner at Nebraska State Fair. Sale in October; write or visit. W. H. Cummings & Son Tecumseh, Neb.

RALPH HARRIS, Prop. B. W. WHITE, Mgr. WILLIAMSTOWN, Kans.

Farm station, Buck Creek, on the U. P., 45 miles west of Kansas City.

C. W. TAYLOR, R. 2, Enterprise, Kans.

**K. & N. Herd Royally Bred Duroc-Jersey Swine**

Have a few gilts that I will sell at reasonable prices, bred for April farrow. Also a few fall boars of September, 1906, farrow. Write for prices and description.

R. L. WILSON, Chester, Neb.

#### FOUR-MILE HERD DUROCS

Choice fall boars by Orion Jr. 31497 and Ohio Chief 2d 41197. 50 spring boars, growthy, heavy bone, good feet, nice color; sired by the above named males, and E. B. Kaut Be Beat 57563. Crimson Chief 31228, Rose Top Notcher 54059, You Bet 31111, Tip Top Notcher 20729, and other noted sires. Sows of the best and leading families. Write or visit herd. Visitors met at trains.

E. H. ERICKSON, R. 1, Olsburg, Kans.

F. N. WOODWARD, secretary, Belleville; September 8-11.

Rice County Agricultural and Livestock Association—C. Hawkins, secretary, Sterling.

Riley County Agricultural Association—W. B. Craig, secretary, Riley.

Rooks County Fair Association—H. A. Butler, secretary, Stockton; September 8-11.

Saline County Agricultural Horticultural and Mechanical Association—B. B. Stimmel, Jr., secretary, Salina.

Shawnee County Kansas State Exposition Company—R. T. Kreipe, secretary, Topeka; September 7-12.

Sheridan County Agricultural Association—Frank A. McIvor, secretary, Hoxie.

Sheridan County, Selden District Fair Association—George W. Sloan, secretary, Selden; September 1-4.

Stafford County Fair Association—D. S. Mull, secretary, St. John; August 26-28.

Wilson County, Fredonia Agricultural Association—W. H. Edumundson, secretary, Fredonia; August 4-7.

W. H. EDUMUNDSON, Fredonia, Kans.

cliation—F. N. Woodward, secretary, Belleville; September 8-11.

Rice County Agricultural and Livestock Association—C. Hawkins, secretary, Sterling.

Riley County Agricultural Association—W. B. Craig, secretary, Riley.

Rooks County Fair Association—H. A. Butler, secretary, Stockton; September 8-11.

Saline County Agricultural Horticultural and Mechanical Association—B. B. Stimmel, Jr., secretary, Salina.

Shawnee County Kansas State Exposition Company—R. T. Kreipe, secretary, Topeka; September 7-12.

Sheridan County Agricultural Association—Frank A. McIvor, secretary, Hoxie.

Sheridan County, Selden District Fair Association—George W. Sloan, secretary, Selden; September 1-4.

Stafford County Fair Association—D. S. Mull, secretary, St. John; August 26-28.

Wilson County, Fredonia Agricultural Association—W. H. Edumundson, secretary, Fredonia; August 4-7.

W. H. EDUMUNDSON, Fredonia, Kans.

### DUROC-JERSEYS

**GAYER'S DUROCS.** 36 choice fall gilts and 14 toppy fall boars by Golden Chief, a good son of Ohio Chief. These will be sold cheap to make room for my spring crop. Also 1 good yearling boar, \$25.

J. H. GAYER, R. R

**POLAND-CHINAS****SUNNY SLOPE POLANDS**

A number of spring pigs, either sex, the farmers' kind, at bottom prices. Gilts will be sold bred or open. Also a litter of Scotch Collie pups, the great watch and cattle dog.

W. T. HAMMOND, Portis, Kans.

**ELM LAWN POLANDS.**

Extra good fall boars \$15 and \$20. Choice gilts bred for August litters at \$20. Will also sell or trade my herd boar, On and On 2d 39817.

R. M. BUCK, - - - Eskridge, Kans.

**Becker's** POLAND-CHINAS. 30 bred sows and gilts by Dandy Rex, Emperor Chief, Black Boy; and bred to dandy Rex and Trouble Maker 2d. Prices reasonable.

J. H. BECKER, Newton, Kans.

**BOARS!****BOARS!**

Choice spring males, at right prices, by Grand Chief, Masterpiece, Nonpareil, Choice Chief, E. L. 2d, and other noted sires. Call on or write

THOS. COLLINS, R. 4, Lincoln, Kans.

**Highview Breeding Farm**

Devoted to the Raising of

**Big Boned Spotted Poland-Chinas**

The biggest of the big. The prolific kind. Big bones, big hams, big spots. Young stock for sale.

H. L. FAULKNER, Prop., - Jamesport, Mo.

**H. H. Harshaw, Butler, Mo.**

Breeds the Big Type of Poland-Chinas

Choice stock for sale at all times at moderate prices. Large herd to select from. Show hogs and herd headers of the largest type and no hot air sales. I sell them worth the money and get the money.

Public sale, May 30, at Butler, Mo. Public sale, October 10, at Harrisonville, Mo.

Public sale, November 10, at Butler, Mo.

Public sale, January 21, at Sedalia, Mo.

Public sale, February 25, at Butler, Mo.

Write me what you want. I will sell them worth the money and guarantee them to please you if you want the big kind with quality. Write for herd catalogue.

**BERKSHIRES****60 Berkshires For Sale 60**

from weaning pigs up to matured animals, including herd boars and old herd sows of Lord Premier, Black Robinhood, Berryton Duke, Masterpiece and Lord Bacon families.

G. D. WILLEMS, Inman, Kans. Thirteen years breeder of Berkshires.

**Ridgeview Berkshires**

-FOR SALE-

One aged and one yearling boar, and spring pigs of both sexes

MANWARING BROS., Lawrence, Kansas

Route 1.

**Sutton's Berkshires**

Best imported and American breeding. Fancy boars, herd headers, \$25 to \$50; good boars, 100 to 125 lbs., \$15 to \$25; fancy gilts, bred to show boars, \$35 to \$50; promising open gilts, \$15 to \$30. Strong bone, fancy heads. Every one good.

We offer you Size, Quality and Finish.

SUTTON FARM, Lawrence, Kans.

**King's Berkshires**

Have weight, quality and constitution developed by rustling for the best pork producing food on earth, alfalfa and blue-grass, supplemented with a light ration of grain and millfeed. They are bred right, and best of all they are priced right. Write for anything in Berkshires to,

E. D. KING, Burlington, Kans.

**Guthrie Ranche Berkshires**

The Guthrie Ranch Berkshire herd, headed by Berryton Duke, assisted by his prize winning son, Revelation, and his half brother, Baron Duke. Size, bone and quality for the farmer; style and finish for the breeder. A few extra good boars and over one hundred fall pigs to choose from.

T. F. GUTHRIE, Strong City, Kans.

**Knollwood Berkshires**

Headed by Pacific Duke 58691, dam Marjorie 37491, by Baron Duke 23d 50000, a son of Baron Lee 4th, the sire of Lord Premier and Duchess 120th 28675, grand-dam of Premier Longfellow. Stock of all ages for sale. All stock guaranteed as represented.

E. W. MELVILLE, Eudora, Kans.

**GEO. W. BERRY,  
High-Class Berkshires**

R. F. D. No. 4, Lawrence, Kans.

Breeder of Masterpiece, head of the superb Masterpiece family; also Black Robinhood, head of the great Black Robinhood.

FOR SALE—Show pigs and herd headers, fall of 1907 farrow. Choice boars and gilts at moderate prices.

**CHESTER-WHITES****O. I. C. SWINE**

Fall boars and gilts, also spring pigs. They are bred right and will be priced right. Let me know your wants. S. W. ARTZ, Larned, Kans.

**O. I. C. BARGAINS**

Bred sows and gilts all sold. Have a fine bunch of spring pigs for which I am booking orders. Write your wants and get prices.

W. S. GODFEE, Onaga, Kans.

Prop. Andrew Carnegie herd O. I. C. swine.

**RED POLLS****RED POLLED BULLS**

12 good, choice bulls from 6 months to 2 years old, by good sires and out of heavy milking dams. Also a few good cows. Prices reasonable.

H. L. PELLET, Endura, Kans.

**COBURN HERD OF RED POLLED CATTLE**

Herd now numbers 115 head. Young bulls for sale.

GEO. GROENMILLER & SON, Pomona, Kans.

**Foster's Red Polls.**

Some choice young bulls and heifers, also a few good cows for sale. Prices reasonable.

CHAS. FOSTER & SON, Eldorado, Kans.

**Red Polled Cattle, Poland-China Swine.**

Best of breeding. Write or come and see.

Chas. Morrison & Son, B. 2, Phillipburg, Kans.

**JERSEYS****Linscott's Jerseys**

ESTABLISHED 1878.

REGISTERED IN A. J. C. C.

Want a choice registered Jersey cow at a bargain? Get my catalogue of heifers.

R. J. LINSCOTT, - - - Helton, Kansas

**GALLOWAYS****Smoky Hill Galloways.**

Choice young stock of both sexes for sale. Large herd to select from. Acclimated to buffalo grass country, equally good for Eastern breeders.

Smoky Hill Ranch, Wallace, Kans.

**CAPITAL VIEW GALLOWAYS**

Over 200 head. Extra lot of young bulls by Imp. Ballie of Lockside 23524, Lost boy of Platte 12682, and Tip Top 22260.

G. E. CLARK, 2301 Van Buren St., Topeka, Kans.

**HOLSTEIN-FRIESIANS****BRAEBURN HOLSTEINS AND BERKSHIRES.**

A few bargains in bull calves. Some choice bred spring pigs and boars ready for service. H. B. Cowles, Topeka, Kans. Ind. Telephone, 1036.

**Somerheim Farm Breeds  
HOLSTEIN-FRIESIAN CATTLE,  
POLAND-CHINA SWINE.**

Stock for sale at all times.

Jas. B. ZINN, Box 348, Topeka, Kans.

**ABERDEEN-ANGUS****Allendale Stock Farm**

Pure-bred Aberdeen-Angus cattle. All leading families represented. A few good herd bulls for sale.

W. A. HOLT, - - Savannah, Mo.

**POLLED DURHAMS****Polled Durhams****FOR SALE.**

A choice lot of young Double Standard Polled Durham bulls by Kansas Boy X2585, S-H19799, Senator X5940, 263005 and the grand bull, Belvedere X2712, 195058. Inspection invited.

D. C. VanNice, - - Richland, Kans.

**HEREFORDS****Maplewood Herefords**

5 bulls, all tops, from 18 to 16 months old; and a few choice females, by the 2400-pound Dale Duplicate 2d, son of the great Columbus. Stock guaranteed. Prices reasonable. A. Johnson, Clearwater, Kans.

**HORSES AND MULES****ROBISON'S PERCHERONS**

FOR SALE—Two extra good 2-year-old stallions; and some good young mares bred to Casino.

J. C. ROBISON, Towanda, Kans.

**America's Leading Horse Importers**

The best stallions in France are imported by us. This is proven by the fact that for many years our horses have won every championship competition for at all of the leading shows in France and America. On account of the fact that we import such large numbers, we can sell you a high-class stallion for less than others ask for an inferior animal. \$1,500 will buy a good one. We have no salesmen in Kansas.

PERCHERONS.

FRENCH COACHERS.

**McLAUGHLIN BROS.,**

Kansas City, Mo., Columbus, O. St. Paul, Minn.

**SHORTHORNS****New York Valley Herds of Shorthorn Cattle and Berkshire Hogs.**

A few fancy male pigs 6 and 7 months old for sale. Also 5 Scotch topped bulls 9 to 12 months old, red, and some heifers; must be sold to make room. See them or write.

**JACKS, STALLIONS**

Some parties claim that they are getting as much for jacks as a year ago, but we are selling ours 50 to 50 per cent cheaper. Kentucky Mammoth, Imported Catalonian, Imported Majorca, \$600 to \$1500, the kind that have been bringing from \$800 to \$1500. If you will visit our farms in the next 30 days you will find the greatest bargains ever offered by any firm in good jacks and stallions. A guarantee unquestionable goes with each jack sold. These jacks must be sold, panic or no panic. Write or wire us when to expect you.

J. F. COOK & CO., Lexington, Ky.

Branch barn: Fair Grounds, Wichita, Kans.

**Jacks, Jennets, Stallions**

30 black jacks of good ages, heavy boned and up to 16 hands high: 38 jennets; stock nearly all of my own raising and acclimated. Also several draft stallions and one saddle stallion for sale. Prices reasonable.

PHILLIP WALKER, Moline, Elk Co., Kans.

**PIKE COUNTY JACK FARM**

Largest importer and breeder of Mammoth jacks in the United States. Every stall in my barns has a big Mammoth jack, 15 to 17 hands high, 1000 to 1300 lbs.; that I will sell on one and two years time to responsible parties. If my jacks are not just as I represent them I will pay all rail-road expenses.

LUKE M. EMERSON, Bowling Green, Mo.

**Percheron Horses**

Stock for sale. Come and see us or write your wants.

F. H. Schrepel, Ellinwood, Kans.

**THE BROWN FARM.**

Horses—Cattle—Swine—Poultry. Silkwood 12226, in stud, race record 2:07; Guidelines record 2:07 1/4; sire of two in 2:10 and of eleven with records better than 2:25. Fee, \$25 to insure. Pasture and feed reasonable. Registered Shorthorns and Jerseys. Large strains. Several Jersey bulls for sale. O. I. C. Swine. Choice boars and gilts for sale. R. I. Red chickens, both rose and single comb. Eggs \$1 per 14, \$5 per 100. Correspondence, inspection and patronage solicited.

T. O. BROWN, Prop., Reading, Kans.

**AUCTIONEERS****R. L. HARRIMAN**

Live Stock Auctioneer.

BUNCETON, - - - MISSOURI

**JAS. W. SPARKS**

Live Stock Auctioneer

MARSHALL, - - - MISSOURI

Twenty Years selling all breeds.

E. E. POTTER, Sterling, Kan.

Live Stock Auctioneer.

Pure bred stock sales a specialty. Best of references. Write, wire or phone for terms and dates, at my expense.

Jas. T. McCulloch,

Live Stock - Auctioneer

Clay Center, Kansas.

I am making a study of your herd and best interests from a public sale standpoint. I am conducting sales for



Few men except carpenters and daily users of tools realize the importance of proper balance. This is especially necessary in the tools for home or farm, as well-balanced tools are less tiring and require less skill to obtain good results. True Balance is but one of the unusual features of

## **KEEN KUTTER**

Tools and Cutlery

Pick up a Keen Kutter Saw or Drawing-knife—note the perfect "hang." Drive a nail with a Keen Kutter Hammer—observe how true the swing. You take no risk at all in buying Keen Kutter Tools. The trademark on each tells you that whatever risk there may be is taken by the manufacturer, for if anything goes wrong you can have your money back.

- Keen Kutter Tools include Carpenter Tools of all kinds, also Forks, Hoes, Scythes, Trowels, Pruning-knives, Manure-hooks, Lawn-mowers, Grass-shears, Rakes, and all kinds of Farm and Garden Tools. Also a full line of Scissors and Shears, Pocket-knives and Table Cutlery.

Keen Kutter Tools have been sold for nearly 40 years under this mark and motto:

*"The Recollection of Quality Remains Long After the Price is Forgotten."*—E. C. Simmons.

Trademark Registered.

If not at your dealer's, write us.

**SIMMONS HARDWARE COMPANY (Inc.),**  
St. Louis and New York, U. S. A.

### **KEEN KUTTER TOOL CABINETS**

contain an assortment of tools suitable for home, farm or shop. The right tool for every use, a place for every tool, and every tool in its place. The only complete outfit of first-class tools sold under one name, trademark and guarantee. Various styles and sizes from \$8.50 to \$85.00.

