

KANSAS FARMER

Volume XLI. Number 37.

TOPEKA, KANSAS, SEPTEMBER 10, 1903.

Established 1863. \$1 a Year.

KANSAS FARMER.

Established in 1863.

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

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

SUBSCRIPTION PRICE: \$1.00 A YEAR

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

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



ADVERTISING RATES.

Display advertising, 15 cents per line, agate (fourteen lines to the inch). Continuous orders, run of the paper, \$1.54 per inch per week.
Special reading notices, 25 cents per line.
Business cards or miscellaneous advertisements will be received from reliable advertisers at the rate of \$5.00 per agate line for one year.
Annual cards in the Breeders' Directory, consisting of four lines or less, for \$16.00 per year, including a copy of the Kansas Farmer free. Special rates for displayed live stock advertising.
Special Want Column advertisements, 10 cents per line of seven words per week. Cash with the order.
Electros must have metal base.
Objectionable advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.
To insure prompt publication of an advertisement, send cash with the order; however, monthly or quarterly payments may be arranged by parties who are well known to the publishers, or when acceptable references are given.
All advertising intended for the current week should reach this office not later than Monday.
Every advertiser will receive a copy of the paper free, during the publication of the advertisement.
Address all communications to

KANSAS FARMER CO.,

116 West Sixth Ave., Topeka, Kans.

Table of Contents

Adams, Mrs. Jessie	943
Apiary department	947
Barger, Lydia	942
Bobby Boy's nest	937
Broadmoor dairy, annual report of the	946
Bulb planting	949
Calhoun, A	935
Chemistry of soils	944
Chicks, gathering the crop of	945
Club department	943
Co-operative experiments, Ft. Hays	935
Dayhoff, J. L	943
Eggs for bakers, dried	948
Experiments with winter crops in Ontario	934
Exports via the Gulf increasing	944
Fair pays at Burlingame, the clean	933
Farmer, and how he factors in civilization, the	942
Farmer feeds them all, the	942
Farm notes	944
Grange department	952
Hammond, R. M	934
Herd header? which breed for a	946
Hog, the bone of the	936
Hog cholera remedy, Government	936
How I was fooled by a bird	941
Hubbard, Thos. D	934
Kansas farmer in the old country, a	942
Laughing girl, or the bare-foot boy's sister, the (poem)	940
Live-stock freight rates in Kansas not advanced	937
Live-stock rates case, the	944
Live-stock sale, requisites for a successful	936
Melzee, C. H	934
Mildred's chickens (poem)	941
Oats, experience with winter	935
Our pilgrimage	940
Petroleum in 1903, production of	952
Pickings (poultry)	948
Political issue revived, an old	944
Poultry at the World's Fair	948
Progress and safety at Galveston	933
Renter's share of clover, the	934
Roseland Farm	934
School question	943
Scott, E. W	949
Shepherd, N. J	944
Sparrow, English	949
Sparrow, song	941
TenEyck, A. M	934
Tests, variations in	946
Timothy or clover, when to sow	934
Tree rights	949
Trees, propagate from bearing	949
Using one's leisure	940
Wheat-growing and seed wheat	934
Wheat market, the	933
White, new kind of	934
White, W. W	934
Zeebrula vs. the mule, the	936

Iowa is expecting about half an average corn crop this season. Kansas will do a good deal better than that.

The Northwestern spring wheat crop is estimated by "Farm, Stock, and Home" to be 20,000,000 short of that of last year.

The State entomologist of Montana, Mr. Cooley, is distributing fungus from South Africa to cause disease among grasshoppers. It is reported as effective in destroying the pests.

BLOCKS OF TWO.

The regular subscription price for the KANSAS FARMER is one dollar a year. That it is worth the money is attested by the fact that thousands have for many years been paying the price and found it profitable. But the publishers have determined to make it possible to secure the paper at half price. While the subscription price will remain at one dollar a year, every old subscriber is authorized to send his own renewal for one year and one new subscription for one year with one dollar to pay for both. In like manner two new subscribers will be entered, both for one year, for one dollar. Address, Kansas Farmer Company, Topeka, Kans.

PROGRESS AND SAFETY AT GALVESTON.

The Galveston News of September 1 contains an exhaustive review of the business and improvements recently made and in progress at that city. During the past year the port of Galveston advanced from fourth to third place in its rank among exporting ports of the United States. The total value of Galveston's foreign imports and exports during the past year was \$105,632,087, compared with a total business of \$97,691,312 for 1901-02. The total value of goods handled over the Galveston wharves during the year just closed was \$447,910,707, compared with a valuation of \$246,567,246 for 1901-02, showing an increase of \$201,343,461. Cash receipts at the custom house from all sources for the year amounted to \$448,519, compared with receipts of \$220,321 for 1901-02. During the past year the amount collected in duties was \$388,504, compared with \$179,084 collected during 1901-02. Galveston's total elevator capacity has been increased to 4,000,000 bushels. The total value of Galveston's foreign exports for the past year was \$104,121,087, compared with a valuation of \$96,181,423 for 1901-02. The total value of Galveston's foreign imports for the past year was \$1,511,334, compared with a valuation of \$1,192,758 for 1901-02, showing an increase of \$318,587. The total value of foreign goods imported over the Galveston wharves during the past year was \$3,233,039. A statement of the total tonnage entered or cleared at the port of Galveston the past year shows 1,340 vessels, with a tonnage of 3,094,903, compared with a total of 1,042 vessels, with a tonnage of 2,222,928 for 1901-02. This shows an increase of 298 vessels and an increase in tonnage of 871,975. The coastwise trade of Galveston during the past year more than doubled that

of the previous year. Galveston has 53 lines of steamships to foreign ports. There are two regular lines of coastwise vessels to New York and 9 lines of coastwise vessels to points in the Gulf. During the past year 90,591 loaded cars were handled in the yards of the Galveston Wharf Company by the various railroads, compared with a total of 77,139 loaded cars handled during the previous year.

The Federal Government spent during the past year \$848,020 at Galveston. Work is well under way on the Galveston channel, which is to be made 30 feet deep and 1,200 feet wide. Galveston now has a depth of 27 feet of water in its channel. Including the Government and seawall expenditures there was a total of \$2,019,420 expended at Galveston during the past year, while there is available for Government, seawall, and private improvements a total of \$5,158,920 for the year beginning September 1.

A leading feature of The News' trade edition is an illustrated writeup of the various stages of work on the seawall. This work was begun in October, 1902. About half of the work on the entire structure is completed. The wall is to be 17,593 feet long, 16 feet wide at the base and 17 feet high. Bonds to the amount of \$1,500,000 have been issued for erecting the wall and for filling immediately behind the wall. Plans are now under preparation for raising the grade of the city with funds made available by a remission of a portion of the State tax for a period of seventeen years.

Among Galveston's improvements this seawall appeals to the outsider as the most important. It gives stability to the city in the assurance it affords that the great Gulf storms may after its completion beat upon Galveston's defenses without possibility of bringing disaster.

Every forward step in the development of the great port on the Gulf is valuable to the people of the Southwest interior.

THE CLEAN FAIR PAYS AT BURLINGAME.

The experience of the Osage County Fair Association amply justifies the policy of having a clean fair. The writer was told that years ago it was thought necessary to have the money offered by various persons for "privileges." The conscience of the farmers of Osage county so rebelled against taking this kind of money, and their rebellion was so ably represented in the directors' meeting that it was finally determined to get along without selling privileges for questionable enterprises. This year the visitor could take his wife, daughter, sons, and grandchildren to see anything on the grounds without risk of bringing a blush to the cheek of the most sensitive, and without even encountering a gambling device of any kind. "Money talks" is a saying frequently used by those who claim that a fair cannot be made to pay expenses without selling out the conscience of the community. Well, the gate receipts at Burlingame last Wednesday amounted to \$600. Pretty good for the first day of a county

fair. People went to the fair. The writer estimated that half of those on the grounds were women and children, and half of the remainder were "young people" who were enjoying the merry-go-round, the lemonade, the peanuts, and other pleasant excuses for the young fellows to spend a little money for the enjoyment of the attractive young ladies, who accepted the proffered courtesies with undisguised pleasure. The editor has not learned how the gate receipts on the following days footed up, but has no doubt the fair was a financial, as it certainly was a social success.

The exhibits of live stock, of poultry, of farm, garden and dairy products, of home decorative productions, were interesting. But the best exhibit of all, and the one which is the chief attraction of every county fair, was the people. Speaking there was—more than any community ought to be asked to hear at one sitting; races there were, but the visiting was the principal thing, and the pleasant recollections free from regrets will bring the same people and many more to the Osage County Fair next year.

THE WHEAT MARKET—SOWING.

A great contention is in progress as to the magnitude of this year's wheat crop. This is confined almost exclusively to dealers on the speculative market, and others interested in having the real volume of the crop greatly magnified or greatly reduced in the estimation of other people. The two opposing interests are strongly arrayed in the Chicago Board of Trade. Those brokers who are anxious to handle speculative deals for farmers—well knowing that when farmers speculate they take the bull side of the market, that is, they buy to hold for a rise—are industriously sending out circulars in which the showing is positively made that there is a great shortage of wheat, and that this is, therefore, a propitious time to buy. Another lot of venders of statistics are now actively in the field on the bull side. These are attempting to have the wheat of the country "cornered" by inducing farmers to hold their stocks. The KANSAS FARMER does not care to question the motives of these last, whose motto is "dollar wheat," but to caution the reader that the judgment of those who are assuming the management of these great interests is no more perfect than that of other men. Dollar wheat may come, but it behooves every man to study market conditions for himself and to act on his own judgment in disposing of his crop.

Opposed to the two agencies here mentioned as giving out statements which, if accurate, would point to advancing prices, there are the "bear" operators, who always see a great crop of wheat coming upon the market and are sure prices are going lower. They are interested in having their predictions believed, for then their customers will authorize them to sell wheat, which they never possessed, expecting to compel the purchaser to pay the amount of the decline. The broker's interest, as a

(Continued on page 944.)

Agricultural Matters.

REPLIES FROM THE AGRICULTURIST OF THE KANSAS EXPERIMENT STATION.

When to Sow Timothy or Clover.

I expect to sow five or six bushels of timothy and clover. When is the best time to sow it, fall or spring, with or without nurse crops? I have obtained good results by following your instructions in planting Kafir-corn.

Allen County. C. H. MELJZEE.

Timothy may be sown either in the fall or in the spring, but clover usually does best when sown early in the spring. A common practice in Iowa and other States is to sow timothy in the fall with a light seeding of wheat or rye as a nurse crop and early the next spring seed the clover, simply sowing broadcast and depending upon the spring rains to cover the seed. If the fall remains dry I should prefer to seed the timothy and clover in the spring, using a light seeding of oats as a nurse crop; or if the ground is reasonably clear you will be more apt to get a good catch of grass by seeding without a nurse crop. The timothy and clover may be seeded broadcast after seeding the oats, harrowing lightly immediately after seeding, or the grass-seed may be sown with the seeder attachment on the drill, care being taken not to cover the seed too deeply. A field that is seeded to grass should not be harrowed except immediately after seeding and then only lightly. Two or three days after the grass-seed is sown in moist soil and under favorable weather conditions it will begin to germinate and the slightest stirring of the ground is apt to destroy the life of the seed.

At this station our usual method is to seed all kinds of grasses without a nurse crop on well prepared land which has been cleaned of weeds by cultivation or the growing of cultivated crops. The experiments at the station have shown that a good catch is more apt to be secured by this method either in fall or spring seeding than by using a nurse crop. In your part of the State, seeding with a nurse crop is more apt to be successful than at this station, for the farther west we go the dryer the climate is and the better the conditions must be in order to secure a good catch of grass. Timothy and clover are sown quite generally in Allen County and it would be my recommendation that you inquire as to the method of seeding which is in general practice in your neighborhood as the method pursued is likely to be well adapted to the locality.

A. M. TENEYCK.

New Kind of Wheat.

I send you a sample of wheat for examination. A large number of farmers in this vicinity expect to plant this new wheat this fall. Do you think that we should plant this wheat here or not? Please write us something concerning this, and oblige

McPherson County. W. W. WHITE.

If I understand it this is a new variety of wheat which is being introduced into your locality. I can not identify the variety by name. It belongs to the white, soft, wheat type and resembles the Clawson more nearly than any other variety with which I am able to compare it. McPherson County is in the hard-wheat belt and I should expect that the Russian or Turkey Red wheat would do better with you than any of the varieties of soft wheat. The soft-wheat varieties are grown successfully in eastern and southeastern Kansas, but even in this part of the State which seems adapted to the growing of soft wheat, the red varieties, such as the Fultz and Zimmerman, are more extensively grown and give better results than the white varieties.

The white, soft type of wheat like the sample you sent is grown quite extensively on the Pacific Slope but is not grown to any extent, so far as I am aware, in Kansas. In the experiments at this station the red varieties have as a rule yielded much better than the white varieties. If this new variety of wheat has not been grown

to any extent in your locality it would seem wise, if you plant it at all, to plant it in a small way, simply as an experiment, because this wheat is not likely to prove so hardy and productive in your locality as the red, hard wheats.

A. M. TENEYCK.

Roseland Farm.

Will there be any clover-seed this year or enough of it to justify one in retaining the second cutting for thrashing? In all the earlier blossoms on my second growth of clover there seems to be no seed of any consequence. I had a very heavy first cutting—2½ tons to the acre.

I have carefully pulled out all the English plantain and dock to avoid having their seed among the clover-seed. But it looks doubtful if I will have much clover-seed or enough to pay for thrashing in case I keep the second crop instead of cutting for hay.

When shall I cut it for seed if the seed comes in the blossoms now on and coming on? I enclose you some of the heads of the earlier blossoms and of the next later. How much seed per acre should clover yield?

A great corn-crop is maturing on Roseland. How are your corn plots testing out? Will there be record-breaking ears and yields?

THOS. D. HUBBARD.

Roseland Farm, Neosho County.

The sample of clover-heads which you sent are very poorly filled with seed and it is my judgment that unless the later blossoms fill out better than the earlier ones the crop will not be worth cutting for seed. A crop of clover yielding less than two bushels of seed per acre can not be profitably cut for seed if any use can be made of the hay. If there is a good stand of clover on the field and by examination it is found to yield, on an average, about thirty good seeds per head, the crop will yield in the neighborhood of three bushels of seed per acre.

Medium red clover should be cut for seed when nearly all the heads have turned brown. The later maturing heads are likely to be better filled than those which matured earlier.

Clover should yield from two to six bushels of seed per acre, three or four is a good average crop.

Our crop of corn is very good although I do not think that the yield will be at all extraordinary. Our corn was planted during the first part of May and has eared very well and much of it is nearly matured at this date.

A. M. TENEYCK.

Wheat-Growing and Seed Wheat.

EDITOR KANSAS FARMER:—Every person who has engaged in wheat-growing to any extent or has given the matter any thought whatever knows the importance of having good, pure seed. He knows that it costs just so much to plow, sow, reap, and thrash a field and that it is the yield that brings in the pay; that the yield and price received for it must equal the cost, or the grower will soon be compelled to quit business; that the larger the yield and better the price the more profit there is; that if wheat can be raised and break even at 15 bushels per acre at 50 cents per bushel, that a 30-bushel yield will mean about 100 per cent profit and 35 bushels still more profit.

A certain farmer might raise 1,000 acres of wheat and secure a yield of 12 or 15 bushels per acre, and find on closing up his accounts that he had not made a single cent. He had done a big business, handled lots of money, but was none the better off. He had simply been trading dollars and run the risk of losing them in the act.

Another farmer might raise 40 acres of choice wheat, secure yield of 35 to 40 bushels per acre, and make 200 to 300 per cent profit. It is not the volume of business handled but the margin of profit that multiplies our means. Better raise 50 acres of choice wheat with a high yield than 100 acres of the common kind, for there is more profit and less work. The small additional expense for good seed will all come back to you one hundredfold.

DETERIORATION.

Another question of vital importance

that deeply interests all grain-growers is, will wheat deteriorate? and when I once get good seed how long may I continue to raise it on the same soil with profit, and what are the signs of deterioration?

Let us review briefly the history of some of the varieties of wheat that have been grown in this State. Kansas did not grow much wheat until in the 70's. The first varieties grown were those brought in with the settlers from Ohio and Indiana and were mostly spring wheats. It was soon proven that spring wheat was not the thing for Kansas. These varieties would make a nice kernel, but the yield was small. They soon ceased to sow spring wheat. Later came the soft winter wheats, of which the Early May is a good example. This variety was grown extensively in the north-central part of the State for several years and made a good yield with a nice berry; but each year it was grown it continued to degenerate until it closed its history with complete deterioration. It was effected badly by rust, insects, drouth, and smut and the last crop grown would not make good feed for swine.

Another variety that might be mentioned here is the "grass wheat." It was a semi-hard wheat and could be sown in either spring or fall. It completed its course in about ten years, closing its record in 1888 by becoming unpopular because of decrease in yield and quality, and was replaced by Turkey, Fultz, and other varieties.

COMMON TURKEY.

In the year 1874 a colony of Menonites came from the Russian Crimea to settle in central Kansas. They brought with them a small amount of wheat which they planted. This wheat was a hard, red, winter wheat which became known as "Turkey." It spread to some extent but was not very plentiful or sown to any great extent until the year 1882. From the year 1882 to 1885 the farmers of central Kansas began to realize its value, its great hardiness and inherited constitutional vigor brought about by being grown on the steppes and plains of Russia, subjected to the severe vicissitudes of that climate. They realized that as a wheat for resisting drouth, severe winters, rust, insects, etc., it could not be beaten; that the yield was above that of other varieties, and they began sowing it extensively. One objectionable feature about it was the price. The millers for a number of years would not take it except at a discount of several cents below other wheats—they did not know how to handle it. It is different now, they have learned how, and this "Turkey" is the wheat that has made Kansas famous. But who is there who does not know that this wheat is now showing unmistakable signs of deterioration; that it is becoming softer every year; that it does not stool as it once did, that it falls down before maturity; that the yield is less and the quality is becoming worse every year? What shall the end be?

The experience of the great Northwest should be a warning to the farmers of the great Central West. The celebrated Scotch Fife which gave to the Northwest its fame and prestige is rapidly losing that renown. The


Varieties.	Tons of straw.	Pounds per bu.	Bushels per acre
Dawson's Golden Chaff, white.....	4.2	59.7	63.5
Imperial Amber, red.....	4.4	61.0	61.0
Prize Taker, white.....	4.2	59.0	60.3
Early Genesee Giant, white.....	4.5	59.9	60.1
Rudy, red.....	3.9	61.0	57.7
McGarvin, red.....	3.9	61.1	57.7
Egyptian Amber, red.....	4.6	61.8	57.5
Early Red Clawson, red.....	4.1	59.4	57.4
White Golden Cross, white.....	4.5	58.9	57.3
Buda Pesth, red.....	3.9	61.3	57.2
Michigan Amber, red.....	4.6	60.2	55.4
Treadwell, white.....	4.0	61.0	54.2
Turkey Red, red.....	3.7	61.5	53.4
Bulgarian, white.....	3.9	61.1	53.0

Mineapolis mills for a time enjoyed the benefits of one- to two dollars premium per barrel on this flour, but continued growing of the same seed upon the same soil has put an end to this. If farmers of the Central West will profit by the experience of others, our soil and climate will do the rest.

Wheat is strictly a self-pollinating plant and will deteriorate if sown continually upon the same soil and under the same climatic conditions without any particular precautions being taken to maintain its standard.

THE BREAK DOWN
is usually in the wheel. They receive the strain and wear. They dry out, spokes and felloes rot, tires come loose. Get the service out of wheels you do out of gears by using

Electric Metal Wheels.



You have a wagon for a life time. Electric are the staunchest, lightest, easiest running wheels made. Straight or staggered oval steel spokes, cast in the hub, not riveted in tire. Broad tires, no rutting, light draft, any height, fit any wagon. Write for free illustrated catalogue on Electric Wheels and Handy Wagons.

ELECTRIC WHEEL CO.,
Box 46, Quincy, Ills.

The length of time it takes any given variety to deteriorate will be proportional to its inherited constitutional vigor and subsequent treatment.

The signs of deterioration are:

1. A decrease in yield and quality; the straw not filling in proportion to its other development.
2. A soft, flimsy straw that falls down before maturity.
3. Poorer stooing qualities than formerly possessed.
4. More liability to be effected by drouth, severe winters, insects, rust, etc.
5. General weakness, as shown by color and general appearance.

I have for several years been engaged in wheat-growing and am deeply interested in wheat, breeding seed wheat, and its improvement, having taken up the matter at the Kansas State Agricultural College and made a special study of the same. I recently examined a number of wheat-fields in various localities of central Kansas and find on talking to the owners of these fields that the general opinion is that the wheat is rapidly deteriorating and does not possess the vitality it once did.

The unmistakable signs of the truth of this statement are present and I am fully convinced that it is true. If there be any who doubt this let them continue to grow the wheat until they are convinced.

I can do no better than recommend the sowing of seed recently imported from the Crimea in the region of the Black Sea, Europe.

R. M. HAMMOND.

Osborne County.

Experiments with Winter Crops in Ontario in 1903.

1.—RESULTS OF EXPERIMENTS AT THE COLLEGE.

Winter Wheat.—The winter wheat crop of the present year has been unusually good. The yields have been high and the quality of the grain has been excellent, some of the varieties weighing as much as 63.8 pounds per measured bushel. The rust did not cause serious damage, and the Hessian fly has apparently disappeared for the present.

Upwards of two hundred varieties of winter wheat have been grown at the college within the past fourteen years. The most of these have been grown for at least five years in succession. The following figures represent the average results for five years of some of the best varieties in yield of both straw and grain per acre, and in weight of grain per measured bushel:

Varieties.	Tons of straw.	Pounds per bu.	Bushels per acre
Dawson's Golden Chaff, white.....	4.2	59.7	63.5
Imperial Amber, red.....	4.4	61.0	61.0
Prize Taker, white.....	4.2	59.0	60.3
Early Genesee Giant, white.....	4.5	59.9	60.1
Rudy, red.....	3.9	61.0	57.7
McGarvin, red.....	3.9	61.1	57.7
Egyptian Amber, red.....	4.6	61.8	57.5
Early Red Clawson, red.....	4.1	59.4	57.4
White Golden Cross, white.....	4.5	58.9	57.3
Buda Pesth, red.....	3.9	61.3	57.2
Michigan Amber, red.....	4.6	60.2	55.4
Treadwell, white.....	4.0	61.0	54.2
Turkey Red, red.....	3.7	61.5	53.4
Bulgarian, white.....	3.9	61.1	53.0

The Dawson's Golden Chaff produces stiff straw and soft grain, and the Turkey Red, weak straw and hard grain. We have made several crosses between these two wheats, and hope to secure a new variety with the productive power and the stiffness of straw of the Dawson's Golden Chaff and the quality of grain of the Turkey Red.

In 1902, Ontario millers were desirous to have Turkey Red, Michigan Amber, Early Genesee Giant, and Bulgarian varieties of winter wheat grown

throughout the Province, owing to their superior milling qualities.

The varieties of winter wheat which we have grown for less than five years, and which produced the greatest yields of grain per acre in 1903, are as follows: (1) New American Banner, (2) Abundance, (3) No. 6, (4) Cap Sheaf, (5) Silver Dollar, (6) Paramount, (7) Forty-fold, (8) Superlative, (9) Prosperity, (10) Winter King, (11) Fultzo-Mediterranean, and (12) Banatka.

The average results of six years experiments show that large plump seed yielded seven bushels fifty-one pounds of wheat per acre more than the shrunken seed; and six bushels thirty-three pounds more than the small plump seed. Sound wheat produced five times as great a yield of both grain and straw as seed which had been broken in the process of thrashing.

Dawson's Golden Chaff seed wheat grown in Ontario gave slightly better results in 1902-3 than that imported from a thousand miles farther south.

From sowing one, one and one-half, and two bushels of winter wheat per acre for each of six years, average yields of 40.2 bushels, 43.3 bushels, and 43.9 bushels per acre, respectively, were obtained. As two varieties of wheat were used each year, these averages represent twelve distinct tests.

Winter wheat which was sown broadcast by hand gave practically the same results as that which was drilled in with a machine in the average results of tests made in each of eight years. The land was in a good state of cultivation in every instance.

Winter wheat sown at the college during the last week in August or the first ten days in September yielded better than that sown at a later date in the average results of tests made in each of the past nine years. In 1903 the highest average yield was obtained from sowing on September 9, 1902.

In an experiment conducted for four years, winter wheat grown on land on which a crop of field peas was used as a green manure, produced an annual average of 22.1 per cent more wheat per acre than on land where a crop of buckwheat was plowed under. In another experiment which was carried on for one year, winter wheat grown on land prepared from clover stubble produced 20.7 per cent more wheat per acre than on land prepared from timothy stubble. In a two-years' test with commercial fertilizers, an application of 160 pounds of nitrate of soda per acre increased the yield of wheat 18.8 per cent, on 7.2 bushels. The present price of nitrate of soda is about \$60 per ton.

For seven years in succession five plots of each of two varieties of winter wheat were sown at the same time in the autumn, and cut at five different dates in the following summer—a week being allowed between each two dates of cutting. Seed from each of the seventy cuttings was sown and the crop therefrom was harvested when ripe. In the average results of these tests it is found that the heaviest weight of grain per measured bushel and the largest yield of both grain and straw were produced from seed taken from the crops which had become very ripe by remaining uncut for the longest period of time.

In the average of four years' tests, seed wheat infested with smut spores produced grain containing the following number of smut balls per pound of wheat: untreated, 45; treated with potassium sulfide, 11; treated with copper sulphate (Bluestone), 2, and treated with hot water, 1. The copper sulfate (Bluestone) treatment consisted in soaking the seed for twelve hours in a solution made by dissolving one pound of copper sulfate in 24 gallons of water, and then immersing the seed for five minutes in lime water made by slaking one pound of lime in 10 gallons of water. The hot water treatment consisted in immersing the wheat for fifteen minutes in water at 132° F. After each treatment the grain was spread out and stirred occasionally until dry enough to sow.

Hairy Vetches.—For three years in succession, Hairy Vetches have been

sown in the autumn and ripened in the following year with the result that an average of 10.8 bushels of seed per acre has been obtained. In past years, the Hairy Vetch seed has been principally imported from Germany and usually costs fully \$5.00 per bushel. The Hairy Vetches produce a crop which seems specially useful as a pasture for farm stock, a cover crop in orchards, or a green manure for plowing under to enrich the land.

II.—RESULTS OF EXPERIMENTS THROUGH-OUT ONTARIO.

Varieties of Winter Wheat.—Three varieties of winter wheat were distributed throughout Ontario in the autumn of 1902 for cooperative experiments. Good reports of successfully conducted experiments have been received this year from eighteen counties, extending from Essex in the south to Haliburton in the north. The following is the average yield in weighed bushels of grain per acre for each variety for five years at the college, and for 1903 throughout Ontario:

	College.	Ontario.
	bus.	bus.
Imperial Amber.....	61.0	24.9
Buda Pesh.....	57.2	21.4
Turkey Red.....	53.4	20.7

All three varieties are bearded. The chaff of the Imperial Amber is red, and that of the others is white. The grain of each variety is red, hard, and recommended for the production of flour of good quality. All three varieties are rather weak in the straw. The Imperial Amber is a close rival to the Dawson's Golden Chaff in yield of grain per acre.

Fertilizers with Winter Wheat.—In the cooperative experiments with different manures applied in the spring of the year, the average results show a yield of 29.7 bushels of winter wheat from an application of one hundred and sixty pounds of nitrate of soda per acre, and 35.7 bushels from a top dressing of twenty tons of well rotted cow manure per acre. The unfertilized land gave an average yield of wheat per acre of 22.7 bushels. The yield of wheat from one hundred and sixty pounds of nitrate of soda surpassed the yield from four hundred pounds of common salt by 3.5 bushels per acre. Nitrate of soda, when applied in the spring, gave better results than when applied in the autumn. The usual cost of nitrate of soda is about three and one-half cents per pound in small quantities, and three cents per pound in ton lots.

Winter Rye, Hairy Vetches, and Crimson Clover as Fodder Crops.—An interesting cooperative experiment was made for the first time by sowing winter rye, hairy vetches, and crimson clover, in the autumn for the purpose of producing green fodder in the following summer. The reports show that the crimson clover received the greatest injury from the early spring frosts. The highest individual yields were produced by the hairy vetches. In the average results, however, the winter rye surpassed the hairy vetches by 420 pounds of green fodder per acre, but the quality of the feed of the latter was superior to that of the former. In ten out of a dozen tests, the hairy vetches were eaten readily by farm animals, and seemed particularly suitable as a feed for hogs. A Bruce farmer reported that "the hairy vetches gave a large yield, and were relished by all classes of animals."

C. A. ZAVITZ, Director.
Agricultural College, Guelph, Ont.
[These experiments are valuable even at this distance. They show our Canadian neighbors to be active experimenters along useful lines.—EDITOR KANSAS FARMER.]

Experience With Winter Oats.
EDITOR KANSAS FARMER:—I have just read, in your issue of August 20, an account of the experience of J. B. Dobbs with winter oats.

My experience with winter oats has not, like his, extended over "several years," but it has been more satisfactory.

Last fall I got three bushels of winter oats and sowed them on two acres of land, with a press drill, October 16.

The land had been plowed in July and again just before the oats were put in. I harrowed it three times after

the last plowing and it should have been rolled as it was too loose for a good seed-bed. The weather was wet, however, and the oats came up in a few days and made a fair growth before winter set in.

They came through the winter in better condition than any of the wheat in this vicinity. The spring was wet and cold and the growth of the oats slow for some time, but when the weather got warmer they pushed up rapidly and made a good crop, while spring-sown oats were very poor. They grew very tall and had long heads.

John E. Francis, an old farmer, who has had long experience raising oats, said when they were beginning to ripen, "I think it is the finest piece of oats I ever saw."

They stood up well and were not hurt by rust while many of the spring oats were ruined by it. Being sown late they were not pastured.

My farm is on Sac river in Missouri, due east of the north line of Bourbon County, Kans.

I was so well pleased with the oats that I shall sow several acres this fall. I have no seed for sale but can tell any one interested where he can get them for 60 cents per bushel.

I would do so here but I suppose the KANSAS FARMER'S advertising space is for sale. A. CALHOON.
Saint Clair County, Mo.

Fort Hays Cooperative Experiments.

The Fort Hays Branch Experiment Station has this year produced superior wheat of several varieties. It is the purpose of Superintendent Haney to extend the benefits of this seed to progressive farmers through a system of cooperative work. The profits of all sales of station wheat will be applied to carrying on the work in this line.

The following from Supt. J. G. Haney gives all needed information for those who desire to secure the advantages of the superior seed produced at the station:

"There has been grown on the Experiment Station this year over two hundred varieties of fall wheat, spring wheat, oats, barley, and rye. A number of these varieties have given yields considerably above the average. This may be due in part to the land being new, but the varieties were furnished by the Bureau of Plant Industry of the Department of Agriculture, and were already known to be very promising. As this work is in cooperation with the Cereal Investigation Bureau, and it is the intention to extend it as much as possible, it is thought best that the seed of the varieties that appear superior should be sold to wheat-growers.

"It is desired by the station that the parties to whom seed is sold be considered as cooperators. It will be the policy of the station to send out only superior seed, from which reports will be expected. The cooperators will receive a written certificate of the kind and quality of seed which will enable them to sell the seed raised to their neighbors. It is expensive work to grow hundreds of different varieties and find only a few that can be sold as superior.

"The appropriations for work here are limited, so we are adopting this method of extending the experiments. A variety that yields only from one to two bushels per acre more than the wheat usually grown, will make a large increase in profit, for it takes no more time or seed to plant and harvest.

"The Minnesota Experiment Station has over five hundred cooperators who are anxious to take all the seed recommended by the station. It is hoped that we may find the same plan successful in Kansas, and that the profits in wheat-growing may be increased."

VARIETIES AND YIELDS.
"The following is a list of the best varieties for sale, price and yield of each:

No. and name of wheat.	Yield per acre.	Bu. on hand.	Price per bu. sacked.
4. Karkov, a Russian winter wheat (bearded).....	40.90	190	\$2.50
5. Beloglina, a Russian winter wheat (bearded)....	38.34	75	2.00
6. Ulta, a Russian winter wheat (bearded).....	56.35	35	2.00
7. Crimean, a Russian winter wheat (bearded).....	40.61	35	2.50
8. Ghirka, a Russian winter wheat (bald).....	35.68	30	2.00
Imported Turkey (bearded).....	35.62	675	1.50
33. Kharkov (bearded).....	35.28	10	2.50
35. Crimean Importation (bearded).....	36.94	10	2.50
37. Theiss (bearded).....	40.97	10	2.50

"I wrote to Dr. Pierce for advice though I thought surely I would die."

"After my baby came in January, 1900," writes Mrs. Nancy Abner, of St. Paul, Ark., "I suffered severely from all sorts of aches and pains, until the following May, when I read one of your pamphlets, treating on female diseases. I wrote to Dr. Pierce for advice, although I thought surely I would die, as our physician told me I was more liable to die than to get well; your fatherly advice caused my health to be restored. I took five bottles of Dr. Pierce's Favorite Prescription, three of 'Golden Medical Discovery,' and three vials of 'Pellets,' together with your other remedies, and I am now able to do all my work."

Weak and sick women are invited to consult Dr. Pierce, by letter, free, and so obtain without charge or fee the advice of a specialist upon diseases peculiar to women. All correspondence is held as strictly private and sacredly confidential. Address Dr. R. V. Pierce, Buffalo, N. Y.

The invitation to consult Dr. Pierce, by letter, free, is not to be confused with offers of "free medical advice" made by irresponsible persons who are not physicians and are professionally and legally disqualified for the practice of medicine.

Dr. Pierce's Favorite Prescription is a safe and reliable remedy for the cure of womanly ills. It establishes regularity, dries weakening drains, heals inflammation and ulceration and cures female weakness.

FREE. Dr. Pierce's Common Sense Medical Adviser is sent free on receipt of stamps to pay expense of mailing only. Send 21 one-cent stamps for the book in paper covers, or 31 stamps for the cloth-bound volume. Address Dr. R. V. Pierce, Buffalo, N. Y.

"The branch station has also small quantities of other varieties that made yields of thirty-five bushels or over per acre. Sacked f. o. b. Hays City.

"We also have a considerable amount of barley, macaroni wheat, and oats which will be ready for distribution next spring.

FORM OF AGREEMENT.

"The Fort Hays Branch Experiment Station in cooperation with the Cereal Investigation Bureau agrees to furnish seed that has proven superior in yield and other qualities as far as known. No less than two bushels of wheat, oats, barley, or rye will be sold to any one person.

"The cooperator agrees to prepare the land, plant and harvest the seed in the manner best adapted to growing the crop in his locality, and report the manner and time of preparing land, seeding, and harvesting, and give his opinion concerning it in general.

"So that we may know you, we would be glad to have answers to the following questions:

Name.....
County.....
Post office.....
Railroad station.....
Land owned.....
Range.....Town.....Section.....
If renter, how much rented.....
Term of lease.....
Area usually grown in wheat.....
Bottom or upland.....

"The Fort Hays Branch Experiment Station comprises four thousand acres of the abandoned Fort Hays Military Reservation, Town 14, Range 18, west 6 P. M. Ellis County. Work was begun in March, 1902. The present crop of fall wheat is the first grown. About seven hundred acres is now farmed, but in two years it will be increased to nearly two thousand acres."

Tells His Friends.

Ree Heights, S. D., March 1, 1902.
I now avail myself of the opportunity of telling my friends that they will find nothing better than Watkin's Vegetable Anodyne Liniment for cholera in calves. I gave them about a tablespoonful in a wine glass of water; I use a wine or beer bottle to drench with, and in one hour, if not relieved, repeat the dose.
LEWIS LACCOSS.

The Stock Interest.

THOROUGHBRED STOCK SALES.

Dates claimed only for sales which are advertised or are to be advertised in this paper.

- October 1, 1903—W. S. Hamilton, Clarksdale, Mo., Shorthorns.
- October 1, 1903—Poland-Chinas, J. R. Killough & Sons, Ottawa, Kans.
- October 6, 1903—A. E. Burleigh, Kansas City, dispersion sale Polled Durham.
- October 7 and 8, 1903—Combination sale of Poland-Chinas and Shorthorns. Poland-Chinas on the 7th, Shorthorns on the 8th. James P. Lahr, Sabetha, Kans., Manager.
- October 8, 1903—John Cameron, Lebanon, Kans., Poland-China swine.
- October 8, 1903—M. C. Vansell, Muscotah, Kans., Poland-Chinas and Shorthorns.
- October 9, 1903—Sabetha Combination Sale Co., Sabetha, Duroc-Jerseys.
- October 12, 1903—C. O. Hoag, Centerville, Kans., Poland-China hogs.
- October 13, 1903—Shorthorns at Wellington, Kans. D. H. Robinson, Jamesport, Mo.
- October 14, 1903—C. M. Garver & Son, Abilene, Kans., Poland-Chinas.
- October 14, 1903—A. G. Lamb, Eldorado, Kans., Poland-Chinas.
- October 15, 1903—Central Missouri Hereford Breeders' Association, at Salisbury, Mo. S. L. Brock, Secretary, Macon, Mo.
- October 16, 1903—W. S. Wilson, Manager, Shorthorns and Herefords, at Monroe City, Mo.
- October 19, 1903—Oak Grove, Mo., Poland-Chinas. E. E. Axline.
- October 19-24, 1903—American Royal, Kansas City, sale by Galloway Breeders' Association.
- October 21, 1903—American Aberdeen-Angus Breeders' Association sale at Kansas City. W. C. McGavock, Mt. Pulaski, Ill., manager.
- October 22, 1903—100 head of Herefords, at Kansas City, Mo. C. R. Thomas, Secretary.
- October 24, 1903—Newton Bros. Whiting, Kans., Duroc-Jersey swine.
- October 27, 1903—Duroc-Jerseys, Peter Blocher, Richland, Kans.
- October 29, 1903—W. W. Miller & Sons, Lyons, Kans., Standard-bred horses.
- October 30, 1903—Combination sale of Poland-Chinas, Clay Center, Kans. J. R. Johnson, manager.
- November 3, 1903—O. B. Smith & Son, Cuba, Kans., Poland-Chinas.
- November 3, 1903—Aberdeen-Angus at South Omaha. Chas. Escher, Jr., Manager.
- November 5, 1903—Breeders Combination Sale, Westmoreland, Kans.
- November 9, 1903—Cooper County Shorthorn Breeders' Association sale at Buncectan, Mo. W. H. H. Stephens, Secretary.
- November 10, 1903—D. A. Kramer, Washington, Kans., Poland-Chinas.
- November 10-11, 1903—Marshall County Hereford breeders' annual sale at Blue Rapids, Kans.
- November 11, 1903—David Cook, Washington, Kans., Poland-Chinas.
- November 12, 1903—Purdy Bros., Harris, Mo., Shorthorns.
- November 13, 1903—Central Missouri Hereford Breeders' Association, annual sale; S. L. Brock, Macon, Mo., Secretary.
- November 17, 18, 19, 1903—Armour Funckhouser, Herefords, at Kansas City, Mo.
- November 21, 1903—L. E. Moyer, Junction City, Kans., Poland-Chinas.
- November 21, 1903—Henry W. Kuper and W. D. Elmore, Humboldt, Nebr., Shorthorns.
- December 2, 1903—American Galloway Breeders' Association sale, at International Exposition, Chicago.
- December 3, 1903—100 head of Herefords, at Chicago, Ill. C. R. Thomas, Secretary.
- December 4, 1903—American Aberdeen-Angus Breeders' Association sale at Chicago. W. C. McGavock, Mt. Pulaski, Ill., manager.
- December 10-11, 1903—Hereford cattle and Berkshire swine, Sunny slope Farm, Emporia, Kans., C. A. Stannard, owner.
- December 18, 1903—Plainville Breeders' Association combination sale of cattle and swine, Plainville, Kans.
- February 3, 1904—Jno. O. Hunt, Maryville, Kans., Duroc-Jersey sows.
- February 4, 1904—C. E. Pratt, Frankfort, Kans., Duroc-Jersey sows.
- February 5, 1904—J. B. Davis, Fairview Kans., Duroc-Jersey sows.
- February 4, 5, 6, 7, 1904—Percherons, Shorthorns, Herefords, and Poland-Chinas, at Wichita, Kans., J. C. Robison, Towanda, Kans., Manager.

Requisites for a Successful Live-stock Sale.

This method of disposing of the surplus live stock that accumulates on our farms from year to year has grown popular because it is the best way to sell it. It is best for both the seller and the buyer as well.

It enables the breeder to clean up in one day the product of his year's work, getting all of his money in one bunch, and thereby relieving him of the unnecessary correspondence, anxiety, worry, dissatisfaction, disappointment, failure and defeat that belong to the "old fogey" method of trying to sell at private treaty.

Upon the other hand, it enables the buyer to have something to say about what he shall buy and at what price. He is not altogether at the tender mercy of the breeder, who sometimes says, "I can't spare this cow or that one; you may have those two over in the other lot if you are willing to pay my price." But at auction sales there are no reservations or setting of price. The buyer can make his own selections from out of the whole offering, and he can buy at a price that is fixed by the general public, or rather by himself and the other buyers who are present, thus making a market that is the most satisfactory of all markets.

The requisites for a successful live-stock sale I will divide into three general classes, as follows:

First—A man must have something good to sell.

Second—He must let the people know about his sale.

Third—He must have "his house in order" when the sale day arrives.

Now, then, we will take up each of

the three counts, separately, and enter briefly into detail or explanation.

SOMETHING GOOD TO SELL.

In the first place, in order to have something good to sell, in the line of desirable live stock, a man must be a breeder of some useful, well established, money-making and popular breed of thoroughbred stock.

I am talking to farmers. Every live-stock breeder is necessarily a farmer. I wish I could say that every Missouri farmer was a breeder of some variety of improved live stock. If this were the case, we would have more sales and better ones; but alas, somebody has said, "It takes all kinds of people to make a world." We have three classes of farmers. The farmer who raises grain and other farm products, exclusively, for market, is a generation behind the times but he is better off than the farmer who raises good grain, hay and grass and then feeds it into scrub stock. This fellow makes me tired. He needs a guardian or else he ought to turn his business over to his wife. Any woman would have more sense than that. There is no danger of his having a good sale; he hasn't "got the goods" that people want and are willing to pay good prices for. Life is too short and land is too high in this country, for a man to fool away his time on scrub stock or scrub people.

But it is the other class, the up-to-date, wide-awake farmer and stock breeder that I like to talk about, the man who is feeding the products of his farm into well-bred live stock, thus turning it into cash by converting it into high priced beef, pork or horse flesh as the case may be. These are the men who are living up to their opportunities. They are the class who are getting rich just now faster than any other class. They live in the best houses, they wear the best clothes, they ride in the best rubber-tired rigs, behind the best trotting-bred teams. They have the happiest homes and they are the people who have successful public sales because they have something good to sell and the public are willing to buy it and pay good money for it.

NECESSITY OF PUBLICITY.

Requisite No. 2 will, of course, be understood to have reference to the advertising of your sale. Judicious advertising is a very important and essential feature that should not be overlooked. You need not be extravagant in this particular, but be sure you begin to advertise in time. As soon as you have decided upon the date you will use, having first secured the services of one or more good actioneers, have the live-stock papers you expect to use announce your sale date and keep it before the people.

Don't try to sell any kind of good stock without a catalogue. It is the poorest economy imaginable. Get out a neat, plainly printed catalogue and be sure it is finished and ready for distribution a full month before the sale. You ought to get a first-class job in a catalogue for \$1 per page if you can furnish the copy. The amount of advertising and the number of papers you will use, should of course depend upon the character and importance of the sale. If you have a good offering of high-class stock, don't be afraid to spend a moderate amount of money to advertise your sale. It will pay well. Get out large attractive posters and send them everywhere. Use such live-stock papers as circulate over the territory you want to reach. Don't patronize any paper that don't keep live hustling field men on their staff. These field men are the money-getters for you and a paper without them is a burlesque. Have the field men come and look over the stock and write up the sale. They are out among the stockmen of the country all the time and are therefore in a position to do you some good and they will bring some buyers to the sale.—Excerpts from a paper by Col. R. L. Harriman, Buncecton, Mo.

Government Hog-Cholera Remedy.

EDITOR KANSAS FARMER:—Will you please give in next week's issue of the FARMER the directions for feeding the

hog-cholera medicine recommended by the agricultural department, and oblige,
LEE COSEND.

Douglas County.

The following is the prescription for what is generally designated as the Government hog-cholera remedy:

- Pulverize and mix thoroughly:
 - 1 part wood charcoal.
 - 1 part sulfur.
 - 2 parts sodium chloride (salt).
 - 2 parts sodium bicarbonate (soda).
 - 2 parts sodium hyposulfite.
 - 1 part sodium sulfate.
 - 1 part antimony sulfate.
- Dose, 1 tablespoonful for each 100 pounds of weight of hog once a day.

The Zebrula vs. the Mule.

RICHARD GUENTHER, CONSUL-GENERAL, FRANKFORT, GERMANY.

German papers say the mule will probably be replaced in the twentieth century by a more efficient animal, as it has been demonstrated that the mule, the cross between horse and donkey, is inferior to the cross between horse and zebra.

Formerly the opinion prevailed that the zebra was almost extinct. The opening up of Africa, particularly the eastern part, reveals these fine animals in large numbers.

Compared with horses and cattle they possess peculiar advantages, as they are immune against the very dangerous horse disease of Africa and also against the deadly "tsetse" fly. The question was therefore raised whether the zebra could not take the place of the mule, commonly used in the tropics. The greatest credit with reference to the solution of this problem is due to Prof. Cossar Ewart, who has been trying since 1895 to produce crosses between horses and zebras, with a view to developing an animal superior in every respect to the mule.

Three species of zebras still exist in Africa: the so-called "Grevy" zebra, on the high plateaus of Schoa; the common or mountain zebra, formerly found everywhere in South Africa; and the "Burchell" zebra, still frequently found.

Professor Ewart produced crosses from mares of different breeds and zebra stallions of the Burchell kind. The offspring is called zebrula, and on account of its form and general bodily condition—especially the hardness of the hoofs—is specially adapted for all transport work heretofore performed by mules. The zebrula is much livelier than the mule and at least as intelligent.

The Indian Government has already experimented with zebrulas for transporting mountain artillery at Quetta.

In Germany much interest in this animal is manifested. The well-known Hagenbeck is experimenting in this direction and intends to introduce the zebrula into Germany and America. The zoological gardens at Berlin possess some very fine specimens. The zebra stripes are often well preserved, while the undertone of the skin is generally that of the mother. A full-grown zebrula is 14 hands high and the girdle circumference about 160 centimeters (63 inches).

The experiments so far have been so successful that it is predicted that the zebrula during the present century will completely supersede the mule.

The Bone of the Hog.

This is a part of the hog which produces much discussion, as we have three divisions on the bone question. Some breeders want the heavy bone, others the light bone, and others the medium bone. The different expert associations will meet throughout the next two months and breeders will study the hog, bone and all. The following points on bone, taken from an exchange, present the question in an interesting manner and are worthy of your attention:

Size of bone does not seem to be the index of its strength. There is a fineness of structure in bone that is necessary to greatest strength. This quality of bone goes with highest vitality or completest development of all the parts that go to make up the animal of highest type and fullest development. No man has yet seen the bullock of abnormally large bone take a prize at

Horse Owners! Use



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

Cremoline

Combines the greatest healing qualities and anti-septic properties of any known preparation
For Man, Beast or Fowl.

Highly concentrated; to be diluted as required. Quickly cures sores, cuts, galls, sore mouth or teats, greasy heel, scratches, mange, eczema; all skin diseases; kills lice, fleas, bed bugs, nits, screw worms, warbles, etc.

Cremoline Dip
Is an absolute and unobjectionable Cure for Scab, Foot Rot, Mange, etc. Kills all vermin on Horses, Cattle, Sheep and Hogs without injuring them.

Cremoline Cholera Cure
A sure preventive and Cure for Hog Cholera, Swine Plague, Chicken Cholera, Roup, Gapes and other diseases in Hogs and Fowls.

General dealers sell 25 cent bottles, but if your dealer does not keep **Cremoline**, accept no substitute and we will ship promptly on direct orders.

Nothing else is "Just as good" as **Cremoline**

Sample Gallon, which makes 50 gallons of two per cent solution for ordinary purposes, only \$1.50, express prepaid. Sample bottle by mail, 10 cents. Makes one quart. Circulars of all our **Cremoline** Remedies, Free. The **Cremoline Mfg Co.**, 1789-51 Olive St., St. Louis.

Free to Horse and Cattle Owners

Our two large booklets telling how to cure Lump Jaw in cattle, Spavins and all kinds of blemishes upon horses, also, Sweeney and Knee-Sprung, inexpensive methods, easily employed by anybody, and that cannot fail to cure.

Spavin
Ring-bone
Knee-Sprung
Fistula
Poll Evil
Lump Jaw

We know of over 140,000 farmers and stockmen who rely upon these same methods, and for whom we have saved hundreds of thousands of dollars. Books mailed free if you write stating what kind of a case you have to treat.

FLEMING BROS.,
Chemists,
513 Union Stock Yards,
Chicago, Ill.

CAR-SUL CATTLE DIP

URES Mange and Itch; KILLS Lice, Ticks and Screw-Worms; HEALS Cuts, Wounds, Galls and all Sores.
GUARANTEED to do the work without injury to eyes or other parts of animal. At dealers or by express, prepaid, \$1.50 per gallon. 25 cent cans—dealers only. Special price in quantities. Write to-day for book and free trial Car-Sul Address

MOORE CHEMICAL CO.,
1501 Genesee St., Kansas City, Mo.

LUMP JAW

A positive and thorough cure easily accomplished. Latest scientific treatment, inexpensive and harmless. NO CURE, NO PAY. Our method fully explained on receipt of postal.

Chas. E. Bartlett, Columbus, Kans

VETERINARY SCIENCE

A branch of learning of most direct and practical benefit to the farmer, one which goes into the every day affairs of his business. Taught in all its bearings so that it means something, comes right home and makes for profit, by

Our Correspondence System
Fits for treatment, care, judging, feeding, breeding of live stock, etc. Courses of special interest, most thorough, in hands of competent instructors. Only spare time required, expense small. For particulars write for new free book, "The 100% Farmer."

Correspondence Agricultural College,
421 Nebraska Street,
Sioux City, Iowa.

Please mention Kansas Farmer when writing our advertisers.

the fat-stock show for the best beast on foot or on the block, and until the animal law of growth is changed, no man ever will find prize-winners among the big, spongy-boned brutes. The animal of highest vitality is the one with strength of muscle, bone, fiber and every vital organ above the average. The big spongy bone always means low vitality. Its texture and coarseness is an index of flesh and skin. The coarse boned beast is a poor handler.

Quality of bone is of first importance and it seems impossible to find this along with abnormal bigness. The size and quality of bone may be affected by character of feed, but this can not wholly overcome the inherited effect of selection and heredity. The highest quality of bone is the product of good breeding and judicious feeding. The eye can not always detect the quality of bone in the living animal, but the practiced eye, along with practiced hand, can tell much of the quality and texture.

The extremes of bigness and smallness of bone are to be avoided. Each has its objections. The bone of greatest excellence is found between the two extremes. After the breeders have been selected let it be borne in mind that quality is easily affected by feeding. This means the feed must not be all corn, or of the fat-forming kind, but must furnish the elements for making bone and fiber as well as fat. The Nebraska and Utah experiments are showing that alfalfa or middlings or grass should always be fed with corn, as they so balance the ration as to insure better and cheaper growth and greater vitality, because of better bone and vital organs.

Live Stock Freight Rates in Kansas not Advanced.

The case of the stockmen of Kansas in their protest against the rates announced by the railroads to go into effect September 5, came on for hearing before the Railroad Commissioners on September 2. The attorneys for the railroads raised several objections to the hearing. The most important of these was their contention that because the proposed rates had not yet been used nobody had been hurt and therefore no case could be maintained. The commissioners overruled this point as well as several others and went on with the hearing.

The attorneys for the stockmen then stated that a careful perusal of the new rates showed an advance of about 15 per cent over those now in force; that the Santa Fe proposed to increase tariffs from no less than 329 Kansas towns along its line, maintain the present schedule in 53 stations, and lower rates from only two points—Sitka and Spear. The Rock Island proposed to raise rates at 71 points, hold them stationary at 23 stations, and lower 3, Broughton, Kingsdown, and Ford City. A comparison of the new tariffs on all lines, showed that three-fourths to four-fifths of all the Kansas shipping points would have material advances on and after September 5.

The cattlemen's attorneys stated that the plaintiffs would head off all attempts of the railroads to crawl out under the pretense of the subject in question being one belonging to interstate traffic, by proving that shipments made to Kansas City were largely unloaded in chutes on the Kansas side of the line and that the new rates applied to and affected local shipments to points within the borders of the State. He also stated that his people would produce documents showing that rates in Kansas were relatively higher than in other Western States.

The attorneys here called their witnesses. Before the taking of testimony began, however, J. W. Robison, president of the Kansas Live Stock Association, was called upon for a statement touching the question.

J. W. ROBISON'S STATEMENT.

"The railroads are entitled to fair compensation for hauling live stock," said Mr. Robison, "but they are now trying to obtain unreasonable tariffs. When the cattle rates were originally fixed there was no restriction upon them and they had license to put in effect just such tariffs as they thought would make them a fair profit, besides

paying all expenses. They had full opportunity to install rates in proportion to their expenses and there is no one here who doubts but what they did so. While rates are steadily advancing, it is obvious that cattle are being hauled by the roads at less cost to themselves than in the olden days.

"Then the trains were composed of ten to twenty cars each, while now they are bringing to market trains composed of forty to sixty cars each. This enables the railroad companies to make one crew do the work of two or three as formerly. True, labor has advanced and this must be taken into consideration as a factor against the railroads. I am certain, however, that the increase in wages of railroad employees will not show up so large as in many other lines of industry.

"Cattle to-day are low in price, and is high, all the expenses of the farmers are way up, yet in the face of all this and the acknowledged prosperity of the railroads, the latter are attempting to force upon the cattlemen of Kansas a higher rate for cattle shipments. Not only do the roads saddle upon us increased tariffs, but they also furnish us with distressingly bad service, causing our cattle to shrink heavily while en route and thus directly losing us money. We cattlemen are not asking any requests or begging favors; all we wish is to obtain our rights in the matter. We feel that we are being imposed upon and that the present and contemplated tariffs used by Kansas roads are most unreasonable."

P. H. LANDERGIN,

of Eureka, was the first witness to take the stand. In reply to queries he stated that he handled from 4,000 to 6,000 steers per year and had shipped as high as 11,000 head in a single season. He said that nearly all his stock went to Kansas City and was unloaded on the Kansas side. "It costs us \$3 to \$10 per car more to ship steers to Kansas City now than it did when the car-lot rates were in effect. Two years ago the roads were prone to change the method of collecting rates and under guise of so doing advanced rates considerably. The service rendered stockmen by the roads to-day is the poorest I have known in over a quarter of a century of cattle-shipping. Engines are overloaded to the extreme, causing innumerable breakdowns and delays. To-day we are compelled to load stock on Saturday in order to get to market by Monday, something we have never done before."

Mr. Waggoner: "Was the service as bad before the flood?"

Mr. Landergin: "Yes, sir—that is, before this modern flood."

Great laughter was occasioned at this hit at the duration of poor stock service upon the part of the railroads. Mr. Landergin was questioned by Paul Morton of the Santa Fe regarding the lowering of rates in a few localities by the inauguration of the cents per cwt. system. Mr. Landergin replied that whatever the railroads might say about the rates not being raised when the change of 1889 was made, Kansas stock-shippers desired nothing on earth more than a resumption of the old car-load rates.

HON. T. M. POTTER,

of Peabody, Kans., who for thirty-three years has fed and handled cattle in Kansas, his operations embracing 1,500 to 2,000 head per year, was next called. "The new tariff will mean a general increase of \$10 per car to the stock-shippers of Kansas," said Mr. Potter. "Our State furnishes about half of all the cattle that come to the Kansas City market, I believe. Last year that place received 117,000 cars of cattle. If 50,000 of these came from Kansas it can readily be seen that the stock-growers of this State alone will lose \$500,000 annually by the change in tariffs. Thus, while the roads are claiming that the advance they propose is insignificant, amounting to only 1 to 1½ cents per cwt., it will be seen that the aggregate loss to the stockmen of Kansas is enormous."

Mr. Potter declared that he had suffered great financial losses of late through the failure of the railroads in

getting the stock to market on time. He stated that it is almost impossible at present to get cattle on the market before 9 o'clock and after that hour the shipper ran the risk of securing much lower prices if a depression set in that day. He said he would give \$1.50 per head to have his stock on the market bright and early, rather than have it come in late.

Mr. Potter's testimony wound up the afternoon session of the commission. An adjournment was then taken until evening.

J. W. ROBISON AGAIN.

Mr. Robison was called to the witness stand and recounted the events leading up to the change from car-lot rates to cents per cwt. rates a few years ago. At that time the roads themselves, not the stockmen, asked that the change be made. The commission was appealed to by the cattlemen and issued an order to the roads that they maintain the old system. The matter was taken before Judge Randolph, of Lyon County, who decided in favor of the cattlemen. The roads let the matter drift along until the year was almost out, when they took the case to the Supreme Court of the State and it again dragged until a new Legislature dissolved the old board of commissioners and the court dismissed the case.

Paul Morton, of the Santa Fe, asked Mr. Robison several questions anent the relative price of cattle on the hoof and beef, insinuating there is a beef trust hitting the cattlemen harder than the railroads. "Yes, we're truly up against it this year, betwixt the beef trust and the railroad combination," said Mr. Robison. Mr. Morton then tried to show that the stock business was hard on the roads, inasmuch as they were compelled to ship the cars back empty.

"Does not as big a proportion of empty box-cars go back on the lines as stock-cars?" asked Mr. Robison.

"Not on a well-managed road," said Mr. Morton.

"Well, on the Santa Fe—" began Mr. Robison, but laughter drowned the rest of the sentence. The railroad attorneys next tried to show that the rates on stock have been too low all along and have been losing the lines money. "If such be the case," said Mr. Robison, "there certainly has been some rank mismanagement somewhere, for all the lines of late years have been sending an army of solicitors to the country asking for stock business."


"I admit your statement," replied Mr. Morton.

MATT EDMONDS,

of McLouth, Kans., next took the stand and declared rates from his town were unreasonable, in that discrimination existed.

J. W. BERRYMAN,

of Ashland, Kans., was called. He stated that the 24-cent rate applicable from his station was an increase of 37 per cent from the old carload-lot rate, figuring on a basis of 22,000 pounds minimum. On an average load of 25,000 pounds the increase was 55.8 per cent and on a 30,000 pound load, 87 per cent. He stated that the new tar-



DR. HESS
Great Stock Book
Free

If you will write and say what stock you have—how many head of each, what stock food you have used—and mention this paper. This book is a comprehensive treatise on the care of all live stock and poultry, based on the scientific knowledge and attainments of the eminent veterinarian, Dr. Hess (M.D., D.V.S.); written in popular language; commended and used by veterinarians everywhere. Get it and become a master of all stock diseases. Write to-day, to
DR. HESS & CLARK, Ashland, Ohio.
Makers of Dr. Hess Stock Food.



KENDALL'S SPAVIN CURE
Cures Spavins

like magic. Read the testimony below and then resolve to suffer no longer from Spavin, Ringbone, Splints, Curbs and all other forms of Lameness. Kendall's Cures them all.
Hershey, Maine, Jan. 1, 1903.
Dr. B. J. Kendall Co.,
Gentlemen:—I have used your Kendall's Spavin Cure and it works like magic on Spavins. Will you be so kind as to send me one of your "Treatise on the Horse and his Diseases." Very truly yours,
H. D. DARLING.
Price \$1; six for \$5. As a Liniment for family use it has no equal. Ask your druggist for KENDALL'S SPAVIN CURE, also "A Treatise on the Horse," the book free, or address
DR. B. J. KENDALL CO., ENOSBURG FALLS, VT.



The Genuine TOWER'S POMMEL SLICKER
HAS BEEN ADVERTISED AND SOLD FOR A QUARTER OF A CENTURY. LIKE ALL TOWER'S WATERPROOF CLOTHING, it is made of the best materials, in black or yellow, fully guaranteed, and sold by reliable dealers everywhere. STICK TO THE SIGN OF THE FISH.
TOWER CANADIAN CO. Limited. A. J. TOWER CO.
TORONTO, CAN. BOSTON, MASS. U.S.A.

CRITERION HOTEL
BROADWAY AND 41ST STREET, NEW YORK.
HANDY TO EVERYWHERE. EUROPEAN PLAN.
G. T. STOCKHAM,
Formerly Manager Midland Hotel, Kansas City.

DIETZ LANTERNS
are everywhere noted for shedding strong clear, white light. Hand lanterns, street and driving lamps, etc., many sizes and styles for all purposes. Send for free illustrated catalogue.
R. E. DIETZ COMPANY, 87 Laight St., NEW YORK.
Established 1848.

DIP

GOVERNMENT DIP ORDER ISSUED June 18, 1903, covers entire territory west of Mississippi river and demands that "Lime and Sulphur Dip Shall Be Used." No Other Dip is Approved. Rex Official Lime and Sulphur Dip is the BEST of Dips. Costs less than half what other Dips cost. Dip, wash, or spray for lice, scab, mange, scurvy, ticks, etc. For all stock. Write to-day for free copy of "VITAL POINTS ON DIPPING."
REX STOCK FOOD CO.,
Dept. 9, Omaha, Nebr.

BLACKLEGOIDS
BEST PREVENTIVE OF BLACKLEG.
Blacklegoids afford the latest and best method of vaccination against blackleg—simplest, safest, surest. They are always ready for use; no filtering, measuring or mixing is necessary. Accuracy of dosage is always assured, because each Blacklegoid (or pill) is exactly sufficient for one inoculation. Administration with our Blacklegoid Injector is easy. The operation need not consume on a minute.
Blacklegoids are sold by druggists; ask for them.
Our newly printed eight-page folder on the "Cause and Nature of Blackleg" is of interest to stockmen. Write for it; it is free.
PARKE, DAVIS & CO. - DETROIT, MICH.
Branches: New York, Kansas City, Baltimore, New Orleans, Chicago, Walkersville, Ont.; Montreal, Que.; London, Eng.



iff was unreasonable in that it made the rate equivalent to 10 per cent of the total valuation of the stock shipped.

SECRETARY PLUMB,

of the Kansas Live Stock Association, who lives at Emporia, stated on oath that the new rates meant a \$3 to \$5 per car increase to shippers out his way and that the cattlemen considered this unjust.

SENATOR H. M' MILLAN,

of Minneapolis, who represents the Ottawa County Live Stock and Grain-Dealers' Association, an organization whose members own 45,000 head of cattle, stated that the increase in rates contemplated by the railroads would work great hardship on the stock-feeders and shippers out his way and he therefore prayed that the board would thoroughly investigate the merits of the case as presented by the cattlemen.

KANSAS RATES COMPARED WITH OTHERS.

Mr. Landergin furnished the following comparative statement of Kansas rates to Kansas City and rates from equi-distant points in other States to the same point, showing that the Kansas shippers are getting the worst of it at the hands of the railroads:

KANSAS RATES COMPARED WITH OTHERS.

Table with columns: Station, Distance, Old rate, New rate. Lists various stations like Florence, Graf, Tegmon, etc., with their respective rates.

INCREASE OVER 1899.

The following table shows increases in rates at the big shipping stations in Kansas:

Table with columns: Station, Old rate, Present rate, Proposed rate, Inc. per car since 1899. Lists stations like El Dorado, Peabody, Elgin, etc., with rate changes.

ILLINOIS AND MISSOURI RATES TO CHICAGO AND ST. LOUIS, COMPARED TO KANSAS RATES TO KANSAS CITY.

The following shows relative cheaper rates in Illinois and Missouri to Chicago and St. Louis, when compared with Kansas rates to Kansas City;

To Kansas City: Peabody, 185 miles, old rate 14c; new rate 15c. El Dorado, 203 miles, old 14c; new 16c.

To Kansas City new rates: Wichita, 213 miles, 17c. El Dorado, 178 miles, 16c. Newton, 186 miles, 16c.

OLD RATES STAND.

The hearing was brought suddenly to a termination on Thursday morning as the result of a conference of the attorneys for the railroads.

"In view of the present bad condition of the cattle markets and the depression of the industry, and in view of the fact that the service rendered by the roads is not what it should be despite our great efforts towards remedying the same, the railroads agree to postpone for a time the putting into effect of the proposed rates, reserving the right, however, to put the same into effect when conditions justify."

This closed the case. The stockmen accepted the settlement in a neat speech by President Robison.

THE COUNTY FAIRS.

Jefferson County Fair.

It seems that Jefferson County stands at the head of the list of county fair associations in point of years.

The grounds are finely located about a mile southeast of the city. They have a good, substantial agricultural hall which was reasonably well filled with products usually found in that building.

In the sheep department, A. P. Rear-don, of McLouth, and J. E. Blevins, of Oskaloosa, had entries of Shropshire sheep.

Nemaha Fair Association.

The Nemaha County Fair Association held its fifteenth annual fair at Seneca on September 1-4. It was a financial success.

The principle features of the fair were a great speed program and a splendid showing of farm, garden, and orchard products, and one of the very best and most tasty displays of women's fancy handwork.

The showing of live stock was small, entirely too small to properly represent the amount of improved stock bred and owned in Nemaha County.

Osage Fair Association.

Burlingame, Kansas, is the home of one of the oldest county fair associations of the State, and on September 1, 2, 3 and 4, held their twenty-seventh annual exposition.

In the horse department H. J. Urish, of Scranton, Geo. Bivins, of Scranton, and the Salt Creek Percheron Horse Company, of Osage City, had entries in the Percheron and French draft classes.

To Chicago from Illinois points equal distant with Kansas City-Kansas towns: Galesburg, 111. Pomenah, 117. Wilburn, 102. Smithshire, 119.

To St. Louis-Missouri points equal distant: Carrollton, 15 1/2 c. Keytesville, 13 1/2 c. Brunswick, 13 1/2 c.

Rice County Fair.

The third annual fair held by the Rice County Association at its grounds adjacent to Sterling, was in many ways a complete success.

Shorthorn cattle were exhibited by George Ross, Alden; J. P. Engel, Alden; H. M. Ward, Alden; R. A. Ward, Alden; D. J. Fair, Sterling; M. L. White, Sterling.

Herefords were shown by D. J. Fair, Sterling, and Wm. Culbertson, Sterling.

Swine were exhibited as follows: Duroc-Jerseys—H. B. Kilbourn, Sterling; W. R. Crow, Hutchinson; Wm. Blackhall, Sterling.

Horses: George Ross, Alden; McMurphy & Leatherman, Sterling; Frank Matthews, Sterling; F. Haynes, Sterling; Ed Knowlton, Alden; C. N. Fair, Alden.

The cattle were judged by A. L. Sponsler, of Hutchinson, who gave M. L. White first on aged bull.

In Poland-China swine, F. P. McGuire took all the premiums except on yearling sow. This was won by H. B. Kilbourn on a sow bred by M. McGuire.

W. R. Crow, of Hutchinson, had his big Duroc-Jersey boar, which weighed 1,000 pounds, on exhibition, and he served to attract a great deal of attention from people not otherwise interested in swine.

NOTES.

C. S. Snodgrass, of Lyons, who is now county clerk, but a former swine breeder, acted as judge in the swine classes.

I. C. Murphy, of Sterling, had one of the finest exhibits of agricultural products that we remember to have seen.

George B. Ross, Alden, Kans., consigned one bull to the Shorthorn sale which sold for \$110. He was a September calf, by Tarves 163203, out of Lady Flora, and was the first prize-winner in his class at the fair.

Editor J. E. Junkin, of the Sterling Bulletin, showed a commendable degree of enterprise in issuing a neat little daily during fair week.

Of course F. P. McGuire, of Hutchinson, got practically all the prizes awarded to Poland-Chinas, but then that was what he was after.

Mr. Ira S. Brothers, Saxman, Kans., showed eight head of Galloway cattle. The judge gave him first on 2-year-old bull, first on bull calf under 1 year, first on aged cow, and heifer calf under 1 year.

On Wednesday morning it was found that a number of the concessionaries were using their booths for games of chance. As soon as this fact came to the knowledge of Chief of Police Berry, he at once cleaned out the whole gang, and the board of directors returned the money which they had paid for their concessions. There was no gambling al-

Advertisement for Empire Steel Wind Mill. Features a large illustration of the windmill and text describing its benefits, including 'IT IS BETTER to buy right once than wrong many times.' Price \$14.95.

Advertisement for Farm Telephones. Text: 'How to them up—what they cost—why they save you money—all information and valuable book free. Write to I. Andrae & Sons, 194 W. Water St., Milwaukee, Wis.'

Advertisement for 4 Horse Sweep Mill. Text: 'Grinds corn with shucks, head kaffir, wheat, oats and all other grains. Self-feeds. Coated 7 to 1. Light draft. Great Capacity. (Also make plain sweep and Belt Mill; 10 sizes.) C. N. P. Bowsher Co., South Bend, Ind.'

THE GRANT COUNTY Agricultural Fair Association

Invites all breeders of good stock to make an exhibit at their Fourth Annual Fair, OCTOBER 13, 14, 15, 16, 1903. Liberal premiums are given in all divisions, and competition is open to the world. For premium lists write C. F. EBERBE, Secretary, Deer Creek, Okla.

lowed on the ground during the remainder of the week.

The largest tent on the ground was occupied by the Empire Cream Separator Company's exhibit, in charge of E. V. Rugh, of the J. P. Baden Company, at Winfield, and A. E. Jones, of Lyons, both of whom were kept busy explaining the merits of their machine.

It was reported to our representative that the fair last year was almost overwhelmed by the grafters and fakirs. This year a strong effort was made to dispense with these gentry, and the management can feel proud of the fact that they presented a clean fair which was well worth the money charged for admission.

In the big tent there was a little machine shown which attracted more attention than all else. This was the grain drill manufactured by the Miller Grain Drill Company, of Newton, Kans. The one on exhibition was a one-horse pattern, designed especially for drilling between corn-rows.

In speaking of a lack of attendance at the Rice County Fair, it is not to be understood that there was no attendance, or even that there was not a good attendance. It is only intended to mean that the attendance was not nearly up to the merits of the fair.

American Royal Show Notes.

Commissioner Trickett of the Kansas City Transportation Bureau, has advised the management of the American Royal Live Stock Show to be held at Kansas City, October 19-24, that the railroads of the Western Passenger Association have granted a rate of one fare plus \$2 for the round trip from all points in the territory, except where the open rate of one fare and a third for the round trip amounts to less.

leaving Kansas City not earlier than October 19, nor later than October 26. By depositing tickets with the joint agent at Kansas City and paying a fee of 50 cents, any time between October 19 and 26, the return limit may be extended to November 10.

Col. O. P. Updegraff, manager of the horse division of the American Royal Live Stock Show to be held in Kansas City, October 19-24, says:

"We thought the horse division of the American Royal wouldn't be much of a show this year because it was the first effort to show breeding horses here, but the indications now are that it will be the biggest thing of its kind held this season. The breeders and dealers in draft- and coach-horses are taking hold of the show with much enthusiasm, and it is bound to be a big success.

"I have been importuned by a number of horsemen to make a class in the American Royal for American-bred Percherons, where they would not have to compete with imported animals. It will be impossible to do this for a number of reasons. One reason is that not enough money is available for premiums for several additional classes. If American-bred horses were shown by themselves there would have to be classes for all kinds of animals down to yearlings and colts. What we will have here at the American Royal will be the cream of the prize-winners at all the leading State fairs. It will be a show of high-class horses. There is nothing to prevent owners of home-bred horses from competing. We have just about as good horses bred in this country as are imported, and if these American-bred horses are put in a good condition for showing as the imported stock, there is no reason why they should not stand an equal show to win prizes."

Secretary C. M. Hiles, of the O. I. C. Swine Breeders' Association, is sending out premium lists and entry blanks for the O. I. C. exhibit at the American Royal at Kansas City, October 19-24. The premiums aggregate \$500, of which sum \$250 was given by the O. I. C. Swine Breeders' Association and \$250 by the management of the American Royal. Entries close October 1, and must be made with C. M. Hiles, Ajax Building, Cleveland, Ohio. The following is the premium list:

- Class 10—Boar 2 years old or over, first \$15, second \$10, third \$6.
- Class 11—Boar 1 year old and under 2, first \$15, second \$10, third \$6.
- Class 12—Boar 6 months old and under 1, first \$12, second \$9, third \$6.
- Class 13—Boar under 6 months old, first \$12, second \$9, third \$6.
- Class 14—Sow 2 years old or over, first \$15, second \$10, third \$6.
- Class 15—Sow 1 year old and under 2, first \$15, second \$10, third \$6.
- Class 16—Sow 6 months old and under 1, first \$12, second \$9, third \$6.
- Class 17—Sow under 6 months old, first \$12, second \$9, third \$6.
- Class 18—Champion boar, any age, competition limited to first prize winners in above classes, first \$20.
- Class 19—Champion sow, any age, competition limited to first prize winners in above classes, first \$20.
- Class 20—Boar and three sows over 1 year old, first \$18, second \$12, third \$8.
- Class 21—Boar and three sows over 1 year old bred by exhibitor, first \$18, second \$12, third \$8.
- Class 22—Boar and three sows under 1 year old, first \$18, second \$12, third \$8.
- Class 23—Boar and three sows under 1 year old, bred by exhibitor, first \$18, second \$12, third \$8.
- Class 24—Four pigs under 6 months old, produce of same sow, first \$18, second \$12, third \$8.
- Class 25—Four swine, get of same boar, bred by exhibitor, first \$18, second \$12, third \$8.

Gossip About Stock.

J. R. Killough, the big Poland-China breeder at Ottawa, will dedicate this new pavilion, by holding a sale of his choice swine in it on October 1.

T. A. Hubbard, proprietor of the Rome Park Stock Farm herds, Poland-Chinas and large English Berkshire hogs, Rome, Kans., announces that he is prepared to hold a public sale about September 29, detailed announcement of which will appear in the Kansas Farmer.

One of our customers, a large breeder of Shorthorn cattle, wants to buy 20 heifers or young cows, bred for April or May calves. If any of our readers having Shorthorns of this class will advise us whether they can fill this order, we will try and make a sale for them. Address this office.

The hustling breeders' association at Ottawa are building a fine \$2,500.00 sale and show-pavilion in Forest Park to take the place of the old sheds that have outlived their usefulness; this sale-pavilion will be finished in time for use in showing stock at the big fair September 14-19.

Jas. U. Howe, of Wichita, Kans., breeder of Duroc-Jersey swine, writes that he will not attempt to make a show outside of the home fair at Wichita, although he expects to visit the breeders at the fair at Topeka. He reports that he has a number of very fine pigs, the get of four different herd boars and that he has recently sold to W. R. Crow, Hutchinson, Kans., his herd boar, Dandy Boy 1072L. Mr. Crow will exhibit him at the fairs.

C. M. Garver & Sons, Abilene, Kans., take pride in the fact that they have been able for two years now to top the market by at least 2½ cents with culls from their herd of Poland-Chinas. This means that after selecting the animals which they sell for breeding stock the culls which remain are still good enough to top the market with. What more could be said in praise of the quality of breeding in any man's herd?

James Mains, Oskaloosa, Kans., that old reliable breeder of Poland-Chinas, has an important advertisement in this week's paper on page 939. Those of our readers who have never done business with Mr. Mains need not hesitate to send him their orders. His stock and his price are always right. At the Jefferson County Fair last week his boar, Perfection Style 29990, took four first premiums, first in class, sweepstakes, first for boar and get, first at head of herd. Mr. Mains also won sec-

ond on sow and first and second on sows under 1 year and over 6 months.

We are just in receipt of a handsome premium list issued by the Southern Kansas Fair and Carnival Association, which will hold its annual meeting at Wichita, Kans., during the week beginning September 28. A hasty glance through the premium list shows that liberal premiums are hung up for all classes of live stock with good purses for the races. The secretary is H. L. Resing, who will be glad to furnish premium lists to all who write to him. This fair has long been one of the big ones of the State, and promises this year to exceed anything that has ever been attempted before.

The Kansas Farmer takes great pleasure in claiming date for the great sale of standard-bred horses to be held by W. W. Miller & Sons, at Maple Grove Stock Farm, near Lyons, Kans., on October 29. This farm has for many years been breeding an exceptionally fine class of high-acting horses and it is the home of Woodfield 2192, who is one of the best-gaited horses we have ever seen. He has a wonderful knee action and a hock action that is seldom excelled; he has proved himself a great sire, and many of his get will be offered in the sale which will include about 75 head, chiefly mares and fillies.

The East Side Stock Farm of Poland-China hogs and Shorthorn cattle, owned by W. H. Barr, Elliott, Iowa, announces that he expects to hold a public sale at Red Oak, Iowa, September 26. He will also contribute five head to the breeders' combination sale at Sabetha, Kans., on October 7, consisting of three boars that are herd-headers and two gilts just as good. At the Red Oak, Iowa, sale he will sell 40 head consisting of 10 fall yearling boars, 10 fall gilts, 10 spring boars, balance springs gilts sired by such boars as Royal Blue 27642, Simply Perfection Jr. 30933, Perfection E. S. 31273, Broad Perfection and Tom Price 27643. There is not a poor pig in the lot.

On the main street in Sterling and adjacent to the Santa Fe railroad tracks stands a neat building which bears a sign announcing it as division headquarters for the Continental Creamery Company. This company claims to be the largest creamery company in the world and when one can travel in any direction and over any railroad in Kansas, and find their stations at almost every town one can appreciate the extent of territory covered by it. The filling of a contract recently for 400,000 pounds of butter in one order for the United States Government at the rate of about 75,000 pounds per day gives one a better idea of the magnitude of this institution whose headquarters are in Topeka.

Did any one ever hear of an auctioneer who was not a Colonel? The Kansas Farmer knows of two of them, and they are very successful men too. This is the firm of Gray and Porter, of Sterling, who have had many years of experience and who are making a specialty of pure-bred live-stock sales. This firm lately conducted a live-stock sale in Colorado, which so pleased the seller that he took occasion to pay them more money than they asked for their services as well as to write a hearty letter of commendation expressive of his appreciation thereof. The writer has seen these gentlemen at work in the ring and has no hesitation in recommending them as active hustlers, who will prove useful to their employers. We take pleasure in calling attention to their advertising card on page 955.

W. R. Crow, the big Duroc breeder at Hutchinson, has plans laid for a hog barn that we think will be of general interest to farmers and breeders who take care of their stock. This barn will be circular in form and will consist of pens all of which open towards the center. A gateway will be provided of sufficient size to admit a load of hay or straw but the barn otherwise will be entirely closed on the outside. With such a barn Mr. Crow hopes to solve the problem of shelter accompanied by an abundance of ventilation and sunshine. It will be a combination of barn and protected hog-lot. The swine will have enough room in the lot for plenty of exercise and will be at all times protected from the wind from whatever direction it may come. We think the idea is an excellent one and well worthy to be tried on other farms.

We are in receipt of the small pamphlet giving the history, objects, constitution and by-laws, together with other instructions about the great Anti-Horse Thief Association. This association has done more than any other one power to uphold the law, guard the rights of its members, and create that fraternity of interest which has rid the Indian Territory and adjacent States of the terrorizing gangs of lawless men who once infested it. This great fraternity never takes the law in its own hands, but does all in its power to assist the officers of the law in the performance of their duty. There is abundant room for other sub-ordinations and it is noticeable that wherever one has been organized, such organization has been followed by an observance of law and a respect for it which did not previously show. Its mere presence brings order. Write to G. J. McCarty, State secretary, Valeda, Kans., for one of these little books which tells all about it.

McLaughlin Bros., Columbus, O., write under date of September 3, as follows: At the Ohio State Fair yesterday in the French Coach stallion classes we won every prize it was possible for us to win, including first in collections. In the Percheron stallion classes we won three first prizes, and every prize that it was possible for us to win except two. Our Percheron stallions also won first in collections. French draft and Belgian stallions showed together at the Ohio State Fair. As is our custom we registered enough of our Percheron stallions in the French draft stud book to fill these classes. We won every prize, in the aged class defeating the Belgian that won first at the International Exposition. Here, too, ours won first in collections. Yesterday and today we won altogether fourteen first prizes, and it was only possible for us to win fifteen. These prizes were won in the hardest competition. More Percherons are being exhibited at the Ohio State

... USE ...
Globe Stock Food
FOR YOUR
CATTLE, HOGS, HORSES, SHEEP.



The Greatest Milk Producer, Flesh Producer, Disease Preventive, and Stock Toner in the World
It is the Best and Cheapest Stock Food on the Market.
It costs only 16½ cents a month to feed a steer or horse and less than half that amount to feed hogs or sheep.
Price for 2,000 pounds, 6½ cents per pound; 1,000 pounds, 7 cents per pound, and 500 pounds or less, 7½ cents per pound.
Awarded First Premium at Iowa State Fair—1895, 1896, 1897, 1899, 1900, 1901, 1902, 1903.

We will have an exhibit at the Topeka State Fair next week which will be in charge of Mr. Chas. L. Walker, State Agent (known to many feeders and breeders in Kansas), who hopes to see many of the old patrons of the Globe Stock Food Company and make many new ones. Stockmen drop in and smoke up with us.

O. ROBINSON & CO.,
Kansas City, Missouri. Des Moines, Iowa.

10 CENTS

WE WILL SEND YOU FOR ONE YEAR
WESTERN BREEDERS JOURNAL
AND 37 SONGS.

10 CENTS

On receipt of 10 Cents—Silver or Stamps—our New and Popular Magazine replete with Farm Views, Short Stories, and Current Events. This offer is made as an inducement to secure 100,000 new subscribers by January 1, 1904. To all new subscribers that will mention this paper we will give Absolutely Free, 37 of the most popular songs of the day, complete with music bound in book form, and should occupy a place in every parlor.

WESTERN BREEDERS JOURNAL
DEPT. B, CLAY CENTER, KANSAS.



MAINS' HERD OF POLAND-CHINAS
Over 200 Head with fall farrow, of large, early litters, good length and heavy bone, sired by Perfection Style 2990 S, he by Chief Perfection 2d, Kemp's Perfection 2d, L's Perfection 2d, and other noted boars out of well-selected sows of the latest leading strains. The spring farrow has been reserved for this fall's trade. I think I can furnish what you want.
JAMES MAINS, Oskaloosa, Kansas.

5,000 Improved Handy Herd-Books
Wanted by Up-To-Date Swine-Breeders.
The Best, The Cheapest. Can carry in pocket. Capacity for 101 litters of 14 pigs each. Contains farmer's breeding calendar, and pocket for certificates, receipts, etc. Satisfaction guaranteed. Sent prepaid to any address on receipt of price, only ONE DOLLAR. Address Ira K. Alderman, Maryville, Mo.

Consign Your Shorthorns to Our Sale.

There will be a Breeders' Sale of SHORTHORN CATTLE at Parsons the last of September. Parties wishing to enter stock for sale should do so by August 15, so as to get them in the catalog. We advertise and sell the stock. Charge 10 per cent commission.
COL. EDMONDSON, OF KANSAS CITY, AUCTIONEER.
PORTER MOORE, Manager. PARSONS, KANSAS.

Fair than have been shown at any State Fair in America for ten years.

A recent trip through a portion of the wheat belt shows that it is in part at least a corn belt as well. Saline County, south of Salina, and Rice County are conspicuous this year for the magnificent broom-corn crop, than which the writer never saw a better. While Rice County is supposed to be in the middle of the wheat belt the display made at her fair at Sterling last week, together with observations made in passing through the county, served to convince the writer that their crops of all kinds except, perhaps, the fruit, leaves nothing to be desired. A new designation will have to be made for this section of country and the wheat belt moved further west. With the prosperity which has come from successively bountiful crops there has grown up a renewed interest in pure-bred live stock, and it was noticeable that nearly all of the Rice County exhibitors at the fair were from the vicinity of Alden which is but a few miles up the river from Sterling. Other breeders were present as visitors who did not consider it worth while to fit their herds for one or two local shows when they need them in breeding condition. There are many new herds starting in Rice County and it will not be long before it will be known as a breeding center.

Mr. & Mrs. W. R. Crow, of Hutchinson, Kans., are partnership breeders of Duroc-Jersey swine. There is no firm of breeders within our acquaintance that has risen more rapidly into prominence than has this one, and the reason for this is easily found in the quality of the stock they breed. Mr. Crow had an exhibit of 35 head of his choice swine at the Sterling Fair last week and of course won practically all the ribbons. The explanation of this rapid rise in the breeding business and of their success in the show-ring may be found in the fact that they started with the choicest line of breeding and that they know how to feed. Mr. Crow takes all the milk from the Hutchinson Creamery and a great portion of it is used in his large herd of 230 head of Duroc-Jerseys. This, with the alfalfa on which he pastured them, served to keep them growing from the time they are
(Continued on page 960.)

The Large Berkshires

—AT—
Springbrook Farm

Will be of interest to all breeders of fancy swine. Some few herd-headers for sale, as well as a few choice gilts.
Farm five miles from town.

.....ADDRESS.....
DAVID G. PAGE,
North Topeka, Kansas.
Care Mid-Continent Mills.

Feeder Steers For Sale!

The American Pastoral Company, Limited, owner of the LX Ranch, near Amarillo, Texas, has for sale about 3,000 4-year-old steers, also 2,000 3-year-olds, all of good grade. This ranch is well-known for its good feeders. Address, **HENRY C. HARDING,** Manager LX Ranch, AMARILLO, TEXAS.

PINK EYE.

Pink Eye Tablets are a sure and speedy cure for Pink Eye in cattle.
Iolin Tablets never fail to cure Periodic Ophthalmia (moon blindness) in horses, price \$1.00 per box. Sendfor pamphlet.....

THE IOLIN CO., Lock Box 912, JOPLIN, MO.

EXTENSION AXLE NUTS
Make old buggy run like new one. Sure cure for wobbles and rattles. Quick seller and very profitable. Agents Wanted.
Hardware Specialty Co., Box 136, Pontiac, Michigan

The Young Folks.

CONDUCTED BY RUTH COWGILL.

THE LAUGHING GIRL, OR THE BAREFOOT BOY'S SISTER.

Blessings on thee, little maid,
Laughing girl, with cheeks of shade,
With thy brown hair browner still,
Kissed by sunbeams at the rill,
With thy brown eyes sparkling jet,
And they feet with toes all set;
Fashion has not marred thee yet;
With thy dress of cotton wove,
And thy hands that know no glove,
And thy teeth all in a row—
Nothing whiter save the snow.

Girl of beauty, girl of wealth,
Girl of hardihood and health;
Thou hast arms as strong as boy's,
Thou hast hands that are not toys;
In thy veins the blood doth flow
Leaping like a startled roe.

Thou hast treasures vast and great;
None surpass thee in estate:
For thy hair the roses grow,
For thy sport the wind doth blow
And the large tree spreads its shade,
Just to please thee, little maid.

And beneath it, great and tall,
Up against the roots withal,
Is thy play-house—wondrous scene—
Envy thee might any queen;
Carpets—mosses, dishes pearl!
Blessings on thee, little girl.

All the daisies nod their heads
To welcome thee among their beds;
And the fields with music swell,
As lightly tripping through the dell,
Hand in hand with friend of thine,
Darest thou the rain and shine,
Ward'ring long among the flowers
Where beat soft, refresh'ning showers,
Thou at last a pond descries,
Greatest wonder 'neath the skies!
With skirts in hand high o'er the knees
(Such sport no princess ever sees!)
Oh, maiden fair, to know thy joy
One need wish to be a boy!

But flowers of color and perfume
Must die the sooner for the bloom.
And so must thou, my maiden fair,
Give up thy life to toil and care—
To fashion, motherhood—and there
Thy part to play each live-long day
Busily while thy life away.
Klowa County. L. W. Bateman.

Our Pilgrimage.

There is no better way to realize history than to go over the ground upon which it was made. This was demonstrated to me in my trip to Lexington and Concord. All along the way are tablets bearing the date April 19, 1775, each marking the place of some detail in that first demonstration of the American spirit of independence. I took the trip by trolley from Cambridge to Concord, approximately over the route traveled by the British that eventful spring day, and, on that swiftly flying car, propelled by an unseen power, ever marvellous electricity, it was easy to lose connection with the present, the modern hurly burly, rush and whirr, and imagine myself a spirit flying through the air, accompanying Paul Revere as he flew to warn the sleeping farmers of the danger to their liberties. Their hearts were hot within them. Their mother-country had dealt them only injustice, had heaped insults upon them—had treated them as slaves rather than as her own natural children, and, indignant, they resolved to put up with it no longer. It is probable that at this time few wished for independence or would have dared to dream of what they themselves afterward brought about. They were a few scattered farmers, living in pioneer simplicity; they had been content to owe allegiance to England forever so long as she did not encroach upon their Englishman's birthright, Liberty. But she had wounded them, had trampled upon their self-respect, and they were ready to show her they were still free men and brave. They had gathered together in Concord a small store of ammunition and provisions prepared against whatever emergency might arise in the unsettled state of affairs, and at midnight came the clatter of flying hoofs, and the word that the soldiers were coming to destroy their military stores. All along the way they were aroused, and gathered, stern of face and determined in heart, armed with their trusty rifles, brave soldiers in fact though dressed in common homespun and undrilled and undisciplined. But the soldiers did not appear and at dawn they dispersed, thinking they had heeded a false alarm. One man was tramping along by the main road at Lexington, his gun on his shoulder, when the British appeared. His name was Benjamin Wellington, and to-day a granite slab

marks the place where he, the first minute man taken, was disarmed, and ordered to go home. He said "All right," and, at a much later hour, he did go home. But at that moment there was another thing for him to do. He went around over the other side of the hill, returning to pass the word to his scattering friends, and when the British came to the Lexington Green—behind the meeting-house, there was a staunch little band of brave men ready to enter their protest against them with the bayonet, and among them was Benjamin Wellington, as ready as another to oppose them, though with a borrowed gun. To-day, at the head of the Green, a bronze minute man stands guard upon a huge pile of stones. This minute man is one of the things worth seeing. It was made by a sculptor named Kitson, since grown famous, but once so poor that when he wanted to place a piece in the Grand Salon of Paris he had to hire a little fish-vender to carry it in his cart, while the artist himself walked along to steady it. His wife is an artist, also, and they tell how she came with him when the minute man was to be placed, and climbed here and there over the pile of stones to help adjust the figure. And there stands the minute man, with his working man's clothes and his musket, alert, fearless, determined, a magnificent defiance in his face—a worthy ideal of the men, long dead, who left their plows to shoulder their guns, in whose hearts the love of liberty burned steadily and always.

Further along on the Green is a great unheaven boulder, one side only polished. This is the point where the colonists made their stand. Captain Parker said to them, "Stand your ground. Don't fire unless fired upon, but if they mean to have a war, let it begin here." And those simple, brave words are inscribed upon the boulder.

At Lexington I had the rare pleasure of being shown about by a great-granddaughter of this same Benjamin Wellington, of whom I have been telling you. To her, all this history is as real as her own experience. She knows what the minute men felt. She knows with what inward consternation, yet undaunted determination they opposed their sovereign. She chatted familiarly of the people of that time. One of the survivors she even remembers well. He was Jonathan Harrington, a fifer to the minute men, only a boy at the time of the Revolution. When my friend knew him, he was an old man, and the ugliest old man possible. She says she and her sisters, tiny children, used to nudge each other in their pews in the meeting-house, when he entered, and snicker wicked little childish snickers, because he looked so funny.

Three or four ancient houses are still standing in Lexington, relics of that time. The most important of these is the John Hancock house. Here John Hancock and Samuel Adams were sleeping on that memorable night when Paul Revere came clattering. The house is a typical old New England house, rather more pretentious than some of them. It is filled with relics of ye olden times, many of them rare and valuable, and pictures of Revolutionary heroes connected with this region.

Concord is some six miles further on, and again in my magic chariot, the electric car, I followed in the footsteps of Paul Revere. As I approached the old Concord bridge, a feeling of awe stole over my heart. The spot is most quiet and peaceful now. Old trees, with low murmuring leaves, shade the long avenue which leads up to the bridge and a placid stream lies silent beneath it. At one side is a stone fence, and imbedded in it is a large plain stone, with a simple inscription marking the resting place of the unknown British soldiers who lost their lives here. That plain memorial has a pathetic dignity all its own. At the point across the bridge where the colonists made their attack stands another bronze minute man, but as I sat by the wayside, dreaming, he disappeared, and I thought I saw in his place a band of farmer-soldiers come gathering silently, their faces stern,

their guns ready for action. My heart was thrilling with the horror of a battle and bloodshed, but a carriage of sightseers drove up, and my sturdy band disappeared. I realized that I was tired, and the early dusk was falling, so with one backward look at the little bridge I left the scene of the first battle for American independence.

I was interested a few days later in reading a contemporary account of this affair. It was from the Salem Gazette of April 25, 1775, and closed with these words: "The publick most sincerely sympathize with the friends and relations of our deceased brethren, who gloriously sacrificed their lives in fighting for the liberties of their country. By their noble and intrepid conduct, in helping to defeat the forces of an ungrateful tyrant, they have endeared their memories to the present generation, who will transmit their names to posterity with the highest honor"—words fitly written, and may we never neglect to accord that honor so generously predicted two hundred and twenty-eight years ago.

A few days later I visited the Washington elm, the tree under which Washington first took command of the Continental Army. It is a fine old tree, venerable, yet green with the vigor of eternal youth in its heart. Such is the spirit of American independence in the heart of our people. May it never wither in the fierce heat of material growth, nor grow old as the years roll by. May it flourish, eternally young, eternally vigorous, that the courage and the faith of the early patriots be not betrayed. To be worthy her heritage is the great and hard duty before America to-day.

Concord has other associations besides the merely historical. It has been the home of several people of literary renown. I paid my tribute to Emerson by standing outside the gate and looking with somewhat perfunctory interest at his home, a pretty white house set among trees—not different from many other substantial New England homes. Then I walked on down the street and presently I came to the old Alcott place, and here I stood for a long time looking, pleased as at meeting a dear old friend and finding him unchanged. All boys and girls have read "Little Women," "Little Men," and "Joe's Boys," and we all know that the dear "Marmie," Meg, and Beth and Amy were real people, and that harum-scarum Joe, was no other than Miss Alcott herself. When I stood before the old humble home, the scene of such romps, such tears, such wholesome pleasures and youthful heartaches as all the world knows, I was glad. The house is old and shabby. No one lives there now. But it has a homelike air. You can almost hear the echoes of young voices. In the old comfortable-looking trees where the children used to sit among the branches, and where Joe rode her fancied fiery steed, the birds now twitter undisturbed. At a little distance from the house, among the trees, is a small church with its steep pointed gable. This is where Mr. Alcott held his school for many years. Those were happy children who could learn here at Nature's heart under the guidance of a gentle, good man.

To come yet a little more closely in touch with these lives, so useful and so inspiring a generation ago, I visited the Sleepy Hollow Cemetery. I first found Emerson's grave, just above the Hollow. It is marked by a great uncut stone. An old man was acting as guide to some strangers. "Yes," he was saying, "Mr. Emerson was always a pleasant-spoken man. There wasn't never a man too poor for him to say good morning to." A little away from here is the Alcott lot. The whole family lie here close together, united as in life. A small plain stone marks each pathetic mound, the only inscriptions being the three initials of each member.

Longfellow's home is in Cambridge, set back from the street behind a green and well-kept park. His daughter lives there now, and most generously allows the public the privilege of coming into her father's study. There is probably no other American

writer known to so many of all classes and so well-beloved as Henry W. Longfellow. The first thing one sees in entering the room is the portrait of the poet himself looking toward you from a painted canvass. The picture was painted by his son, and is said to be an excellent likeness. At least, it looks like the man we have learned to know and love through his poems, gentle, honest, genuine. No snobbery, no affectation shuts him from the people's hearts. He stands always for the simple best. Someone who had been in the room said to me, "It seems just like Longfellow." It is true. A room takes on the character of its occupant, to some extent, and the atmosphere of Longfellow's study is like the man himself. On the walls are portraits of his life-long friends, many of them taken when they were all young together, before fame had found them out.

There are gifts from other noted men of letters, also. But what pleased me most was the old great-chair presented him by the school-children. The room is kept just as he left it, and it is a beautiful memorial of a beautiful life. In the hall, as you go out, you see the old clock on the stair, still ticking unchangingly, "Forever, never, never, forever."

Using One's Leisure.

There are some men and women whose work is so heavy and engrossing that they have no leisure; but such people are relatively few in number, and are, as a rule, at the head of great enterprises. Practically all young men and women have some hours from work which need not be devoted to exercise and sleep—two things which ought never to be overlooked or neglected. These unoccupied hours are of priceless worth if they are wisely used. They determine the value of the working hours because they educate a man to use and enjoy what the working hours bring him, for a man's ability to enjoy success depends on his intelligence, his tasks, and the variety of his interests. Many of the most successful business men have so many interests, outside of their business, that they can always give themselves the rest of a change of occupation, and can get pleasure and profit out of any form of leisure. They understand that, in order to use wealth with judgment, and to get satisfaction and happiness out of it, a man must grow rich in mind as fast as he grows rich in pocket.

One of the most substantially successful men of the time recently said that in his boyhood he revolted against poverty, not because it denied him the luxuries of life, but because it curtailed his freedom, and he resolved that he would gain freedom at all costs. Having an unusually clear mind, this boy decided to get an education first, and become rich afterwards; he went through college and then made a fortune. His extraordinary influence and usefulness are largely due to the fact that he has kept his inward growth in line with his outward advancement.

On the other hand, there are few more pathetic spectacles than a man who has grown rich and remained ignorant. Every increase of his wealth only makes his inward poverty more apparent, and he gets out of his fortune only his housing, his clothing, his food, and a small sense of power.

Now, it is the use of the leisure hour that equips a man to use wisely what the working hours bring him. The working hours develop his character, if his principles are good, while they increase his fortune, but they do not give him broad views of life, knowledge, and love of the best things. These are the gifts and fruits of the leisure hours, for the leisure hours constitute a man's educational opportunity. No man who has a few hours every week which can be used as he pleases should remain uneducated. Education is not a matter of schools, colleges, and universities; these are valuable instruments and aids to education, but they are not so essential that the man who can not command their privileges needs remain uneducated. Some men are better educated out of college than in it. All highly

educated men, no matter how liberal their opportunities may have been, are self-educated. The school and the college teach men how to study and what tools to use, but when they have done with the school and the college, they are only at the beginning of education.—Hamilton Wright Mable, in the August Success.

How I Was Fooled by a Bird.

WILLIS GRANT JOHNSON.

I well remember when I was a lad of 10 how I was deceived by a turtle dove. I was climbing an apple-tree in the old orchard. When well out on one of the larger limbs among the branches, reaching for an apple, I was startled by the rustling of something in the branches and almost fell out of the tree. About the same time my knuckles were fanned by the wings of a turtle dove. She had a nest on a branch very close to the apple I was after. I was so frightened and trembled so much, I forgot about the apple, sat down astride of the limb and crawled back to the trunk of the tree, sliding to the ground safely.

In the meantime the dove had darted through the branches to the ground. She was fluttering terribly as if severely injured. I thought the poor bird had been hurt in some way and tried to catch it. As I came near she tumbled and fluttered more and more, always keeping five or ten feet away from me, gradually luring me from under the tree. After I had chased her about 300 yards she flew swiftly to a tree some distance away. I was mystified and could not understand how the bird got well so quickly.

After the evening chores were done, I related the incident to my father. He laughed heartily and told me the dove had not been injured at all, but pretended it had been just to lead me away from the nest. "She feared you would injure her young," he remarked. "But," I said, "I was not after the birds, in fact, did not know there was a nest in the tree. I had my eye on the big apple and was reaching for it when she fluttered and struck my hand with her wing."

"Of course," father replied, "the bird did not know you did not mean to harm her or the young ones, but she decided to be on the safe side and get you away from them just as fast and as far as she could. She knew very well that if she dropped to the ground and acted as if she had been injured, you would try to catch her. In that way she got you safely away from the tree and when at a safe distance, took flight. I am sure she went back to the youngsters and told them how she had fooled you."

I never forgot this lesson. Even though it was a case of pure deception, I always thought that mother-bird did the right thing to protect the baby birdlings in that old apple-tree.

Song Sparrow.

Early one spring while strolling through a clearing close by a brook, the writer discovered the nest of a song sparrow in a brush pile; it contained two eggs. Upon visiting the nest again a day or so later, two additional eggs had been deposited, and upon making a third call some time afterwards the nest contained four young. On my return trip, the mother bird was sitting on the edge of the nest in the act of feeding the young. Upon approaching closer, she surprised me by remaining there, and I advanced near enough to place my hand upon her, still she refused to leave her precious little ones, but sat perfectly motionless, with the exception of a slight quiver of the eye. She remained in this position until I had retreated a good distance from the little home, evidently to make sure that no harm was intended. Here indeed was a striking instance of the protecting care and filial devotion shown by our birds towards their young.—Burton Mercer, in American Ornithology.

Electric sparks are always obtained from kites reaching a height of a quarter of a mile and increase as the kites go higher.

For the Little Ones

MILDRED'S CHICKIES.

Chickie, chickie, supper's yeddy,
Tum and dit,
All my mama 'div me for 'oo,
Every bit;
Tum old mama Biddie, dear,
I is waitin' for 'oo here;
Wots ze matter, tan't 'oo hear?
Better git!

See 'em tummin' in a hurry,
Dit here quick;
Else 'ese ozzer drate bid chickies
All get sick.
Only see how dey is stuffin',
Can't eat any more for puffin',
Dey won't leave a bit of nuffin,
For 'oo chicks.

When 'oo eats up all 'oo supper,
Every bite,
'Oo mus' take 'oo chicks to beddy
While it's light;
Dot is what my mama say
To her chickie eb'ry day,
And I know dat is de way,
So dood night.
—Mrs. A. M. Marriott.

Bobby Boy's Nest.

"Mother," said Bobby Boy, when she kissed him good night, "I wish I were a little bird and lived in a little nest."

"Isn't this bed a nice little nest?" asked Bobby Boy's mother. She knelt on the floor beside him, and put her head on his white pillow. "Isn't this nice soft little bed, and pretty blue comfort, and plump white pillows nicer than sticks and straws and leaves and paper, woven together as the robin in the lilac bush makes its little house?"

"Not quite, mother," said Bobby Boy. "I want to sleep just one night in a nest."

Next day Bobby Boy was very busy. His mother found him building a bird's nest in the closet. It was bigger than the nest in the lilac bush for Bobby Boy was five years old. It was made of pine branches he had brought in from the woods, and the feathers he had picked from an old duster, and bits of moss and paper and string.

Night came again and Bobby Boy's mother tucked in the blue comfort and patted the white pillow and smoothed the yellow hair and kissed Bobby Boy good-night after she had sung a little "go-to-sleep" song to him.

Bobby Boy did not go to sleep. He lay very wide awake, watching a big white moon shining through the apple-tree. Bobby Boy was waiting till the house grew still, then he meant to go out and build a nest in the apple-tree. When the house grew still, Bobby Boy crawled out of bed. He put on his little trousers and stockings, then he pulled the blue comfort off the little bed and tied it into a bundle. There were sticks in the bundle, and moss and paper and the feathers from the feather duster. Bobby Boy opened the window and crept out on a little piazza.

"Cheep weep, cheep weep," went a frightened little bird in the tree; then it flew away and screamed, for it had never before seen a little boy looking down into its tree when the moon was shining. The apple-tree threw one big branch up on the piazza.

There was the nicest place where five big limbs branched out. It was just big enough to hold a little boy's nest, and Bobby Boy had been thinking about it for a long, long time. He climbed up on the branch and put his legs around it, exactly as he did when he slid down the banisters. He held the rope that was tied to his bundle, then he slid down the big branch into the heart of the apple-tree. Once or twice the little twigs whipped him in the face, the tree creaked and groaned, and the blue bundle stuck among the branches. At last he was down in the little nest, and he stood there for a minute, breathing very hard. He pulled the bundle after him, and it came with a whack that almost knocked him down. It was a good thing there were nice, firm branches like a wall all around him, or Bobby Boy would have tumbled to the ground. He waited for a minute to get his breath back, then he began to build his nest. It was not as easy to build a nest as in the closet, because things tumbled to the ground. All the sticks fell, and a puff of wind carried the paper and feathers away. The moss wouldn't stay put, and nothing seemed

to want to be made into a nest but the blue comfort. Bobby Boy began to feel cold so he spread it round him and crouched down in his nest. It was very lonesome and quiet. The little bird came back and flew into the top of the tree and said, "Cheep weep, cheep weep," as if it were sleepy and tired.

The moon grew bigger and whiter and brighter, and stared boldly at Bobby Boy through the branches. Bobby Boy didn't feel comfortable in his nest; a scraggy old branch kept pushing his head out of its way, so he turned around and tried to curl up in a new way, but another branch wouldn't let him. It poked into his back. It began to grow very cold, and the wind whistled through the branches, and the moon stared at him and said: "Bobby Boy, you're a little goose. Climb up the tree and go to bed."

"I don't believe I like sleeping in the tree to-night," said Bobby Boy to the moon. "It is too cold. It will be lovely, though, when it grows warmer and I can eat apples all night."

"You're a goose," said the moon again. "Go to bed."

"All right, sir, I will," said Bobby Boy. He began to crawl up the branch that led to his room. When he was half-way up, he slipped right back, and slid away down into the heart of the tree. He would have fallen to the ground if it had not been for his shirt catching in a sharp branch. Bobby Boy was frightened. The blue comfort had tumbled to the ground, and his hands were so cold he could hardly hold onto the old tree.

"Father! mother!" he screamed. "Come and get me! Come and get me!"

He could see the lamp lit in his little room, and he heard his mother give such a cry it nearly made him fall from the tree.

"Bobby Boy!" cried his father. "Bobby Boy, where are you?"

"Here, in my nest," called Bobby Boy. Then father and mother climbed out on the piazza. His mother was crying, and his father was bending down into the apple-tree, but he could not reach Bobby Boy. Then everybody in the house waked up, and a long ladder went up to the very heart of the old apple-tree, and Bobby Boy crept into his father's arms. He went to sleep in his own little bed, with a hot-water bottle at his feet, and a hot woolly blanket wrapped about him and soft white pillows under his head; and the last thing he remembered was the big moon looking at him through the apple-tree and saying: "Bobby Boy, you're a goose. Isn't that lovely bed better than a nest in the apple-tree?" "I believe it is, sir," said Bobby Boy, sleepily.—Good Housekeeping.

RIDE ON RUBBER
GREAT WESTERN FLYER
Rubber Tire Buggy
THIS BEATS THEM ALL
FULL LEATHER QUARTER TOP



ONLY \$50
F. O. B. Factory St. Louis

Genuine Goodyear 1 1/2 in. Rubber Tires, and all for only \$50 F. O. B. factory, St. Louis. Others ask \$90. BUGGY COVERED WITH IRONCLAD GUARANTEE. We will refund your money and pay freight if buggy is not as represented. If you want such a buggy later, SEND US \$5.00 NOW, to apply on purchase price and we will make it to your order and ship it when wanted. We can ship buggy promptly if wanted at once. We send full description of this buggy and many others on request. Get it and our Buggy Catalogue Free. Our name insures quality.

O. L. CHASE MERCANTILE CO., 1435 W. 9th St., Kansas City, Mo.

WARM YOUR HOUSE

at low cost by using the LEADER Steel Furnace. Saves coal, time, trouble. Send for free booklet No. 22 Hess Warming and Ventilating Co., Chicago, Ill.

PIANO Do You Want a Genuine Bargain
Hundreds of Upright Pianos returned from renting to be disposed of at once. They include Steinways, Knabes, Fishers, Steadings and other well known makes. Many cannot be distinguished from new a great discount. Also bear-uptights at \$125, \$135, instruments at \$200, \$400 pianos. Monthly payments accepted. Freight only about \$5. Write for list and particulars. You make a great saving. Pianos warranted as represented. Illustrated Piano Book Free.

FROM

LYON & HEALY
29 Adams St., CHICAGO.
World's largest music house; sells everything known in music

SPORTING GOODS



FIRE ARMS, AMMUNITION, BICYCLES, BASE BALL, LAWN TENNIS, FOOT BALL, FISHING TACKLE, SPORTING, AND ATHLETIC GOODS Of Every Description.
Catalogue mailed free upon application.
AKHURST-EBERLY ARMS CO., 216 South Fourth St., ST. JOSEPH, MO (Mention Kansas Farmer.)

TEXAS, OKLAHOMA, INDIAN TERRITORY
—AND BACK—
\$15.00 SEPTEMBER 15th
FINAL LIMIT October 6th
—VIA—
MISSOURI, KANSAS & TEXAS RY
Ask Nearest Ticket Agent or write
G. A. McNutt, D. P. A., Blossom House, Kansas City, Mo.

PREPARED ROOFING FELTS.
We can save you money on your wants in this line. We offer you Two-Fly Tarrad Roofing Felt, 108 square feet to the roll, complete with caps, nails and cement, per roll, \$1.15. Three-ply complete, per roll, \$1.25. Vulcanite, the highest grade on the market, complete as above. Price per roll, \$1.50. We have all kinds of Roofing. Write for Free Catalogue No. 61 on material bought from Sheriffs and Receivers' Sales CHICAGO HOUSE WRECKING CO., W. 35th and Iron Streets, Chicago.

KANSAS CITY College
N.E. CORNER TENTH AND WALNUT STS.
Bookkeeping, Shorthand, Typewriting, Telegraphy, Penmanship and all English and Commercial branches thoroughly taught by experienced teachers. Highest endorsements. Elegant apartments. For illustrated catalogue and list showing hundreds of pupils in positions. Address C. T. SMITH, Principal.

SEVEN GREAT COLLEGES
Chillicothe Normal College
Chillicothe Commercial College
Chillicothe Shorthand College
Chillicothe Telegraphy College
Chillicothe Pen Art College
Chillicothe Musical College
Chillicothe College of Oratory
For free Catalog, address
ALLEN MOORE, Chillicothe, Mo.
CAR FARE PAID.

Platt's Commercial College
Fall Term Opens September 1, 1903.
—COMPLETE AND PRACTICAL COURSES IN—
BOOKKEEPING, PENMANSHIP, COMMERCIAL ARITHMETIC, COMMERCIAL LAW, TELEGRAPHY, STENOGRAPHY, AND TYPEWRITING.
Thorough Training for Business Life. Our students occupy the most responsible positions. Charges very reasonable. Board cheap. Address
Platt's Commercial College, Ballinger Building, St. Joseph, Missouri

The Home Circle.

CONDUCTED BY RUTH COWGILL.

THE FARMER FEEDS THEM ALL.

The king may rule o'er land and sea,
The lord may live right royally;
The soldier ride in pomp and pride,
The sailor ride o'er oceans wide;
But this or that whate'er befall,
The farmer, he must feed them all.

The writer thinks, the poet sings,
The craftsman fashion wondrous things,
The doctor heals, the lawyer pleads,
The miner follows precious leads;
But this or that whate'er befall,
The farmer, he must feed them all.

The merchant, he may buy or sell,
The teacher do his duty well;
The men may toll through busy days,
Or men may toll through pleasant ways,
Beggar or king, whate'er befall,
The farmer, he must feed them all.

The farmer's trade is one of worth;
He's partner with the sky and earth,
And partner with the sun and rain,
And no man loses by his gain,
And if men rise or if men fall,
The farmer, he must feed them all.

The farmer dares his mind to speak;
He has no gift or place to seek,
To no man living need he bow,
For he who walks behind the plow,
Is his own man, whate'er befall,
Beggar or king, he feeds them all.

—Anon.

A KANSAS FARMER IN THE OLD COUNTRY.

XIV.—Switzerland.

Lucerne lies at the head of the beautiful Swiss lake, with the lofty peaks of Rigi on one side and Mount Pilate on the other, while many smaller mountains seem closely packed in around the city, thereby making it entirely locked in by lofty peaks on all sides.

One of the finest Swiss journeys to be taken is to travel from Lucerne to Geneva, then up the Rhone Valley to Zermatt and back to the starting point. Starting from Lucerne, the traveler by train winds around the base of Mount Pilate for an hour, when, after passing the important city of Hergiswyl, he arrives at Alpnach-stad, where the mountain road ascends to the top of Mount Pilate. This lofty peak, though snow-clad for nearly the whole year, had fruitful farms and orchards on its sides reaching up thousands of feet from its base. At Giswil, about twenty-five miles from Lucerne, the train takes a twenty-minute rest, while arranging to ascend to the Brunig pass. Here the traveler can indulge himself with many kinds of fruit at the station, if he is there in July or August, and also delight himself with wine and beer, if so inclined, for there is a very great plenty of both liquids on sale near the depot, and the great majority of the travelers seem to regard it as a necessity to partake freely of them; and for a lunch a piece of bread and a bottle of native wine seems ample for the European tourist.

The long 'express train is cut into three sections, with a heavy engine arranged on the "cog and pinion" plan, to push each section up the steep mountain, and then begins a most interesting trip of a few miles to the summit. At Burgein, the summit of Kaiserstuehe is reached, affording a fine view of the three peaks of the Wetterhorn. Further up the village of Lungern is passed and then the train goes through the Kappell tunnel and ascends the Brunigmat-thal, to the top of the range to Brunig station.

Here a long rest is again taken, giving the passengers opportunity to inspect the Engelhorner and the Faulhorn chain of mountains which appear in the distance, and to look down upon the beautiful Meieringen Valley, the Reichenbach Falls, the Oltschibach Cascade, and the Lake of Brienz in the distance. From Brunig the train descends to Meieringen, crossing the Grossebach, Kehlbach, and Hausenbach, streams of rushing water which come down from the Brunig region to join the waters of the River Aare which flows through Lake Brienze.

At Meieringen another long stop is taken during which the three sections of the train are united to travel on a level road to the head of Lake Brienze. Meierbach is a village of about 2,000 inhabitants, and is the principal railway station on the Brunig system. Its inhabitants claim descent from the Schweizers, who immigrated thither

from Scandinavia some two thousand and odd years ago. The Muhlbach, Alpbach, and Dorfbach are streams which rush down to Meieringen from the Haselberg to join the River Aare in its rush to Lake Brienze.

From Meieringen to Brienze, down the Aare Valley, is a delightful ride giving the traveler views of waving fields of grain on either side, fruit groves and vine clusters along the steep hillside, with green woods up higher, and finally ice and snow caps upon the very tops, with rushing waterfalls at intervals all along the way. At Brienze the train had to quit business entirely, as the lake fills up the whole valley from mountain to mountain, and all the passengers with their baggage are transferred to a steamer in waiting, which soon moves off, with band playing on deck. From Brienze to Interlaken, a distance of about eight miles, a fine steamer ride can be enjoyed, with most delightful scenery on either side, if the weather be pleasant as it was when our Kansas party made their journey, both in going and returning. On the southeast we saw the Sustenhorner Mountains, and on the other side the Thierberg, all snow-capped peaks in July.

At Interlaken our party made a stop of two different days, and enjoyed the beautiful mountain views to be had from that city. It has been described in print so often that no attempt will be made in this letter to say much about it. It being in the midst of the tourist season the town was full of travelers from all parts of the world. Our party was happy in being able to obtain a clear view of the snow-capped Jungfrau Alp, which is the great attraction of Interlaken, and every morning, during July and August, many Alpine climbers start from Interlaken to go up to the glaciers of the Maiden Mountain.

From Interlaken the traveler has the choice to continue by steamer to Thun, or take the railway which begins again at this point. A two- or three-hours ride, by train, brings the traveler to Bern, the capital of Switzerland, and one of the most interesting cities we found in our journey. The new capitol building lately completed is one of the handsomest capitol buildings the writer ever saw; and while much smaller than our capitol at Washington, in beauty and finish it is its equal.

The bears of Bern, its wonderful clock-tower, and other attractions are familiar to most American readers, and two days were spent in this charming city by our party to inspect them all. From Bern to Lausanne, by way of Freiburg, is a journey of about sixty miles, through the finest farming portion of Switzerland. Fields of grain were seen all along the route, and many large groves of well-grown trees which showed they had been transplanted many years ago. The region is so dotted with these groves that the country appears to be more covered with trees than any portion of the farming regions of America.

At Lausanne, the most charming lake of Geneva is viewed and the train passes along its northern shore, among vineyards, for over thirty miles, to the ancient and historic city of Geneva. This city, renowned in history for two thousand years, is most familiar to the general reader in connection with the names of Rev. John Calvin and Dr. Servetus.

After examining the city to our satisfaction, our party one morning at 8 o'clock went aboard the steamer for a journey on Lake Lemanus, which is the old, historic name for Lake Geneva. From the city at the west end of the lake to Chillon at the east end, is a ride of forty-five miles, the steamer crossing from south to north, and touching at ten or more cities on the north shore. A more delightful steamer journey than on Lake Lemanus can not be enjoyed by any one.

At Chillon the ancient castle has to be examined, where the noted prisoner, Bonivard, was confined for years, some three centuries ago, so long ago that he, no doubt, has forgotten all about it, though remembered by the present generation on account of the poetical writing of Lord Byron.

From Chillon a railway journey is enjoyed, for some sixty miles or more, up the valley of the River Rhone, past St. Maurice, Martigny, and the very ancient city of Sion, which claims a history of more than one thousand years. All along the route the slopes of the mountains are covered with grapevines, and this is one of the great wine-growing regions of Switzerland.

At Visp, near the end of the railway line, our party transferred to the cog-wheel railway, up the mountains, for a twenty-two mile ride to Zermatt, which lies just below the glaciers of Mount Cervin, or Matterhorn, as it is more familiarly called.

Zermatt was a little village of cheerless mountain huts of the Swiss farmers until the craze for mountain climbing overtook the traveling world. Since then many large hotels have been built there for the three summer months' use, and in July we found possibly two thousand visitors at this high altitude. Our stay was for three days, during which time we made journeys up the peaks to better view the glaciers.

From Zermatt to the top of Stafelalp is an uphill trip of about four miles, and requires nearly four hours for the average low-land walker to travel it. We started out in good spirits, and just at the edge of the town we overtook a Switz, who was loaded with a huge sheaf of rye. We presumed the weight of his burden was sixty pounds, which he had securely bound, and on his head and back, which he used as a cart to haul home his grain.

He lives way up in the Alps at the very margin of the glaciers, so he could not raise rye there. He has a few feet of ground near Zermatt, possibly an acre in all, which he tills with a shovel and hoe, and raises possibly three or four such sheaves as we saw him carrying. He was going up the Stafelalp path, and told us in German that he would be pleased to pilot us on our way. He was a young man, not over thirty years of age, and seemed to be an intelligent person. He told us about the Alpine dwellers, and how they managed to make a living.

Now we were "running light," with no burdens, while he had a sixty- or seventy-pound bundle of rye on his head and back. Yet we had difficulty in climbing the path as fast as he did. He would occasionally stop and wait for us, and his countenance seemed to say, "What slow people those are, anyway!" calling us slow, and we from Kansas, too!

At last we reached his log chalet, and he directed us as to the path to follow to get to our destination; but there were numerous signs along the route, which tell the tourist as follows, "Strasse nach Stafelalp," so we were in no danger of losing the path.

At the top of the Alp we had the lofty Matterhorn peaks in front of us, and could see five different glaciers, which seemed very close to us, though we did not try to cross the one we had now reached. The next day another four-hours walk took us up to the Groenergrat, on another side of the Matterhorn, where we walked a few minutes among the ice and snow of the glacier, and then hastened down the mountain, not liking the wintry climate of the lofty peaks.

We entered the little churchyard, surrounding the pretty English church at Zermatt, and read on the tombstones the names and dates of demise of the various individuals who had lost their lives in climbing the Matterhorn.

N.

The Farmer, and How He Factors In Civilization.

LYDIA BARGER, BEFORE FARMERS' PICNIC INSTITUTE, COTOTWOOD GROVE, AUGUST 26.

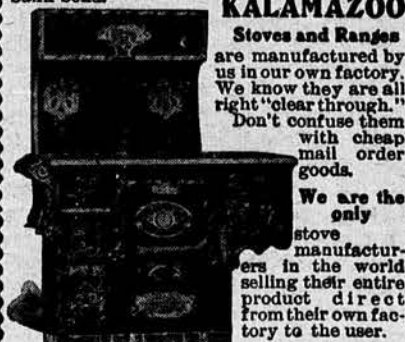
How many people look upon farming as a very undesirable occupation, fit only for the lowest class of civilization. If they would stop to think, reason, and observe, I think they would find that the most venerated, honest, and upright people in the world are engaged in this industry, and that they the critics, are themselves dependent upon the farmer for food and clothing.



All Kalamazoo ranges and cook stoves are equipped with patent oven thermometer. Makes baking sure and easy.

The KALAMAZOO

A better stove or range than you can get from any other source. A saving of from 25% to 40% in price. Prompt shipment from factory to user. Factory prices—no dealers' profits. Freight prepaid by us. 300 days approval test. Guarantee backed by \$30,000 bank bond.



KALAMAZOO

Stoves and Ranges are manufactured by us in our own factory. We know they are all right "clear through." Don't confuse them with cheap mail order goods. We are the only stove manufacturers in the world selling their entire product direct from their own factory to the user.

There isn't a better stove or range at any price

and by eliminating all dealers' and middlemen's profits we save you easily 25% to 40%. Moreover we give you a 300 Days Approval Test. If your purchase is not satisfactory in every way, return the goods at our expense. We have a complete line of ranges, cook stoves and heaters for fuel of all kinds. All stoves blacked, polished and ready for business.

It will pay you to investigate.

Send for catalog No. 189 and prices, freight prepaid. THE KALAMAZOO STOVE CO., Manufacturers, Kalamazoo, Michigan.



Scanty would be the meal of which any one might partake if there were no farmers. Where does bread come from? Is it sent down from heaven as manna was sent to the Israelites? No, the farmer must raise the wheat from which bread is made. From what is our clothing made? From products of the farm.

Where would civilization be to-day were it not for the farmer? Would the civilized man of today be more than a savage? What would become of that great industry, manufacturing? It would be almost extinct.

Why were the first attempts to colonize America failures? Because the colonists were mainly gentlemen who would not work and were not farmers. It is true that the first successful colony was settled by these gentlemen, but it was not successful until Captain John Smith, the leader of the colonists, made farmers of them by commanding them to work, that food might be grown. I hope you do not think that farmers are not gentlemen. The gentleman of 1607 was quite a different man from the gentleman of 1903.

Some think that food and clothing are all that are obtained from the farm. A brawny arm, a strong, healthy body, and a vigorous mind are the farmer's inheritance. Among what class of people do we find more noble characters than among the farmers? Why is the farmer the possessor of such a noble character? Search the world over and we find no place which is more uplifting in its surroundings than the farm. Perhaps you think that surroundings are not the principle factor in forming a good or evil character. Did any of our great men ever rise from the slums of our large cities? Have not many of our great men been reared upon the farm?

Our histories inform us that John Adams, Jackson, Lincoln, Grant, and many others were reared upon the farm.

Who won the battles that made the United States free and independent? Were not most of these men farmers? Did not Israel Putnam leave the plow in the field to fight for independence? Such was the patriotism of the farmer during that trying time in our Nation's history.

What class of men wrought the miracle that changed what was known as the Great American Desert from a wilderness to its present state of prosperity? I think we can find the an-

swer to this question in a few stanzas of a poem entitled "Kansas:"

Away out West in Kansas,
In the days so long ago,
The buffalo roamed the prairie,
And the Indian knew no foe.

The farmer built him a cabin
Out on those prairies wild,
And cared not he for companions
Other than wife and child.

As time marched quickly onward,
Other men to this country came
And built them homes on the prairie,
For they sought for homes—not fame.

Then the golden grain was planted,
And what had been prairie wild,
Soon blossomed fair like a garden,
'Neath her skies so soft and mild.

Oh, Kansas is a land of plenty,
With her "wall of waving corn,"
With her golden yellow wheat-fields,
And her flowers that greet the morn.

The same agency that wrought such change
in Kansas also changed other States included in the Great American Desert. How much are we indebted to the farmer! We often hear him taunted by being called "hayseed." Proud might any person be who could be able to fill his place!

Of all pursuits by man invented,
The farmer is the best contented.
His calling good, his profits high,
And on his labors all rely.
Let kings to farmers make a bow,
And every man procure a plow.

Club Department

Our Club Roll.

- Mutual Improvement Club, Carbondale, Shawnee County (1885).
 - Give and Get Good Club, Berryton (1902).
 - Osborne Woman's Literary Club (1902).
 - The Ladies Reading Club of Darlington Township (1902).
 - Woman's Club, Logan (1902).
 - Domestic Science Club, Osage, Osage County (1888).
 - Ladies' Crescent Club, Tully (1902).
 - Ladies' Social Society No. 1, Minneapolis (1888).
 - Ladies' Social Society No. 2, Minneapolis (1889).
 - Ladies' Social Society No. 3, Minneapolis (1891).
 - Ladies' Social Society No. 4, Minneapolis (1897).
 - Chillico Club, Highland Park (1902).
 - Cultus Club, Phillipsburg (1902).
 - Literatae Club, Ford (1903).
 - Sabeau Club (1899).
 - Star Valley Woman's Club, Iola (1902).
- [If mistakes are made in the above roll, please inform us at once. Let each club look for its name, and see that all information concerning it be correctly given.]

The Club and the School.

MRS. JESSIE ADAMS.

The Star Valley Woman's Club gave a reception at the school-house on the evening of August 1, in honor of its first anniversary. The ladies of the club gave a short program and light refreshments were served. The evening was stormy and the attendance not so large as had been hoped for, but those present spent a very pleasant evening.

We have kept up our meetings every two weeks during the summer as we have a number of school girls who enjoy the work, but who can not attend during the school months. Several of our members attended the Ottawa Assembly in July, and came home with new inspiration.

For the benefit of those who could not attend, may I give a few suggestions made by Mrs. Noble Prentis, of Topeka? Among other things that country clubs might do, she suggested that we might make the district school grounds a public park where neighborhood meetings could be held; and that the school-house be made a club-house, having moveable seats that could be set back against the wall on occasion.

Concerning the public roads she suggested that the country club women use their influence to keep the weeds mowed along the roadsides, and that after the road had been "worked," flower-seeds, such as portulaca, be sowed in the freshly stirred soil.

As most of our country schools will open within the next two weeks, may I speak of one or two things that the women in the country, whether banded in clubs or not, may do for the good of the school?

Many of the schoolhouses have hardly been opened during the summer; and the dirt and dust brought in last term still lie on floor and desks and walls.

Can not the woman's clubs see that the house is thoroughly cleaned? Perhaps, if asked, the school board will hire it done. If not, let the ladies

gather at the schoolhouse and clean it themselves. Then before school opens, or on the first day send potted plants to fill the windows. Who can tell of the cheer and encouragement it will give to the teacher coming as a stranger into the neighborhood to find that others besides herself have remembered that her work begins and are interested in it?

Another thing that has been done in our "temple of knowledge," not however by the woman's club, but through the Sunday school, could be done by the club women as well. Pictures which are really fine were ordered from the Perry Picture Company, Malden, Mass., and one of our girls mounted them neatly on cardboard, some singly, some in groups.

For instance, the portrait of Longfellow, pictures of his home, his daughters, his famous arm-chair, and of Evangeline were mounted on one card, making a fine group. The expense is small, as the pictures come at from 1 to 5 cents.

Mrs. Burdette's Club Creed.

The "club creed" of Mrs. Robert J. Burdette, first vice president of the General Federation of Women's Clubs, which she recently gave before the West End Woman's Club of Chicago is repeated below:

I believe in afternoon club life for women.

I believe in evening club life for men and women together when it does not rob the home of father and mother.

I believe that woman has no right to undertake any work whatsoever outside of the home, along the lines of philanthropy, church, temperance, or club life, that does not emanate from the home and in its final and best results return to the home. Home must always be the center but not the limit of woman's life.

I believe in equal rights in the family for father and mother in intelligence, affection, and filial respect. These the club should foster.

I believe in nine-tenths of the club members doing the work and one-tenth the criticising instead of the reverse.

I believe in individual responsibility for every interest of the club, mutual sympathy and appreciation of results.

I believe no woman has a right to accept a place on any committee unless she serve faithfully, promptly, intelligently, and is willing to stand by the results of her individual action.

I believe that women should have a moral responsibility regarding financial matters in the prompt payment of dues and pledges, and a comprehension that as no other phase of life can be carried on without money neither can the enlarged club life.

I believe in the value of a minute, and that thievery of time on the part of one late member from those in waiting is reprehensible. Railroad trains do not wait; why should immortal souls?

School Question.

EDITOR KANSAS FARMER:—I wish to ask a few questions about our late school law, if such questions can be taken up by your valuable paper. What is the meaning of the law when it reads, "A public, denominational, parochial, or private school shall be taught by a competent teacher?"

Who is competent? Does the law grant the privilege to a community to keep their children in a German private school where there is not a single branch of English taught (this being specified by law) while a public school is in progress in the same district?

Is a school board liable to a fine if it hires a teacher for its home district and then sends its own children to the above-mentioned German private school? Does the late school law grant the privilege to a community to educate its children in whatever language it pleases?

If you can, please answer the above questions through the KANSAS FARMER for the benefit of our neighborhood. I am a German and a lover of the English and the German languages. I

Perfection Windmill
only \$19.00
All steel, strong, well built, well governed. Pumps more on less wind than any other mill. Above price is for our 8 foot mill. Larger sizes equally low.

Pitcher Spout Pump
top covered, dirt proof, fine finish, only \$1.10.

Stock Watering Trough
galv. iron, the best made. Five widths and depths, any length. Price 42 to 78 cents per foot.

THOMPSON-LEWIS Gasoline Engines
furnish the greatest possible power at the lowest possible cost in time, labor, fuel and money. They are so simple that anybody can run them without expert training or experience. Our Volume Governor gives uniform speed. Our Agre Mixer is the most positive and economical on the market. Our Hand Starting Lever starts engine with least effort. All bearings of Iridium Bronze. Best material and workmanship throughout. Many sizes from 4 (actual) h.p. up. Best for all farm work—cutting and grinding feed, sawing wood, pumping water, separating cream, churning, etc. Send for free catalog before you buy. It may save you time, money and annoyance.
J. THOMPSON & SONS MFG. CO., 117 BRIDGE STREET, BELoit, WIS.

DODD, DOOLEY & CO
A. J. DOOLEY, Manager, Topeka, Kansas.
Manufacturers of PURE SOFT COPPER CABLE
Lightning Rods
Endorsed by the Farmers' Mutual Insurance Company of Kansas. Prices the very lowest. Send for free booklet on the Laws and Nature of Lightning and how to control it. A good man wanted in every county to handle our goods. References—100,000 farmers in Iowa and adjoining states, and the Kansas Farmer, Topeka, Kans., Iowa Homestead, Live Stock Indicator, Wallace Farmer, of Des Moines, Ia., Cashier of Bank of Topeka, Kan., and The Mall and Breeze.

FREE. FREE. FULL SIZE
We are anxious to introduce our household remedies in every home throughout the Americas, and are doing so, as sensational advertising to do this quickly and thoroughly. Will you order home remedies from us, either for yourself and relatives, or to sell among friends, and get a beautiful dinner set FREE?
Send us your name and address and we will send you eight boxes of remedies, sell each box for 20c, and return the money. When we have received the money for the medicine, which we will send you immediately upon receipt of your order, without the payment of a single cent more than for eight boxes, after you have sold the \$1.00 worth and returned the money, we will without any further work on your part or payment of any kind whatsoever send you a beautifully decorated 112-piece CHINA dinner set, exactly as per out, with either brown, blue or gold decorations, FULL size for family use. This set is genuine CHINA, and has absolutely no trade-mark or advertisement of ours on it; all we ask you to do is to show it to your friends and tell them how you got it. Absolutely no other conditions. Dishes packed and shipped addressed to you free of charge. Our No. 2 box of remedies contains \$10 \$1.00 REWARD to any one who will prove we do not do exactly as we say.
NEW YORK MEDICAL ASSOCIATION, Dept. 60 111 Broadway, New York.

think our children ought to speak the English fully as well as the German, for this is our and our children's beloved country. P. G. HEIDELBRECHT. McPherson County.

In reply to this first question as to who shall be considered competent to teach in our public or private schools, I reply by saying that a holder of any legal certificate, granted by the county board of examiners, the State Board of Education, or by the board of education in any city of the first or second class. Persons holding these certificates are supposed to be competent. In the case where the school is a private school, and is being taught by a teacher who does not hold a legal certificate, as cited above, it then becomes the duty of the superintendent to satisfy himself, by any method of investigation that he may choose, that the teacher or teachers in said private school are doing satisfactory work, and are competent in every way to teach in public schools. He does not determine this by an examination, but by an investigation of the work being done, the course of study pursued, and the general results obtained from said instruction.

Replying to question No. 2, the law does not grant a community the privilege of keeping their children in a German or private school where there is not a single branch of English taught, unless said school be the only school available. This condition can not legally exist under the law since the law requires that each legally organized school district in the State of Kansas must maintain a school for a term of five months, provided a suitable building can be secured.

Replying to question 3, the school board would be liable under the law, if, after receiving five-days notice from the truant officer to place their children in the public school of the district, providing the private school above mentioned was being taught in the German language exclusively. This German school, in order to exempt the pupils attending the same from liability under the truancy law, must maintain a course of study equal to that of the State course of study for the common schools, and the instruction must be partly in English. German may be taught as a branch, and if the entire community be German, there would not be any objection to the instruction all being in German,

WE SELL DIRECT Save our customers two and three profits—Send for Catalog
20 Days Free Trial
One Year Guarantee **\$39.50**
Top Leather Quarter, Leather Cushion Back Wholesale manufacturers of Buggies, Road, Spring, and Farm Wagons, Harness, Saddles, Rural Mail Wagons, Buggy tops, and Cushions.
ERHARDT WAGON MFG. CO.
Third and Commercial Streets, ATCHISON, KANS.

ROGERS CARRIAGE PAINTS
THE OLD AND ONLY ORIGINAL
MAKE YOUR BUGGY LOOK LIKE NEW.
For carriages, wagons, lawn seats, chairs, boats, launches, pumps, farm implements, or anything requiring a durable gloss finish in black or colors.
ASK THE DEALER
Send us postal for interesting souvenir, free.
DETROIT WHITE LEAD WORKS, DETROIT, MICH.

STEEL TUBULAR FENCE POSTS.
Absolutely indestructible. A permanent Fence Post suitable for fields, farms, pastures, etc. Made of a one-piece hollow tube. Costs no more than the ordinary cedar post. We have all kinds of wire for sale. Write for Free Catalogue No. 61 CHICAGO HOUSE WRECKING CO. West 35th and Iron Streets, Chicago.

HONEY
For Kansas, Missouri and Oklahoma.
Two cans, 120 pounds net—amber, \$7.50; whitest, \$9.00. Also small cans, all sizes. Comb honey in one-pound sections, 11 to 13c. See price list. Nothing but genuine bees' honey. (Reference, Kansas Farmer Co.) Address
Arkansas Valley Apiaries, Cheek & Wallinger, Las Animas, Colo

excepting that the English language should be taught as a branch to all the pupils attending said school.
Replying to question 4, this question is partly answered in the answer to question 3. The spirit of the law is to have the children of the State of Kansas educated in the English language. The law can not prevent their studying any language they please, providing they are being taught and become proficient in the English tongue. There is no question but what the children who have the mastery of both the German and the English are better equipped as a rule for practical life than those who only have mastered the one tongue.
J. L. DAYHOFF,
State Supt. of Public Instruction.
Please mention Kansas Farmer when writing our advertisers.

THE WHEAT MARKET—SOWING.

(Continued from page 933.)

broker, is to have men act on his representations and place their deals through him; for whether wheat goes up or goes down he gets his commission on the amount bought or sold.

The wheat farmer is interested in the remote as well as the immediate prospects of the market. There is no doubt but that the world needs as much wheat as it produces. The demands are really crowding upon the supplies. With average conditions, the prospects do not, as the farmer views it, favor a decline either in the market for the present crop or for the crop soon to be sown. There need, therefore, be no great rush to market the present crop, neither need there be any hesitation about sowing a large acreage for next season.

THE LIVE-STOCK RATES CASE.

The outcome of the live-stock rates case before the Kansas Railroad Commissioners was a surprise to some and doubtless a source of gratification to all interested in live stock. The railroads conceded, for the time, the contention of the stockmen against an advance of the rates. The hearing had progressed at considerable length and much of the evidence of the stockmen had been introduced. The inquiry had been conducted in a manly spirit on both sides. The suggestions of the railroad attorneys of lack of authority of the commissioners was doubtless to the stockmen the most disquieting element of the hearing. In the councils of the stockmen it was generally understood that if beaten on this score they would, with a united front, carry before the people at the next election a demand for the enactment of the Texas railroad law. This law confers great power upon the commissioners and is in every way effective. Some have suggested that apprehension of some such law in Kansas had much to do with the final course of the railroads in bringing the case to a close. It is doubtless more accurate to recognize the fact that the management of Kansas railroads is in the hands of broad-minded men who were convinced by the showing made by the stockmen that no advance should be made. That they formally claimed the right to make the change at some future time is doubtless due to their habit as lawyers of conceding no more than is necessary at any time. Shippers will probably find them as ready to adopt reasonable views in the future as at this time.

The value of the Live Stock Association has been amply demonstrated. Without the association the stockmen could not have made the showing which won the day.

Suggestions are frequently made that Kansas freight rates on other than live-stock shipments are out of proportion to rates in other States. If such be the case it will be well if some organization of shippers shall make as thorough a showing of the facts as was made in the live-stock case. These facts would on proper presentation doubtless lead to a readjustment.

PRIZES FOR PAPERS ON HUMUS.

In the KANSAS FARMER of July 16, a schedule of prizes for papers on humus was printed. Some papers have been received. The season has been an unusually busy one so that several who intend to write have been unable to do so within the time stated in the original offer. The editor has therefore decided to extend the time for filing papers in this contest to October 1.

The offer is as follows: Paper to contain not more than 1,500 words, to be mailed to the KANSAS FARMER, Topeka, Kans., not later than October 1, 1903. The prizes will be as follows: First, \$5; second, \$4; third, \$3; fourth, \$2; fifth, \$1.

The offer is open to all readers of the KANSAS FARMER.

Old-Time Aphorisms.

Never entreat a servant to dwell with thee.
Grace thou thy house, and let not that grace thee.
Keep your eyes wide open before marriage; half shut afterward.

Miscellany.

The Renter's Share of Clover.

EDITOR KANSAS FARMER: Will you please give me information through the columns of the KANSAS FARMER as to a fair division of clover-land?

1. If harvested on the shares, what is the fair proportion for owner of land? (2) If let for cash-value in spring for whole season, how much rent should one ask per acre? (3) What should one ask per acre for second crop, fair stand, but not very heavy? Market good. This last question is the most important.

READER.

The first question is indefinite. You ask, "What is a fair division of clover-land?" It is probable your first question is merged in the second, as you ask, "What is the fair proportion for owner of land?" It is assumed you intended to ask, "What is a fair proportion of the clover-hay for the land-owner?" The general custom and rule is one-half the hay in stack or barn for the land-owner, the other half for tenants. To carry the inquiry further, as it may be involved in this inquiry if the tenant furnish the seed and sow it, what would be the fair share of the crop for him? The tenant's just share is two-thirds of the crop, and the land-owner's, one-third. The improvement of the land by growing clover or it makes the difference in the shares to the land-owner.

2. The rent per acre for the land is a matter that must be determined by local custom, the kind and condition of the land, and whether the land is in clover or is to be seeded to clover by the tenant. The rent would be fixed fairly by making it approximately one-half of the estimated value of the crop of clover hay in the stack or barn. This answer assumes that the land is already seeded to clover.

3. As to the sum the land-owner should ask per acre for second crop of clover, it is a matter that involves so many contingencies that a fairly intelligent answer can not be given. The parties, who understand all the conditions, could settle the matter more justly than one who knows nothing of them. One-half the hay in the stack or barn of land-owner would be as fair an estimate as can be made in answer to the inquiry.

Following local custom is a safe and fair rule in such matter.

Chemistry of Soils as Related to the Yield of Crops.

The Secretary of Agriculture announces that the Bureau of Soils has just finished an exhaustive investigation of the chemistry of soils as related to the yield of crops. The results indicate that practically all soils have sufficient available plant food for normal crop yields, and that this supply is constantly maintained through natural agencies in the soils dissolving the material of the soil grains. The difference in yield is dependent upon the condition and kind of cultivation and rotation of crops, maintaining certain necessary physical conditions in the soil, under which this plant food can be used by the crop. A bulletin has just gone to press giving the details of the investigation, and discussing the influence of climate, texture of soil, rotation, fertilizers, and soil management upon the yield of crops. The work is based upon analyses by new and exceedingly sensitive methods, by which the amount of plant food in the soil moisture itself, which is the great nutritive solution for the support of crops, has been determined, and not by digesting the soils in acids which attack the inert mineral matter of the soils.

While the conclusions appear to be in conflict with the opinions held for so many years by agricultural chemists, they are in strict conformity with the experience of good farmers in all countries, and with actual facts which have long been established by agricultural chemists. The fertility of the soil is thus shown to be due to physical causes which control the supply of water and plant food which it con-

tains, as the soil moisture in all cases appears to be about the same in composition and concentration. The fertility is therefore controlled by a physical cause, and a chemical examination of a soil can not be expected to indicate the yield of a crop. It is believed that a simple physical method will be devised for determining the relative fertility of soils.

Exports Via the Gulf Increasing.

The doors through which the exports of the United States flow to the outside world are opening more widely year by year, and this seems to be especially true of the ports located on the Gulf of Mexico, the northern lake border, and the Pacific coast. Formerly the Atlantic coast ports held a very large proportion of the export as well as import trade, but in recent years the export trade is being distributed to the ports at the north and the south, as well as the west, though in importations the Atlantic ports still retain about 80 per cent of the total import trade. The figures of the fiscal year just ended, compared with those of the fiscal year 1901, presented by the Department of Commerce and Labor, through its Bureau of Statistics, show a reduction for Boston of 55 millions in exports; New York a reduction of 24 millions; Philadelphia a reduction of 6 millions; Baltimore a reduction of 25 millions; Newport News a reduction of 7 millions, and Norfolk a reduction of nearly 2 millions. Moving down the coast toward the south, however, and still comparing the figures of 1903 with those of 1901, Savannah shows an increase in exportations of about 8 millions; Wilmington, N. C., over 2 millions; Galveston an increase of 3 millions; Mobile an increase of a million, and New Orleans a decrease of 3 millions.

Combining all of the Atlantic ports, the total exports of 1903, compared with those of 1901, show a falling off of 98 million dollars; the Gulf ports show practically the same figure in 1903 as in 1901; Mexican border ports show an increase of nearly 5 millions; Pacific ports an increase of 10 millions, and northern border and lake ports an increase of 18 millions in the exports of 1903 compared with 1901. Thus the Atlantic ports are the only group showing a reduction in 1903 compared with 1901.

In imports, however, the Atlantic ports still hold their commanding position. The total imports of 1903 amounted to 1,025 millions, and of this, 821 millions, or 80 per cent, came in through the Atlantic ports. In 1893 the total importations were 866 millions; of this, 717 millions, or 82 per cent, came in through Atlantic ports. Comparing the imports of 1903 with those of 1901, the Atlantic ports show an increase of 151 millions dollars; the Gulf ports 12 millions; Mexican border ports, 3 millions; Pacific ports, 8 millions, and northern border and lake ports, 25 millions.

Comparing conditions at the principal ports in 1903 with those of 1893, it may be said that Baltimore shows an increase in exports from 71 millions in 1893 to 81 millions in 1903, and an increase in imports from 16 millions in 1893 to 27 millions in 1903. Boston shows in 1893 exports of 85 million dollars, and in 1903, 88 millions, an increase of 3 millions; in imports Boston shows in 1893, 79 millions, and in 1903, 86 millions, a gain of 7 millions. New York shows in 1893 exports of 347 millions, and in 1903, 505 millions, an increase of 158 millions; and imports in 1893 of 548 millions and in 1903 of 618 millions, an increase of 70 millions. Philadelphia shows in 1893 an exportation of 49 millions, and in 1903, 73 millions, an increase of 24 millions; and imports in 1893 of 66 millions, and in 1903 of 60 millions, a reduction of 6 millions. Savannah shows in 1893 exportations of a little less than 20 millions, and in 1903 over 54 millions, an increase of 34 millions. Galveston shows in 1893 an exportation of 37 millions, and in 1903, 104 millions, an increase of 67 millions. New Orleans shows in 1893 an exportation of 77 millions, and in 1903, 149 millions, an increase of 72 millions.

WITH ON HAND
WATKINS

You can always feel safe if you have a supply of **WATKINS' Standard Remedies** in the house. Our bonded agent will call on you with 25 household preparations, direct from our \$500,000 medical laboratory. He'll help you save the doctor's bill. Watkins' Home Doctor and Cook Book—100 illustrated pages—sent free to any address. Write to-day.

THE J. N. WATKINS MEDICAL COMPANY,
28 Liberty St., Winona, Minn.

The following table shows the imports and exports of the Atlantic, Gulf, Mexican border, Pacific, and northern border and interior ports, respectively, in 1893 and 1903:

IMPORTS.		
Ports.	1893.	1903.
Atlantic ports.....	\$717,360,074	\$821,283,328
Gulf ports.....	24,682,332	38,378,060
Mexican border ports	*13,825,550	13,337,190
Pacific ports.....	48,315,035	56,474,603
Northern border and lake ports.....	52,923,430	82,053,268
Interior ports.....	9,294,501	14,185,089
Total.....	\$866,400,922	\$1,025,751,538
EXPORTS.		
Ports.	1893.	1903.
Atlantic ports.....	\$624,278,456	\$904,168,130
Gulf ports.....	125,591,932	285,021,144
Mexican border ports	12,151,900	25,935,871
Pacific ports.....	42,229,504	79,253,519
Northern border and lake ports.....	43,413,402	125,758,847
Interior ports.....		603
Total.....	\$847,665,194	\$1,420,138,114

*Includes \$10,898,363 gold and silver in ore; not included in figures of 1903.

An Old Political Issue Revived.

In the early days of our National history, whether the general Government should take a hand in making internal improvements became one of the great political issues. The matter was fought out in Congress and in political campaigns, and finally settled in the affirmative. Among the improvements discussed, the building of roads was probably the most important. Plans were made for connecting the different parts of the county by National highways. The National pike was built from Cumberland, Md., to the Ohio river, and then on westward. The plan was to build to St. Louis, but before that point was reached, the building of steam railroads was begun, and the people lost interest in the road question.

In these days when river and harbor bills are looked upon as a matter of course, and National aid to road improvement is considered a novel proposition, it is interesting to recall that the question of road-building by the Nation was a great and burning issue long before river and harbor bills were ever heard of. It is also worth noting that Presidents were vetoing river and harbor bills as unconstitutional long after National aid to road improvement had become a settled policy.

It does not seem probable that the question of constitutionality will ever be seriously raised against such legislation as that proposed in the Brownlow Bill for National aid in the building of roads. It can be defended as strongly as river and harbor legislation under those clauses of the Constitution which authorize the Federal Government "to promote the general welfare," and to "regulate commerce between the States." But in addition to these, it finds its strongest warrant in the authority conferred upon Congress "to establish post-roads;" a provision that is growing in practical importance every year with the extension of the rural free delivery system.

Farm Notes.

N. J. SHEPHERD, ELDON, MO.

To make a success of farming avoid extremes.

Plow deep according to the character of the soil.

Economy of production and value of product is the standard of merit.

Better to raise something to sell than to grumble at the market.

The better food you feed the more careful you should be of the manure.

The manurial value of feeds corresponds with their nutritive value.

Upon the first six months of a colt's life depends to a greater or less extent

the value and usefulness of the future house. It is important to keep it in a thrifty condition.

The fertilizing elements in the soil need to be balanced as well as the food of the stock.

Broad tires pay on the farm. They lighten the draft on soft ground and will not cut up the surface.

In all stock farming the manure, if properly handled, will pay the entire cost of care and labor.

The cob ground with the corn makes it porous and aids to keep it from compacting in the stomach.

Manure worked thoroughly into the surface will soon get low enough for deep-rooted plants.

The value of commercial fertilizers depends on their containing the elements which the soil needs.

A sharp plow makes easy work, not only for the team that pulls, but for the man that guides.

To haul out the manures and spread as made is generally the most economical plan as regards the product and labor.

When land is in good condition to plow, it is in good condition to harrow, and the most effective work is done the same day the land is plowed.

The animals that are selected for breeding purposes should be fed and cared for in such manner as to induce the most thrifty habits.

So long as the old sow is doing well it is not good economy to discard her unless there is a certainty that she can be replaced with something better.

Close confinement on dry floors and feeding on dry food causes many troubles which at least prevent thrift if they do not cause deaths.

If milk is cooled before setting and then agitated, the cream raising which follows can never be perfect, the loss often amounting to nearly one-third of the original per cent of the butter-fat in the milk.

One of the principal advantages of growing a variety of crops and keeping and feeding different kinds of stock is, that with good management, it is possible to have something to sell at almost any time.

In plowing great care should be taken that the turning corners and finishing furrows be not made in such shape as to collect water and cause washes or leave unsightly depressions in the field.

With hogs, especially, one of the plainest indications that they have been crowded with feed when too young is the breaking down in the feet. The majority of hogs which are broken in their feet become so while yet pigs, before they are 5 months old.

One of the principal advantages of growing a variety of crops and keeping and feeding different kinds of stock is, that with good management, it is possible to have something to sell at almost any time.

In plowing great care should be taken that the turning corners and finishing furrows be not made in such shape as to collect water and cause washes or leave unsightly depressions in the field.

With hogs, especially, one of the plainest indications that they have been crowded with feed when too young is the breaking down in the feet. The majority of hogs which are broken in their feet become so while yet pigs, before they are 5 months old.

With hogs, especially, one of the plainest indications that they have been crowded with feed when too young is the breaking down in the feet. The majority of hogs which are broken in their feet become so while yet pigs, before they are 5 months old.

With hogs, especially, one of the plainest indications that they have been crowded with feed when too young is the breaking down in the feet. The majority of hogs which are broken in their feet become so while yet pigs, before they are 5 months old.

With hogs, especially, one of the plainest indications that they have been crowded with feed when too young is the breaking down in the feet. The majority of hogs which are broken in their feet become so while yet pigs, before they are 5 months old.

With hogs, especially, one of the plainest indications that they have been crowded with feed when too young is the breaking down in the feet. The majority of hogs which are broken in their feet become so while yet pigs, before they are 5 months old.

With hogs, especially, one of the plainest indications that they have been crowded with feed when too young is the breaking down in the feet. The majority of hogs which are broken in their feet become so while yet pigs, before they are 5 months old.

With hogs, especially, one of the plainest indications that they have been crowded with feed when too young is the breaking down in the feet. The majority of hogs which are broken in their feet become so while yet pigs, before they are 5 months old.

With hogs, especially, one of the plainest indications that they have been crowded with feed when too young is the breaking down in the feet. The majority of hogs which are broken in their feet become so while yet pigs, before they are 5 months old.

With hogs, especially, one of the plainest indications that they have been crowded with feed when too young is the breaking down in the feet. The majority of hogs which are broken in their feet become so while yet pigs, before they are 5 months old.

With hogs, especially, one of the plainest indications that they have been crowded with feed when too young is the breaking down in the feet. The majority of hogs which are broken in their feet become so while yet pigs, before they are 5 months old.

With hogs, especially, one of the plainest indications that they have been crowded with feed when too young is the breaking down in the feet. The majority of hogs which are broken in their feet become so while yet pigs, before they are 5 months old.

With hogs, especially, one of the plainest indications that they have been crowded with feed when too young is the breaking down in the feet. The majority of hogs which are broken in their feet become so while yet pigs, before they are 5 months old.

With hogs, especially, one of the plainest indications that they have been crowded with feed when too young is the breaking down in the feet. The majority of hogs which are broken in their feet become so while yet pigs, before they are 5 months old.

With hogs, especially, one of the plainest indications that they have been crowded with feed when too young is the breaking down in the feet. The majority of hogs which are broken in their feet become so while yet pigs, before they are 5 months old.

With hogs, especially, one of the plainest indications that they have been crowded with feed when too young is the breaking down in the feet. The majority of hogs which are broken in their feet become so while yet pigs, before they are 5 months old.

With hogs, especially, one of the plainest indications that they have been crowded with feed when too young is the breaking down in the feet. The majority of hogs which are broken in their feet become so while yet pigs, before they are 5 months old.

With hogs, especially, one of the plainest indications that they have been crowded with feed when too young is the breaking down in the feet. The majority of hogs which are broken in their feet become so while yet pigs, before they are 5 months old.

With hogs, especially, one of the plainest indications that they have been crowded with feed when too young is the breaking down in the feet. The majority of hogs which are broken in their feet become so while yet pigs, before they are 5 months old.

With hogs, especially, one of the plainest indications that they have been crowded with feed when too young is the breaking down in the feet. The majority of hogs which are broken in their feet become so while yet pigs, before they are 5 months old.

With hogs, especially, one of the plainest indications that they have been crowded with feed when too young is the breaking down in the feet. The majority of hogs which are broken in their feet become so while yet pigs, before they are 5 months old.

Publishers' Paragraphs.

Ground was broken Aug. 25 at Barberton, Ohio, for extensive additions to the factory of the National Drill & Mfg. Co., whose business has grown so rapidly during this season as to necessitate doubling its manufacturing space and adding to its equipment new machinery and tools, valued at \$75,000.00. This company manufactures a line of well-drilling machinery, contractor's earth-handling machinery, and road-grading machinery and tools.

All boys like guns. Most boys like fishing tackle; while the admirers of baseball, football, tennis, polo, croquet, and golf, may be found in almost every family. Farmers are always in need of firearms about the place to protect their property against the ravages of vermin, stray dogs, and the equally dangerous tramp, and are only deterred from investing a little money along these lines by the excessive prices which are sometimes charged by local dealers. It is therefore a matter of satisfaction to announce that the Akhurst-Eberly Arms Company, 216 So. Fourth Street, St. Joseph, Mo., are wholesale dealers who will ship any goods in their catalogue at prices which will save you money. You have the advantage in buying from them of being able to select from a large stock and of getting the goods at wholesale prices. Write them and get their catalogue and you will be a permanent customer.

The farmer who runs his farm with his brains as well as with his hands is the one who finds farming profitable. In another column will be found the advertisement of the Correspondence Agricultural College, 421 Nebraska street, Sioux City, Iowa, which is one of the most recent efforts to bring greater knowledge into practical farming. It offers instruction for the spare moments of the farmer, son or father, who cannot go to an agricultural college, and on reasonable terms. The course of study is arranged to cover the most essential things in farm life. There are two courses in live-stock husbandry; one, "Judging for the Market and Dairy," and the other, "The Breeding, Feeding and Care of Animals." There are also special courses in veterinary science and sanitation and the prevention of diseases. Every man who has worked on the farm realizes how valuable information of this kind would have been to him when something went wrong with his stock. The Correspondence School course is under the direction of men who are well able to give instruction. The opportunities it offers are to be had at small expense, and once obtained are invaluable. Familiar to all our readers are the names of Prof. W. J. Kennedy, of the Iowa Agricultural College, at Ames, Iowa; Dr. A. T. Peters, of the chair of veterinary science, at the State University of Nebraska. The work of the Correspondence Agricultural College is also endorsed by these Agricultural Colleges.

The Famous "Malakoff" Wheat.

Ratekin's Seed House, Shenandoah, Iowa, reliable in every way, added largely to their high reputation by introducing "Malakoff" wheat, which they sell at \$1.50 per bushel, and Turkish Red, at \$1.10. These winter seed wheats are the best on the market. "Malakoff" is a Russian wheat from Odessa, the seaport in the Black Sea. It originated in the Crimea, and is a magnificent compact grain. The Russians grow this wheat extensively, and a line of steamers carries all the surplus in bulk to London. In quality, weight, condition, and grade it surpasses all other wheat delivered at that great city. The Ratekin seed farm has taken select seed of this famous Russian production and by cultivation and breeding improved upon the parent stock. It is practically a "bonanza" wheat, but they are not asking bonanza prices for it. "Turkish Red" is a bearded, hardy variety, is strictly iron-clad, absolutely free from rust, and withstands all unfavorable conditions. The Iowa Agricultural College obtained best results from this wheat ten years running. At Ratekin's you get this wheat to perfection. Notice the advertisement on page 949, and address J. R. Ratekin & Son, Shenandoah, Iowa.

About Highland Park College.

Highland Park College, Des Moines, Iowa, has opened its new school year with the largest attendance ever known in the history of the school. Students have registered from Texas, Colorado, Montana, Washington, Oregon, North and South Dakota, Nebraska, Kansas, Missouri, Illinois, Wisconsin, Minnesota, Michigan and several other of the central western States. Besides there are students from practically every county in the State of Iowa. The opening has been something unusual for a western school. The attendance in every department is larger than ever before. There is a largely increased attendance in the College of Liberal Arts, in the Normal College, in the Colleges of Engineering, Pharmacy, and Shorthand and Typewriting, while all the departments report more or less increase. The College of Music is enjoying unusual prosperity. Several new and competent teachers are added to the Faculty. Col. John D. Letcher, of Virginia, is the new Dean of the Civil Engineering department. Prof. Letcher is one of the most talented mathematicians in the county and comes to his new position with a splendid record. Mr. Luther C. Scott, who has been the foreman in several of the largest manufacturing establishments in the East, has been placed at the head of the shops in the engineering department. The electrical, steam and mechanical engineers are enthusiastic over the work he is outlining for them. He is in all probability the best machinist in the West at the head of the shops in an engineering school. The class work, therefore, in all departments of the college has been enthusiastically begun for the year. The old students that have returned and the new students and the faculty all feel that this is to be the greatest year in the history of Highland Park College. There never was such an enthusiastic feeling among the students and the faculty for athletics. Coach Williams has already taken up his work on the field and some 75 or 100 men are to be found on the field every afternoon contesting for a place on the football team, which

will probably be as strong a team as will be found in any of the colleges of the West.

Mr. Frank H. Hamilton, the new physical director, comes to the school with a reputation second to no physical director in the West.

There were 1,841 registered last year and the indications are that there will be fully 2,500 students registered this coming year. The new equipments in the engineering department, the new members of the faculty, the general broadening of the work of the school, the interest in athletics, and everything goes to show that Highland Park College is to experience in the coming year the greatest prosperity in its history.

The Mart of the Million.

The patronage of the prosperous farmer and rancher of the great Southwest has been the principal factor that has developed the merchandising house of the O. L. Case Mercantile Co., of Kansas City, Mo., to its present mammoth proportions. Locating as this concern did at the best distributing point for all concerned, where merchandise in quantities can be laid down most cheaply and from whence the distribution of the Western consumer's door is most prompt and economical, the result was readily forecast and the patronage assured in advance. Yet with every encouragement of location, capital, experience, and contiguity to consumer, it was never expected, even by the most optimistic, that the success of this mail-order merchandising house would reach the proportions it has attained.

The factors that have led to this unprecedented success are to be found primarily in the policy of the business management of the institution, which has strenuously and continually followed the plan originally laid down to supply the people with all their needs at the very lowest possible prices consistent with market conditions and with due consideration to the quality of the merchandise handled.

Good goods, low prices, one profit, honest endeavor, promptness—all have contributed to make this the favorite emporium of the great mass of farmers and householders of the great Southwest. The growth of this great business has been steady and continuous. More warehouse room, additional floor space, new departments, increased force of competent clerks, have been demanded and secured, not once, but many times. Their mammoth catalogue is a household necessity, and if there is a home—your or your neighbor's—where it is not present, it should be secured at once, and the money-saving it insures inaugurated at once. This book is free on postal card request made to the O. L. Case Mercantile Co., 1435 W. 9th St., Kansas City, Mo.

The service of the Nickel Plate Road to New York City and Boston is unsurpassed. Three fast express trains, in each direction, daily. These trains are composed of modern first-class day coaches, elegant vestibule sleeping-cars between Chicago, New York and Boston and other eastern points; superior dining-car service, meals being served on American Club Plan, ranging in price from 35 cents to \$1.00; also service a la carte. Passengers can travel comfortably and economically via the Nickel Plate. See that your ticket reads that way. Chicago City Ticket Office, 111 Adams St. Depot, La Salle St. and Van Buren St., on the elevated loop.

Reduced Rates to Baltimore, Md.

The Chicago Great-Western will on September 17, 18 and 19 sell round trip tickets to Baltimore at the rate of one fare plus \$2 on account of the annual meeting Grand Lodge Independent Order of Odd Fellows, September 21-26, 1903. Tickets good returning until September 29, and by payment of \$1 fee until October 3. For further information apply to Geo. W. Lincoln, T. P. A., 7 West Ninth St., Kansas City, Mo.

Indiana and Ohio Excursions.

The Chicago Great Western Railway will on September 1-8-15 and October 6, sell tickets at one and one-third fare for the round trip to Cincinnati, Columbus, Dayton, Toledo, Sandusky, Springfield, Elkhart, Fort Wayne, Lafayette, Indianapolis, and all intermediate points in Ohio and Indiana, also Louisville, Ky. For further information apply to Geo. W. Lincoln, T. P. A., 7 West 9th St., Kansas City, Mo.

Opening sale of lots in two new town-sites on the Omaha extension of the Chicago Great Western Railway will take place as follows: Bentley, Pottawatomie County, Iowa, Tuesday, September 15, and McClelland, Pottawatomie County, Iowa, Tuesday, September 22. One fare to Fort Dodge from all points on the Chicago Great Western Railway. Special trains from Fort Dodge to townsites, fare fifty cents for round trip. For further particulars see bills or address Edwin B. Magill, Mgr. Townsite Dept., Ft. Dodge, Ia.

KANSAS FARMER'S NEW WALL ATLAS.

The KANSAS FARMER has arranged with the leading publishers of maps and atlases to prepare especially for us a New Wall Atlas, showing colored reference maps of Kansas, Oklahoma, Indian Territory, the United States, and the world, with the census of 1900. The size of the New Wall Atlas is 22 by 28 inches, and it is decorated on the outer cover with a handsome design composed of the flags of all nations.

Tables showing products of the United States and the world, with their values, the growth of our country for the last three decades and a complete map of the greater United States are given. This is an excellent educational work and should be in every home. The retail price of this New Wall Atlas is \$1.

Every one of our old subscribers who will send us \$1 for two new trial subscriptions for one year will receive as a present a copy of this splendid Wall Atlas postpaid, free.

Any one not now a subscriber who will send us 50 cents at once will receive the KANSAS FARMER for five months and will be given a copy of our new Wall Atlas free and postpaid.

SHARPLES TUBULAR FARM SEPARATORS

Right Now

we are ready to show you wherein the Tubular is better than other separators and why thousands of dairymen buy them in preference to other separators. We don't ask you to buy as a favor to us or for any other reason than that

THE TUBULAR

is a different machine from the others and one that is sold on the strength of what it is "Right Now." Send for catalog 165.

The Sharples Co. P. M. Sharples,
Chicago, Ill. West Chester, Pa.

In the Dairy.

Conducted by George C. Wheeler, Kansas Experiment Station, Manhattan, Kans., to whom all correspondence with this department should be addressed.

Which Breed for a Herd-header?

Mr. D. M., of Dickinson County, writes: "Will you kindly tell me which of the dairy breeds is the most profitable for me? I have a United States separator and sell the cream and feed the skim-milk to calves and hogs.

"I want to buy a bull to head my herd of twenty to thirty cows. I can not decide which breed would be most suitable without your advice. My cows are Shorthorns and not very good milkers; this is why I want to improve them by getting a pure-bred male of the dairy type."

The question of our correspondent is rather a difficult one to answer intelligently from the fact that we are not familiar enough with the circumstances connected with this individual case. This question of which is the best breed is being constantly asked and so far has not been answered, and in all probability will never be answered. In fact there is no best breed. It is best that all the excellencies are not found in one breed alone.

There are always so many individual circumstances and preferences in the selection of a breed that it would be a difficult matter to meet all requirements with but one breed. A man would never succeed with a breed of cattle unless he had a strong preference for that breed. In other words, let him select the breed which appeals most strongly to his personal fancy. If our correspondent is inclined toward large cows and is not prejudiced as to color by his association with Shorthorns, he could not do better than to select a good prepotent bull of the Holstein-Friesian breed. In the selection of a bull to head his herd he should bear in mind that the bull is half the herd, and in the case of a pure-bred bull with grade cows of mixed breeding is more than half from the greater prepotency of the pure-bred animal. He should understand that there are as great or greater differences between individuals of a breed than between the breeds themselves.

The bull selected should be from a family of good producers. The greater the number of females in his ancestry with above the average powers of production, the greater will be his prepotency in begetting heifers which shall be large and economical producers of milk and butter-fat. In other words, simply buying a bull registered as a Holstein-Friesian, Jersey, Guernsey, or other milk breeds is not sufficient; there must be individual excellence and breeding.

If our correspondent is inclined to a smaller breed of dairy cows, let him select a Guernsey or Jersey bull, applying the same tests of individual excellence and breeding. After securing a

The EMPIRE CREAM Separator.

The Easy Running Kind. Will give better satisfaction, make you more money and last longer than any other. Our book shows why. Send for it.

Empire Cream Separator Co.,
Bloomfield, N. J.

bull of the right kind of whichever of the distinctly dairy breeds he may select as his personal preference he will most assuredly find the half-blood heifers raised from this breeding to be superior to their dams as producers. Of course there will be exceptions and right here comes in another point in developing a dairy herd. The cows must be tested individually; for every herd, no matter how carefully selected and bred, contains cows that are either not even paying for what they eat or else are yielding so small a profit as to be a drag to the rest of the herd.

Study the cows individually. Find out how much milk and butter-fat each cow is capable of producing. Raise the heifers from these best cows and when they come in milk apply the same test to them rejecting all which do not come up to a certain standard. The man who will conscientiously carry on this method for a few years will find himself in the possession of a dairy herd which will be a joy to his heart and a source of revenue to his pocketbook.

Annual Report of the Broadmoor Dairy.

The following report is printed in hopes that it may be a means of encouragement to every ambitious young man desirous of bettering his condition in life. There is also a lesson in it for every dairyman, showing him what may be done by applying strictly business principles to his work.

Mr. H. R. Blair completed the dairy course at the Agricultural College and then became superintendent of the Broadmoor Dairy Farm of Colorado Springs, Colo. Here he put into practice what he had learned at the college and kept complete monthly records of the cows in his charge. The feed records include the amount of milk produced, the quality of the milk, the cost of feed, and the exact cost of producing the milk. At the close of the year these monthly records were summarized, the results being given in the following figures:

ANNUAL REPORT OF BROADMOOR DAIRY, MAY 1, 1902, TO APRIL 1, 1903, INCLUSIVE.

Average number of cows on record, 138.	lbs.	cost.
Alfalfa hay fed.....	712,237	\$3,561.11
Alfalfa soiled.....	855,061	1,068.82
Bran fed.....	278,962	2,510.66
Corn-chop fed.....	29,893	269.04
Silage.....	445,136	445.13

Milk produced.....	1,005,149.5	\$7,854.76
Average lactation period, mos.....	6.3	
Average herd test, butter-fat, per cent.....	4.1	
Feed cost per pound milk.....	\$0.007	
Average milk per cow, lbs.....	7,211.23	
Average butter-fat per cow, lbs.....	295.66	
Butter per cow, 1-6 overrun, lbs.....	344.93	

FEED VALUES (cost basis).

Alfalfa hay, per ton.....	\$10.00
Alfalfa soiled, per ton.....	2.50
Bran, Kansas, per ton.....	18.00
Corn-chop, per ton.....	18.00
Silage, per ton.....	2.00
Herd on short pasture from May 15 to Sept. 30, 1902.	

AVERAGE RATION (pasture excluded).

Alfalfa hay per cow per day, lbs.....	15.11
Alfalfa soiled per cow per day, lbs.....	16.97
Bran per cow per day, lbs.....	5.53
Corn-chop per cow per day, lb.....	.59
Silage per cow per day, lbs.....	8.83
Milk per cow per day, lbs.....	19.95

DIGESTIBLE NUTRIENTS (pasture excluded).

Gross weight, lbs.....	47.03
Dry matter, lbs.....	26.88
Protein, lbs.....	3.09
Carbohydrates, lbs.....	11.46
Fat, lb.....	.51
Calories, lbs.....	25,958.2
Nutritive ratio.....	1:4.1

May 2, 1903. H. R. B.

Variations in Tests.

Every creamery or skimming-station operator meets with complaints and dissatisfaction from his patrons on account of the variations in their tests from month to month. Undoubtedly there are occasions when there are ample grounds for complaint. There are some careless operators, and there may be some who are designedly careless. Many complaints of unfair tests, however, must find their explanation back of the man taking the sample at the creamery or skimming station. There is a great deal of ignorance in the lay mind regarding some of the prime causes producing unsatisfactory tests.

Mr. B. B. Scripture, of the Pleasant Valley Creamery, Minnesota, writes to

A Good Pointer on CREAM SEPARATORS

From the "Nebraska Dairyman" Lincoln, Neb.

A Valuable Token of Esteem from a Son to Father and Mother and a Display of Good Judgment.

Our friend J. M. Betts of Broken Bow, Neb., sends us the following:—

"Our esteemed citizen, Frank Norton, and his wife are the recipients of a very fine present from their son Frank Lee Norton, of Racine, Wis., who is manager of the J. I. CASE THRESHING MACHINE COMPANY. The father and mother being extensive farmers and have many milch cows, wrote the son that 'as all the neighbors were getting cream separators, they thought that they, to be in line with them, should purchase one.' The son, on receipt of the letter, immediately purchased a DE LAVAL SEPARATOR and shipped it to them, writing to them as follows: 'My Dear Father and Mother: I have examined the different makes of cream separators and send you the one that I consider the very best; it costs a little more than some others, but the difference in price is more than made up in quality.'"

A De Laval catalogue may be had for the asking.

THE DE LAVAL SEPARATOR CO.

RANDOLPH & CANAL STS., CHICAGO. General Offices: 121 YOVILLE SQUARE, MONTREAL.

1218 FILBERT STREET, PHILADELPHIA. 74 Cortlandt St 75 AND 77 YORK STREET, TORONTO.

9 AND 11 DRUMM STREET, SAN FRANCISCO. 248 McDERMOT AVENUE, WINNIPEG.

The U. S. Leads the World

That the U. S. Separator leads all others has been proved so many times that it is a well-established fact. To those who doubt it, we call attention to two very decisive victories: one at the Pan-American Model Dairy, where

The U. S. Won the World's Record

with the average test of .0138 for 50 consecutive runs; the other the recent competitive test between six different makes of separators at the Kansas State Agricultural College, where

The U. S. Excelled All Others

in the tests of skim milk and total minimum loss, according to Press Bulletin No 123.

For reports of many other victories, write for catalogues.

We have the following transfer points: Chicago, La Crosse, Minneapolis, Omaha, Sioux City, Montreal, Quebec, Sherbrooke, P. Q., Hamilton, Ont.

Address all letters to *Bellevue Falls, Vt.*

Vermont Farm Machine Co., Bellevue Falls, Vt.

Two Thousand Witnesses

All happy, contented and satisfied Cream Shippers, testify every day to the merit of our system of shipping a can of cream. Do you want to join this happy family? Are you going to continue to keep the cows, or do you want the cows to keep you? For 360 days we have enrolled on an average five new members every day. Who is next?

Don't Wait. Commence Now.

Blue Valley Creamery Co.

ST. JOSEPH, MO.



Empire Separator.

the Dairy Record on this subject as follows: At the end of each month we are asked many times: "What is the matter with my test?" It is several points lower than last month.

They should ask themselves this question: "What have I done to lower my test?"

I will mention a few things that will make the test vary.

Sometimes the whole herd is excited by some unusual noise, or possibly the dog was sent after them at milking time. Or, it may be they came in contact with the hard side of the milking-stool. These things will lower your test every time.

Treat your cows kindly and induce them to come up at milking time of their own free will; it is a good plan to give them a handful of feed each time they come in the barn. They will soon learn that you are their friend, and they will pay you well for your extra trouble.

Sometimes we forget, when we are in a hurry, that the last part of the milk is the richest in butter-fat. Not milking dry also has a tendency to dry up your cows. Milk regularly, feed and water as near the same time each day as possible; keep your cows comfortable every day in the year; all these things will increase the flow of milk, and have a tendency to raise the test.

Sometimes milk is hauled to the factory in large cans, and to prevent the milk from slopping out, a cloth is used between the can and milk, and by the time it reaches the factory the cloth is saturated with cream.

During warm weather and when the roads are rough, the cans that are not full are so badly churned when they reach the factory it is impossible to get a fair sample of milk; always fill your cans full. In the winter some of us forget to cover our cans and find when we reach the factory that the cream is frozen into the bottoms of the covers; we pour in the remainder of the milk and then ask the butter-maker: "What makes my test drop off so sudden?"

The last point that I will mention, and possibly one some of us have never thought about is, part of the year we may be milking cows that are very poor testers, and the rest of the year the majority of them may be extra good cows and still give a good flow of milk.

The cows of Minnesota average about 150 pounds of butter per year, scarcely enough to pay for the feed. Where does the profit come in? I think it is time that we brace up and get out of the old rut that our fathers have been in for years.

Some will say, "How are we going to tell our poor cows from our best ones?" My advice to you is this: Talk the matter with your butter-maker and tell him how you are situated, and ask him if he will test your herd provided you weigh and sample each cow's milk at each milking for seven days; after this is done it will be quite easy to decide which are the profitable cows; and if you continue to do this for several years, and sell the poor cows and raise the heifers from the best cows, you will have a herd that will make a good profit, and one that any dairy farmer may well feel proud of.

Please mention Kansas Farmer when writing our advertisers.

The Apiary.

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

Removing Propolis from the Hives.

EDITOR KANSAS FARMER:—Kindly give me a reply to the following question concerning bees. How can the glue be removed from the pound sections and other parts of the hive occupied by bees?
H. CHAPMAN.
Lincoln County.

There is no method except by an edged tool to remove propolis from the hives and sections. Different shaped knife-edged tools are made for this purpose and kept for sale by supply dealers, but you can make one to suit yourself from any good steel blade. You may in finishing up the pound section-boxes use some sandpaper, but you must be very careful not to damage the honeycomb by breaking it or soiling the same. An ordinary pocket-knife will do the work about as well as anything.

Bees and Alfalfa.

EDITOR KANSAS FARMER:—I have been reading the columns of the KANSAS FARMER very closely for the last two summers, noting the writings on bee culture. I find that you claim that alfalfa is the best honey-producer for bees. I have Italian bees and it is claimed that I have the finest field of alfalfa in this part of the country. It is now blooming for the third time in this season. I go out often and look for bees gathering honey, and can find every insect imaginable working on the blossoms, but have failed to find my first Italian bee in the field. Kindly inform me through the columns of the KANSAS FARMER why this is, and what to do, as my bees should gather more honey than they do. By every other describable insect working on it, it looks reasonable that the blossoms afford a good amount of honey.

W. B. UPDEGROVE.

Byron, Oklahoma.

Your experience is certainly exceptional, and I have never seen or heard of a similar circumstance. I am aware of the fact that during a wet spell of weather clovers of all kind do not furnish honey, and alfalfa is not an exception. A dry atmosphere with hot sunshine is right for the clovers to produce the most honey. To take the season all through as in your case it is a singular occurrence. The only way I can account for it is that in exceptional seasons some of the principal honey-producers, such as white clover, fails to furnish honey. Sweet clover, one of the best honey-producers we have, failed to furnish honey two years ago with us, and the crop of blossoms and growth of the clover were excellent, and as you say every describable insect was working on it, but not a bee was to be found near it the entire season. You may not see this occur again for a long time, and by next year your bees and alfalfa will probably act differently.

How to Begin With Bees?

EDITOR KANSAS FARMER:—I have a colony of bees that are in a nail keg, and the keg is filled with comb and bees. I want to build up a small apiary, and would be pleased to know how to proceed to do so with this beginning. I have had some experience in transferring bees.
L. J. LAMB.
Morris County.

Your start of bees is very small, but you can in time build up an apiary with even such a small start. The best method to pursue is to feed up your colony of bees in the nail keg so they will have abundance of food for next winter and the following early spring. You should feed them through the month of September. Feed the best of granulated sugar, and I would have that nail keg to weigh fifty or sixty pounds by the last of this month. Make a chaff hive for them in winter, that is, put them in a box and pack them well with six inches of chaff all around the nail keg, and overhead ten or more inches. Fix the entrance so



Davis Cream Separators

**BEST IN THE WORLD
EASIEST CLEANED
MOST DURABLE
CLOSEST SKIMMER**

CATALOGUES

DAVIS CREAM SEPARATOR CO.,
54 to 64 North Clinton Street,
CHICAGO, ILL.

Save time and freight by ordering from

PIONEER IMPLEMENT CO.
Council Bluffs, Iowa.

the bees can go out and in at will, leaving but a small entrance. In this way they should winter well, if you have fed them. Or, if they have this amount of honey in the keg, you need not feed at all. When spring comes, and the fruit-trees are in full bloom, transfer them from the keg into a good frame hive, that is, one of the late standard hives now used by all apiarists. As you say you have experience in transferring you doubtless know just how to proceed. I would cut out all the comb from the nail keg and fit it in the frames on the old-fashioned method, and you should have foundation comb to fill out the rest of the frames, for I do not believe that your nail keg will hold enough combs to fill a new hive. Feed in spring, and if you wish to increase rapidly the more you feed at times they can not gather honey, the faster you will proceed to build up an apiary. The liberal feeder in the fall, and in the spring, will be the one that succeeds.

Homeseekers' Excursions.

Via Chicago Great Western Railway to points South, Southwest, West, North, and Northwest at one fare plus \$2 for the round trip, on sale September 1 and 15. Free Reclining Chair Cars, Dining and Cafe Cars on which you pay only for what you order, on all trains. For further particulars apply to any Great Western Agent, or J. P. Elmer, G. P. A., Chicago, Ill.

Perfect Cure for Corns and Bunions.

Fountain City, Ind., March 20, 1903.
Dr. B. J. Kendall Co., Enosburg Falls, Vt. Gentlemen: Please send me two copies of your "Treatise on the Horse and His Diseases." Our drug store has the Kendall's Spavin Cure in stock, but no books. I wish one for myself and I have a friend that I have recommended it to.
I have used Kendall's Spavin Cure for corns and bunions and found it a perfect cure after everything else had failed.
Yours very truly,
DORSEY THOMPSON.

The Wheel of Fortune

Revolves for all at some time in their career. We have attractive pamphlets that tell of opportunities for placing capital in the gas and oil regions of Missouri, Kansas and Indian Territory. Write for them, enclosing two-cent stamp for postage. Address
GEORGE MORTON, G. P. & T. A.,
M. K. & T. Ry.,
Suite D, St. Louis, Mo.

Business Opportunities for All.

Locations in Iowa, Illinois, Minnesota, and Missouri on the Chicago Great Western Railway; the very best agricultural section of the United States, where farmers are prosperous and business men successful. We have a demand for competent men with the necessary capital for all branches of business. Some special opportunities for creamery men and millers. Good locations for general merchandise, hardware, harness, hotels, banks, and stock-buyers. Correspondence solicited. Write for maps and sample leaflets. W. J. Reed, Industrial Agent, 604 Endicott Building, St. Paul, Minn.

Opening sale of lots in three new townships on the Omaha extension of the Chicago Great Western Railway, will take place as follows: Tennant, Shelby County, Iowa, Tuesday, September 8; Bentley, Pottawatomie County, Iowa, Tuesday, September 15; and McClelland, Pottawatomie County, Iowa, Tuesday, September 22. One fare to Fort Dodge from all points on Chicago Great Western Railway. Special trains from Fort Dodge to townships on day of sales, with fare of \$1 for round trip. Special trains from Council Bluffs to townships, fare 50 cents for round trip. For full particulars see bills or address Edwin B. Magill, Mgr. Townsite Dept., Fort Dodge, Iowa.

Please mention Kansas Farmer when writing our advertisers.

\$29-PEERLESS FARM and STOCK SCALE-\$29

The "Peerless" is a 5-ton Compound Beam Wagon and Stock Scale, material and workmanship guaranteed for 5 years. Certificate of City Scale Inspector as to accuracy furnished if desired. Send for catalog. Address, mentioning this paper, Peerless Scale Co., Milwaukee and Ft. Scott Ave., Kansas City, Mo. (We have contracted with manufacturers for the output of this scale.)

Indiana

—and—

Ohio

Cheap

Excursions.

Most all railroads in Missouri, Kansas, Arkansas, Indian Territory, Oklahoma and Texas, will on

**Sept. 1st, 8th, 15th
and Oct. 6th,
1903**

Sell round trip tickets reading over the

Vandalia-Pennsylvania Lines

to points in INDIANA and OHIO at very low rates.

Call on your nearest railroad Ticket Agent or write to our Traveling Passenger Agent,

Mr. A. B. Retchie,
at Kansas City, Mo.,

For full information regarding these 30 day excursion tickets.

J. M. CHESBROUGH,

Ass't General Passenger Agent,
Vandalia-Pennsylvania Lines,

ST. LOUIS, MO.

Big Profit in Cows

Is but a question of getting all the cream (butter fat) out of the milk. With the old setting system your loss is over 80 per cent greater than with

NATIONAL Hand Separator

A valuable machine you can test in your own home or dairy

10 Days Free

If you like—buy it; if you don't, we take it back and pay all expense—you have nothing to risk. Our catalogue gives full particulars.

National Dairy Machine Co., Newark, N. J.



The Poultry Yard.

CONDUCTED BY THOMAS OWEN.

A Progressive Move in this Department.

The Kansas Farmer Company takes pleasure in announcing that this department will hereafter be conducted by Mr. Thomas Owen and that his paper, the Western Poultry Breeder, has been consolidated with the KANSAS FARMER. Mr. Owen is widely known as a poultry-keeper who makes it pay and as an able writer on poultry topics. His knowledge of how to keep poultry is at the command of the readers of the "Old Reliable." Subscribers for the Poultry Breeder will receive the consolidated papers under the name, KANSAS FARMER, during the time for which their subscriptions have been paid. Those who have been receiving both papers may have the time due them on the Poultry Breeder credited as an extension on the KANSAS FARMER.

The readers of both papers are to be congratulated on the consolidation. The management bespeaks for Mr. Owen a cordial reception by those who will now become acquainted with his work.

KANSAS FARMER COMPANY.

Announcement.

Hereafter the undersigned will have charge of the Poultry Department of the KANSAS FARMER. Having bred thoroughbred poultry for over twenty years and edited a poultry journal for fifteen years, he may, without being thought egotistical, lay claim to know something about the poultry industry. The trend of our writings will be along utility lines, treating principally on the utility breeds, the best breeds for flesh, the best breeds for eggs, and the best all-purpose breeds. The proper care and management of poultry will, of course, have our attention, as well as the best and most economical methods of housing them.

The diseases of poultry are many and serious, but we are no believer in much doping of fowls, preferring to prevent disease rather than to cure it, for we believe that most chicken ailments are preventable by proper care and attention.

As all knowledge is gained by experience, our own or that of others, it would please us to have the experience of our readers in raising poultry sent in for the benefit of the rest of us. You may know some excellent method of feeding young chicks. Send it in. And if you want to know something known to us that may benefit you, send in your question and we will answer it to the best of our ability. Let our motto be, "Better poultry and more eggs."

THOMAS OWEN.

Poultry at the World's Fair.

The premium list of the World's Fair at St. Louis in 1904 is out and in the way of poultry it is very liberal, the cash prizes amounting to \$11,786. Pigeons are allowed \$3,984.

The varieties of poultry have been divided into three classes, on the basis of their total number and value to the industry. They are designated as classes A, B, and C. Each cock, hen, cockerel, pullet and breeding-pen in class A will receive prizes as follows: First prize, \$10; second, \$6; third, \$4; fourth, a certificate of high commendation; and fifth, commendation. In class B, the prizes are \$7, \$5, \$3, high commendation, and commendation. In class C, the prizes are \$6, \$4, \$2, and high commendation, and commendation.

In class A are Barred, White and Buff Plymouth Rocks; Buff, Golden, Silver, Partridge and White Wyandottes; Light and Dark Brahmas; Buff and Partridge Cochins; Black Langshans; S. C. Brown and White Leghorns, Rose Comb White Leghorns; Black Minorcas; Black Spanish; S. C. Dorkings; Buff Orpingtons; Houdans, and others.

In class B are Black Cochins, White Langshans, White Minorcas, and others.

In class C are American Dominiques,

Black and Mottled Javas, Redcaps, Anconas, and others.

No entry fee will be charged for any fowls sent to St. Louis, but exhibitors must provide their own coops and also attend to feeding, watering, and cleaning while they are at the fair. If owners can not attend the fair in person, they must provide a representative to look after and care for their fowls, as the exposition authorities will not receive, care for, or assume any responsibility in connection therewith.

All entries are to be shown singly or in breeding-pens. A breeding-pen will consist of one male and four females. Birds entered in single classes can not compete in the breeding-pens. All poultry will be judged and awards made by comparison.

The exposition grounds will be open for the reception of poultry on Thursday, October 20, 1904. The exhibition will begin Monday, October 24, and close Saturday, November 5, 1904.

Gathering the Crop of Chicks.

With the first cool days comes our determination to fix the poultry house nice and warm and transfer the new crop to it. Usually we find them in boxes, granaries, corners in the barn, in the plum-trees, and here and there.

Did you ever pick a sick chick out of the plum-trees or apple-trees? I never did and I have gathered a good many chicks. I don't think you ever picked many sick chicks off the trees, not even in colder weather. There is something in this and we can profitably think it over.

I have gone through the experience of transferring the new crop to comfortable houses each season, year after year. Until lately the transfer was followed with colds, the sneezes and sometimes with genuine roup. Lately I have been more careful and left the house open until the weather grew colder and justified closing the doors and windows. When we come to think about it chickens are naturally outdoor fowls; they enjoy the open air and seldom get sick if they are allowed to grow up that way.

Now, Mr. Scrappy Fellow, don't get indignant and say Johnson is in favor of the tree-method.

Such is not the case. What I am getting at is that we usually close them up too tight to start with; it is better for them to be a little cool rather than to curtail the pure air and put them through a sweating process that will cause a chill when they are let out of mornings. M. M. JOHNSON.

Pickings.

Remember the State Fair at Topeka, September 14 to 19. If you have thoroughbred chickens that you think are worthy of showing, send them along. They will be fed and watered and taken good care of; no entry fees to pay. It will be a good place to advertise your stock.

If you are in need of pure-bred poultry, there is no better time in the year to buy than now. Breeders generally have not sufficient room to keep all young stock they raise over winter and they are willing to sell them at a reduction. They will easily be worth twice as much in the spring and hard to get at any price. So buy now, and take good care of them through the winter.

Never cross pure breeds. It is right and proper to grade up the common stock by the use of a pure-bred male if you prefer, as such course is much better than no improvement at all, but when you have pure breeds, keep them pure. Crossing destroys all the characteristics of the breeds. Cross two birds of non-sitting breeds and the result will be females that will be sitters. The object should be to select the best layers of the breeds in the endeavor to increase the average egg-production each year. The hens that have made

good records were never produced by crossing. Keep a record of your hens and aim to get something better from them each year.

Duck feathers always bring a fair price, especially white ones, and should be saved when dressing ducks, if they are sold dressed; if not sold dressed, do not pick just before selling.

The breeding ducks may be picked several times a year, generally four to six times. Do not pick until the feathers are ripe, which can be told by pulling a few from different parts of the bodies of several birds. If they come out easily, without any bloody fluid in quill, they are all right and should be picked or many will be lost. In picking, pull only a few feathers out at a time by taking between thumb and forefinger and giving a quick jerk. Do not pull the long, course feathers under the wing. Before you begin picking, tie the duck's legs together with a piece of soft cloth, and if the duck is inclined to object to the picking by thrusts with the bill, slip an old stocking over its head. Use no unnecessary harshness with any of the birds and be especially careful with laying ducks. Sitting ducks and those that are soon to be set should not be picked. In hot weather much of the down may be taken from the drakes. Do not take any in cold weather. You can get almost as much profit out of the feathers as the ducks and eggs combined.

Dried Eggs for Bakers.

A recent report from Sioux City, Iowa, says: Within a couple of weeks Sioux City's desiccated egg plant will be in full operation and will be transforming daily about eight thousand dozen eggs into bakers' eggs.

The factory building, which has been in process of construction for the National Bakers' Egg Company for months, now stands completed, and the company is only waiting for the placing of its machinery in order to begin business. Two carloads of machinery are on the road now, and Superintendent A. D. Robinson expects to have it all in place and in working order in two weeks.

The company has erected a commodious building for its factory. Although but one story high, the building covers the entire lot owned by the company, 50 by 168 feet in dimensions. When running at its full capacity the factory will turn out about a ton of the dry product per day. As it takes four dozen eggs to make a pound of the "baker's egg," the purchasing agent of the company will need to buy eight thousand dozen eggs each day. Mr. Robinson was asked if it would not be a difficult problem to secure such a quantity of eggs every day. "Oh, no," he replied. "Eggs are very abundant now, and we could easily pick up that many of the kind of eggs we buy right in the local market. The eggs we buy are largely what are called 'seconds.' That is, they are eggs which are either cracked or dirty, or in other ways unfit for packing. We now have in storage a good quantity of eggs to start off with."

The National Bakers' Egg Company sells its product to the largest bakers in the country. It is used in cooking in the same manner as are fresh eggs. Last year the company supplied one hundred thousand pounds of "baker's egg" to the National Biscuit Company. The Sioux City factory, like the St. Louis factory operated by the same company, will be in operation only a few months in the year, the months when eggs are plentiful, usually from June to October.

Earthquakes are due to discharges of electricity between strata of good conductivity and insulating strata, like granite and silica, in the view of Professor Pilsudski. The discharges generate gases, to which the observed effects are mainly due.

POULTRY BREEDERS' DIRECTORY.

SILVER SPANGLED HAMBURGS, White Langshans, Golden and Silver Seabright bantams. Frank McCarty, Elizaville, Indiana.

BLACK LANGSHAN EGGS for sale, 5 cents a piece. Minnie M. Steel, Gridley, Kans.

BARRED ROCKS ONLY—Heavy boned, vigorous stock, unlimited range. Eggs carefully and securely packed. 100, \$4; 15, \$1. Adam A. Wier, Clay Center, Neb.

SUNNY NOOK POULTRY YARDS—S. C. B. Leghorn eggs, from vigorous, good layers, \$1 per 15. John Black, Barnard, Kans.

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

GEM POULTRY FARM has for sale 400 Buff Plymouth Rock chicks, also 100 last year's breeding stock. Prices reasonable. C. W. Peckham, Haven, Kans.

COLLIE PUPS AND B. P. ROCK EGGS—I have combined some of the best Collie blood in America; pups sired by Scotland Bay and such dams as Handsome Nellie and Francis W. and others just as good. B. P. Rock eggs from exhibition stock; none better; 15 years' experience with this breed. Eggs \$1.50 per 15. Write your wants. W. B. Williams, Stella, Neb.



DUFF'S POULTRY

During the summer months we will sell all our fine breeders, consisting of over 400 one-year-old birds, from our breeding-pens of this season. Birds costing us from \$5 to \$25 will all go at from \$1.50 to \$5 each. We will also sell spring chicks all summer. Our stock can not be excelled by any in standard requirements and hardiness. Barred Plymouth Rocks, White Plymouth Rocks, Buff Cochins, Partridge Cochins, Black Langshans, Light Brahmas, Silver Wyandottes, White Wyandottes, Silver Spangled Hamburgs and S. C. Brown Leghorns. Single birds, pairs, trios and breeding pens. Circulars free. Write your wants.

A. H. DUFF, Larned, Kans.

TWELVE HENS MAKE \$500 YEARLY Setting 8 days instead of 21, all the year round. Far superior for stamp. Metropolitan Supply and Novelty Co., Kansas City, Kans.

NICKEL PLATE.

The New York, Chicago & St. Louis R.R.

NO EXCESS FARE ON ANY TRAIN

Three Express Trains East Every Day in the Year. Pullman Drawing Room Sleeping Cars on all Trains. Trans-Continental Tourist Cars leave Chicago Tri-Weekly on Tuesdays and Saturdays at 2:30 p. m. and Wednesdays at 10:35 a. m.

CHICAGO TO BOSTON WITHOUT CHANGE.

Modern Dining Cars serving meals on Individual Club Plan, ranging in price from 35 cents to \$1.00, also service a la Carte. Direct line to Fort Wayne, Findlay, Cleveland, Erie, Buffalo, Rochester, Syracuse, Binghamton, Scranton,

NEW YORK CITY, BOSTON AND ALL POINTS EAST.

Rates Always The Lowest.

Colored Porters in uniform in attendance on all Coach Passengers. If you contemplate a trip East call on any convenient Ticket Agent, or address,

JOHN F. CALAHAN, Gen. Agt., 118 Adams St., Chicago, Ill.

Thomas County, Kansas

offers exceptional advantages for the home-seeker. I have some choice farms in Thomas County, at prices, which considering the prosperous conditions, are the best bargains to-day on the market.

Write me for Land Buyers' Guide, giving list of many choice farms.

80 acres, level land, 9 miles from town, Thomas County, ordinary improvements; 30 acres cultivated. Price \$700.

160 acres, Thomas County, mostly smooth, 7 miles from Rexford, 10 acres cultivated, balance grass. Price \$1,400.

320 acres, 60 acres cultivated. Price \$3,000.

240 acres, house and barn, good well and windmill; 3 miles from town, all cultivated. Price \$3,000.

480 acres, mile and half from town; 4-room house, stable, sheds. 200 acres cultivated. Price \$5,500.

HILAND P. LOOKWOOD,
102 Bryant Bldg., Kansas City, Mo.

Horticulture.

"English Sparrow."

EDITOR KANSAS FARMER:—In your last issue I find a "criticism" of my article defending the English sparrow, by Mrs. Elton, of Osborne County. The writer evidently failed to read carefully my statements. I did not intend to say that the sparrow caught the moth. He is too wise a bird to be deluded into the attempt, but he went straight to the seat of trouble, and devoured the rising generation.

I think the writer will see the point if she will read again.

Mrs. Elton is led into an error by a false conclusion respecting the habit of the sparrow. In her opinion, "Mr. Sparrow is a grain-eating bird exclusively." This is a very great mistake. He will eat anything that tastes good, and knows a good thing when he sees it and generally sees it. The following I quote from the Kansas City Star of August 28, 1903, tenth page, under the caption, "Value of the Birds":

"The sparrow's friends, the naturalists, say each sparrow saves one bushel of corn in a year, because for nine months of the year he lives on insects, and as long as the young remain in the nest they are fed with worms and insects. One pair will feed their young 4,000 grubs in a week. It is said that 354,375,000 caterpillars are put down to the credit side of the sparrows' year's work." Pretty good results for the "lousy bird." No cleaner bird "flips" a wing in the universe.

I hope Mrs. Elton has access to the "Star" and will read the entire article from which this is an excerpt. I have no faith in any of the "insect powders" offered for sale as a remedy, and respect the public health too greatly to use "Paris green," "London purple," or other poisonous remedies. I have submerged the "worm" in "Pyrethrum" for half a day, and he continued to "kick." To use a bath of any kind hot enough to kill spoils the appearance of the cabbage, and always demands an explanation when you come to sell. I cut my early cabbage this year as clean as nature grows it, but wheat-fields on both sides of me seduced the sparrows for a couple of weeks, and my late cabbage suffered, but as soon as the wheat was thrashed and ground plowed, they returned to their job. I am now free from trouble and my cabbage is perfectly clean.

Long live "Cock Sparrow!"
Geary County. R. W. SCOTT.

Bulb Planting.

Bulb planting is often deferred until October, and frequently later, but it ought to be done this month, if possible. The reason for early planting is this: Bulbs put into the ground now will develop strong roots and make all preparation for next spring's work before the close of the season. Late-planted ones can not do this, consequently they will have an arrested development when cold weather comes, and the work that remains undone in fall will have to be taken up and completed in spring, at the very time when all the energies of the plant ought to be concentrated in the development of flowers. Therefore plan to plant your bulbs early. Send on your orders for them as soon as you receive your catalogues. And when your order has gone, begin at once to get the ground ready for them. Spade it up to the depth of at least a foot. Work it over until it is fine and mellow, and make it very rich. The best fertilizer for bulbs is old well rotted cow manure. If this is not procurable use fine bone meal in the proportion of a pound to each yard square of soil. Set the larger bulbs about five inches below the surface, and about the same distance apart. The smaller ones, like crocus and snowdrop, can be set close together, or in groups, and ought not to be planted more than three inches deep.

All newly made bulb beds ought to be covered to the depth of ten or twelve inches with litter before cold weather sets in. If this is not done the frost will cause the soil to heave, and this will break the roots of the bulbs and greatly injure them. By covering we do not keep out cold, as

many suppose, but we keep the cold in, thus preventing the frequent alternation of freezing and thawing, which is what does the mischief with our bulbs. By all means have a good sized bed of tulips, another of hyacinths, and one of narcissus, with snowdrops, crocuses, and other small bulbs tucked into nooks and corners, here and there, all about the grounds. The value of a collection of bulbs is not understood by those who have never grown them. They begin to bloom as soon as the snow goes, and for at least six weeks they will make the garden gay, as not all will come into bloom at the same time. Thus they bridge over the long interval between the opening of spring and the advent of the earlier hardy perennials. The lover of flowers who is without them is not living up to his or her privileges.

Propagate From Bearing Trees.

J. H. HALE, BEFORE NURSERYMEN'S ASSOCIATION.

Many of you have read in the horticultural press within the last few months of the suit in Massachusetts of a certain planter there suing a member of this association for damages in the sale of a certain number of Gravenstein apples, and the samples of proof and all sorts of things were in court, and leading horticulturists had visited the field. The trees were some 200 in number, part of them were propagated in Massachusetts by the man who sold them; he bought a portion from a reputable nurseryman in Pennsylvania; in another portion of the orchard, which was not subject to the suit, the trees were purchased of the most reputable nurseryman in New York. After this suit was begun, or after it was settled, I am not sure which, the New York nurseryman went down and paid quite a liberal sum of money to prevent suit. The Massachusetts nurseryman was subject to pay \$600, which he has appealed, simply on technicalities; but he will have to pay \$600. I have been in the orchard; I have seen the trees that were propagated in Massachusetts, the ones that were propagated in Pennsylvania and the ones that came from New York; I have not the slightest doubt in my mind that every one of them are Gravensteins, but they do not bear good Charlestone Gravenstein apples, except five or six trees. It is simply a combination of variations. There is no doubt in the mind of the gentleman who paid the blackmail that they are Gravensteins, but he simply did not want to get into court. But there is a matter of very great importance. The gentleman in Massachusetts suffered to the extent of \$600 and the other gentleman suffered a large loss, yet they sold the genuine article, but they had not been careful enough in propagation, and they propagated over and over again from the nursery row. If they had propagated from known bearing trees, they probably would not have had this difficulty. It is a matter of great importance to the orchard interests of the country, and I do believe that we nurserymen should propagate as closely as possible from bearing trees of known value.

Tree Rights.

MAJOR HOLSINGER, IN WESTERN FRUIT-GROWER.

Returning home some time ago, I was horrified to see three fine large maple-trees on our avenue being dug about with a view of their removal. I was indignant at once. I had reason to be. Some fifteen years ago I had planted the trees along this avenue or had them planted, with a view to the comfort that comes of grateful shade, as along this avenue we had to reach the street cars, and not a day, summer or winter, but my family had to pass this way. To see this avenue beautified then, was my ambition. These trees I furnished to this party free of cost, he to plant and care for them. Years have gone and the trees are models of beauty and our avenue, the handsomest in our town. We are proud of it. Now a vandal has appeared and is about to remove these beauties because some magnate in Kansas City is able to pay

J. G. PEPPARD, MILLET, OATS, CLOVERS, TIMOTHY, GRASS SEEDS
1101 to 1117 West 8th St.
(Near Santa Fe St.)
Kansas City, Missouri.

SEEDS

Plant Trees For Posts

Catalpa, Osage, and Russian Mulberry Seedlings, one year old for planting. The Catalpas are from seed selected from known Speciosa trees. Write for prices stating number wanted.

Peters & Skinner, North Topeka, Kansas.

SEED WHEAT FOR SALE

Two varieties of Beardless Winter Wheat, "MAY KING" and "RED AMBER."

Both are hardy, yield well, have a stiff straw, and do not lodge or break down like bearded wheat. Price ONE DOLLAR Per Bushel. Send for samples. LOUIS DUEHN, Farm one mile south of Clements, Chase County, Kansas.

the ransom. "Stop that vandalism; fill up those trenches," I command. "We bought them; they are ours," came the answer.

To hunt the marshal was my first move. "Oust those men," I command. "On what grounds?" he asked. "As a common nuisance; don't you see they are despoiling city property—the rights of the people?" "We bought those trees of the owner," was the answer. "Oust those people; hold them until I can get a warrant, get out an injunction. These trees must be protected." The marshal forbade them further interference until he had consulted the city dads, when it was found such an act was punishable with heavy fine. The despoilers filled up the trenches, and silently stole away, glad to have escaped so easily. But for my happening along in time, an ugly gap would exist, our avenue despoiled. Trees have rights as well as individuals. They are mute. Let us not forget them. They are our companions and comforters during this torrid weather. Let us stand up for them.

French Horses for the United States.

(A Translation from the Journal Le Havre of July 29, 1903.)

The opportunity was given us to witness the departure of horses on the 16th which contained nearly all the prize-winners at the recent National shows at Evreux and Nogent-le-Rotrou.

At the sight of this magnificent group of breeding animals we were expressing our admiration when Mr. H. Charles, the sanitary inspector for the Minister of Agriculture, said to us: "Truly these specimens of breeding animals are exceptional; it is a true selection of 'la creme de la creme' of the Percheron breed which Mr. McLaughlin has just effected in the Perche by this choice so remarkable, so numerous, so uniform. But it behooves us to note that these extraordinary young stallions will be greatly missed in the breeding of Percheron horses."

"While perhaps we should felicitate ourselves, for it is the most profound encouragement for the producing of good horses when the best ones are easily sold for high prices, yet these animals must be replaced if we search to make still better the breed."

"To-day I am obliged to partake in a large measure of the fears even the inquietudes which have been told me to-day by Mr. Aveline of Werrieres, Orne, one of the most distinguished breeders of Percheron horses and an authority beyond dispute."

"Evidently," said he, "under actual conditions of the breeding of Percherons and above all in the opinion of our principal breeders, it is very disquieting to see parting from France such an extraordinary lot of young breeding animals which have not yet left products in our country."

"We do not breed to-day enough horses (which is proved by the increasing number of Belgians which are mixed in the embarkments) to permit us to sell even at the very high prices which we have received for them, the subjects so necessary to maintain the superiority of our production. Our breeding is constantly restricted."

"Our society, the Societe Hippique Percheronne, does not exactly realize our sorry plight. However, added Mr. Aveline, 'you have rendered a good service by your recent article upon the "Chicago Exposition" and "Breeding in Normandy." It has been extensively spread in our region through "La Petit Havre" and has awakened to a certain extent our society. I hope that it will at last awaken from its profound apathy. Its representation at St. Louis in 1904 has already been decided upon and it is busy taking proper measures to preserve at least for three or four years for our breeding the best among the coming stallions which until now have been exported to foreign countries."

"If, as I believe," concluded Mr. Charles, "the observations of Mr. Aveline have any foundation, it is certainly time to stop a little this drainage of the best animals."

"This could be accomplished by an agreement among the breeders of the Societe upon whom it would fall to designate the prize-winners qualified, and to buy and hold them on account of the Societe so long as they may deem it necessary."

"By proceeding thus on their own ac-

STARK TREES best by Test—78 Years Largest Nursery.
FRUIT BOOK free. We PAY CASH
WANT MORE SALESMEN
STARK BROS., Louisiana, Mo.; Huntsville, Ala.; Etc

TREES kept dormant till May 15th. French trees one year from bud, 1 and 2 cts. each. Also pear, quince, Japan plums. Circular from E. S. Johnston, Box 17, Steelkey, Delaware.

Beardless Winter Wheat

Ten varieties to select from. Thoroughly tested. Yields 40 to 60 bushels per acre. Samples and Catalog free.

J. M. MAHER, FREEMONT, NEBR

ALFALFA FOR SEED

New Crop; thoroughly re-cleaned, evenly graded, no chaff nor waste to pay for. BUY IT WHERE IT GROWS nearest perfection and save money. Write for prices.

GEO. H. MACK & CO., Garden City, Kansas.

SEED WHEAT

It always Pays to plant the Best. Our varieties grown from pure stock imported by us, cost but little more than common sorts, but will yield 45 to

60 Bushels Per Acre

Write for our Free Seed Wheat Catalog with full descriptions of our New "MALAKOFF," the grandest new variety of wheat ever introduced; requires less seed per acre; stools better; stands up better; gives larger yield and better quality of grain; stiff straw; rust proof and never attacked by fly; as hardy as Eye. Price, \$1.50 per bushel. Turkish Red, - \$1.10 per bu. Bags Free. Mammoth Winter Eye, 90c per bu. Ask for prices on Timothy, Clover and other seeds. RATEKINS' SEED HOUSE, Shenandoah, Ia.

count and responsibility they would secure, if not the number, at least the maintenance of the high standard of the Percheron breed; the great sires would no longer be cut off and delivered to foreigners and leave us without having left behind some of their precious blood." The interest at stake is too great for us not to seize upon this occasion to submit to the reflection of interested persons the decisive opinion and arguments of people so highly qualified upon the actual state of affairs.

Our Great Cook Book Offer.



The White House Cook Book, 590 pages, comprehensive treatise on carving. All kinds of cooking and baking. Everything from soup to nuts. Cooking for the sick. Health suggestions. Kitchen utensils. Family recipes. Toilet items. Dyeing and coloring. Measures and weights, etc. Prepared by the former chef of the Hotel Splendide, Paris. Regular price \$2. Our price with the Kansas Farmer for one year \$2. The two for the price of one, delivered to you. Address, Kansas Farmer Company, Topeka, Kans.

Gossip About Stock.

(Continued from page 939.)

weaned. The result is large size at an early age. Dandy Boy 10721 was on exhibition at the Sterling Fair and weighed 960 pounds; he was sired by Higgin's Model. Last season Mrs. Crow bought a sow for \$25.00 and took her home to a diet of sweet separator milk and alfalfa; she sold eight pigs from her first litter for \$120.00, won \$41.00 cash prize on the sow, and \$21.00 cash prize on the pigs; this gave her a total cash return of \$182 on an investment of \$25, and she still has the sow and 14 of her pigs yet left. She is now in the show herd, which will be at the State Fair at Hutchinson. The breeders' card of the Cherry Valley Breeding Farm appears on page 954.

We take pleasure this week in calling attention to the breeders' card of C. M. Garver & Son, Abilene, Kans. These gentlemen have earned the reputation of being among the very best breeders of Poland-Chinas in the State of Kansas, and at their public sale held on February 18, 1903, they made an average of \$41.70 on 50 head of swine. This record has been exceeded by but two breeders in Kansas. The reason for this success is easily found in the quality of stock they breed and the condition in which they are maintained. They have used four great herd books of late, some of the get of each yet remaining in the herd. Greatest among the four and great in any company is Kansas Chief 28250, the present senior herd boar. This boar was sired by Chief Tecumseh 3d 20740, out of Lady Wilkes (39515). He is the sire of most of the young stuff that is now for sale in this herd and was the sire of the majority of the sale stuff that made such a high average last February. He is worthy of a description on account of his large size, deep body, and fine arched back, good head and ear, and extra bone, legs and feet; he is as smooth as an egg, and would make lots of trouble in the showing if he were fitted. In fact we consider him one of the great boars of Kansas. He is just the type that the farmers of the West are in need of as he has the abundant length and bone that they require, together with the finish which would make his a first-class show hog if placed in condition. His pigs are like him, and there are some 130 youngsters on the place now that make the greatest young bunch of swine for evenness and quality that has been our pleasure to see lately. They are wonderfully alike in type and wonderfully like their sire; their colors are perfect, and there are plenty of show pigs in the bunch. As second herd boar stands Hard to Beat 29612, by Big-Bone Tecumseh 27754, out of Bessie's Rival (61432), a Black Stop Chief sow Hard to Beat was bred by E. E. White, of Altoona, and makes a good second in command of the herd. Mr. Garver has a number of choice youngsters of both sexes and a few bred gilts that he has reserved from the sale stuff for special trade. There are a large number of prize-winners in this bunch which can be had at private treaty by corresponding with Mr. Garver at once.

WEEKLY WEATHER-CROP BULLETIN.

Weekly weather-crop bulletin for the Kansas Weather Service for the week ending September 8, 1903, prepared by T. B. Jennings, Station Director:

GENERAL CONDITIONS.

The week has been warm and dry; the temperature has ranged from 3° above normal in the western counties to slightly below normal in the eastern. Very light showers—mere traces—have fallen in several of the western and northern counties with slightly better showers in the southwestern but over the greater part of the State no rain has fallen, the weather being very good for farm work.

RESULTS.

EASTERN DIVISION.

Corn is in good condition. Early corn has matured rapidly this week; cutting has progressed in the south and has begun in the central counties. Late corn

the usual standard. The English blue-grass has been thrashed in Johnson and Marshall and a large amount of the seed being marketed; in Marshall a large acreage is being sown to blue-grass. Apples are plentiful in the south; they are abundant in Shawnee, where they are unusually large and fine. Grapes are ripening and are a fair crop. Melons planted in the flooded district since the flood are ripe and are unusually fine. Pastures are good.

Anderson.—Early corn ripened rapidly during the week, and some is cut; late corn needs rain; fall plowing nearly done; ground getting hard; wet weather, weeds, and foxtail have destroyed recently planted fields of alfalfa.

Bourbon.—Cool weather retards the full development of the late corn; the flax and oat crops are both small; hay crop large.

Brown.—Weather rather cool for growing crops, which are in fair condition; farmwork progressing rapidly.

Chase.—Corn ripening rapidly; some have been cutting; late corn is being improved by dry weather; pastures still good; haying nearly done; most of third crop of alfalfa in stack; alfalfa seed is being thrashed; quality is good but yield very small; Kafir-corn heading; ground almost too dry to plow; alfalfa seeding suspended.

Chautauqua.—Considerable corn is cut and most of the early corn is matured; rain would be beneficial to late corn; fall plowing about done; third crop of alfalfa all harvested; apples plentiful; grapes are about all ripe; they are a fair crop; all forage crops are doing well.

Cherokee.—Plenty of moisture but too cool for rapid development of corn; good progress is being made in preparing wheat ground; haying completed.

Coffey.—Fine week for haying and thrashing; corn is maturing, but rain would be beneficial to the late planting; considerable plowing is being done.

Elk.—Corn ripening rapidly; haying well along; third crop of alfalfa being cut; ground dry for plowing.

Jefferson.—Haying is well along; rain would be beneficial to late corn; grapes are ripening and are a fair crop; what few peaches there are are ripening; apples very scarce and poor.

Johnson.—Plowing for wheat about done; sowing will begin next week; late corn needs more rain; early corn getting hard; blackbirds are damaging corn; thrashing about done; a large amount of blue-grass seed being marketed.

Leavenworth.—All growing crops look well; early corn maturing nicely; late corn earing finely; apple crop very poor; pastures good.

Linn.—The dry weather is maturing the corn; the prospects are for a greatly increased acreage of wheat; ground in good condition and seeding will begin soon.

Marshall.—Late corn is growing rapidly and promises to be a good crop if not caught by frost; third crop of alfalfa is in the stack; considerable ground is being prepared for wheat; a large acreage of English blue-grass is being sown; potato crop is short; fruit almost a failure.

Montgomery.—Late corn and forage crops are doing well, but a good rain would be beneficial; thrashing all done.

Morris.—A very dry week; millet and third crop of alfalfa cut and stacked in fine condition; ground getting very dry; late corn Kafir, and cane need rain; prairie hay a very fine crop and being put up in fine condition.

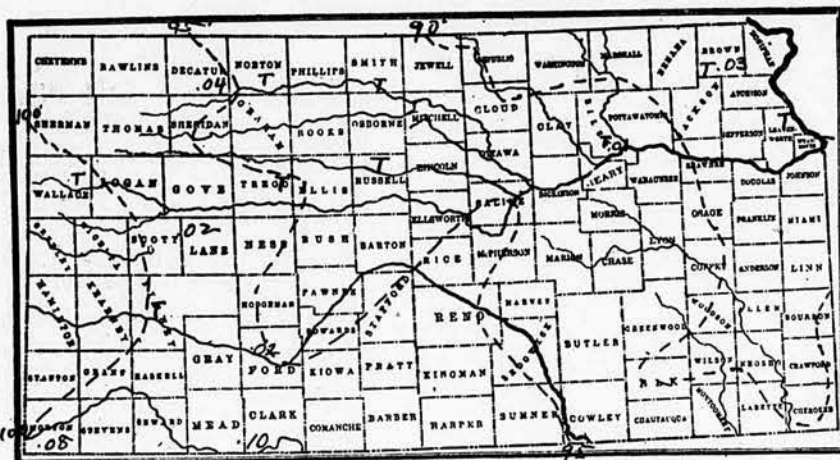
Pottawatomie.—Ground too dry to finish plowing for wheat; apples dropping badly; the crop will be very light; the flooded district is securing a large forage crop from unplanted ground that has sprung up with various grasses that make fair hay.

Riley.—Ground dry and rain needed; corn conditions very fine; melons of fine quality that are grown in the flooded district are being marketed.

Shawnee.—The recent dry weather has been very fine for early corn and it is nearly ripe; late corn is as tall as early corn and is in roasting ear; thrashing is progressing; fall plowing nearly done; haying is being rushed; hay is heavy and a fine crop; pastures good, and cattle doing well.

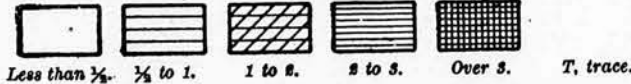
Woodson.—A good week for haying; a good rain would be beneficial to late corn; many of the hay batters finish next week. Wyandotte.—A fine week for farmwork; thrashing done; fall plowing nearly done;

Rainfall for Week Ending September 9, 1903.



Maximum temperature shown by broken lines.

SCALE IN INCHES.



has grown rapidly, and is in the roasting ear stage in the central counties, but it needs rain and hot weather yet. Plowing for fall seeding has been pushed, until the ground became too dry and hard, and is now nearly finished. Wheat sowing will begin in Johnson and Linn this coming week. Haying has been rushed and a large crop of fine prairie hay is now in the stack and haying is well nigh ended for this season. The third crop of alfalfa is now in the stack, or mow, and is a good crop. Much alfalfa has been thrashed but the seed crop was not up to

pastures fine and stock doing well; early corn drying up; apples scarce.

MIDDLE DIVISION.

Early corn has matured in the south and is being cut, and in the north is ripening rapidly; late corn needs hot weather and rain. Plowing has continued but in some counties it has been stopped by the ground being too dry and hard. Thrashing has progressed rapidly during the week with fair results. Haying has been rushed and a large crop of the prairie hay has been

Alfalfa Seed Fresh Seed. Crop 1903.

NEW CROP SEEDS FOR FALL SOWING IN STOCK NOW.

Alfalfa, Timothy, Kentucky Blue-grass, English Blue-grass, Red Top, Orchard Grass, Brome Grass, and Bermuda Grass; also Seed Rye and Seed Wheat. State varieties and quantities wanted and we will quote you promptly. KANSAS SEED HOUSE, F. Barteldes & Co., Lawrence, Kansas.



\$500. Reward to any one who will prove we do not do as we advertise. Piano-Free.

We want you as our agent in your neighborhood to introduce our household remedies and are doing some sensational advertising. The piano shown here is a Plectro STEINWAY—remember it is not a second-hand broken down piano but a "STEINWAY" with name stamped on it and guaranteed. We want you to particularly note our guarantee; this piano is sent to every one who sells ONLY eight boxes of our remedies at 25c. per box; you positively do not have to sell a single box more than eight boxes, and positively not a single other condition. On receipt of \$2.00 we send this piano packed, shipped and addressed to you free of charge. There is no advertisement of any kind on it. This piano has a full rich tone, and will add a great deal of pleasure to your home. Be the first in your neighborhood to get this piano and tell your friends how you got it; that is all we ask of you. HOME REMEDY COMPANY, Dept. AC, 1358 BROADWAY, N. Y.

\$200,000,000 PRODUCED BY CLEAR CREEK COUNTY Where the Gold Hammer M. & T. Company's Property is Located

Property within 600 feet has produced \$3,000,000. Shaft is now down 220 feet in good ore. We must have heavier machinery and are selling Treasury Stock to buy it for ten cents per share. Write for full particulars. IT WILL MAKE YOU BIG MONEY. Mining with us is a "business, and not a gamble." Live Agents Wanted. W. H. COMBS, Sec'y and Treas., 722 Equitable Bldg., DENVER, COLORADO.

Advertisement for a 2 H.P. engine. Text: "For 25 Cents a Day Our 'Man of All Work' Never tires, Works Day or Night, Wind or Calm, Rain or Shine. A hired man that takes no vacation and never kicks. Complete 2 H. P. Engine \$60. This Engine is complete with water, gasoline tank, batteries, spark coil, piping and all fittings and connections, mounted on base, Ready to Run. Pumping attachment as shown in cut \$10 extra. Starts or stops in a moment. All set up when you receive it ready to operate, and a child can run it. Absolutely Safe. No fire, no explosions, no danger of any kind. Can be moved from place to place. The simplest and the best Gasoline Engine ever produced. Also available in 3, 5 and 7 H.P. Fully described with large clear cuts in our Special Gasoline Engine Catalogue. With these engines you can churn, saw wood, pump water, shell corn, run creameries, printing presses, manufacturing plants, etc. The 2 H.P. will pump more water in a day than ten men. Requires little attention and furnishes the cheapest power on earth. O. L. CHASE MERCANTILE CO., Dept. K2, KANSAS CITY, MO.

put up. Grass and pastures are fine. The third crop of alfalfa is now in the stack, a good crop. Forage crops are fine and are being cut. Apples and peaches are plentiful in the south. Grapes are abundant south, light crop north. Melons are fine. Barton.—Thrashing and haying are being rushed; wheat ground about all plowed; the ground is getting dry and needs rain for harrowing and sowing; pastures good. Clay.—Late corn badly in need of rain; too dry to plow; third crop of alfalfa about harvested; prairie hay being put up; quality and quantity good. Cloud.—Early corn is beginning to ripen; late corn needs hot weather; plowing for wheat progressing; thrashing and haying being rushed. Edwards.—Very warm, dry, and windy weather. Jewell.—The earliest corn is nearly matured, and late corn is doing well; soft fall plowing is being done. Kingman.—Thrashing is drawing to a close; corn cutting in progress; corn is a very fair crop and of fine quality; haying continues; too dry for plowing. Lincoln.—Nearly everyone has stopped plowing because it is too dry; haying is the order of the day; rain in the near future will be very beneficial to next year's wheat crop. McPherson.—Good weather for thrashing, of which there is yet much to do; the third crop of alfalfa is cut and stacked; most of the corn has matured and is a good crop; fall plowing is finished and ground is in good condition except getting dry; hay is abundant. Reno.—A dry week; corn beginning to dry up; plowing for wheat about finished, but the ground is too dry now for good plowing; cane and Kafir-corn look well. Republic.—Dust storms on the 2d; has been dry and dusty all week; good weather for maturing the corn. Russell.—A fine week for farm work; thrashing, haying, feed cutting, and plowing are being rushed; the ground is becoming dry in spots for plowing. Saline.—A dry week; early corn ripening; late corn needing rain for best results. Sedgwick.—Early corn made, late corn injured by the dry weather of the past three weeks; grapes, apples, peaches, and melons plentiful. Smith.—A damp week with no rain; thrashing progressing slowly, and plowing the same way; early corn is too hard for roasting ears. Sumner.—Very dry; some have quit plowing till it rains; cane cutting for feed has begun; many apples blown off by the wind; corn dry enough to feed; water getting low in the streams. Washington.—Fine weather for farmwork; thrashing and haying are being rushed; alfalfa seed crop not good; early corn is ripening rapidly; late corn in the roasting ear; ground very dry; grape crop light.

crop of prairie hay is being put up. Pasture, or range grass, has cured and is now dry enough to burn. Plowing continues in many parts but in others the ground is too dry. Forage crop cutting has begun in the north and a good crop is being put up. Grapes are ripening in Norton. Clark.—Too dry for vegetation to grow much. Decatur.—But little change in crop conditions since last week; corn in some localities injured slightly by drought and high winds during the week. Finney.—A dry, hot week; range grass has cured finely and cattle on range are fat; wheat, oats, rye and barley are all yielding well; a large acreage of wheat will be sown this fall; ground in fine condition and much plowing being done. Ford.—Dry and warm; fodder crop will be short; thrashing continues; alfalfa hay crop fair in yield and quality, but the seed crop is light. Gove.—No rain this week; prairie hay is being rapidly harvested; late corn and all fodder crops promise well. Lane.—The ground is getting dry for plowing; grass is curing well and cattle look very fine; in consequence of the late freeze fruit is almost a total failure. Ness.—A dry week; grass curing; corn cutting begun; forage crop abundant.

Advertisement for Chicago Medical Institute. Text: "DISEASES OF MEN ONLY. The greatest and most successful Institute for Diseases of Men. Consultation free at office or by letter. BOOK printed in English, German and Swedish. Explaining Health and Happiness sent sealed in plain envelope for four cents in stamps. All letters answered in plain envelope. Various cures in five days. Call or address: Chicago Medical Institute, 518 Francis Street, ST. JOSEPH, MISSOURI."

Advertisement for Seed Wheat. Text: "Seed Wheat! I have an IMPROVED TURKEY Wheat selected by cereal specialist and imported from near Crimea, in region of Black Sea Europe, which is the greatest wheat country in the world. It is a bearded, hard winter wheat, with a stiff, firm straw, is very hardy, and will stand up on any kind of soil. Tested here two years and in both cases yielded double the common wheat. Will yield 40 to 55 bushels per acre. Price, f. o. b. here, \$1.10 per bushel. Supply limited. Catalogue and samples free. R. M. Hammond, Portis, Kas"

Grange Department.

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

Conducted by E. W. Westgate, Manhattan, to whom all correspondence for this department should be addressed. Papers from Kansas Granges are especially solicited.

NATIONAL GRANGE.

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

KANSAS STATE GRANGE.

Master..... E. W. Westgate, Manhattan
Overseer..... J. C. Lovett, Bucyrus
Lecturer..... Ole Hibner, Olathe
Assistant Steward..... E. C. Post, Spring Hill
Steward..... W. H. Coultis, Richland
Chaplain..... Mrs. M. J. Ramage, Arkansas City
Treasurer..... Wm. Henry, Olathe
Secretary..... Geo. Black, Olathe
Gate Keeper..... G. F. Kyner, Lone Elm
Ceres..... Mrs. M. J. Allison, Lyndon
Pomona..... Mrs. Ida E. Filer, Madison
Flora..... Mrs. L. J. Lovett, Larned
L. A. S..... Mrs. Lola Radcliff, Overbrook

EXECUTIVE COMMITTEE.

Henry Rhoades..... Gardner
J. T. Lincoln..... Olpe
A. P. Reardon..... McLouth

The Need of the Hour.

Organization is one of the great words in the English language. It stands for a great idea, an idea we are slowly but surely learning to appreciate. The old saying has it that in union there is strength. But the machinery of organization is needed. Organization implies machinery to carry out the objects of union. There must be intelligent and systematic use of the power of numbers before mere numbers can have their proper weight.

Everybody knows that the greatest of industries is agriculture. No other industry ranks with it in the amount of capital invested, the number of workers employed, or the actual usefulness of the products furnished to the world. Agriculture is the first and the greatest of industries. But where does agriculture stand in its influence upon politics and government? Certainly not in the front rank. Farmers have been content to be diligent workers and law-abiding citizens. Their stability of character and their industry and thrift have made possible the great development of the American Nation.

The farming industry is fairly well represented in some State Legislatures; but in Congress it makes a poor showing. The leaders of the political parties are in the cities and the large towns. The organizers of the party workers have received their training elsewhere than in meetings of the Grange and of farmers' clubs. Of course there are exceptions. In some parts of the country the farmers are gaining in power. The Grange is training hundreds of thousands of them. It ought to be training millions. The training given by the Grange is not always the best possible, but it is the best possible under the circumstances. Every year its influence for good becomes greater. Every year it enlists the sympathy of more strong and resourceful men.

Let it be frankly confessed that one of the influences that hinders the progress of organization among farmers is the false pride of a large number of the very men who ought to be leaders in the Grange movement. Many excellent farmers would rather have the good opinion of the bankers, lawyers, and merchants of the town than of their neighbors on the farms. To them the epithet "granger" is a term of reproach. They can not bear to be ridiculed by the people who wear soft clothes. They have not been able to realize that if they—the best farmers of the community—were to join the Grange, and give their best efforts to make it respectable in the eyes of others, there would be no laughing at the organization of farmers.

The bankers, the lawyers, and the merchants have their organizations. No one makes sport of the bar associations, because the best lawyers are members. In the States and counties where the best farmers are members of the Grange there are none to make sport of the Grange. The well-to-do farmer who stands aloof from the only organization that is making a serious effort to unite farmers for their own benefit and improvement is weaker than he imagines. His ability to take care of himself will not be increased by his aloofness. He may find himself

suspected by the very people whose favor he thinks to win by his show of independence.

The place of every progressive and thoughtful farmer is with the organization that is working for the advancement of the farmer and the elevation of his calling. Organization is the need of the hour. The Grange is the one great and growing organization that is making a great effort to supply this need in behalf of the great agricultural population of the United States. It is not to be judged entirely by what it has done, but also by its opportunity to do even greater things than its most enthusiastic advocates have imagined. It has its weaknesses and its failings; but these need not prevent the strong men of the farms from joining it and helping in the work of fitting it to accomplish its purposes.

Rock Valley Grange No. 1438, Lyon County, Kans.

We had been debating among ourselves for some time about this continual initiation. We of course wanted new members, but to initiate at every meeting as we had almost always done was becoming very monotonous, especially to the young folks, and our grange is about one-half quite young people. So, happily for us, at our field meeting in July, either Brother Westgate or Brother Bachelder, we forget which, suggested to us the plan of initiating once a month, and he also said that continual initiations would kill any grange, and I believe it. We brought this up at our last meeting, and after some debate on the question, a motion was put to initiate once a month, and if found necessary, in some particular case, to initiate often, to call a meeting for that particular business. The motion was seconded and carried, and a programme was arranged for our next meeting. It was an easy matter to get them to help with a program, and the young folks especially, took hold eagerly.

We think this will be a good plan, and will make the grange a more successful organization by having something new and interesting going on at regular times at our meetings.

We want to initiate, and are glad to, and think we will take in more new members by following this plan, than by the former method.

MRS. IDA E. FILER.

Production of Petroleum in 1902.

In his report to the United States Geological Survey on the production of petroleum in 1902, now in press, Mr. F. H. Oliphant notes the following points as the most conspicuous features in the production, sale, and export of crude petroleum and its products for the year 1902: The production of crude petroleum was greater than that of any previous year; there was a slight decrease in production of the Appalachian field, and a slight increase in the Lima-Indiana field; the general average price for crude petroleum was less than in any year since 1898; stocks held in the Appalachian and Lima-Indiana fields showed a considerable decrease, principally in the Appalachian field; the exports of petroleum in 1902, were less than in 1901; no new pools were discovered in 1902.

The total production in the United States of crude petroleum in 1902 was 80,894,590 barrels, as against 69,389,194 barrels in 1901, an increase of 11,505,396 barrels, or 16.5 per cent over that of 1901, and of 27 per cent over that of 1900. The greatest portion of the increase in 1902 came from Texas and California, the gain being 5,830,994 barrels, or 132.7 per cent, for Texas, and 5,187,518 barrels, or 59 per cent, for California, as compared with their respective productions in 1901. The increase in Indiana in 1902 was 1,723,810 barrels, or about 30 per cent over that of 1901. Louisiana produced for the first time in 1902, the production being 548,617 barrels. The increase in the production of Kansas was 152,598 barrels, or about 85 per cent over 1901. Kentucky and Tennessee increased their production in 1902 by 47,799 barrels, or nearly 35 per cent. Indian Territory increased 27,000 barrels and

Collier
Missouri
Red Seal
Southern

CONSUMERS should bear in mind that there are many brands of White Lead (so called) which are claimed to be "just as good" or better than Pure White Lead, which contain little, if any, White Lead, but are simply mixtures of Zinc, Whiting and Barytes, or other cheap, inferior materials.

Make sure that the brand is right. Those named in list are genuine.

If interested in paint or painting, address

National Lead Co., Clark Ave. and Tenth Street, St. Louis.

Stock and Grain Ranch FOR SALE.

2,000 Acres, 400 acres in cultivation, balance divided in five pastures. All watered good barn and granaries. This is one of the best ranches in southwestern Kansas. Will sell very reasonable and on most liberal terms.

S. B. ROHRER, Topeka, Kansas.

Wyoming 850 barrels as compared with 1901.

The largest decrease in production in 1902 as compared with 1901 was in West Virginia, where it amounted to 663,781 barrels, or about 4.5 per cent; and Ohio, in its two fields, showed a decrease of 633,852 barrels, or nearly 3 per cent. The decrease in Pennsylvania was 561,498 barrels, or 4.5 per cent; in New York, 86,888 barrels, or about 7 per cent; in Colorado, 66,218 barrels, or about 14 per cent.

The percentages of production by fields show a remarkable change from 1900 to 1902. In 1900 the percentages were: Appalachian field, 57; Lima-Indiana field, 34; all other fields, nearly 9. In 1902 the respective percentages were: Appalachian field, 39; Lima-Indiana field, 29; all other fields, about 32.

The value of the crude petroleum produced in 1902 was \$69,610,384, or 86 cents per barrel, that for 1901 having been \$66,417,335, or 95.7 cents per barrel, a decrease of 9.7 cents per barrel, or 10 per cent, in 1902. The gross amount received for the total product in 1902 was only \$3,193,013 greater than that of 1901, although the increase in output was about 16.5 per cent. The average price paid for what is known as Pennsylvania petroleum, which comprises nearly 95 per cent of the production of the Appalachian field, was \$1.2375 per barrel in 1902, that for 1901 having been \$1.21, a gain of nearly 3 cents per barrel. There was also a gain of nearly 4 cents per barrel in the price of the Lima-Indiana petroleum in 1902 over 1901. California petroleum decreased 21.8 cents per barrel in 1902 as compared with 1901, and Texas petroleum decreased 4.55 cents per barrel.

The total number of productive wells in the Appalachian and the Lima-Indiana fields in 1902 was 11,326, the number in 1901 having been 9,912. The total number of wells completed in the United States in 1902 was about 15,800. At an average cost of \$1,500 each these wells represent an investment of \$23,700,000, or about 34 per cent of the gross receipts for all the petroleum produced in 1902.

The exports of petroleum and its products exceeded 1,000,000,000 gallons in 1902, for the second time in the history of the industry, the number of gallons exported being 1,064,233,601, a smaller total exportation by nearly 15,000,000 gallons than in 1901.

FARMERS

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

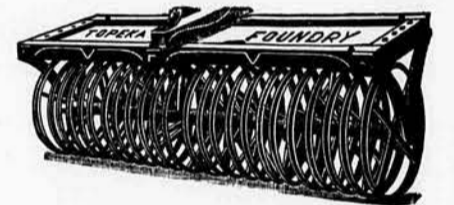
THE STATE BUREAU OF IMMIGRATION OF MARYLAND.

Address

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

PACKER PULVERIZER ROLLER.

A full stand of wheat guaranteed.



A good stand means a full crop. You cannot fail if you use our Packer. Write for circulars.

Topeka Foundry.. Topeka Kansas.

FINE DAIRY ..AND.. STOCK FARM FOR SALE.

240 acres located on Badger Creek, Lyon County, Kansas, divided as follows:

150 acres in cultivation (100 acres bottom land), 10 acres orchard, 20 acres good timber, 60 acres pasture and meadow land. Good improvements. Eight-room house in nice grove, new creamery building (cost \$750), two good barns, cattle sheds, chicken house, hog house, coal house, two ice houses, two silos (100 tons each), never-falling water, pond and three wells, elevated tank and windmill, underground water pipes with hydrants, two stock tanks with floating valves and tank heater, 40 acres in alfalfa. Three miles from railroad station, 8 miles from Emporia (county seat), 10,000 population. Long-distance telephone connecting with Emporia exchange and all parts of the State goes with the farm. Fifty cows kept on this farm at present. Would like to lease creamery building of purchaser and will contract to take all milk produced on farm by the year. Price \$50 per acre. Easy terms. Address owner.

G. W. PARKMAN, Emporia, Kansas.

PROPOSITION \$65,000 (MADE IN 7 MONTHS.)

I can give a few parties who can secure \$500 to \$3,000, a very paying business, choice locality. I have an article, or machine, valuable to all farmers and stock raisers. With the help of three farmers I made, clear, over \$65,000 in seven months. Sales in one county, \$12,360. The like never before known. Call in person. I pay half car fare, whether you invest or not, and give best bank references. I can show customers who made clear \$1,000 to \$4,000 in 30 days. Fairness to all. W. R. WHITE, 70 times Patentee. Office Eddy Building, Bloomington, Ill. Home, 612 N. East St.

BIG MAGAZINE one year free to quickly introduce it. As good as Harper's, Munsey's, Ladies' Home Journal or McClure's. Send 10 cents to help pay postage. AMERICAN STORIES, Dept. G. F., Grand Rapids, Mich.

TAKE YOUR OWN WEIGHTS FOR \$29.75



Don't take the other fellow's weight on your grain and live stock. With one of our absolutely perfect **Rollant 5-Ton Scales** for only \$29.75 you know just what you take to town every trip. No guessing. It saves money and gives satisfaction. Sold under five year guaranty on 30 DAY'S FREE TRIAL. Ball Bearings, Interchangeable Parts, Full Compound Beam, No Loose Weights, Best Construction. No risk to you. No better scale made. You can erect it yourself, no expert needed. Remember a 5-Ton FULL Compound Brass Beam Scale for only \$29.75. Send for Catalog. O. L. CHASE MERCANTILE CO., 1485 W. 9th St., Kansas City, Mo.

Camping in Colorado

If you are fond of outdoor life, are willing to do your share of the work, and don't mind "roughing it," you will enjoy a fortnight under canvas in Colorado.

The climate is perfect; the fishing is good and the mountains are always in sight.

Why not get up a party of half a dozen congenial spirits and try it?



Whether you camp or not, you will be interested in the low rates to Colorado which the Rock Island offers, June 1 to September 30—\$17.50 for the round trip from Topeka. Information and literature on request.

Rock Island trains for Colorado Springs and Denver leave Topeka at 1.10 and 8.10 p. m.

For information and literature, see Rock Island Agents, or

A. E. COOPER,
Division Passenger Agt.,
TOPEKA, KANSAS.

HORSES.

Percheron Horses

HENRY AVERY & SON, WAKEFIELD, KANSAS.

Registered Stallions For Sale

15 HEAD AT SPECIAL PRICES CONSISTING OF

Five Percherons, 2 to 5 years old—all black but one, and that a black-grey; two black yearling Percherons; four Shires, 8 to 7 years old; three trotting-bred horses, 2- and 4-year-olds; one registered saddle stallion. All but two at prices from \$200 to \$1,000 each. Come at once for bargains.
SNYDER BROS., WINFIELD, KANSAS.

ROBISON'S PERCHERONS AND SHORTHORNS

Percheron Herd headed by Casino (45462) 27880. Prize-winner Notional Show of France 1901. Winner of first prize at Missouri and Kansas State Fairs 1902. Shorthorn herd headed by Airdrie Viscount, a son of the great Lavender Viscount, champion of America in 1900 and 1901. Stock for sale. Address

J. W. & J. C. ROBISON, TOWANDA, KANS.

THE AMERICAN

Percheron Horse Breeders & Importers Association

Capital Stock, \$10,000.00. Shares, \$10.00 Each
Incorporated under the laws of Illinois.

No proxies can be used in this Association and no person or firm allowed more than ten votes. Our legal rights are fully and finally established by the courts. ONLY PERCHERON ASSOCIATION IN AMERICA RECOGNIZED BY THE UNITED STATES GOVERNMENT. It is the objects of this Association to have its stock as widely scattered as possible, that the Percheron interests of the whole country, may be represented in its membership. We are now ready to sell stock and receive applications for registry. For application blanks, stock and full information, address,

GEO. W. STUBBLEFIELD, Secretary,
Bloomington, Ills.,



WABASH ROUTE
Home Visitors'
EXCURSION

"FOLLOW THE FLAG"

TO POINTS IN
Ohio and Indiana
and Louisville, Ky.

Sept. 1st, 8th & 15th and Oct. 6th

30 Days LOW ROUND TRIP RATES WILL BE IN EFFECT, GOOD 30 Days
Unsurpassed Service—Smooth Track—Fast Time

Wabash trains run directly through the World's Fair Grounds, St. Louis, in full view of all the magnificent buildings. The only line that does it.

Ask your Ticket Agent for tickets over the WABASH. For further information, write

L. S. McClellan, Western Passenger Agent,
H. C. Shields, Traveling Passenger Agent
903 MAIN ST., KANSAS CITY, MO.

K. C. S.

Kansas City Southern Railway

"Straight as the Crow Flies"

KANSAS CITY TO THE GULF

PASSING THROUGH A GREATER DIVERSITY OF CLIMATE, SOIL AND RESOURCE THAN ANY OTHER RAILWAY IN THE WORLD, FOR ITS LENGTH.

Along its line are the finest lands, suited for growing small grain, corn, flax, cotton; for commercial apple and peach orchards; for other fruits and berries; for commercial cantaloupe, potato, tomato and general truck farms; for sugar cane and rice cultivation; for merchantable timber; for raising horses, mules, cattle, hogs, sheep, poultry and Angora goats, at prices ranging from

FREE GOVERNMENT HOMESTEADS

to twenty-five dollars or more per acre. Cheap round-trip, homeseekers and one-way colonist tickets on sale first and third Tuesdays of each month. Write for a copy of "CURRENT EVENTS," published by the

KANSAS CITY SOUTHERN RAILWAY
THE SHORT LINE TO

"INEXPENSIVE AND COMFORTABLE HOMES."

H. D. DUTTON, TRAV. PASS. AGT., KANSAS CITY, MO.
S. G. WARNER, G. P. AND T. A., KANSAS CITY, MO.
F. E. ROESLER, TRAV. PASS. AND IMIG'N AGT., KANSAS CITY, MO.



America's Leading Horse Importers

At the Great Annual Show of France held at Evreux June 10 to 14, our stallions won first, second, third, and fourth prize in every Percheron stallion class; also won first as the best collection.

At the Show of the Societe Hippique Percheronne De France held at Nogent-le-Rotrou from the 18th to the 21st of June, our stallions won every first prize, over forty prizes in all. Two groups were made up of our exhibit, on which we won first and second.

This prize-winning importation consisting of a hundred and nine stallions arrived home July 28, and is by far the best lot of horses ever imported to America.

Call on us if your neighborhood needs a good stallion. A catalogue and calendar sent on application.

McLAUGHLIN BROS., Columbus, Ohio,
Emmetsburg, Iowa. Kansas City, Mo.

Cheyenne Valley Stock Farm.



F. H. Schrepel, Ellinwood, Kans.

Breeder of
PERCHERON HORSES and
POLAND-CHINA HOGS

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

Prospect Farm



H. W. McAFEE, Topeka, Kans.

Breeder of
CLYDESDALE HORSES,
SHORTHORN CATTLE

FOR SALE—Two Clydesdale Stallions, one 5 years old, weight 1,750 pounds, the other 2 years old, weight 1,400 pounds; registered and sound. Inspection and correspondence invited

POLAND-CHINA PIGS.



Elegantly built, fashionable bred, and well marked May and June pigs that have been raised right to develop into great money makers. They are sired by the 700-pound 2-year-old Proud Perfection 2d, the richest bred boar in the world, every drop of his blood comes direct from Proud Perfection. Perfect 1 Know, Chief Perfection 2d and Darkness, the four greatest hogs the world has ever seen, and out of dams by the 900-pound Black Missouri Chief, the largest Poland-China boar living to-day, and other noted boars. Great beauty, grand development and enormous productiveness await all of them. Also pigs by the massive 900-pound 3-year-old Black Missouri Chief that are out of dams not akin to my other sows. Single pigs, pairs, trios and breeding herds at reasonable prices. Young boars and bred gilts also. Pacific and American Express. Ranch 2 miles from station. Rural mail and telephone. Satisfaction guaranteed.

phone. If desired, express paid by me. I am not selling out, I am here to stay. Satisfaction guaranteed. Reference Kansas Farmer. **J. CLARENCE NORTON, Moran, Allen Co., Kans**

HEREFORD CATTLE.

SOLDIER CREEK HERDS OF Herefords, Shorthorns, Polled Shorthorns

SERVICE BULLS: HEREFORDS Columbus 17th 91864, Elvina's Archibald 75998, Jack Hayes 2d 119761, Jack Hayes 3d 124109. SHORTHORNS Jubilee Stamp 126017, Orange Dudding 149469 POLLED, Scotch Emperor 133646, Ottawa Star 113109. Herds consist of 500 head of the various fashionable families. Can suit any buyer. Visitors welcome except Sundays. Address JOSEPH PELTON, MANAGER, Kiowa County, Belvidere, Kansas.

SHORTHORN CATTLE.

D. P. NORTON'S SHORTHORNS. DUNLAP, MORRIS CO., KANS. Breeder of Pure-bred SHORTHORN CATTLE. Herd bull, Imported British Lion 133692. Young stock for sale.

MAPLE LEAF HERD OF THOROUGHBRED SHORTHORN CATTLE and POLAND - CHINA SWINE. Farm is 2 miles south of Rock Island depot. JAMES A. WATKINS, Whiting, Kans.

FOR SALE MY HERD BULL, Aberdeen Knight 165297. Got by Orange King 130731, out of Mary Aberdeen, tracing to imported Young Mary; 2 years old, deep red, a splendid breeder. A bargain for someone. HARRY EVANS, Pleasanton, Kan.

GLENWOOD HERDS.

VICTOR OF WILDWOOD 126054 at head. A pure Scotch herd-header for sale. Twenty yearling 1- and 2-year-old Scotch-topped heifers bred or with calves at foot for sale. Choice young bulls always for sale. Poland-China herd headed by Glenwood Chief Faultless 27815. Address C. S. NEVIUS, CHILES, KANSAS.

PONY CREEK HERD SCOTCH AND SCOTCH-TOPPED SHORTHORNS

Young stock by the roan champion bull John Ward 159491 and by the present herd bull Barmpton Knight 148796. Choice breeding, good individuals, and square dealing. Address E. D. LUDWIG, R. R. No. 2, Sabetha, Kans.

CHERRY CREEK HERD Pure Scotch and Scotch-topped.... Shorthorns

Imported Scottish Knight 126371 heads the herd. Formerly of Sutherland, Iowa. H. W. WEISS, Westphalia, Kan.

Mt. Pleasant Herd SHORTHORNS

Herd Bull For Sale—Acomb Duke 18th 142177, is worth looking after; also 18 young Bulls ready for service, and eight young Cows with calves by Acomb Duke 18th. Inspection invited. A. M. ASHCRAFT, R. R. No. 3, Atchison, Kans.

Glendale Shorthorns

Imported Thycalm 150064 and Scotland's Charon 127264 in service. Fifteen young, serviceable bulls for sale. One extra good young Scotch bull, sired by Imp. Royal Favorite 140612, dam Imp. Pavonia. Also 50 heifers and young cows mostly bred, some with calves by side. Visitors always welcome. Long distance phone at farm.

C. F. WOLF & SON, OTTAWA, KANSAS.

SILVER CREEK Shorthorns

The imported Missie, bull, Aylesbury Duke 159763, and the Scotch bull Lord Thistle 129960 in service. A few Aylesbury Duke bull calves of most excellent individuality for sale. See our herd at the prominent Western shows this fall.

J. F. Stodder, URDEN, COWLEY CO., KANS.

SHORTHORN CATTLE.

Elder Lawn Herd Shorthorns

Headed by GALLANT KNIGHT and Imp. Tilly Cairn. Bulls, Cows, and Heifers, for sale at bargain prices. Can supply females in car-load lots if desired. Some show yard material. T. K. TOMSON & SONS, Dover, Shawnee Co., Ks.

Plainville Shorthorn Herd.

Herd headed by Strawberry Baron 149498 FOR SALE—Fifteen Bulls of serviceable age, 5 Bull Calves, and choice Cows and Heifers out of choice dams and sired by herd bull, Waterloo Duke of Hazelhurst 11th 130728, or Potiphar 124995. Prices reasonable. Inspection and correspondence invited. Address, N. F. SHAW, Plainville, Kans.

Rocky Hill Shorthorns and Saddle Horses

Sempstress Valentine 157771 and Mayor 129229 head of herd. Larkin's Duluth and Kansas King at head of Saddle Horse Herd J. F. TRUE & SON, Perry, Kansas. Railroad Station, Newman, Kansas.

Valley Grove Shorthorns.

Bulls, bred heifers, and cows with calves at foot sired by Lord Mayor 112727, Knight Valentine 157048 and Golden Day for sale. Heifers bred to Golden Day and calves at foot by each herd bull. T. P. BABST & SONS, Auburn, Kans. Telegraph Station, Valencia, Kans.

Shorthorn Cattle.

For immediate sale, 12 bulls ready for service, and 12 bull calves. Also 20 cows and heifers, 1 to 7 years old. Give me a call, or Address H. R. LITTLE, - - - Hope, Kans.

...GREENDALE RANCH...

BREEDERS OF PRIZE-WINNING SHORTHORN CATTLE, BERKSHIRE SWINE, SHROPSHIRE SHEEP Great constitution and lung capacity gained in high altitudes. A few select young swine and sheep for sale. ED. GREEN, MORRISON, COLORADO.

...N. MANROSE... Shorthorns

Rural Route 5, Ottawa, Kans. (Siltspur's Knight 171591, at head of herd. Young bulls ready for service, for sale. HERD BULL FOR SALE OR TRADE. Having used my herd bull on my small herd of Shorthorn cows as long as practical I offer him for sale or trade. He is out of a pure Duchess cow and by a pure-bred Cruickshank bull. Guaranteed a breeder and all right. For particulars, address DR. C. M. COE, 915 Walnut St., Kansas City, Mo.

Sunflower Herd of....

SCOTCH AND SCOTCH-TOPPED Shorthorn Cattle, Poland-China Swine. Two Scotch bulls in service. Representative stock for sale. Address Andrew Pringle, Eskridge, Wabash County, Kansas.

Pearl Shorthorn Herd.

BARON URY 2d 124970 and SUNFLOWER'S BOY 127337 Head the Herd.

30 head of Well Developed April Duroc-Jersey Boars For Sale.

Can ship via Rock Island, Union Pacific, Santa Fe, or Missouri Pacific Railways. Call, telephone, or write to C. W. Taylor PEARL, DICKINSON COUNTY, KANSAS.

Can ship via Rock Island, Union Pacific, Santa Fe, or Missouri Pacific Railways. Call, telephone, or write to C. W. Taylor PEARL, DICKINSON COUNTY, KANSAS.

Can ship via Rock Island, Union Pacific, Santa Fe, or Missouri Pacific Railways. Call, telephone, or write to C. W. Taylor PEARL, DICKINSON COUNTY, KANSAS.

Can ship via Rock Island, Union Pacific, Santa Fe, or Missouri Pacific Railways. Call, telephone, or write to C. W. Taylor PEARL, DICKINSON COUNTY, KANSAS.

Can ship via Rock Island, Union Pacific, Santa Fe, or Missouri Pacific Railways. Call, telephone, or write to C. W. Taylor PEARL, DICKINSON COUNTY, KANSAS.

Can ship via Rock Island, Union Pacific, Santa Fe, or Missouri Pacific Railways. Call, telephone, or write to C. W. Taylor PEARL, DICKINSON COUNTY, KANSAS.

Can ship via Rock Island, Union Pacific, Santa Fe, or Missouri Pacific Railways. Call, telephone, or write to C. W. Taylor PEARL, DICKINSON COUNTY, KANSAS.

Can ship via Rock Island, Union Pacific, Santa Fe, or Missouri Pacific Railways. Call, telephone, or write to C. W. Taylor PEARL, DICKINSON COUNTY, KANSAS.

SHORTHORN CATTLE.

MEADOW BROOK SHORTHORNS—Ten fine young bulls for sale—all red. Red Laird, by Laird of Linwood, at head of herd. F. C. KINGSLEY, Dover, Shawnee County, Kansas.

COPELAND'S Shorthorns

I have a few good Shorthorn cows and heifer calves for sale, also a few young bulls from 6 to 8 months old, the best for I ever bred. Herd headed by my fine Scotch bull, Minister 2d 150171. J. M. COPELAND, Glasco, Cloud Co., Kas

ABERDEEN-ANGUS CATTLE.

ABERDEEN-ANGUS CATTLE AND PERCHERON HORSES FOR SALE. All stock recorded. GARRET HURST, PECK, KANSAS.

Sutton's Doddies.

40 Bulls For Sale. Every one a good one and at farmers' prices. Elegant breeding and quality. The kind that sire my champion steers. Chas. E. Sutton, Russell, Kansas.

ALLEDALE HERD OF Aberdeen - Angus Cattle.

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

THE SUNFLOWER HERD PURE-BRED Angus Cattle

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

Jim Creek Herd ..Aberdeen-Angus Cattle..

Reginal Doon 32728 and Gardner Mine 32240 at head of herd. 100 head of splendid bulls, 11 to 28 months old, weighing up to 1500 pounds, for sale. Prime condition, net registered. Guaranteed breeders and a snap in prices. Address C. H. Butler, Frankfort, Kansas

GALLOWAY CATTLE.

CLOVER CLIFF FARM Registered Galloway Cattle

Also German Coach, Saddle, and trotting-bred horses World's Fair prize Oldenburg Coach stallion Aabbo, and the saddle stallion Rosewood, a 16-hand, 1,100-pound son of Montrose in service. . . . Visitors always welcome. BLACKSHEEP BROS. ELMDALE, CHASE COUNTY, KANSAS.

GALLOWAY CATTLE.

E. H. WHITE, ESTHERVILLE, IOWA ...Importer and Breeder of... GALLOWAY :: CATTLE

Herd Foundation Stock A Specialty. Few Choice Females and 14 Bulls For Sale Inspection or Correspondence Invited.

CLOVER HILL FARM. Breeders of CHOICE REGISTERED Galloway Cattle.

Arnold the Great 15520 by King Hensol and Decey of Wavertree 17094 by Imp. Miro of Castlemilk at head of herd. Extra fine young bulls by Arnold the Great for sale. GEO. M. KELLAM & SON, Richland, Shawnee Co., Kans.

RED POLLED CATTLE.

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

DISPERSION SALE! -Polled Durhams-

ON OCTOBER 6, 1903, AT KANSAS CITY, MISSOURI. I will sell my entire herd of high-class Double-Standard Polled Durhams, numbering 45 head, having sold my farm and quit farming. More than \$4,000 of the best Polled Durham blood has been added to this herd during the past three years. Catalogue after September 1, 1903. A. E. BURLEIGH, KNOX CITY, MISSOURI.

RED POLLED CATTLE.

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

Red Polled Cattle

of the Choicest Strains and good individuals. Young animals, either sex, for sale. Alsobreeders of..... Percheron Horses, Improved Chester White Swine, Broke Turkeys, and Plymouth Rock Chickens. Address S. C. BARTLETT, R. F. D. No. 5, Wellington, Kans.

PHILLIPS COUNTY HERD

RED POLLED CATTLE, POLAND-CHINA SWINE PARTRIDGE COCHIN CHICKENS, MAMMOTH BRONZE TURKEYS. The herd bull, King of Valley Lawa 4888, for sale. Will book orders for young stock. CHAS. MORRISON, Rural Route No. 2, PHILLIPSBURG, KANSAS.

SHEEP.

Anoka Flocks Cotswolds and Ramboulllets. Foundation for flocks a specialty. Correspondence and inspection invited. GEO. HARDING & SON, WAUKESHA, WIS.

Sheep For Sale!

A band of about 700 Rambouillet sheep, 7 months to 4 years old. Sheared ten pounds. . . . Address L. K. Butts, R. F. D. 3, Kingman, Kansas.

LIVE STOCK AUCTIONEERS.

Live Stock Auctioneers. GRAY & POTTER, STERLING, KANSAS.

WILL SELL ANYTHING ANYWHERE. We make a specialty of Pure-bred Live Stock Sales in Kansas and adjoining States. We Get You the Money.

Live Stock Auctioneer. J. N. HARSHBERGER, Lawrence, Kansas.

Special attention given to selling all kinds of pedigreed stock; also large sales of graded stock. Terms reasonable. Correspondence solicited. Mention Kansas Farmer.

JAS. W. SPARKS, Live Stock Auctioneer, MARSHALL, MO.

Ten Years Successful Selling for the best breeders in America. Posted on pedigrees and values of all classes of pure-bred stock. Sales made anywhere. Terms very reasonable. . . . Write me before fixing dates.

R. L. HARRIMAN LIVE STOCK AUCTIONEER

BUNCETON . . . MISSOURI Twenty years devoted to breeding, handling, and selling pure-bred live stock. SALES MADE EVERYWHERE Well posted in pedigrees, quality, and values. Am selling successfully for the best breeders in the United States. Terms reasonable. Write before fixing dates.

CAREY M. JONES, Live Stock Auctioneer DAVENPORT, IOWA. Have an extended acquaintance among stock breeders. Terms reasonable. Write before claiming date. Office, Hotel Downs.

JOHN DAUM, Live Stock Auctioneer NORTONVILLE, KANSAS. Fine Stock a specialty. Large acquaintance among Stock breeders. Sales made anywhere. Write or wire for dates.

WINDSOR-CLIFTON HOTEL.... Monroe and Wabash Ave., Chicago. Centrally located; has 250 rooms \$1.00 up; also First-Class Restaurant at popular prices. CHRIST HEIPP, Prop.

YOUR CAR FARE PAID TO COLLEGE

BY STANBERRY NORMAL COLLEGE, STANBERRY, MISSOURI.

DEPARTMENTS: Teachers, Scientific, Music, Commercial, Shorthand and Typewriting, Art, Elocution, and Pen Art

A school of National reputation, whose graduates are in demand all over the country. Modern equipment and equivalent units gotten in best universities without examination. Lowest rates and highest service.

Address

D. S. ROBBINS, M. S., President, Stanberry, Missouri.

New Crop ALFALFA For Fall Sowing

Write for Samples and Prices.

MANGELSDORF BROS. CO.
445 Commercial St., Atchison, Kans.



Your Line Fence

should always be PAGE. It's so much stronger. PAGE WOVEN WIRE FENCE CO., Adrian, Mich.

Drive to the Depot—Not to the Dealers

And get **ADVANCE FENCE** as we send it direct to you, saving you from 10% to 20% on what you would have to pay your dealer for it. Remember that we manufacture and sell fence direct to the user, at wholesale prices, and will allow you **30 DAYS' FREE TRIAL.** You take no risk in dealing with us. This is the most liberal offer ever made by a fence factory. Write at once for our catalogue giving special discounts for large quantities. Address **ADVANCE FENCE CO., 180 St., Peoria, Ill.**

\$10.00 A Sweep Grinder For \$10.00

We manufacture Wind Mills, Steel Towers, & Feed Grinders. All sizes & styles. Write for catalog & prices. **CURRIE WINDMILL CO., Topeka, Kansas.**

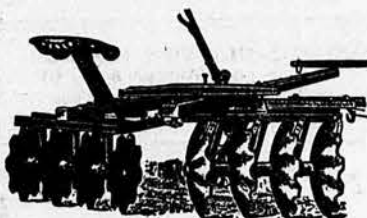
THE LARGEST AND BEST LINE OF WELL DRILLING MACHINERY

in America. We have been making it for 20 years. Do not buy until you see our new Illustrated Catalogue No. 41. Send for it. It is FREE. **F. C. AUSTIN MFG. CO., CHICAGO.**

Established 1887 **WELL DRILLING MACHINERY.** PORTABLE and drill any depth, by steam or horse power. 42 DIFFERENT STYLES. We challenge competition. Send for Free Illustrated Catalogue No. 23. **KELLY & TANEYHILL CO., 88 Chestnut St., Waterloo, Iowa.**

WELL DRILLING Machines

Over 70 sizes and styles for drilling either deep or shallow wells in any kind of soil or rock. Mounted on wheels or on sills. With engines or horse power. Strong, simple and durable. Any mechanic can operate them easily. Send for catalog. **WILLIAMS BROS., Ithaca, N. Y.**



Clark's Right Lap Cutaway Plows

Succeed where others fail; 24-inch disks, 8 1/2 inches apart, do the work. Heavy straight disks first out ground and act as landside. Address **J. C. CONLEY, Wichita, Kans.**

BALES 15 TONS A DAY HAY
The Gem Fall-Circle baler, lightest, strongest, cheapest baler. Made of wrought steel. Operated by 1 or 2 horses. Bales 10 to 15 tons a day. Sold on 3 days' trial. Catalogue free. Address **GEO. ERTEL CO., Quincy, Ill.**

Well Machinery.

For drilling and boring either deep or shallow wells, in any kind of soil or rock; with engines or horse power. Easily operated; built strong and durable. Used for over 20 years and they are no experiment. Before buying send for our free illustrated catalogue. **THE W. M. THOMPSON CO., Sioux City, Iowa.**

Go Below

for pure water. Use the National Well Drilling Machine, equipped with automatic well pumping device. For drilling for water, oil, gas or mineral. All sizes for all depths. Address **National Drill & Mfg. Co. DEPT. 16 Pullman Bldg. Chicago Illinois**

TO WOMEN WHO DREAD MOTHERHOOD!

Information How They May Give Birth to Happy, Healthy Children Absolutely Without Pain—Sent Free.

No woman need any longer dread the pains of child-birth; or remain childless. Dr. J. H. Dye has devoted his life to relieving the sorrows of women. He has proved that all pain at child-birth may be entirely banished, and he will gladly tell you how it may be done absolutely free of charge. Send your name and address to Dr. J. H. Dye, 125 Lewis Block, Buffalo, N. Y., and he will send you, postpaid, his wonderful book which tells how to give birth to happy, healthy children, absolutely without pain; also how to cure sterility. Do not delay but write to-day.

DR. SQUIRE'S CELEBRATED FEMALE PILLS.

A Positive and Safe Cure for Irregularities. Endorsed and prescribed by many of the leading physicians. \$2.00 Per Box. Address **SQUIRE CHEMICAL CO., Washington, D. C.**

EYE BOOK FREE!

Tells how all Eye and Ear Diseases may be cured at home at small cost by mild medicines. It is handsomely illustrated, full of valuable information, and should be read by every sufferer from any eye or ear trouble. This book is written by Dr. Curtis, originator of the world-famed Mild Medicine Method, which without knife or pain speedily cures most hopeless cases. Dr. Curtis offers to send this book absolutely FREE to all who write for it. Address, **Dr. F. Geo. Curtis, 350 Shukert Bldg., Kansas City, Mo.**

RUPTURE Cured in 10 days

by the world renowned Rupture Specialist, Dr. O. H. Riggs. No knife, no ligature, no danger. The patient is required to come to the doctor's office, and by a novel process the rupture is closed and in 10 days he can return home sound and well. Call or write and enclose 2c stamp for booklet. Address, **DR. O. H. RIGGS, 205 Altman Bldg., Cor. 11th and Walnut Sts., Kansas City, Mo.**

VARICOCELE

A Safe, Painless, Permanent Cure GUARANTEED. 30 years' experience. No money accepted until patient is well. CONSULTATION and valuable BOOK FREE, by mail or at office. **DR. C. M. COE, 915 Walnut St., Kansas City, Mo.**

HAY FEVER and ASTHMA

cured to stay cured. Symptoms never return. Cause driven out. Health restored. Over 52,000 patients. Write for BOOK L FREE, containing many interesting cases. Address, **DR. HAYES, Buffalo, N. Y.**

LADIES My Regulator never fails. Box FREE.

DR. F. M. MAY, Box 31, Bloomington, Ill.

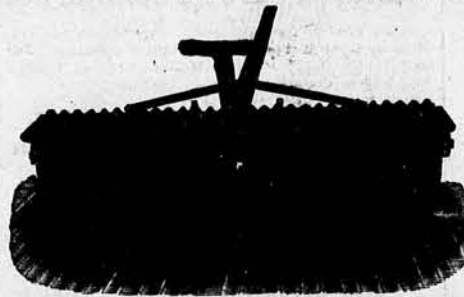
BED-WETTING CURED. Sample FREE.

DR. F. M. MAY, Bloomington, Ill.

SOROSIS FARM and STOCK SCALES Write for prices and catalogue. **RELIABLE** Scales of Every Description STANDARD SCALE AND FOUNDRY CO., MANUFACTURERS, Kansas City, Mo.

NEWTON PULVERIZER & ROLLER

Made of Separate Disks, 20 Inches Diameter and 3-Inch Face. HUNDREDS OF THEM IN USE AND EVERY ONE SATISFACTORY.

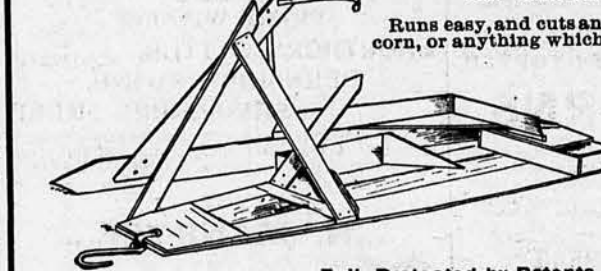


The most perfect Implement for preparing a Seed Bed for Fall Grain. Used before and after seeding will INSURE an INCREASED YIELD.

Write for Particulars. **MCCOWAN & FINNICAN FOUNDRY & MACHINE CO., ST. LOUIS, MO.**

WHY BUY A CORN-BINDER

When You Can Purchase a Sled-Cutter for One-tenth the Price.



Runs easy, and cuts and gathers corn, cane, kafir-corn, or anything which is planted in rows.

Ask your implement dealer for it, or send **\$12.00**

to **Green Corn Cutter Company, Topeka, Kansas.**

THE BIG FAIR OF KANSAS

Forest Park, Ottawa, Kansas, September 15-19.

A new \$2,500 sale pavilion now being built to stall and show 150 head of cattle. Bring your cattle to Ottawa, the big live stock center of Kansas. Park and Fair Grounds one block from depot with extra facilities for handling stock. The finest park and the finest live stock in the west. **CAREY M. PORTER, Secretary, OTTAWA, KANS.**

The Southern Kansas Fair

WICHITA, KANSAS

SEPTEMBER 28 TO OCTOBER 3, 1903

\$5,000 IN LIVE STOCK PREMIUMS. Bigger Than Ever. Better Than Before.

We use classification adopted by Kansas Improved Stock Breeders' Association. Race meeting will be the largest ever held in this city. \$5,000 in purses and special races will be provided for horses in attendance that are not eligible in classes published.

For Entry Blanks, Catalogues, or Other Information, address **H. L. Resing, Secretary WICHITA, KANSAS.**