VOL. XXXX NO. 24

### TOPEKA, KANSAS, THURSDAY, JUNE 12, 1902.

ESTABLISHED IN 1863 \$1.00 A YEAR

### KANSAS FARMER.

Established in 1863.

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

E. B. COWGILL.......President
J. B. MOAFEE......Vice President
D. C. NELLIS.....Secretary and Treasures

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 mail matter.



#### ADVERTISING RATES.

Display advertising, 15 cents per line, agate (fourteen

pisplay advertising, 15 cents per line, agate (fourteen lines to the inch).

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.

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 leach this office not later than Monday.

Every advertiser will receive a copy of the paper free, during the publication of the advertisement.

Address all orders:

KANSAS FARMER CO.

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

One of the most important decisions ever rendered by the Kansas Supreme Court is that handed down last Saturday sustaining the Kansas anti-trust law. Its far-reaching consequences will be the better realized as the wide scope of the decision becomes understood The case which brought out the decision is from kush County and is known as the Grain Trust case. It was championed by the Farmers' Cooperative Grain and Live Stock Association. There is some talk that the case will be taken to the United States Supreme Count

We present this week an interesting pioneer sketch by Mr. A. C. Trehfer, one of the pioneers of eastern Kansas. It is not here suggested Kansas. It is not here suggested that the Kansas Farmer can or desires to print such sketches of the experiis given as an example of what those now living may do for those that fol-low them. The paper presented covers low them. a period of ten years and is the most of Vol. I of a series of autograph books which Mr. Trehfer is preparing.
The original is in a neat blank
book suitable for preservation. The
editor suggests that doubtless the State Historical Society will find a safe place to keep all such records if offered, where they can be seen on call by persons of this and succeeding generations.

### 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.

#### THE TIMES.

The time was when the most profitable use to make of surplus money was to lay it away in a safe place—where it would draw interest if possible, but in any case to lay it away—for prices were falling and the money would each year buy an increased amount of property. The time is now when the purchasing power of money is falling and the most profitable use to make and the most profitable use to make of a surplus is to buy something with it, for if properly selected, the prop-erty will in future sell for more than its present valuation. The former condition was one of depression, inactivity, stagnation; the present condition is one of activity, one which brings into use money that formerly hid away. This very activity feeds and grows on the conditions it produces, just as the former depression and leaves. mer depression sunk lower on account of the stagnation it produced.

The close of the war in Africa, and the consequent reopening of the gold mines, ad-ded to the enormously in-creased productiveness of the gold fields of other parts of

### **Table of Contents**

	******
	Agricultural college, rape at the624
	Agricultural education, American insti-
	tutions for 624 Alcohol for fuel, potato 626
	Alcohol for traction engines636
	Alfalfa questions625
	Arid soil, treatment of
	Breeds in poultry, new
	Business outlook, the
ı	Castle and the king, the (poem)633
	Chicken slaughtering, wholesale638
	Chitty, J. C
	Cream, action of starter on the ripening
	of
	Dairy cow, sorghum for the 620
	Dairy interests of Nebraska, the634
	First ten years in Kansas, the629
	Gallagher, M. M
	Hereford office moved, the63
	Herefordshire of Kansas, the
	Hogs, pasture for
	Horticulture, experiments in
	It is good to be out of doors63
	Kansas loses another competent man632

	Tiguid als slaut
Ŋ	Liquid air plant632
	Make a start638
Ų.	Milk, clean, cold
П	
И	Omaha Hereford sale
S	Opportunity (poem)629
0	Pasture for hogs 627
	Pigeon ranch, a big
20	Pigs, for sick
	Plant-breeding conference, Sept. 30 and
•	Oct : 1 and 2 1902
1	Potato alcohol for fuel626
ï	Potato prospects, our
•	Poultry, new breeds in 638
3	Poultry-raising is profitable on the farm,
3	why
3	Question box
i	Rane at the agricultural college con
	Pacords value of keeping
í	Rape at the agricultural college
í	Pue (neer)
1	Rue (peem)633
`	Run-away swarms, hives, etc637 Securing a stand of Bermuda-grass from
,	securing a stand of Bermuda-grass from
3	seed
'	Seeing the sights in Indiana
	Selection, a good636
,	Soil, treatment of arid628
9	Sorghum for the dairy cow
	Sorrel
ı	South Africa, our interest in642
1	Swarms, hives, etc., run-away63
7	Times, the
3	Traction engines, alcohol for636
3	Trehfer, A. C529
3	Uncle Sam's mistake
2	Wheat, macaroni
-//	
_	

the world, will have no inconsiderable influence in cheapening the dollar, the pound, the mark.

The danger of the present situation is in the disposition to incur debt, expecting that it will be easier to pay to-

morrow than to-day. Investment of surplus is business. Going into debt expecting that money will be cheaper is gambling. Like speculation on a real estate

boom, it is both risky and moralizing. There is now no sign of reaction, but when reaction shall come fate will not listen to the excuse that no warning was given.

Out of debt, out of danger!

### CROP AND STATISTICAL REPORTS.

A proposition is under consideration to transfer the work of collecting and compiling crop statistics to the Crop and Weather Bureau of the Department of Agriculture. Those who are interested in the trade in farm products are, generally, opposed to the trans-

Following are the resolutions recent-



VIEWS AT THE HOME OF HON. GEO. W. TINCHER, TOPEKA.

No. 1.—Hardy Catalpa, C. Speciosa, in full bloom, not yet in full leaf, photographed May 26, 1902, on the grounds of Geo. W. Tincher, Topeka, Kans.; age, 18 years from seed; allowed to form a low system of branches, for ornamental purposes. Careful pruning would have made a straight bole. Height 28 feet. Diameter, two feet from the ground, 10 inches. This tree shows a characteristic of C. Speciosa when grown in good soil. The hedge shown in the background is common privet. This stood the terrible drouth of 1901 with very little injury. The little girl shown in the picture is the youngest of Mr. Tincher's four daughters.

terrible drouth of 1901 with very little injury. The litle girl shown in the picture is the youngest of Mr. Tincher's four daughters.

No. 2.—Red Oak. Photographed May 26,1902, not yet in full leaf. Age 14 years from the acorn. Transplanted twice. Has grown for ten years in present location. Height twenty-four feet; diameter six and one-half inches. No pruning, except the removal of the lower branches. One of the best trees grown for lawn purposes. Leaves remain until late winter. The evergreen shown between the oak and house is red cedar; age 17 years; transplanted three times. Sheared annually, in May.

No. 3.—Austrian pine, grown as a compact and beautiful lawn tree. Age 20 years; height fourteen feet; spread of lower branches twelve feet. Photographed May 26, 1902. Sheared lightly in August. That allows new buds to form before frost, thereby causing an even and regular growth the following season. Transplanted three times. Received no special attention, except the annual pruning during the last six years. This tree shows what judicious pruning and reasonable care will do for an evergreen. A wind-break of such trees would be invaluable to the stock-grower. By removing the lower branches the tree would have been twenty feet high and much more slender.

No. 4.—Dwarf mountain pine. Shown as an ornamental hedge; age 20 years; height thirty inches, width thirty-six inches. Pruned very slightly in order to give form. Photographed May 26, 1902, looking east. This picture shows a good selection of trees and shrubs for general effect. The larger evergreen in the center is a companion tree to the one shown in No. 3. The little girl is the same as in No. 1.

### Agricultural Matters.

Rape at the Agricultural College. H. M. COTTRELL.

Rape is a plant that has been grown only in recent years in Kansas and should be grown on every farm in the State. It has been described as a cross between a cabbage and a turnip. It resembles in appearance a cabbage that does not head and the part above ground is all that is eaten by stock. It has a flavor considerably like that of cabbage, grows much more rank, and after being eaten off nearly to the ground will quickly grow up again. In a favorable season several crops may be secured from one planting. The richer the soil the heavier the growth, but at the Kansas Experiment Station we have secured a heavy growth on high upland with a stiff clay subsoil on land that had been cropped without manure for several years. We have grown it three seasons.

Rape stands both cold and heat, and

wet weather and drouth. At the Kansas Experiment Station it furnished good hog pasture through the unusual heat and drouth of the summer of 1901, and was not killed by freezing until December 20. The writer found it thriv-December 20. The writer found it thriving through the summer of 1901 in Decatur County, 300 miles west of Kansas City. We know of no tests that have been made with it on sandy soil. In ordinary weather it makes a rapid growth. Rape sowed on the college farm March 31, 1902, showed an average height of twenty-nine inches May 26, fifty-six days from seed.

26, fifty-six days from seed.

It is a cheap feed. With the soil in fair condition five to six pounds of seed will plant an acre and the seed sells at from 8 to 10 cents per pound. The seed can be purchased of all seeds. men and at most hardware stores in

BAISING.

We disk or plow the ground and har row until a good seed-bed is secured. If the soil is free from weeds the seed may be sown broadcast, using five to may be sown broadcast, using nye to six pounds of seed per acre and covering lightly with a harrow. We usually seed with a grain drill, stopping up holes so that the seed will be put in rows thirty to thirty-two inches apart. The seed must be drilled shallow. If the soil is dry we use from eight to ten pounds of seed to the acre.

the sold is dry we use from eight to ten pounds of seed to the acre.

The Dwarf Essex is the only variety that has proved satisfactory and the name should always be specified when buying seed, as there are other varieties and bird rape on the market. The seed does not mature in one season in Kansas, and it will not pay farmers to try to carry the plants over to mature seed the second season.

Rape may be put in at any time when the ground is sufficiently moist to bring up the plants from the time oat-sowing begins until September. We have seeded as early as March, and as late as August. It will be ready to be pastured in about six weeks after the plants appear above ground. It should not be pastured or mowed until ten to twelve inches high.

We have drilled oats at the rate of three bushels per acre, then sowed rape broadcast on the same land at the rate of five pounds of seed to the acre, covering lightly with a harrow. The oats and rape grew at about the same rate and the ground was covered with a dense growth of choice forage. In a favorable season with good soil this amount of seed is too great. With poor land and unfavorable season we would use more. Rape can be put on stubble land after harvest and will furnish a large quantity of feed. The land should be disked or plowed, and if loose packed as well as harrowed. Rape grows well on sod if there is sufficient

moisture to give it a good start.

Barn-yards, feed-lots, hog-lots, stack-yards, and the bare spots at the ends of the rows in corn-fields make excel-lent places for the growth of rape. With feed-lots and yards, if the rape is drilled in rows and cultivated, the crop will be heavy and the sanitary condition of the land is greatly improved. Any bare spot on the farm can be planted to rape, generally with profit.

Cultivate shallow the same as for corn. As soon as the plants shade the ground cultivation should cease. After the rape has been eaten down, if the stock are taken off and the rape is culstock is taken o ffand the rape is cultivating over the yield from broadcast sowing will much more than pay for the additional cost.

FEEDING.

April 22, 1901, rape was planted on the college farm and furnished good hog pasture through the summer and The weather in July was very from early spring until fall he carried

dry and intensely hot. The thermometer sometimes registering 107° in the shade. Sorghum and Kafir-corn stopped growing and withered, but did not die. The rape in the hog-lots was about thirty inches high when the hot weather came. The tops down for about a third of the height of the plants withered, the rest remained vigorous withered, the rest remained vigorous and furnished good pasture. When fall rains came the plants made a vigorous second growth and furnished good pasture until heavy frosts.

The Wisconsin Experiment Station found that an acre of rape pastured by pigs four to ten months old produced as much gain as 2,436 pounds of a mixas much gain as 2,750 pounds of a lint ture of two-thirds corn and one-third shorts. This is equal to the gain from more than forty-three bushels of corn. The pigs were fed grain in addition to the rape and the gain is the amount after the gain from the grain is de-ducted. Pigs pastured on rape made a better gain than those pastured on clover, both lots having the same amount of grain and they consider rape the most satisfactory and cheapest green feed for swine that they have ever fed. Hogs pastured on rape alone without grain made no gain.

At this station rape was seeded July 31, 1901, on high upland, the ground being disked and the seed drilled in at the rate of nine pounds per acre. October 7 the college dairy herd began pasturing the rape and continued to

with him a pocketful of rape-seed and whenever he came to a bare spot in fields or yards would scatter the seed and cover it lightly. In this way he secured a large amount of valuable feed at little expense on land that would otherwise produce nothing.

Rape may be pastured or cut and fed green. It is so succulent that with ordinary conditions of moisture it can not be cured for hay nor be preserved in a silo. Animals fed rape should have all the salt they will eat. We prefer to have salt always before them.

The first time a beginner sows rape he will be disappointed to find that after he has secured a good growth nothing will eat it. We have had sows and their pigs stay for several weeks in a field of rape without ever being found to take a mouthful. Finally all other feed was withdrawn and they were given water only. In a day or two hunger compelled them to eat the rape. A few days later the grain ration was restored and the hogs continued to eat the rape greedily though supplied with all the grain they would eat. Usually cattle have to be compelled in the same way to eat rape. With both cattle and way to eat rape. With both cattle and swine after a taste for rape has been acquired they have a great liking for it. The impression is quite general that rape enriches the soil in which it grows

the same as alfalfa or clover. It does not. It is an exhaustive crop if removed

Rape plant twenty-nine inches in height grown at Kansas Experiment Station, photographed May 26, 1902, flity-six days after seed was sowed.

taint was entirely removed. The cows were well fed and then were put on rape twenty minutes the first day. This was increased to forty minutes the second day and each succeeding day the ond day and each succeeding day the time was increased twenty minutes until the cows got on full feed, when they were allowed to remain on the rape all day. Rape contains about 85 per cent water and while on it cattle should be given some dry feed daily, such as hay, straw, or fodder. After freezing weather comes cattle should not be turned on to rape in the morning until the plants have thawed out. Rape is not a very have thawed out. Rape is not a very satisfactory cattle pasture and we recommend it only in an emergency. Then a large quantity of feed can be secured quickly. We have never been able to feed rape to calves, no matter how small the quantity, without making the calves scour.

We have no sheep at the Kansas Experiment Station and have therefore not been able to test the value of rape for sheep. Prof. Thos. Shaw reports that an average acre of rape will pasture ten to fifteen sheep for sixty days, and at the end of the time the sheep should be well fattened. Every report of pasturing sheep on rape indicates that rape has as great or even greater value for sheep than for swine. One of the most successful sheep-growers in the West recently told the writer that

feed on it until December 7. The rape was killed by freezing December 20. The rape gave both the milk and butter an unpleasant odor and flavor, but by forcing air through the milk while warm with a Hill milk aerator this taint was entirely removed. The cows

Sorrel.

Sorrel is among the most troublesome of weeds, when once it has gained a foothold. It appears to be attract-ing more attention in Indiana than formerly, and the following statement has been prepared to answer the enquiries that are now frequently received at the experiment station.

Sorrel flourishes most on sandy soil, here the usual farm crops give only a poor stand. Its presence in a field is generally an indication of limited fertility, and it may become a pest on any thin soil, and especially sour soils. The farmer with rich fields and clean culture, is not likely to notice it.

Sorrel grows about a foot high, with leaves an inch long having a pair of projections at the base of the blade. The leaves are pleasantly sour to the taste. It sends out runners just beneath



the surface of the ground, which start new plants and bind the whole together in mats. Patches of it are usually conspicuous from the red color of the stems, especially during the flowering time, and give fields a red appearance even at considerable distances. It is sometimes called red sorrel, and occasionally horse sorrel.

There is no direct method of exterminating sorrel; it is too tenacious of life to be easily vanquished. First efforts must be given to cultural methods. A succession of hoed crops, if extra care is taken to let no plants escape destruction, will greatly reduce cape destruction, will greatly reduce the numbers; but plants at the edges of the field and seeds in the soil will be likely to restock the ground. It is generally in pastures and clover lands that the weed is the greatest pest, where it is not always expedient to use the plow.

But whether the ground is under the cultivator or in sod chief reliance must be had upon means for increasing the fertility. The land must be made to grow good crops by using manure or chemical fertilizers. In this way the weed is choked by the other plants, and although it will not be exterminated, yet it is so much reduced as no longer to give trouble.

In this connection, the use of air-In this connection, the use of airslaked lime is especially to be recommended in addition to the fertilizers.
Lime has had a reputation in this connection for a long time, and recent experiments confirm the opinion. Its application will do no harm to other crops
and is usually decidedly benefical to
them. It is a corrective for acid soil,
improves the mechanical condition of improves the mechanical condition of improves the mechanical condition of stiff soils, and makes the natural fertility of the ground more quickly available. It should be applied on sorrel infested fields at the rate of one to five tons per acre.

J. C. Arthur,

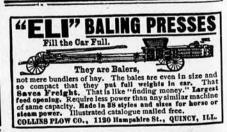
Botanist Botanist.

Purdue (Ind.) Experiment Station.

American Institutions for Agricultural Education.

FROM SECRETARY WILSON'S ANNUAL REPORT.

Considerable progress has been made during the past year in broadening and strengthening the agricultural courses in our agricultural colleges. The movein our agricultural colleges. The movement for the division of the general subject of agriculture into specialties to be taught by different instructors still continues. The committee on methods of teaching agriculture of the Association of American Agricultural Colleges and Experiment Stations, of which the Director of the Office of Everyment Stations. rector of the Office of Experiment Stations is a member, has completed its syllabus for a college course in agriculture by presenting courses in agro-techny (especially dairying), agricul-



IT IS SOLVED The question that has most agitated the ginners and compressors for years is that of a proper tie for cotton baling.

### =THE WIRE COTTON TIE=

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

WILLIAM CHRISTIAN, Agent, 2031/2 Main Street, Houston, Texas.

DOUBLE PRO

TIN KIKENDAN (IKNOWIT)

IT IS THE CORN GROWER USING MICORMICK OK

CORN MACHINES WHO HAS THE CERTAINTY

OF DOUBLE PROFIT IN HIS CORN CROP



tural engineering, rural economics, animal husbandry, soil physics, plant pa-thology, and agricultural chemistry. Thus far, comparatively little attention has been given to several of those branches of agricultural instruction in our colleges. There are, however, beginnings of a movement for the regular establishment of such courses which there is good reason to believe will grow with the increase of the resources of these institutions and the demands of the people. There has been a considerable increase in the total number of stu-dents attending agricultural courses in the colleges, but college faculties have in many cases failed to offer sufficiently attractive four-year courses to induce students to attend, or the trustees have failed to equip faculties with teachers who have mastered their specialties. There is a growing demand for this education, and where it does not exist the college should create it as in duty bound. There is an increasing demand for short and special courses, and the colleges are meeting this to a greater extent than ever before. A much larger amount of college exten-sion work in agriculture is now being done. In the States in which this work has been in progress for a number of years it is being successfully continued, and institutions in other States are following the example of the pioneers in this line of education. In providing for maintenance and new buildings at the agricultural colleges, the various State legislatures meeting during the past year have been more than usually liberal, so that in the aggregate there is a large increase in the resources of these institutions.

One of the most hopeful signs of progress in agricultural education is the movement for the establishment of secondary schools of agriculture and the introduction of nature studies and the elements of agriculture into the rural schools.

This department is already giving aid to the rural schools in various ways, but I believe that the time has come for the department to take a more active part in encouraging the introduction of nature study and elementary agricul-ture into the curricula of rural schools for the purpose of developing the nat-ural tendencies of the pupils to observe and take an interest in the natural phenomena surrounding them and of fostering in them a love for the country and its pursuits.

encouragement may be given by distributing seeds and plants for use in establishing school gardens; by furnishing schools with collections of specimens of beneficial and injurious insects, plant diseases, and other illustrative material; by supplying teachers with the publications of this department which will be useful to them, and by such other means as would suggest themselves as the work progressed. Without doubt, the improvement of our rural schools, so that every child throughout the length and breadth of our land may have an opportunity for education which will prepare him for good citizenship and most efficient industrial service, is one of the greatest which should engage the attention of our people. With the increased interest in country life which is beginning to be manifested in different parts of the country, there is good reason to hope that our rural schools will be much improved in the near future; and espec ially that they will be so organized and maintained that in them the children will be shown the attractive side of country life and will be taught the dignity and worth of rural occupations, so as to incline them toward the study of the sciences that relate to agriculture.

### Macaroni Wheats.

FROM SECRETARY WILSON'S ANNUAL RE-PORT.

During the last two years they yielded one-third to one-half more per acre than any other wheats grown side by side any other wheats grown side by side with them, and in 1900, when other wheats were almost a complete failure in the Dakotas, the macaroni varieties produced a very good yield, and the grain was of excellent quality. They have also been very successfully grown in Kansas and Nebraska. The results of last season's work show also that a high quality of grain of this class can be produced.

The department has made every effort to bring the producers and buyers of this class of wheat together, with the result that the demand for it now more than equals the supply. Moreover, certain companies are now for the first time offering macaroni wheats which include the well-known Wild Goose that was heretofore invariably rejected in the markets, about the same price as is paid for No. 2 Northern. There is a demand for car-load lots of macaroni wheat for seed as well as for milling. Our own factories for making macaroni are awakening to the importance of using these special wheats instead of the ordinary bread wheats, and the demand for macaroni flour for this purpose is already greatly in excess of the supply. Besides the home demand for these wheats there is a good market

The building up of the macaroni in-The building up of the macaroni industry, which has been carried on as a part of the pathological and physiological investigations, shows the importance of concentration of effort on a single crop. With the factories ready to take the wheat and to make from it macaroni equal to the foreign article, it will not be long before the \$800,000 sent abroad can be kept at home.

#### Treatment of Arid Soil.

EDITOR KANSAS FARMER:-The study and practice of agriculturists in the semi-arid regions should be along the line of putting the soil and subsoil in such condition as will enable them to receive and retain the moisture coming to them in all forms and during all seasons until such time as it is needed by

the growing crops.

The plowing and stirring of soil should be by such means and in such manner as will not convey the water from the field or portion of field on which it falls. The troughing of the surface may be resorted to as one means of accomplishing the aforesaid object. The lay of the land in each particular field will need to be considered separately in order to adapt a remedy.

The deeper planting of corn, potatoes, and other crops (not deeper covering) practiced in connection with the fore going treatment of the soil and subsoil

will be found profitable.

The above subject is worthy the consideration of all citizens. M. Jenness. Topeka, Shawnee County.

#### Securing a Stand of Bermuda-grass from Seed.

FROM SECRETARY WILSON'S ANNUAL REPORT.

One of the most valuable pasture grasses for use in the Southern States is Bermuda-grass, a species of tropical origin. In our latitude this grass seeds very sparingly, and the method of se-curing a field of it has been to trans-plant roots. This method, however, is so expensive as to be almost prohibi-tory. Experiments have been made with good imported seed by the department during the past two years on the trial grounds at Washington, and it has been found that when sown at the rate of three pounds per acre during a por-tion of the year in which the ground continued moist, a good stand from three to six inches high was secured in forty-five days. The procuring of good germinable seed and the adaptation of the above facts to conditions in the South should make it possible to secure a moderate price an exce of this valuable grass.

### Alfalfa Questions.

EDITOR KANSAS FARMER: -I have been reading the articles on alfalfa in your paper with interest, but would like to know if the second crop from last fall's seeding will produce seed this year. And if so, will it injure the plants already established? I would like to have this discussed in your paper by men of experience. Also methods of seed harvesting of alfalfa in general.

MCCORMICK HARVESTING MACHINE CO. Chicago, U.S.A. MAIL" KING CORN" TO THE FOLLOWING ADDRESS .infested it will be well to sow a narrow strip of millet between them and other crops. A strip of millet two or three yards wide may be sown by the side of the corn-field next to infested wheat or oats, and when the bugs have taken possession of it the millet may be plowed under with a jointer plow and me ground harrowed and rolled, thus burying the bugs. Another method is to plow a deep furrow across their tracks, as they travel from field to field; the bugs in this furrow will have difficulty in getting out, and may then be killed by sprinkling them with kero-sene emulsion. This may also be used where the bugs have attacked the outer rows of corn, using a spray pump and throwing it with sufficient force to wash them off the corn.

Among the recent atlas sheets reissued by the United States Geological Survey is the Ellis, Kans., sheet. The map represents a rectangular section about 271/2 by 35 miles, just west of the center of the State, showing parts of Trego, Ellis, Rush, and Ness counties. of Ellia from which the sheet takes its name, Ogallah, McCracken, Brownell, and Ransom appear, as does also a portion of the Smoky Hill River and valley. All the highways of the region are shown, and its relief or topography is expressed by the use of contour lines. The map is available for distribution at 5 cents, the nominal Government rate, on application to the director of the United States Geological Survey.

### A Blessing to Dairymen.

FORT.

The United States imports over 16. Ount of the heavy rains. Between six and eight inches of rain have fallen within the last week.

Alfalfa cutting is being delayed on account of the heavy rains. Between six and placed upon the market which may have the elements of novelty and possibly within the last week.

Barclay, Osage County.

The department secured a quantity of the wheats, and it has been found that they are well adapted to a wide extent of territory in the West and Northwest.

Alfalfa cutting is being delayed on account of the heavy rains. Between six and placed upon the market which may have the elements of novelty and possibly prove of some value along certain lines, which, until recently, had never been given a thorough trial in this county.

The following is suggested by the Ohio Experiment Station: The chinching is suggested by the Oh

nign influence cows protected from the annoyance of flies by its use have actually given about 20 per cent more milk than before. Nor is this all. The comfort and safety of those employed in milking and the saving of time thus effected are prominent among the virtues of So-bos-so. Its perfect antiseptic qualities and absolute harmlessness have commended it for general use in stables, chicken-houses, and pig-pens, while for scours in calves, hog-cholera, or foul in calves' feet it has been found to be an unequaled preventive. The ease and rapidity with which it may be applied and the generous terms under which it is sold have also proved important factors in establishing its popularity. Many and hearty have been the endorsements given So-bos-so by leading dairymen all over the country, and Messrs. Chas. H. Childs & Co., of Utica, N. Y., who are the sole manufacturers are to be congratulated upon having given the dairy industry such a valuable product. They gladly mail full particulars upon request.

WRITE FOR

"KING CORN"

AN INTERESTING BOOK

TELLS HOW TO DOUBLE THE

VALUE OF YOUR CORN CROP

MSGRMICK HARVESTING MACHINE 6

CHICAGO U.SA.

OCUT OUT THIS COUPON

### "Uder the Turquoise Sky."

"Uder the Turquoise Sky."

This most fascinating, clear and interesting description of Colorado will be sent free by E. W. Thompson, A. G. P. A. Great Rock Island Route, Topeka, Kans. Also "Camping in Colorado" free, if you want it. Gives full details for the inexperienced. Information about Colorado hotels and boarding houses gladly furnished. It will be worth your while to learn the details of the cheap rates to Colorado effective this summer by the Rock Island. A postal to the above address will secure this information and literature.



### The Air taken into the water by the descending buckets of the PERFECTION Water Elevator and **PURIFYING PUMP**

changes the foul water in well or cistern to sweet, clear, healthful water, purifies it as no other device or method can and keeps it pure. Is a simple, easy, economical pump, fitted to any well or cistern. Steel chain and buckets galvanized after making. Has every desirable feature. Lasts a lifetime. Thousands in use. Price complete, freight prepaid, only where we have no agts \$6.00 for 10 ft. well or cisted and the complete of the complete

ST. JOSEPH PUMP & MFG. CO., 5 GRAND AVE., ST. JOSEPH, MO., U. S. A

### Borticulture.

Experiments in Horticulture. A. H. GRIESA, BEFORE THE KANSAS STATE HORTICULTURAL SOCIETY.

Experiments in any line should lead to progress in that direction. We begin at the low tide of life in thought and in most any undertaking. We can never feel that we have attained the highest in our nature until we end our life. We advance as life's thread is spun and join the throng above. The heights we attain and the progress we make in our journey depend wholly on the efforts we make. These general ideas apply to horticulture with especial emphasis. this high art in nature, this fascinating calling, this labor that demands our best thought, we find more confused ideas than in other other labor or profession. This may indicate that we are at the bottom of the ladder that may lift us up out of the mist. In most of our discussions more than one idea is expressed; the first a good thought, the next may be a better one; yet neither may be right or both may be wrong or fail to solve the right point. When one advises improving a variety by grafting from a specially good tree, valued for its large fruit and especial productive-ness, or to gain anything by cutting scions from particular parts of a tree, and expects to impart its quality to the trees he grows, he works in error; he considers only one element of tree life and fails to see the real cause that makes the favored tree so much better than others of the same kind. He is on a par with the man who feeds with care a razorback hog and expects a Berkshire at fattening time. Both will be equally successful or disappointed.

Tree, or plant-breeding, by selection or high culture, never changes the kind, only so far and for the time being. With rare exceptions, varieties come through seeds only. In nature, where trees have grown since their creation under the same influences, the type is not prone to vary; it is fixed; it is apt to reproduce true to its type; but when grown under other conditions, as by the cultivation of man, then the seed may change its type, at first only slightly, but as the changes continue it may vary more; so much that the original type is lost or that variation has become a second nature. Hence, we have so many kinds of our domestic fruits, and so few of the nuts and fruit of the native wilds. The productions of some of our old apple-trees are the wonders of nature, when you think of the poor, worthless fruit from which they origi-nated, hardly fit for cider; and yet how fair and grand such apples as the Greening, Spy, Baldwin, Spitzenburg, Jonathan, and the hosts of good kinds that we love to grow and eat! They were produced at rare intervals. In the hand that saved the tree is forgotten but the deed lives after him, to bless thousands.

As I look back, it seems as if some magic hand must have been near; or as it, in some silent night, when the blossom first opened, a shooting star has left a trace of heavenly fitness on the pollen that made the seed for the future tree, and the same care grew the tree to perfection. Fancy a tree growing in some corner, a fine season of rain, and sunshine in its fulness; its wood and buds ripened perfectly, and all through the winter during each cold snap its buds blanketed by the white snow; then with the opening spring the buds swell and burst; its bright beauty of color and fragrance are exposed; then the bright sun, marking the spot of brilliant color, infuse elements in the pollen that only a higher power can; and in time it becomes the Elberta, Champion, Emma, Golden Rareripe, or any of the long list of such choice years ago. The same change and in fluence have made all other choice varieties that we now have in strawber-

ries, raspberries, and all other fruits.

The production of choice fruits from seed is more surely accomplished to-day than ever before, especially as the conditions are better understood. Well may the spot be marked by a monument where the original Baldwin stood; also as other good fruits that blazed the way for a higher civilization and a yet higher ideal for us. We need, more than the fruit-growers are aware, an apple of better quality than we now have. There are many new ones on trial, but their prevailing fault is in not being winter fruit; they are mostly early fall varieties here. I have several, claimed to be long-keepers with other rarely good qualities, but I have not yet proven them on my premises. If we had an apple with quality like the Northern Spy or several others, that would ripen and keep till in April and May and

prove productive, we would make the most wonderful advance in fruit-growing known, as it would increase the consumption of apples, increase the demand, the price, the profit, the health of the people, and also increase the tree trade and its many branches of indus-That seeds may be improved by the proper help of man is proven by the success of Mr. Rogers, of Massachusetts, with grapes, as his long list of hybrids of high class are in evidence; so of Mr. Munson, of Texas, who also has a long list of valuable grapes, but, unfortunately for us, neither is up to our need of hardiness. Now Mr. Pat-ten, of Iowa, is working to grow apples and other fruits hardy for the colder North, and he has been very successful, but has not fulfilled his desire in that direction.

I have made a small beginning in raspberry fertilization, in crossing the New Cardinal with the Loudon both ways, and the few plants so saved show in a wonderful and distinct way the parentage in every plant; what the fruit will be I may be able to know another year. I have also saved seed of apples the same way. In trees 2 years old they show their parentage very clearly, so much so that it encouraged me to save more seed this year produced in the same general way, by cross-fertilization. I have the seeds labeled as to the kinds, and will mark them as they are planted, so as to have correct data to work from.

At the Missouri State Horticultural Society I saw several seedling apples of fine appearance; three-fourths had a strong resemblance in some way or oth er to the Ben Davis or Gano; if that is the parentage, that would indicate where good fruit might come from. One apple in that list was evidently of dif-ferent parentage; it was of large size good shape, fair color, but of the best quality, and indicated good keeping quality. Should that all prove true and it be also productive, I would rather pin my faith to that apple than to any I have seen. I would think my farm none too good to plant entirely to that

One thing I wish to urge on all fruitgrowers is to cultivate the orchard late in the fall, after the leaves drop; or, when possible, during winter, to kill the chrysalids of the many insects that pupate there in safety during winter and are ready to destroy the fruit in summer. Summer cultivation will not avail for them; I have tried this enough to prove its value. The curculio is our most serious insect in the orchard. It stays in the ground during winter. To plow shallow, or in any way to cultivate the soil shallow, will bring them up where the birds will find some of them. Others will dry in the air, while others may be broken in disturbing them. Other insects may also get caught that are not helping us to raise the best of fruit. The disk harrow is one of the best implements for orchard culture. It will pay any man who has an orchard to own one. This late culture can be done with a common harrow, if the soil is not too compact. It should be used during mild days in winter to help the soil I think it will pay better than the same time put in during summer, and I would prefer to do less in summer and more in winter. If all would try this I feel sure they would not omit it in the future, and they would complain less about the second-grade apple crop. Looking for the best fruit to grow, as free from insects as may be, should be our ambition.

#### Plant-breeding Conference, September 30 and October 1 and 2, 1902.

The council of the horticultural society, of New York, announces that it has completed arrangements for the holding of an international conference on plant breeding and hybridization in

Acting under the instruction of the society at its annual meeting in May 1901, the chairman of the council addressed letters of inquiry to prominent scientific societies and individuals in terested in progressive horticulture both at home and abroad, to all the Agricultural Experiment Stations in America, the United States Department of Agriculture and the Minister of Agriculture for the Dominion of Canada in order to enlist a widespread support and to ascertain views as to the most convenient date for the attendance of the majority of those interested. The responses were unanimously in favor of holding such a conference and the dates announced were finally selected by the conference committee, consisting of Dr. N. L. Britton, chairman; Dr. F. M. Hexamer, J. de Wolf, H. A. Siebrecht, and Leonard Barron, secretary.

By the cooperation of the American Institute of the City of New York, it is arranged to hold the sessions of the

1101 to 1117 West 8th St. (Near Santa Fe St.) KANSAS CITY, MO.

MILLET **CLOVERS** TIMOTHY GRASS SEEDS.

SEEDS

conference in the lecture hall of the Berkely Lyceum Building, 19-21 West Forty-fourth Street, New York City. This conference will provide for the

reading and discussion of papers, and the discussion of special topics pertaining to the subject of plant breeding and hybridizing.

Arrangements are being made for the publication of a complete report of the papers and discussions in book

form under the auspices of the society.
In connection with the conference there will be an exhibition of hybrid plants and their products, and of the related literature, to which every one is invited to contribute.

Awards of the society in the form of medals, diplomas, and certificates may be made to exhibits of plants and plant products of hybrid origin illustrating some particular plant or plant industry

It is further proposed to add to the interest of the gathering by making arrangements to visit points of interest in the neighborhood; and for the convenience of visiting delegates suitable hotel headquarters will be arranged near the conference hall.

The active support of the following institutions has been promised and delegates appointed to attend the conference; Bureau of Plant Industry, United States Department of Agriculture; Department of Agriculture; riculture, Dominion of Canada; Roy-al Horticultural Society of Eng-land; American Pomological Society, Massachusetts Horticultural Society, Massachusetts Horticultural Society, Pennsylvania Horticultural Society, Society of American Florists, American Institute of the City of New York, New York Botanical Garden, School of Practical Agriculture and Horticulture, American Pharmacological Society, Torrey Botanical Club, New York Florists' Club, colleges and experiment stations of the United States.

For the conference committee, N. L. BRITTON, Chairman. LEONARD BARRON, Secretary. 136 Liberty Street, New York.

PRELIMINARY ANNOUNCEMENT OF PAPERS PROMISED.

1. "Results of Hybridization and Plant-breeding in Canada." (Illustrated by speci-mens.)—William Saunders, Director of the Central Experimental Farm, Ottawa, Can-ada.

2. "Notes on Plant-breeding in Cali-fornia"—E. J. Wickson, Horticulturist, Ag-ricultural Experiment Station, University of California.

of California.

3. "Plant-breeding in New Jersey." (Illustrated by specimens.)—B. D. Halsted, Professor of Botany in Rutgers College, New Brunswick, N. J.

4. "The Wild Hybrids of the North American Flora." (Illustrated by specimens of the parents and progeny.)—David George, Museum Aid, New York Botanical Garden.

5. An Address.—L. H. Bailey, Horticul-turist Cornell University, Ithaca, N. Y. 6. Plant-breeding Work in Germany."J. C. Whitten, Horticulturist, Columbia
University (now in Germany).

6. "Plant-breeding Work in Germany."—
J. C. Whitten, Horticulturist, Columbia University (now in Germany).
7. "Cereal-breeding in Kansas."—H. F. Roberts, Botanist, State Agricultural College, Manhattan, Kans.
8. "Recent Experiments in Hybridization."—By C. C. Hurst, England.
9. "Selection vs. Hybridism."—F. W. Burbridge, Dublin, Ireland.
10. "Individual Prepotency."—Will W. Tracy, Detroit, Mich.
11. "Cytological Aspects of Hybrids."—W. A. Cannon, Columbia University, New York City.
12. "Correlation Between Different Parts of the Plant in Form, Color, and Other Characteristics." (Illustrated by specimens.)—S. A. Beach, Horticulturist, New York State Experiment Station, Geneva, N. Y.
13. "Variations in Hybrids not Apppearing in the First Generation, but Later."—E. S. Goff, Horticulturist, Agricultural Excriment Station, University of Wisconsin.
14. "Some Possibilities."—C. L. Allen, New York.
15. "Crossing Species of Salix."—S. W. Fletcher, Washington.
16. "Hybridizing Gladiolus Species." (Illustrated.)—W. Van Fleet, Little Silver, N. J.
17. "Notes on Breeding Hardy Apples."—J. Craig, Ithaca, N. Y.
18. "The Everbearing Strawberry."—H. De Vilmorin, Paris.
19. "Breeding of Native Northwestern Fruits."—N. E. Hansen, Brookings, S. D.
20. "The Muskmelon."—F. W. Rane, Durham, N. H.
21. "Scedlings of the Native Plums."—E. S. Goff, Horticulturist, Madison, Wis.
22. "Results in the Breeding of Species of Ricinus."—E. Mead Milcox, Biologist, Alabama State College and Experiment Station.
23. "On Orchard Hybrids." (Illustrated by specimens of the parents and progeny.)

bama State College and Experiment Station.

23. "On Orchard Hybrids." (Illustrated by specimens of the parents and progeny.)

—Oakes Ames, Ames Botanical Laboratory, North Easton, Mass.

24. "Hybrid Beans."—R. A. Emerson, Horticulturist, Agricultural Experiment Station, University of Nebraska.

25. "Hybrid Plums."—F. A. Waugh, Horticulturist, Vermont Agricultural Experiment Station.

26. "Cross Breeding of Cinchonas."—H. H. Rusby, Botanist, College of Pharmacy, New York.

27. "Breeding Florists' Flowers."—(a) E. G. Hill, Richmond, Ind. (b) C. W. Ward.

TREES best by Test-77 YEARS
LARGEST Nursery.
FRUIT BOOK free. We PAY CASH
WANT MORE SALESMEN PAY Weekly
STARK BROS. Louisiana, Mo.; Dansville, N. Y.; Etc

AGENTS WANTED TO SELL NURSERY STOCK. 40 per cent commission paid to good, competent men. Hart Pioneer Nurserles, Fort Scott, Kausas.

Queens, L. I., N. Y. (c) A. Wintzer West Gueens, L. ... Grove, Pa. ... 28. "Study of the Variations in the Second Generation of Berbers Hybrids."—C. E. Saunders, Ottawa, Can.

The committee has the assurance of other papers, of which the exact titles have not yet been submitted, including contributions from Luther Burbank, Santa Rosa, Cal., and Herbert J. Web-ber, Plant Breeding Laboratory, Washington, D. C., and others.

Correspondence relating to the conference should be addressed to the secretary, as above.

### Potato Alcohol for Fuel.

It is reported from Berlin that Emperor William says the potato has a future such as the world has not dreamed of. He has undertaken to open up a new career for the potato, and to place it securely on a level with the beet root in commercial importance. He has been booming the cause of the potato throughout Germany and he lets no occasion pass to sound its praises—not as an edible root, but as a factor of importance in the progress

of the world.

He would have the potato supplant coal to large extent and take the place of smally gestion and take the place of smelly gasoline. Of late, he has shown extraordinary interest in motors in which potato alcohol is used as

While he was on an excursion lately on the North German Lloyd steamer Kronprinz Wilhelm in the North Sea, he got Herr Wiegand, the general director of the company, to promise to use potato alcohol for the motors of the harbor boats at Bremerhaven. Then he got the Hamburg-American Steam Packet Company to promise the same thing. Herr Krupp was the next man tackeled, and he immediately ordered potato alcohol motors used for shifting guns. Recently the Emperor com-manded Commercial Councilor Koerting to appear before him at Hanover and talked to him half an hour on the great future of potato alcohol as a fuel for motors. Again and again he repeated his intention to smooth the way for its use.

By the Emperor's orders the German navy is to experiment with potato alcohol motors, and the war department is advertising for a military automo-

bile using potato alcohol.

The Emperor's interest in potato alcohol is largely inspired by a desire to help German agriculture by opening a new career for the potato, and he certainly is doing some great work in the promoting line.-Cincinnati Price Cur-

Nothing equal to Prickly Ash Bit-ters for removing that sluggish bilious feeling, so common in hot weather. It creates strength, vigor, appetite, and cheerful spirits.



J. S. CRAWFORD, 214 W. Ninth St., Kansas City, Me.

### The Stock Interest.

### THOROUGHBRED STOCK SALES.

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

November 6, 1902—Thos. Andrews & Son, Cambridge, Neb., Shorthorns.

November 18-19, 1902—Marshall County Hereford Breeders' Association Sale, Blue Rapids, Kans.

December 16, 1902—Gifford Bros., Manhattan, Kans,

#### Pasture for Hogs.

CROPS RECOMMENDED BY THE OKLAHOMA EXPERIMENT STATION.

Pasture and range are necessary in order to keep breeding swine in a healthy condition and grow the stock at a profit. The man who tries to raise swine under other conditions is playing a losing game, and his balance will be on the debtor side of the ledger just as sure as we have day and night. Although these facts have been vouched for many times by experiment stations and successful swine-raisers and given wide publicity, thousands of farmers still continue in trying to raise hogs in a dry lot with nothing but corn as a feed, with the expectations of making it a profitable operation. A hog pasture does not mean a dust lot with possibly a few old weeds off in one corner, but a good and commodious range, and if planned to give the best results, it will contain a variety of crops, selected as to their food value.

as to their food value.

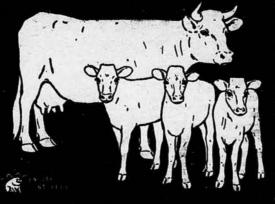
The pasture should not be so small that the hog is compelled to eat his own filth to get the feed. Every farm should have six or eight acres of hog pasture fenced purposely for this use. This is in addition to what range may be utilized outside at times. Better far be utilized outside at times. Better far to have a little too much than not enough. If the crop gets ahead of the hogs and becomes woody, cut it off with the mower and a new growth will start. This can be done with many plants and will pay even if the mowed portion is not gathered. The pasture may be greatly fertilized by this method in many cases. The inclosure should be divided into two or three parts, at least, so that while one part is being pastured, crops may be growing in the others. While succulent food is very essential the year round for growing and breeding stock, the exercise is just as neces-Pigs confined in pens will do sary. Pigs confined in pens will do much better if they have some green feed, but the results will be vastly better if the pigs are allowed a range and the chance to gather this feed for them-

Any green crop is much better than no pasture, but some crops for the purpose are very much superior to others, and a variety of crops, even though they may be much alike in composition, are superior to a single crop. Many swine-raisers that appreciate the value of a hog pasture do not realize the importance of giving attention to a variety and composition of the plants to be used. In selecting the crops for a hog pasture consider the composition of the plants as you would consider the composition of the grain in a ration. Bear in mind that certain crops are rich in food nutrient protein, that is so essential in the animal system to build up the frame and muscles, and is very necessary in the food of breeding stock. Crops of the opposite nature are rich in carbohydrates, the heat and fat forming compounds. Endeavor to have some of the former to pasture along with the latter, and the results will be better. Plants belonging to the former group, those that are especially rich in protein, are alfalfa, clover, field peas, cowpeas, soy-beans, vetches, and peanuts. Rape, sorghum, the cereals, sweet potatoes, and artichokes belong to the opposite group. Aside from being especially valuable for food, the cow-pea group adds greatly to the fertility of the soil while growing on it, and will give paying yields on soil too poor for other crops.

While a wheat pasture, or a sorghum pasture, perhaps, is of great value, the results will be much more satisfactory if cow-peas or some like crop can be pastured at the same time. In selecting the crops due attention should be paid to the point of having a succession of crops that will furnish green feed at all times. Drouth-resisting crops should be included for the drouthy time of year. Some crops with proper handling will furnish feed almost the year round while others are suitable for only one of the seasons, or a part of two. In this list of crops for hog pasture, alfalfa, wheat, rye, and oats will not be taken

wheat, rye, and dats will not be taken up in full.

Where alfalfa can be grown successfully it has no equal as a pasture crop for hogs, and it furnishes a large amount of feed almost the year round when headled managing. But about also when handled properly. But about nine seed per acre should be used. For drill-



### SPLENDID FOR COWS AND CALVES.

STANTON, DELAWARE.

International Stock Food Co., Minneapolis, Minn.

DEAR SIRS:-I have tested all your goods and find them as you represented and much better than I expected. I fed "International Stock Food" to my cows which had been losing their calves for two years. This spring they are calving all right and are having Fraternally yours, good strong calves.

STANTON STOCK FARM,

PER JAMES BROWN.

"International Stock Food" is prepared from Herbs, Seeds, Roots and Barks.

IT CONTAINS 49 183 LARGE FINE ENGRAVINGS OF HORSES, CATTLE, SHEEP, GOATS, HOGS, POULTRY, ETC.

WE WILL GIVE YOU \$14.00 WORTH OF "INTERNATIONAL STOCK FOOD" IF BOOK IS NOT AS REPRESENTED. This Book Mailed Free, Postage Prepaid, If You write Us (letter or postal) and LF Answer These 8 Questions:

Rame this Paper. Snd—How much stock have you? Srd—Did you ever use "HITERIATIONAL STOCK FOOD" for Horses, Cattle, Sheep, Hogs, Colts, Calves, Lambs er Pigst

Largest Stock Food Factory in the World. Capital Paid in, \$1,000,000.

DEALERS SELL THESE ON A "SPOT CASH" GUARANTEE

International Stock Food Co., MINN., U. S. A.

men in ten that use it for that purpose ruin it by too close pasturing and at improper times. Wheat, oats, and rye are standard crops for this purpose and may be so grown as to furnish green food for almost the whole year. many times they are overpastured and pastured too late when the crop is to be left for grain. In both of these cases other crops should be furnished to prevent the overpasturing and at improper times.

In addition to the above-named crops that may be utilized for this purpose should be mentioned field peas, rape and vetches. The field pea belongs to the cow-pea class and is suitable to a cool, moist climate and will withstand a hard frost, so should be seeded early in March. Broadcast a bushel and a half of peas, plow under four or five inches and harrow down, and then seed a bushel and a half of oats on top of this. The peas are ready to pasture when they start to bloom. The seed costs from \$1.50 to \$2 per bushel, which will keep many from growing them. It is well to see if a more suitable crop is not available, but field peas are worthy of a trial in this country. The yield of oats and peas the past season on the station farm was fifteen tons per acre. Fair results have been obtained from fall seeding on the station farm.

The rape plant makes the best of spring pasture. It is a plant that furnishes, under fairly favorable conditions, a large amount of green feed in a short time from planting. The color and texture of the leaves resemble cabbage, but it grows two or three feet tall and has no value only in the green state. It is grown over a wide terristate. It is grown over a wide territory and under varying conditions, but adapted to moist, cool weather and a good, rich soil. For a time it was thought suitable only to the Northern States and Canada, but gradually it is working south and has given very favorable results in Oklahoma and should be tried by all hos, and sheep-raisers be tried by all hog- and sheep-raisers. The following results were obtained on the station farm the past season:

Tons per acre 

 Rape, drilled, rows 30 inches
 23.

 Rape, drilled, rows 6 inches
 11.

 Rape, drilled with oats
 12.

The seeding was made the last week in March and the yield determined June 2. The plots were on well-manured land. For this country the seeding should be made early in March. The hot, dry weather of August has stopped the growth here, and the June seeding for fall pasture, as advised by some, will give years uncertain regults as will and moved, they will produce from one and one-half to two feet of growth by September 1. For earlier feed than this they should be seeded the last of April or the first of May. While broadcasting is a very successful method of seeding them, it is very desirable to drill and cultivate some, as this will aid them to The seeding was made the last week will give very uncertain results, as will the seeding in corn just before the last cultivation. Such methods may give fair results at times of much rainfall. It is a plant that stands a great deal of cold and frost. Seedings made on the station farm last fall have lived through the winter and the plants made an early spring start. The fall growth was rather small. Both broadcasting and drilling for cultivation are prac-ticed. For this country, if much dependence is put upon the crop, drilling in rows to admit of cultivation is recommended. Planted in this way it will stand the drouth much better and if pastured and cultivated properly, the period of growth may be greatly extended, and much more feed obtained.

A good rich soil is more essential where broadcasting is employed. For broadcasting, three to five pounds of

ing in rows thirty inches apart one or two pound should suffice. The poorer the soil and the more unfavorable the conditions, the more seed necessary. The plants reach their maximum growth in six to ten weeks from seeding, but pasturing may commence as soon as the plants are firmly rooted. Sheep or hogs do not like the plants at first, but by limiting their other feed, they will eat it, and when they have acquired a taste for it they eat it greedily. Care must be taken in turning sheep on it to avoid bloating. There will be several successive growths if the plants are not pastured or cut closer than four inches from the ground. The seed costs about 10 cents per pound in small quantities. The Dwarf Essex variety should

Rape and field peas, and rape and oats make fair mixtures for seeding. The following may be considered summer and fall pasture crops: Sorghum, cow-peas, peanuts, sweet potatoes, and artichokes. Sorghum is the most reliable and largest producer of pasture for summer. While it furnishes a large amount of green feed per acre, it is highly carbonaceous, and should be pastured along with cow-peas for best results. Its culture is well understood. Seedings may be made from spring to late summer. It will always be found a standby during drouths. While broad-casting is the common way of seeding for hog pasture, it is always advisable to drill and cultivate some as this will make better feed in a case of a severe drouth. And when grown this way the sugar content is much greater and any stalks left will make good winter feed for hogs. In selecting the seed, the su-gar-bearing varieties should be chosen and seeded thinner on the ground than

when the crop is grown for hay.
Sorghum may be seeded with oats
in the spring, with good results. The sorghum continues after the oats is gone. Cow-peas make a good twin brother to sorghum for hog pasture. The peas furnish the nitrogenous material that the sorghum lacks. Cow-peas are great drouth-resisters and admit of many ways of planting and over a large season. Seeded on ground from which a crop of oats or wheat have been re-moved, they will produce from one and withstand drouth, and more feed will be produced at a critical time. broadcasting about one and one-fourth bushels of seed is required per acre; for drilling in rows thirty inches apart, three pecks.

Peanuts are a crop that do well in Oklahoma, and many are raised for market, but they have greater value to the territory for hog pasture. For hog pasture they can be made to pay on any soil that is open enough to work easily. The hogs harvest them and that expense and labor is saved. Many a pea-nut crop harvested and marketed at a loss would have yielded a handsome profit if it had been used as a hog pasture. Peanuts should be valued as a protein producer, and for that purpose are very valuable, as they contain about 30 per cent of the most valuable food

ingredient. While the vines are green they are Give clean culture and no hilling up is



Used on Outside and Inside of Hogs Kills lice and fever germs, removes worms cures mange, canker and cough; aids diges tion, promotes healthy growth, and

Prevents Disease, at Small Cost. At dealers in Scaled Cans Only. Useful book with illustration of Dip Tank FREE. Address

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

### NO SPAVINS

The worst possible spavin can be cured in 45 minutes. Ringbones, Curbs and Splints just as quick. Not painful and never has failed. Detailed information about this new method sent free to horse owners.

Write today. Ask for pamphlet No. 98.
Fleming Bros., Chemists, Union Stock Yds., Chicago.

Chas. E. Bartlett, Columbus, Kans

WORK THE HORSE IF NECESSARY

### OLIN CURES SORE SHOULDERS. COLLAR GALLS, SCRATCHES

CRACKED HEELS, SITFASTS, CHAFES, ROPE BURNS, WIRE CUTS) SORE TEATS, OLD STANDING SORES AND ALL FLESH WOUNDS ON MAN OR BEAST 25 and 50 Cents

SCREW WORMS AND PROFLESH. — ALL DEALERS SEND 44 FOR TRULL SIZE TO B. H. DOHUY. PL. C., STATION A, DENVER, COLORADO.

> Sunny Slope Farm. Emporia, Kans., July 19, 1900.

Dr. B. H. DeHuy, Denver, Colo.

My Dear Sir:—I have used two boxes
of your Balmoline on my horses for sore shoulders and sore necks and must say that I find it a very satisfactory remedy. It has healed them faster than any remedy I have ever used. At the same time we were working our horses all the time. Yours truly, C. A. STANNABD.

eaten and afford valuable feed. crop should be pastured along with sorghum, rye, wheat, or oats for the most profitable results. For hog pasture the crop can be grown as cheaply as corn. Plant as soon as all danger of frost is over. Have the soil in fine tilth. Make the rows two and one-half or three feet feet apart and drop the seed from twelve to sixteen inches apart in the rows. About two bushels of the nuts in the pod will be required to seed an acre. necessary. The Spanish variety is best suited for this purpose.

Sweet potatoes make a good feed for hog pasture. The expense of this crop is quite light up to the time of harvesting, and the hogs will do this to perfection, and give good returns for value re ceived. The culture of the crop is well understood. It can be made ever prof-

itable utilized as a hog pasture Artichokes are a most excellent crop to furnish fall and winter pasture for hogs. Under proper treatment from 400 to 800 bushels of tubers per acre may be counted on. Plow the ground as you would for potatoes; plant in April in rows three feet apart, with the hills from fourteen to eighteen inches hills from fourteen to eighteen inches apart in the row, and cultivate as you would corn. In this country the pasture is available the winter through.

#### Wanted .- A Plan for Stock Frame.

EDITOR KANSAS FARMER:-Will you, or some of the readers of the "Old Regive a good plan for building a removable stock frame for scales?

Thos. J. Woodworth.

Walnut, Crawford County.

#### The Bigler Shorthorn Sale.

The sale of a draft of the Enterprise Herd of Shorthorn cattle owned by C. C. Bigler & Sons, of Hartwick, Iowa, was held at Victor, Iowa, on June 5 and 6, and was a record breaker in every particular. The recent purchase of Merry Hampton by the Biglers had awakened an interest in this femous herd and breeders were by the Biglers had awakened an interest in this famous herd, and breeders were present from Illinois, Indiana, Wiscoisin, Nebraska, Missouri, Kansas, Oregon, Texas and Iowa. In spite of the terrific pour down of rain and the heavy wind-storm which partically destroyed the sale tent and required Colonel Wood to cry the sale clad in a rubber coat and sheltered by an umbrella the bidding was spirited, and the prices such as have not been made for years past in this breed with so large a number of animals in one sale. The Biglers sold life head for a total of \$86,540, or an average of \$828. The sale in detail is as follows:

1. detail is as follows:

4. 4th Princess Royal of Cherry Grove, F. M. Marshall, Blackwater, Mo.

7. Imp. Crown Princess 3d, Korns & Lee, Hartwick, Iowa.

8. Imp. Scottish Missie, N. A. Lind, Rolfe, Iowa.

9. Imp. Goldie 48th, I Forbes & Son, Henry, Ill.

10. Imp. Blythesome 27th, A. H.

Brett, Mason City, Iowa.

11. Imp. Martha 11th, J. W. Frizell, Brooklyn, Iowa.

12. Roan Berry, T. J. Wornall, Kansas City, Mo.

15. Rose of the Clan, John Rasmus, Lake City, Iowa.

16. Victory, E. S. Donahey, Newton, Iowa.

17. Broses Royal of Blackwater, A. 18. 19. 20. 21. Binford, Marshaltown, Iowa.

Rosalette of Blackwater, Jesse
Binford
Imp. Lady Nell, C. H. Brown,
Dakota City, Iowa.

Imp. Roseblush, Albert Harrah,
Newton, Iowa.

Imp. Blossom, Hector Cowan,
Paullina, Iowa.

Village Lily 3d, W. H. Ritter, Arrowsmith, Ill.

4th Goldencrest, J. G. Robins &
Son, Horace, Ind.

Violette, Geo. E. Ward, Hawarden, Iowa.

Matchless 7th of Maine Valley,
W. J. McLean

Mabel Berry, A. J. Ryden, Abington, Ill.

Summit Simplicity 2d, N. A.

Lind.

Lind. 22. 25. 28. Lind 1,000 Imp. Celia 9th, F. A. Shaefer 1,550 Lad's Miss, L. Brodsky 525 Orange Blossom's Best, Geo. E. 44. Golden Bud, John Rasmus...... Missie Bloom of Wayside, Claus Johnson
Village Maiden, Creswell, Bonaparte, Iowa..... Village Maiden, Creswell, Bonaparte, Iwa.
Village Primrose, Jesse Binford.
Village Fairy 4th, Wallpole Bros.
Imp. Fairy Queen 15th, E. R.
Stoughland, Marathon, Iowa....
Barmpton Leaf 7th, Geo. E.
Ward
Lovely of Fairview, J. G. Robins & Sons.
Lady Russell, H. F. Brown...
Columbine, M. J. Avery & Son,
Mason City, Iowa.
Lavender Princess 2d, Victor
Cowan
Spicy of Oak Grove, A. D. Sears 61. 69. 72. 73. 74. 590 Warden Missie 2d, T. J. Ryan & . 75. 78. 800 79. 710 84. 505 87. Imp. Lady Blanch Douglas, N. A. Lind
Crimson Flower of Mapleton 9th,
J. H. Brown.
Crimson Rose, J. Binford.
Miss Frantic, A. H. Brett.
Eugenie 2d, Jesse Binford.
Queen Rofant, Jesse Binford.
Wild Eyes of Peabody 9th, Mason
& Houghton.
Victoria Countess of Worcester,
Martin Flynn, Des Moines, Iowa.
Duchess of Allerton 6th, L. G. C.
Pearce, Grinnell, Iowa.
2d Sharoness of Maple Hill, C. H.
Brown 550 88. 580 99. 114. 300 

118.

119.

Cow, Antone Williams, Gilmore Sutherland ..., 1,000
Strawberry 6th, E. R. Stangland, Marathon, Iowa... ... ... 1,435
Geranium 2d, A. A. Alexander, Morning Sun, Iowa... ... ... 1,400
Geranium 3d, A. H. Brett, Mason City, Iowa... ... ... 1,400
Nonpareil of York 2d, Claus Johnson, Rolfe, Iowa... ... 925
Marengo's Cambridge Gwynne (Imp), C. R. Steele, Ireton, Iowa... 1,125
Seven Oaks Nonpareil, N. A. Lind ... ... 1,500
Scottish Semestrace ... ... 1,500 Iowa 1,025
Ury of Fraserville, A. H. Brett. 910
Bright Boquet (Imp.), A. H.
Brett 1,100
Rosalina, F. A. Shaefer, Esther-Iowa Son, Williamsburg, Iowa Son, Williamsburg, Iowa and calf, C. S. Barclay & Son, West Liberty, Iowa Moss Rose 2d of Wood Dale, Geo. Harding & Son, Waukesha, Wis. Lyndale Queen 4th, Kriser Bros., Oskaloosa, Iowa..... 510 Son
Poppy 60th, Kriser Bros...
Lady of Boyne 6th, Kriser Bros...
Thorndale Rose, Kriser Bros...
Princess of Wood Dale, Kriser 

### The Omaha Hereford Sale.

The Hereford Exchange sale at Omaha The Hereford Exchange sale at Omaha last week, under the management of T. F. B. Sotham, was very much what he advertised it, "Bull Buyers' Bargains." One hundred and twenty-seven bulls were sold during the two days at an average of \$111.61. The 41 females in the sale made an average of \$177.56. While there were plenty of bargains among the bulls the very fact that 127 bulls could be sold in one sale speaks for the success of the sale and argues well for the business. The list of sale as published below shows where the better-priced animals went and includes all at \$100 and over.

Rodger 137440, May, '00; D. O. Berger-cows

Lady McKinley Vincent, Nov., T. Gardner. Jessie May, '00; H. G. Clark, Craig, Neb. Miss Emma, April, '00; Fred. Boder-man '01; H. F. 210 Lady Chancellor, May, '01; H. F. Grimes

Grimes

Flirt, July, '97; Thos. A. Dohn, North

Bend, Neb. 300

Bird, May, '00; M. R. Peterson. 215

Edna, Jan., '01; A. G. Davidson, Plano, Iowa

Ethel Girl, Feb., '01; O. M. Bovee. 160

Queen of Herd, April, '01; C. S. Francis

Queen, Feb., '01; Stanton Breeding

Farm

Waneta, May, '97; T. F. B. Sotham. 355

SUMMARY

127 bulls sold for \$14,175, average \$111.61;
41 females sold for \$7,280, average \$177.56;
168 head sold for \$21,455, average \$127.70.

### To Boston and Return at One Fare Via New York City.

if desired for the round trip via Nickel Plate Road, for Christian Scientists' meeting in June. Tickets on sale June 12, 13, and 14, with extended return limit of July 31. Stop-over to visit Niagara Falls en route also granted. Write John Y. Calahan, General Agent, 111 Adams St., Chicago, for detailed information. (16)

When writing advertisers please mention this paper.

## Mulford's **Tuberculin**

DETECTS THE PRESENCE OF TUBERCULOSIS IN CATTLE AND PROTECTS YOUR ENTIRE HERD

Mulford's Tuberculin, Mallein, Anthrax or Charbon Vaccine, Black-leg Vaccine and Pneumonia Serum are accepted by all veterinarians as the standard of excellence. They are of uniform strength and reliability.

PRICES FOR TUBERCULIN 2 doses 35c 10 doses \$1.25 50 doses \$4.50 5 "75c 25" 2.50 100 "8.50

Write for our FREE BOOK containing valuable information to every breeder and dairyman.

H. K. MULFORD CO., Chemists 13th & Pine Sts., Philadelphia 74 Wabash Avenue, Chicago

#### Gossip About Stock.

The sale of Shorthorns held by C. L. Gerlaugh, at Osborn, Ohio, resulted in the following summary: 25 females sold for...\$15,375; average..\$615.30 & bull ssold for.... 4,755; average..\$594.70 33 head sold for..... 20,130; average.. 610.00

The Woodland Herd of Shorthorns, owned by W. I. Wood, of Williamsport. Ohio, were represented in a sale held at the farm on May 22. The attendance was very large and the quality of the offering is well shown by the following summary: Thirty-four females brought \$1,2485, average \$367.20; 10 bulls brought \$3,310, average \$331; 44 head brought \$15,785, average \$358.97.

W. C. Kenyon, manager of the South Omaha Stock Yards, has lately issued a handsome leaflet entitled the "Leading Beef Breeds," which after an introduction gives a brief history of the Shorthorn, Hereford, Polled Angus and Galloway as distinct breeds of cattle, and as the four breeds most prominent of the improved beef cattle of the world. This can be had for the asking. for the asking.

White Hall Farm, Yellow Springs, Ohio, the property of E. S. Kelley and the home of a choice lot of cattle, was the scene of a recent Shorthorn sale which proved very satisfactory to the owner as well as to the large crowd of buyers and visitors in attendance. The summary of the sale is as follow: Twenty-eight females \$19,185, average \$685.18; 8 bulls, \$2,070, average \$258.75; 36 head \$21,255, average \$590.42.

Mr. N. A. Lind, of Rolfe, Iowa, had a very successful sale of Shorthorns on June 4. Fifty-three cattle were sold, the top of which was the cow Red Crest by Imp. Scottish Chief who was bought by C. C. Bigler & Sons, of Hardwick, Iowa, for \$3,850. The summary of the sale is as follows: Forty-seven cows brought \$37,295, average \$793.51; 14 imported cows brought \$14,585, average \$1,041; 6 bulls brought \$3,335, average \$555.83; 53 head brought \$40,630, average \$766.60.

The Shorthorn cattle sold by A. Alexander and R. G. Robb & Son. at Morning Sun, Iowa, was well attended and the cattle were in excellent condition. The top of the sale was brought by a Princess Royal cow, Mary of Bluffview, who brought \$1,230.00. The results of the sale were as follows:

51 females brought...\$23,395; average..\$458.72 bulls brought...\$50; average.. 275.00 53 animals brought...\$23,945; average.. 451.79

On June 6 about 3,000 Angora goats were sold at the Stock Yards at Kansas City. These offerings were from the flocks of W. H. Woodlief, of Woodlief, Kansas; W. G. Hughes. Hastings, Lexas; Sam Heyman and Ed. Armer, of Kingstown, Texas; and J. J. Gentry, of Montell, Texas. The sales ran to \$4.00 per head for grade does and \$3.50 for wethers as the top prices. Bidders were present from as far East as Illinois, while Kansas and Missouri were represented by purchasers of the better offerings. The sale was conducted by McIntyre & Co., of Kansas City.

Secretary C. R. Thomas, of the American Hereford Cattle Breeders' Association, an-nounces that the association will hold sales of Hereford cattle at Kansas City on Ocof Hereford cattle at Kansas City on October 21 and 22, during the American Royal, and also at Chicago December 4 and 5, during the International Cattle Show. There is certainly no association of purebred animals in the world that is doing more for the good of the breed it represents than the American Hereford Breeders' Association, and certainly none of them has a more efficient or active secretary than Mr. Thomas has proved himself to be.

The Gad James sale of Shorthorns at West Liberty, Iowa, on May 29, proved a disappointment, as the prices received were less than those recorded elsewhere for the same class of cattle. The bulls were in fair condition but the females were too thin and some of them in-bred while others were bred too young. The top price for females was \$165, and the top for bulls \$135. Nine of the forty-two head sold went below \$75. The summary of the sale is as follows: Twenty-five females sold for \$2,377, an average of \$93.40; 17 bulls sold for \$1,550, an average of \$93.50.

It was a noticeable fact that a large number of the buyers at the Omaha Here-(Continued on page 635.)

### The Some Circle.

#### OPPORTUNITY.

He was a yokel, freckled, and tanned,
Who stood with a rope in his horny hand,
And tried to inveigle a fractious goat
To give him a chance to encircle his
throat
With the rope.
It was the goat, contrary-impelled,
That laughed at the yokel and rope he held
And wouldn't admit for a moment that he
Was foolish as t'other had thought him
to be,
He should hope!

Then raced the two all over the field (The man wouldn't stop, the goat wouldn't yield)
Till, what with the steps they had run and retraced,
They found that the chase and pursuit had embraced
Quite a scope.
Tired of flight, the goat turned around, And brushed with his whiskers the battle ground;
Then lowered his head and proceeded to dash

dash 'Twixt the yokel's legs, in a fractional flash, Slick as soap!

There was his chance! Had the yokel grabbed His horns, he'd have had the fugitive nabbed;
But he didn't, and then with a hopeless wall He caught at the brief, inexpressible tail On the lope.
You know, of course, or hear it from me—A goat's tail's not as long as a tail ought to be;
And so, when he grabbed, the tail wasn't there, And the goat was exciting the yielding air And the goat was exciting the yielding air Up the slope.

Now, here is the moral: You needn't try To catch Opportunity that's gone by; For his tail is the briefest that ever was (Don't hang near as long as a goat's tail does!) If you're after Old Oppor., you're sure to find That you can't head him off if you get behind.

-Baltimore News.

#### His First Ten Years in Kansas. A. C. TREHFER, BEFORE THE BERRYTON FARMERS' INSTITUTE.

What was the West in 1857? Kańsas and Nebraska were vast open plains, for the most part uninhabited, and the home of buffaloes and roving Indians. Along the creeks, reaching out some miles west of Missouri, the first set-tlers had taken lands before the Government had surveyed the land. The farthest points west to which the rail-road had been built was St. Joe on the north and Jefferson City on the east.

Forty-six years ago from March, 1902, I was a young man, not yet 21 years of age, born and raised in Massachusetts, then about to cross the threshold of life as a man among men.

My childhood was spent near the shadow of Plymouth Rock; eight miles from Fall River, on the banks of a stream up and down which those careless pulse-beats of Old Ocean, the tides, flowed twice every twenty for heavy flowed twice every twenty-four hours; the home of the clam-bake and the oyster. Massachusetts, now settled and farmed for nearly three hundred years, has lost its first fertility, been allowed to grow up in forests, they again cut down and the land farmed, and again returned to forests and this repeated several times. There are hills of granite and boulders there, in some places so thickly strewn that it is said that the sheep had to have their noses sharpened to reach the grass between the rocks. In some places gravel is much in evidence. When a boy I learned a verse that was composed by native talent to account for the peculiar badness of a certain piece of ground: When Dame Nature finished making land, She had a refuse left, of stone and sand; She viewed it with care and threw it down Twixt Coy's hill and Belcher town, And said, "You paltry stuff, lie there," And made a town and called it Ware.

Am I speaking slightingly of my native State? I would not. Its farm land may be poor; but if asked what Massachusetts raises I would reply, "Massachusetts raises I," chusetts raise men"; and the young man about to leave this State may or may not have been the "degenerate son of a worthy sire." Many before me left of a worthy sire." Many before me left to settle western New York, Pennsylvania, and Ohio. Then, Ohio was spoken of as the Far West.

### KANSAS IN 1857.

Of course Kansas was thought of only as the home of buffaloes and the Indian, but in eastern Kansas there were few Indians of the wild order. The missionary had preceded the settler.

Some years ago, when my two daughters visited the old home in the East my sister eyed them with some curiosity that so civilized white girls should be born in the land of the Great Desert and home of the Indian. She could hardly realize that even their father had seen but few blanketed Indians, and some Indians lived in good frame houses and had pianos. This was not

put up for them, but slept in tents and made pictures on the walls of the houses

At that time slavery existed in the land. Many people, even in the North, then thought slavery was not wrong, and that it was sanctioned by the Bible. But our land was divided in sentiment.

Meantime the frontier was being pushed farther west and in the rush for homes the lands of Kansas were being

settled upon. The question now arose, Shall it be a free of a slave State? The majority would win; so the South and North vied with each other as to which would pour into Kansas the most set-tlers. Certainly, as Missouri was close she had the advantage; but Massachusetts was not asleep.

As a young man who had his future to make, I decided to kill two birds with one stone. In those days Horace Greeley was a great man. He said, "Go west, young man, and grow up with the country." I thought this good advice, and took it. I would get a good home, and help make Kapsas a free home and help make Kansas a free State.

Money must first be obtained, as I had none and my father could not help me. There was a society called the "Kansas Emigrant Aid Society" which I applied to. They informed me that "The only way we give aid to emigrants is by finding those who wish to go to Kansas and, by forwarding them in large companies, get for them reduced also, to settle them in large rates; also, to settle them in large colonies for mutual help and to aid them by setting up sawmills, stores, etc." They added, "We do not otherwise aid in transportation."

Regardless of these difficulties, I told

my friend I was going to Kansas. But as I had no money, it seemed very doubtful. As I look back over those days, it seems to me that it was God's

plan that I should go.

My old grandmother, now long since passed away, then lived near by, I went over to see her and told her I intended to go away to Kansas and might never see her again. In our talk, she told me she had laid up a few dollars that she intended to be divided among her grandchildren when she was gone, and if I was going to Kansas, now was the time mine would be of greatest benefit to me. This made me very happy. I lost no time in getting ready and making my start. My father afterwards told me that he did not believe I would go. Only my uncle and the pastor of the church was at the depot to see me

### HIS START.

I first went to Providence, Rhode Island, where a brother lived. He loaned me some money. I then went to Worcester, Mass., to see another brother, and from there I bought a ticket to St. Louis, which cost me \$29. I crossed the Mississippi on a ferry boat and from there I went to Jefferson City, which was the farthest point to which the railroad had been built.

Riding on a steamboat was a new thing to me, but I enjoyed it. There was no hurry. If we ran onto a sandbar or snag we pushed off and tried it again. It took five days to get to Leavenworth. On our way we passed Kansas City, which was then a small place, and also Wyandotte, our first town in Kansas. Arriving at Leavenworth at p. m., I found a team bound for Lawrence, on which I paid my passage. We stopped the first night at an Indian's log house and slept on the floor. I was in Kansas now whether I liked it or not. All my bridges were burned behind me. I must stay and be content.

At Lawrence I took passage by stage

for Topeka. On the trip we passed through Lecompton, the territorial capi-tal of Kansas. The foundations were laid for the Capitol building, and there was also a pile of iron columns there. We also came through the city of Tecumseh. It was, at that time, nearly as large as Topeka and was the county The court seat of Shawnee County. house was a large two-story brick building and had columns in front. The abutments for a bridge and the foundations for Bethany College had been laid, but they were never finished. There were, also, at that time two brick churches and many houses and stores in this place.

Tecumseh was a pro-slavery town, while Lawrence was a free-State town The founders of Topeka stopped at Te cumseh, and seeing a good site for a town, asked to be taken in as partners with the Tecumseh company. But only birds of a featner flock together. As the companies could not agree, the Topeka company said, "Very well, we will go a little further and lay out a town that shall kill yours dead."

### SO THEY LAID OUT TOPEKA.

HOW a Gold Outside Sufferning Head Leader The Jas. Boss Stiffened Gold Watch Case is made of Jas. Boss two layers of Solid Gold with a layer of Stiffening Metal between welded and rolled together into one solid welded and rolled together into one solid sheet of metal. The Jas. Boss Case is a Solid Gold Case for all practical purposes. The Stiffening Metal simply adds strength and durability. The Boss Case is guaranteed for 25 years by the largest watch case makers in the world, who have been making it for a full half century. Every Ross Case has the Keystone trade. Watch Case Every Boss Case has the Keystone trademark stamped inside. Ask any dealer to show you one. Write us for a booklet telling the whole story. is made The Keystone Watch Case Company, Philadelphia. By this mark of you know them

ground, but had few houses. One could see it all in one view. There was no continuous street save Kansas Avenue from the river up to Sixth Street. Roads went across lots all over the townsite. Houses were scattered here and there. The town was first laid out in the bottoms near the Santa Fe shops, but this was abandoned for higher ground. The first houses were built between the river and Fourth Street. Sixth Street was as far as anything of importance was built. The business part of town was between Fourth and Fifth Streets. There was a very useful saw and grist mill just north of the present site of the Rock Island depot. thing was high in price, as all articles had to be hauled from the Missouri river, sixty miles away, either from Leavenworth or Atchison.

The mill cut about all the lumber for

our houses. The latter were built either of black walnut or cottonwood. Many used walnut even for the rough framework. Cottonwood made a very durable lumber, if kept under cover; but if left in the sun while green, it would take some very fanciful shapes; and houses boarded up with it, as many were, would, in a year, have cracks large enough to throw a kitten through, especially if the man had forgotten to houses gave us plenty of good fresh air, but the tallow from our beefsteak would harden on our plates even in the socalled hotels.

There was a three-story frame hotel called the Topeka House, where the post-office now stands, and there was a samll frame building called the Garvey House and post-office on the corner south.

At that time no houses were sheathed under the weather-board. The half-inch siding was nailed directly on the studding. The lack of logs delayed work very much. Many put up houses of concrete, and several such are still standing.

### HE TAKES A CLAIM.

I concluded to spend my first year in Kansas working in Topeka as a carpenter. However, the first thing I did was to look up a vacant piece of Government land and take a preemption claim. Uncle Sam, though rich enough to give us all a farm, had not yet concluded to do so, but sold it at \$1.25 per acre. One had to put up a house on his claim, break up five or ten acres, and make it his home, but was not compeled to live on it all the time. A young man without money got a claim in this way: He borrowed the money, and agreed to give half the land to the lender when the land was patented. In this way most all of the quarter-sections were taken and small shanties were ies. All the places on the streams had been taken long before.

At the northeast corner of the piece of land that I took there was a large city staked out, and it had its place on the maps. It was called Dayton. once had a house and a well thirty feet deep, but the well like the town contained nothing but wind. Years after, when the place had been overgrown by grass and forgotten, a man who mowing grass drove over it with a mowing-machine. One of the horses fell into the well and that is its tomb. A man in Canada, at one time traded valuable land for a half-section near by, and when he came to see it he told me that it was two miles southeast of the city of Dayton.

After locating my land, my one desire was to earn enough money to put up a house on it before some one "jumped" it; for if I did not comply with

could take it from me. I hired to a buildcould take it from me. I hired to a build-er in Topeka at \$2 a day, and I paid \$5 a week for board. My boarding-house was on Sixth Street, opposite the place now occupied by the Columbian building. It was a cheap frame house, neither ceiled nor plastered, with a loose floor in the second story. Any conversation in the house could be heard all over it. This boarding-house was the forerunner of what was afterwards the Chase House what was afterwards the Chase House, and it accommodated some twenty boarders.

That season the builder sent about six of us to the town-site of Hiawatha to put up the first house of the place. It was a one and a half-story house and was to be used for a hotel. The lumber to build it was hauled from Iowa

At that time I saw a very good fence made by digging ditches and throwing the earth between them and sodding the mounds. It took much labor to make it, but perhaps no more than to make a stone wall.

### EARLY DAYS OF TOPEKA.

Topeka escaped the cow-boy stage as there were no large ranches near, but one day a few cow-boys from a distance were in town and I suppose were especially if the man had forgotten to rather full of bad whiskey, for one of nail down one corner of a board. Our them on horseback ran over a good citizen of the town and knocked him over. His head struck the curbstone and it

In the year 1857, all merchandise was righ. Northeast of the Rock Island depot there still stands a small stone building where at that time a French-man kept a store. He sold me, at one time, a small tin-cup for 10 cents; and as Mrs. Partington is reported to have said, "The shopkeeper told me with tears in his eyes that he was selling them at less than cost, and the only reason he could come out even was because he sold so many of them."

The cemetery of Topeka was at that

The cemetery of Topeka was at that time located near Tenth Street and was considered quite out of town. Bethany College began in a small building just west of Capitol square. Of course, there was no Capitol building at that time and there were but a few at that time and there were but a few who thought that there ever would be. Washburn College, when afterwards

built, appeared a long way out into the Well water, for some reason, was hard to find except on the low grounds

near the river. There were several church societies.

but, I think, no churches. If there were any they were Congregational and Methodist. Although at work at carpentering, I

was tempted to rent some bottom-land and try to raise some corn. Seed-corn was \$3 a bushel and potatoes were nearly as high, so it seemed as if there would be money in a good crop. I rented ten acres of Bob Edwards, a pro-slavery advocate, paying \$4 cash per acre, hired it plowed and marked off, and then I planted it with a hoe. I afterward hired it cultivated twice. Though the uplands raised but little corn that year, the bottom-lands yielded about thirty bushels to the acre. But corn was down that year; it sold for only 40 cents a bushel.

### LOST ON THE PRAIRIE.

I made my claim shanty, ten by twelve feet in size, boarding it up and down with cottonwood boards. I then put a cheap bed in it and continued my work in town. A big wind storm came over, and I feared that my house, yet incomplete, might have blown down; so, with two other young men who had claims in those parts, I started out to walk to our claims. The first true with all, however; some would I arrived in Topeka the last of March, "jumped" it; for if I did not comply with out to walk to our claims. The first not live in the houses the Government 1857. Topeka was spread over much the requirements of the law, some one night we slept on the floor of a onedaylight we arose and started toward the head of Linn Creek to my claim. We got lost and, as the lost will, we went in a circle and came back to our lodging place. We then started again and went all right. I found my house in ruins.

It is very easy to get lost on a bare prairie where there are no fences or houses for landmarks. The worst lost man I ever saw was one on his way home from Topeka. He lived south of the Wakarusa and it was night. Seeing me light, he came and called me out, told me he was lost and asked direc-tions to reach his home. I told him, but he could not believe I was right, for to him it was nonsense for me to direct him towards what seemed to him the north when he wanted to go south. Finally, after I had mentioned the Wa-karusa to him he said, "Well, am I on this side of the Wakarusa or on the other side?" He was some like a man who was ever getting lost whom a friend told to buy a pocket compass, saying that it would save him much trouble. He did so. Some time after the friend saw him and asked him how he was getting along with it. "Ho!" he was getting along with it. "Ho!" said he, "A great help it was! I get lost as usual, and just when I needed it the worst it proved good for nothing. It pointed the wrong way, and when I repeatedly turned it to the north, it would just fly around and stand south-

A part of the first winter I spent with a Mr. Gaylord, working for him to get the use of his oxen a few weeks later. In the spring I went onto my land and rebuilt my small house. While putting it up I slept in what might be called a chicken coop. It had been put up on another piece of land for a preemption house. It was about six by twelve feet in size and was made of stakes, that is, of split-out boards, six inches wide and three feet long. Their length was the length of the side of the house and was also the length of the rafters. I found in it on the ground a very good bed with bedding on it. There was no one at home, and any one was welcome.

SOME BACHELOR APARTMENTS.

There were such bachelor establishments, as good or better, on every quarter section. Sometimes two men built a shanty across the line so that each could say that he had a house on his place. At one corner four men put up a shanty, so that divided into four parts, each had a house of his own. One man, when preempting his land, swore he had a house fourteen by sixteen. He did not say feet, however; it was only fourteen by sixteen inches.

In the spring of 1858 I moved my few possessions into my ten-by-twelve-foot house and began the lonely life of a bachelor on the wide, open prairie. There was not a tree to be seen except on the creeks.

People living on the creeks said that the prairies would not grow corn but would always remain prairie-land, open for pasture. Had not barb-wire fences been invented, that condition of things would have remained much longer than it did. As it was I had plenty of pas-ture, but no stock. The grass grew and was burned by the prairie fires.

I came to my land with no wife, no team, no stock. I had a dozen hens and a pig; a spade, a pick, and a shovel to dig my cellar under my house, and

room house on one of the claims. About they were my only farming tools daylight we arose and started toward had no money and I would not g they were my only farming tools. I had no money and I would not go in debt. To labor and wait was all I could do. For the first year I carried most of the water I used from the spring. Wells dug at that time were generally deep, on an average thirty-five feet, and I knew of several who dug sixty or seventy feet without finding water. Under these conditions, I felt like a man who lived in the western part of the State, who was compelled to haul water five miles. A stranger asked him why he miles. A stranger asked him why he did not dig a well. He replied, "Stranger, it's just as far one way as the

I may be asked what I did to make Kansas a free State. I must answer, very little. I cast my first vote for the Topeka Constitution. I neither bled nor died for the State. That work proved to have been about finished before I came, although no one knew that to be a fact at that time. It all de-pended upon the attitude of the officials at Washington and the sort of a man they would send out as Governor. Happily good sense prevailed, and a fair man was sent out to us, and as a result we had a fair election and a free State constitution was adopted. There had been bloody times previously, however, as there must always be when the people of a country are divided in senti-ment and are fighting mad.

BAN FROM HIS FRIEND.

A few of the reported outrages of that time were but practical jokes. Here is an instance: For some time we had two territorial governments and two set of officers. As they both levied tax, some paid to one and some to the other. Of course, the people of Topeka would not pay tax to the Lecompton government. One day a tax-collector came from Lecompton collector came from Lecompton. hitched his horse to an unused wagon standing near the front of a store, and went into an office next door, which was only divided from the store by a board partition. Several young fellows in the store decided to scare him out of town. In a low voice they spoke of his errand and cursed all his kind. Some one suggested that they tar and feather him. But could they get the tar. Yes, a man outside was repairing the roof and was using a pot of hot tar. Feathers were plenty. They borrowed the wagon to which the man had tied his horse, and, of course, the horse followed the wagon. When the conector discovered that his horse was gone he warv nervous. The crowd in the store increased and the demonstrations became more pointed. Finally the collector broke and ran, heading toward Tecumseh. A friend of his took his own and the collectors' horse and started after him, but the more he called after the man the faster he ran. He finally reached a creek which had no bridge. He ran down one bank, but as he was running up the other he caught his toe under an outgrowing root and fell, saying, "Oh, my God! It's all up with me now."

The first year I was in Kansas Governor Walker, Secretary Stanton, and Hon. E. O. Perrin came to Topeka to make speeches and ask us to be good. I thought Mr. Perrin the best speaker. I remember two of his illustrations. Speaking of Topeka's fast growing he said, "It reminds me of a Sunday-school the scholars of which I once asked who made them. One scholar answered, 'God made me so big, and I growed the Another illustration he used rest.' was, "Once an old farmer had a valuable ram that could outbutt anything in his line. A railroad was built through his pasture, and when the first train came through Mr. Ram saw it, and rearing up on his hind legs, with all his force he butted the engine—a head-end collision. As may be supposed, he was knocked over a fence rods away, dead. take 3,700 of the pickets, besides the His owner came and looking at him strips. We made part of them and said 'Old ram. I admire your spunk. said, 'Old ram, I admire your spunk, but — your judgment.'" Perrin did not admire our judgment.

STORIES OF RUN-AWAY SLAVES.

Hunters of runaway slaves often searched the houses of the Republicans. Not often did they find any slaves, yet it was said that there was an under-ground road from Kansas to Canada. When I was at a neighbor's house about 9 o'clock in the evening, there came a knock at the door. It was opened and there stood three runaway slaves, so they said. The owner of the house asked them where they came from, and they pointed to a star supposed to be over Missouri, and said, "We come from that 'er star. We want food and a place to hide; our masters are after us." To aid them was against our Government

HEARTBURN Bloated feeling after eating, Coated tongue, Bad breath, Dizziness, Poor appetite and constipation, quickly removed by using **Prickly Ash Bitters** No other remedy does so much to put the digestive organs, liver and bowels in good condition. People who have used it say they can eat heartily without inconvenience, where, before they tried it the most healthful food seemed to get them out of fix. PRICE. \$1.00. Sold at Drug Stores.

only a joke played on us by our neigh-

Another time they came at night to my cabin to scare me alone. They pounded on the door and demanded entrance to search for runaway slaves. As I did not answer they finally fired a gun and there was the sound of breaking glass, as if the had fired through the window; but as I did not show up they left. I was away from home; there was no one there.

An officer did search a house in Topeka, however. The owner was a Mr. Richey. The officer knocked at the door and told his errand. Richey re-fused to let them search the house. After awhile his fuel ran out and he told his boy to go out and get some. But the officer would not let the boy pass. Finally Richey said he "wouldn't freeze for all the soldiers in Kansas, and he went out and got an armful of fuel. As he was going in the officer said, "I will go in with you." "No, sir," said Richey, "I'll be —— if you do." The officer broke the door open and searched the house, but he found no slaves. Mr. Richey afterwards shot and killed an officer on the same errand.

For twenty years I have, each night, jotted down in a diary the principal events of the day, and for twenty years before that I jotted them down occasionally. From that old diary I take this note, written in the spring of 1858: "I write this at home—my home. There is no place like home, be it ever so humble."

From that time I was a farmer, as this was the time I went on my land to live. The following year I worked for a Mr. Reece and earned money to buy two yearling steers. I broke them when they were two years old to plow or haul a light load in a hand-cart with When I had made a body a tongue. for it, it was my wagon, buggy, and all. I was as proud of it as is any young man of his horse and new buggy. The wheels of the first four-wheeled wagon I ever owned were made of sections sawed off the end of a round log.

AS THEY SAW IT

Fred Morse, the owner of the claim east of mine, batched with me one season. He had thirty acres already broken on his claim and we agreed to go into partnership and fence in part or all of his land and share the crop. We went to Wakarusa Creek and split stakes or pickets, as we called them, to drive in the fence row. We made them about five feet long and placed them about ten or twelve inches apart. These with a strip nailed on them about three feet from the ground, made a fairly good fence—a very common kind at that time. We figured that it would

That season was a good one and the corn was fair; but cattle from the neighborhood got into the field several times and as a result we only harvested thirty bushels each. And we were even told that we ought to be jailed for having a fence that would not keep cattle out and thus endangering the lives of our neighbors' stock. Such is life. We can never all see things alike. Fences, in those days, were the source of much ill-feeling between distant neighbors.

SOUTHERN WAYS.

It is said that a person of travel can tell what State a man is from. I suppose I showed by my talk that I am a Yankee. We always, in parting, said, "Good afternoon," whereas in Kansas they said, "Good evening." Northern people spoke of evening as after sungert I can time called at the house of to hide; our masters are after us." To aid them was against our Government laws. Before we could decide we saw their supposed masters coming, yelling and firing guns. Next morning we saw their long strides in the road to town, and we hoped they had got away. It was "Good afternoon," whereas in Kansas they said, "Good evening." Northern people spoke of evening as after sunset. I one time called at the house of a Southern family, and at my departing has come up step by step, unfamily, and at my departing has come up step by step, unfamily, and at my departing has come up step by step, unfamily, and at my departing has come up step by step, unfamily, and they had got away. It was

low voice she added "and good forenoon, too." And why not. One was odd to me; both were to her. The Western and Southern people seemed to think their expressions all right, and yet they were ludicrous to me. If I asked, "How much corn did you raise last year?" I would get some such answer as this: "O, I raised a right smart chance of corn; I sold a pile of it, and still have a heap left." I think that each must have adopted some of the expressions of the other, for I do not notice as many peculiar expressions as I used to.

In 1859, my brother in Rhode Island bought for me a land warrant to pay for my land. It cost about \$180 and saved part of the \$1.25 per acre for the land. It had been given to a widow of an old soldier of the Revolutionary War and called for 160 acres of Government land.

About this time I began to be a stockraiser. A man who was moving out West stopped at my house on his way. He had the old brindle cow tied on behind his wagon. She was a bother to him and as I wanted a cow and had \$12 and a gun, we traded. He said she would be fresh soon, but it was three months before she was fresh. She proved to be much bother for me. As I had no company for her, she would go off a neighbor's herds and would fail to come back at night. I once hunted two days for her. When she came fresh I had a cow, a calf, a pig, a dog, a cat, and a few hens. I could see that I was making some progress.

About July 5, another claim-holder and myself went to the land office at Lecompton to preempt our lands. Each had to testify for the other to show proof of being a lawful claimant. The man was an Englishman whose name was Shilling. We got Government deeds signed by the register of deeds and bearing the signature of Abraham Lincoln, then President of the United States. I had borrowed from a brother money to pay for the land and a small sum for improvements.

ADVANCEMENT OF THE TIMES

Farming at this time, in comparison with farming then seems to be to be getting out from under the curse, "In the sweat of thy face shalt thou eat bread." Farmers now do all their work with machines on which they can sit and ride with a sunshade over their heads—plow, plant, cultivate, and reap. They take life easy now. We used to plow every inch of the field on foot; mark out the furrows, one at a time; drop the corn in by hand, and cover with a hoe or harrow, or kind of "go-devil." The latter was made by fastening a spade-iron to a shovel plow frame. A horse was attached to walk in the furrow and the man, holding the handles, allowed the implement dirt along until it reached the hill of corn. Then he lifted the implement and the dirt covered the corn-hill. Then he dropped the plow to shovel more dirt, drop it on the next hill, and so on to the end of the row. We cultivated with a single shovel. When the double shovel came in we thought it was perfection.

came in we thought it was perfection.

The first corn-planter seen in this vicinity was a home-made affair, made by Samuel Reece. It had wooden wheels, wooden runner, and a dropping-bar made by a blacksmith. It worked well, and was used for most all the planting in the neighborhood. The first mower was an "Excelsior." The owner bought it on time, and after he had er bought it on time, and after he had bought it he did the cutting for every-



Price, 25c and gos. SOLD BY ALL DEALERS IN MEDICINE. THE PROPERTY OF THE PARTY OF TH all hand work, thought it was far ahead of the old hand sickles.

But now where wheat is largely raised they have the heading machine, and, more marvelous still, a combination of machines that at one continuous operation cuts, threshes, and sacks the grain ready for market. And it is said that there is a machine that makes it into flour as well; but I am like the Indian whom a white man had taken out of the wild West to the East, and showed the wonderful inventions of the time, and then returned with him that he might tell his native people of the wonderful things he had seen. The savage told his people of the great cities, the railroads, the steamships, the telegraph, etc. At last the white man said, "Tell them of the telephone." That was a new thing then.

"What is that?" said the savage.
"Why it's a way the white man has so that he can talk to another man twenty miles away."

"And he hear," asked the Indian.
"Yes. Hear every word as plainly a

"Yes. Hear every word as plainly as you hear me."

"Me no tell him that," said the Indian.
"Why?"

"Indian pretty good man to holler. Can only be heard a mile. Me no believe white man holler twenty miles. Me no tell that. Me no believe it myself."

But the facts are that we white men can not refuse to believe that man can "holler" twenty miles, or a thousand miles, or across the ocean, and even without wires; or refuse to believe any statement, even that war-ships of the sea may soon be overcome by war-ships of the air, or sunk by others far beneath the sea. We are doing miracles daily, beside which the miracles of old were but child's play. It seems that about the only thing to find out is how to prevent disease and death, and indeed, the doctors are able to do almost as marvelous things in that line as are being done in the line of invention of machinery.

But to return to the question of ease of farming and dislike of labor in these days. It is really a hard matter to find a man to help you with farm work, even though you tell him that he need do nothing except ride a machine all day. Even horses are being emancipated from much hard labor. Electricity, seemingly the very power of God Himself, man is wresting from His hand; or rather He is gradually giving to man, in part, His own omnipotent power. Soon trolley lines will take, not only the farmer, but his produce from his door to the market. Storage batteries will run his pleasure carriage and even plow his fields.

We are living in a grand and awful time. To simply live, now, is sublime.

In early days when the prairies were open and the grass grew freely, prairie-fires were a source of danger. Often some one burning the grass about his own place would let the fire get from under his control and then it would travel for miles. I find this entry in my diary for October 16:

"Hay all burned up. Fire came from the east. Next day a fire came from the south; burned some of my fence. All the grass burned around here for two miles. All is black prairie."

When the wind blew these fires would run in a V-shaped path as fast as a horse would travel. The wings or sidelines of fire would then burn sidewise to the wind much more slowly.

### A TRAVELER'S PRIVILEGE

In these days the few settlers were far more sociable than farmers are now. We visited each other and went long distances to picnics and revival services. All went in farm wagons; there were no buggies in the country at that time. A buggy cost \$150; a wagon, about \$100.

A traveler knew that a sundown he could put up at any house, be it ever so humble. Twenty men, women, and children slept on the floor of my ten-by-twelve-foot house, one stormy night. There were two or three wagon-loads moving, and a bad night caught them at my place. Now a solitary traveler may be told at dusk that there is no room for him from the door of many a large farm-house he must pass.

In the fall of '59 I put a shed addition to my cabin for a bedroom. It was seven by twelve feet in size. Pine laths were scarce and high, so I bought a sycamore log, hauled it to a Topeka saw-mill, and had it sawed into strips, one-half inch thick and three inches wide. These were my laths. I tacked them in place with a hammer and made slits in them for the mortar with a chisel, and then nailed them in place. They answered very well. I was not yet able to plaster, so I tacked paper over the laths, in this way making the room very comfortable. The log cost me \$2; the sawing, \$6.75.

THE YEAR OF THE GREAT DROUTH.

In the year of 1860 was the great drouth. It began in the fall before, and a year passed without any good rains. Prairie-grass would burn in June. There were no crops on the upland. Many settlers moved back to the States to live off their wives' folks. I could not do that; I stayed it through. Mush and milk, though perhaps a very well balanced ration, got very tiresome. Still, after a fashion, I was contented. I was my own boss, and had no family to provide for.

Nearly two years of batching began to get monotonous; I began to look about me. For February 12, 1860, my note-book has this entry:

"Last night I set up with Miss Sarah Welker. I believe she would make a good wife."

That month I began to dig a well. certain John McQuiston helped me. have since heard him tell of our dinner that day. He said that I put on the table a bowl of milk and a plate of mush and looked at him and said, 'Brother Mac, if you think this is anything to be thankful for you may ask the blessing." He did so. I do not think that he felt hard toward me because of this dinner, but the fact is, he nearly killed me before night. We were walling up the well. I was down in the well about twenty feet from the surface of the earth, placing the stone. There was a board across the well on top of the wall. On that I sat or stood most of the time. I noticed that the stone-box was coming down to me dangerously full, and I told him to take his time and not to fill it too full. After a while, contrary to what I had so far done, I arose and stood on the wall, my back close to the side of the well. I was looking down at the water when crash came a big rock from the load to the bottom of the well. McQuiston had placed a big rock on top of the loaded box and leaned it against the box han-When the box swung over the well, this rock fell to the bottom. They say "A miss is as good as a mile." However, I prefer the mile. McQuiston was much scared and dared not look over the edge of the well to see if I was hurt. I was safe, owing to the position I had taken on the wall. I do not know why I took that position. They say "There is a power that shapes our ends, rough hew them as we may." I notice in my journal mention of many a small item, but of this event I made no mention. Some things in our lives appear small to us at the time, that in after years we look upon as turning points. As I view my past life I recall no time when I stood in so much danger as at that time. Had I not been impelled to arise at the time I did and take the position at the moment I did my life would have ended there.

TAKES UNTO HIMSELF A WIFE.

The next entry in my note-book records a real turning-point in my life. It reads:

"March 10. 1860.—I expect to be married to-morrow. My house is not plastered yet, but Sarah says she is willing to take my house as she takes me—for better or for worse; and as her parents are about to leave for southern Kansas to take a claim, I think she may as well stay here with me. This is the last night of my bachelor life; henceforth I may not be all alone."

The next day, Sunday, March 11, we were married after services by Rev. Ira Blackford in a stone building now used for a barn. For March 17, I find this

"One week of married life. All things considered, I think it far ahead of batching."

My wife and I were both in our twenty-third year.

The price of land at this time was from \$3 to \$5 per acre. Houses were very scarce as much of the open prairie was held by speculators. Small herds of horses roamed over the land. Cattle usually had a fixed limit to which they roamed and they rested quietly at night, but horses by nature roamed farther away, sometimes miles away, but at

to 16 ounces of pure cofee to the pound.
Who knows how much coffee and how much state eggs and gine—called glasing—there is in coaled coffee!
Lion Coeffee is all coffee—nover glassed.
The sealed package happ it frush and pure.

night they would be around the fields. I have many a time got up and chased them away from my field. Fences were expensive and therefore often poor, and the damage stock did was exasperating. I had no horse to tend my crop, but that year it made no difference.

My wife and I attended church, rode

My wife and I attended church, rode to town, went to picnics, etc., in our 2-year-old steer cart, though it had no springs. The experiences we had with this cart were sometimes amusing, sometimes vexing. We frequently visited a near-by neighbor. One day we started on this visit in our cart. To shorten the distance we went through a field of sunflowers in which there had been a fence. But some of the rails had been removed, and here and there were slanting stakes left in the fence row. The field was all grown up in sunflowers. Through these the steers pushed their way. All at once a slanting stake struck the bottom of our cart-bed and upset us both. Later when we were ascending out of a ravine that we were crossing the ring on the neck-yoke slipped off of the end of the tongue and this time we both went over backward. Nevertheless, we arrived at our destination.

About October 25, as I had nothing to winter my stock on, I took my steers and cart and started to go to my wife's folks, intending to cut hay there and later on to drive my cattle there to winter. The place was away to the southwest of Emporia. I left my wife at home alone. My first night out I slept on the floor of a house. The next night caught me away from any house. I reached a creek, however, fed my team, tied them to a tree, crawled under my overturned cart, and passed a comfortable night. I bought hay at my father-in-law's and later on wintered my cattle there.

At this time Lincoln was our President and the Southern States were talking of seceding.

ing of seceding.

As Kansas had had no crop much aid was sent in, but it was no enough to go very far, especially when men who had enough for their immediate need accepted aid, as well as those who were truly needy. I felt that I needed aid, so I applied. Our township relief station was four or five miles east of me. It was winter and I had no team, so I made a hand sled and went to the relief station and there obtained a bushel of meal and hauled it home on the sled through the snow. Soon after this it was decided that all should share the supplies and share alike. I went again for aid and this time I could have brought home my share in my nocket.

brought home my share in my pocket.
On January 12 our first child was born and of course there was never another like it. Although we had set our hearts on a boy, we gave the girl a large place in our affections. I even turned poetical and strung together an acrostical set of verses.

There was plenty of snow that winter, drifts along the sides of the houses sometimes six feet high. At one time no one passed along in front of our house for two weeks. By February 10 the snow was all gone and the creeks were full, and they had not been for years before. March 27 a steam-boat came to Topeka with seed-wheat for the farmers. The season of '61 was a wet one and the crops were good.

KANSAS MADE A STATE AND WAR BEGUN

In the spring of '61 Kansas came into the Union as a free State. The Atchison, Topeka & Santa Fe Railroad was begun from Atchison. The Pacific had got as far as Kansas City. In May of that year we received news of the war. Several battles were fought that year. The North expected to bring the war to a successful close in '62, but people found that the war was likely to last longer than they had anticipated. More soldiers were called for. I debated with myself whether I should enlist or not and decided that I should not. I knew of some defects that would have kept me out of our late war; but I also knew that anything in the shape of a man was accepted, and accepted with thanks, in both North and South.

Not having a horse for farm work I decided to become a school teacher. There were at that time thirty-eight school districts in Shawnee County, but I did not think I could pass the district examination, so I decided to start a subscription school. I charged \$3 per term. A neighbor gave the ground for a school-house but the district was not yet organized. There were but five votes cast in our district when it was organized. There had been two or three more families in the district, but at this time there were only five. I visited the county superintendent to get papers calling the voters together to form a district. The district was duly organized, a tax was levied, and two respectable citizens placed poles under

### Would You Think It?

Would you think it possible that you could be disappointed in the face of a woman whose shapely shoulders, and beautiful hair suggest womanly perfection and beauty? Such disappointment comes not seldom when the face turned to you



shows disfiguring blotches and blemishes. In general the cause of these cruptions is impure blood.

Dr. Pierce's

Dr. Pierce's Golden Medical Discovery purifies the blood, and removes the corrupt accumulations which cause disease. When

the blood is cleansed, pimples, tetter, salt-rheum, boils, sores, and other results of impure blood, are perfectly and permanently cured.

"For three years I suffered with that dreaded disease eczema," writes Mrs. J. Koepp, of Herman, Oregon. "I was told to try Dr. Pierce's Golden Medical Discovery, which I did, and after I had taken fourteen bottles I was permanently cured. It has been a year since I stopped taking your medicine and it has never appeared since. I think your medicine a wonderful cure and hope others suffering as I did, will take it and be relieved of their suffering."

Some of the most remarkable cures effected by "Golden Medical Discovery," have been of scrofulous diseases.

have been of scrofulous diseases.

"I will forever thank you for advising me to take Dr. Pierce's Golden Medical Discovery," writes Mrs. Jas. Murphy, of Fonda, Pocahontas Co., Iowa. "It has cured me of chronic scrofula of twelve years' standing. I had doctored for the trouble until I was completely discouraged. I also had chronic diarrhea for twelve years. I am in good health now—better than I ever was in my life, owing to Dr. Pierce's Golden Medical Discovery. I took several bottles of the 'Discovery' before I stopped."

Accept no substitute for "Golden Medical Discovery." There is nothing "just as good" for diseases of the stomach, blood and lungs.

blood and lungs.
Dr. Pierce's Pleasant Pellets cure dizziness and sick headache.

a claim shanty, ten by twelve feet in size, and with oxen dragged it onto the school-grounds. In this building I taught our first school. I had ten or twelve pupils, which, considering the size of the building, made quite a full school. The building was a light frame, boarded up and down, and had neither ceiling nor plaster. The first district school, started about a year later, was held in this building, in fact it was used for several years. I held the office of district clerk for about ten years. At that time the district treasurer had power to collect the taxes of the district. Our first tax amounted to \$117. My tax was: For the house, \$2.25; for the teacher, \$1.12; for extras, 23 cents.

The corn crop of '62 was short, so I started another school of the nature of the first. I had twenty pupils and I boarded around among the families. Farm products that year were low in price, while the things which the farmer had to buy were high. Potatoes were 20 cents a bushel, corn 25 cents, and butter 6 cents a pound; but calico was 30 cents and muslin 40 cents a yard.

On January 22, 1863, another child was born to us—a boy. Our small house was beginning to need another addition.

For January 1, 1863, 1 find this entry: "War! War! Now the South whips and now the North. Our officers appear to be in the army more for the money than to defeat the rebels. Not so with the South; they are terribly in earnest. And yet I prophesy their defeat and a long step in the abolition of slavery."

In February there was a report that Illinois had come within a few votes of seceding. At that time the outlook was dark for the Union. The President called for 500,000 more men and there was talk of a draft in Kansas. We saw no gold in circulation; small paper money was all we used. Even the printed promise of individuals passed as cash, and we considered it all right so long as men received it from us.

QUANTRELL'S RAID.

In August, 1863, Lawrence was burned by Quantrell, and 125 men were murdered in cold blood. Quantrell was accompanied by 300 men who were governed by no law. It was as if as many savages had been let loose to kill and to burn. Horrible tales were told, and we heard many thrilling stories of escape. That raid brought the horrors of war close home.

ited the county superintendent to get papers calling the voters together to form a district. The district was duly organized, a tax was levied, and two respectable citizens placed poles under

that there was a \$5 fine if we failed to appear on drill days. In the year 1864 I wrote this entry:

"Startling news from Missouri! The rebel general, Price, with 1,500 men, is on his way to destroy Kansas City and to in-vade and overrun Kansas! Notice is given that all able-bodied men be held in ready-ness to start on one day's notice for the horder to repel the enemy. Already they have burned Carthage; in a few days we may have a taste of war, in the army or out."

In a few days we were all ordered to the State line. Every man but the aged were to go. The latter were ordered to Topeka to guard the city. They built a cottonwood stockade at Sixth Street. It was fifteen or twenty feet high and it stood there for a long time. They guarded every road coming into Topeka and threw up earth-works southeast of There was no actual danger, but they did not know but that Price might escape the troops and that it might please the rebel general to destroy the city.

Nearly all the prominent Topeka men were in the Topeka company. Our township people, as they most all had horses, formed a cavalry company. I believe it was luck for me that I was poor and horseless, for the company I was in was not in the fight; while all the cavalry companies were, and some never returned home. I felt as a comrade spoke. He said: "I might have a horse that was warranted to neither bite nor scratch, but it might run away, and what if it ran towards the enemywould I be glad or sorry?"

We infantry were loaded into farm wagons and hauled down near the border, near a place called Shawnee Mission. At the mission we camped and drilled for several days and there we received our camping outfits. I remember that there were not enough frying pans for each mess. We lacked one. Archie Williams said he would get one and he and a friend strolled over to a supply-tent, looked around awhile, and started to return. Then he stopped and said, "Hold on here, I just dropped something." He picked up a frying-pan and came on without detention.

#### A BATTLE.

We were told that the general in command of that department had us en-rolled as United States soldiers, for the time being. We had no uniforms and the question arose how we should be known in case of a fight and we became separated. So we sewed red sumac leaves on our caps as a mark of dis-

News came that Price would reach Kansas City the next day unless stopped. We were ordered to cross the stopped. line into Missouri. Some of the men said that we were not obliged to do this, others favored meeting the enemy at the line, while others said meet them in Missouri. But we were ordered to go on and, with a yell, on we went. After a short march we were halted at a farm-house by the roadside. were told that the troops were hurrying off to meet the rebels who were not far away and that there would likely be a fight soon. In the distance we saw a long line of cavalry on the march and were told that it was the 11th Kansas regiment. After a while orders came to fall into marching order. Our Topeka company was sent to keep back the enemy if they attempted to cross there. A number of other companies of infantry were found there, also a company of artillery. It was at the rocky bank of a stream, across which only the piers of a bridge were to be seen. There was a good fording place, how-ever, as it was on a direct road to the

east out of Kansas City.

The greater part of the troops were farther to the south at another crossing. Here Price actually gave battle. stood in our position ready for orders, to do we knew not what, nor did we know how soon. I felt that we might soon see some war. I felt like the boy in his first battle who said that he wished he was in his father's barn. When asked the reason he said, "Why, then I would run for the house."

After awhile we heard the cannon fire of the battle that was in progress. However, we were not called into any action but kept our place until the fight was finished and the enemy was on the run with the troops in pursuit. Then

we were ordered to Kansas City. Our march was in the night and I for one was glad when I heard the order to halt. We rested, then, by a large tree by the roadside and in the morning we went into Kansas City and were told to go to our homes. The Pacific railway had been laid as far as Lawrence and it was my fortune to get on a construction train and ride that far. From there I started on foot for my home. The night following I stayed at Big Springs and got home the next day.

GUARDED HIS FELLOW PRISONERS.

Many Shawnee County men were killed in this battle and many were taken prisoner. Among the latter was a Mr. Freeland. The prisoners were taken below Fort Scott. Mr. Freeland was dressed in butternut colored clothing, which was a favorite color of the rebels. As he was standing a little way off from his fellow prisoners a rebel approached him and said, "See here! Can't you guard these prisoners?" "Why, yes," said he, "but I have no

gun."
"Well take this one," said the rebel, and he handed over to him the one he held. So Freeland stood guard over his fellow prisoners. After a while one and another was missing so he too thought

it was no use to stay there.

Perhaps you think that the few lonely women left on the wide prairies did not have a hard and anxious time in those two weeks that our Shawnee County company were gone! There was not a man in the country, for any that did not go were in Topeka. My wife was alone with no neighbors for miles and then only lone women like herself. She had two small children, and a field to keep loose stock out of. At one time a herd of Texas cattle came about the place after dark. She placed the children on the bed and told them to stay there till she came back, got on the 2-year-old colt, and drove the herd off more than a mile. When she came back the children were asleep.

Artemus Ward said that his patriot-ism was such that he was willing that every drop of blood should be shed from the veins of his wife's relations. My relatives were not noted as soldiers, but my wife had three brothers who were in the whole war. One lost his life in the battle of Manassas. So our family did its share. And Kansas as a State was then in the front rank, and since then has been noted the world over for its soldiers.

For January 8, 1865, I find this entry: "The Union cause is prospering. Lincoln is again elected President. Our armies are triumphant, and Sherman has marched clear through the Confederacy. Savannah has been taken, as has also the rebel army in Tennessee. The army near Richmond is the only one the rebels have left. "The Rebellon is broken, the slaves are free:

free; And soon Jeff Davis will be hanging to a sour apple-tree."

At this time more soldiers were needed to fill the places of those whose time had expired, and a draft was talked of. To avoid the draft Shawnee County raised \$4,000 to hire men to enlist. To this fund I gave \$5. But we were afterwards told that this was a mistake as no men were called for from Kansas; she was already ahead of her required quota.

Next came the good news that Rich mond was taken; the close of the war was near.

Then we heard the sad news that Lincoln was shot by an assassin. Like Moses, in one respect, he had taken his people through the wilderness, but he himself was not able to enter into the full fruition of the long prayed for realities. But he did live to see in faith over across the narrow space of time that intervened, his country again unit-ed and free, now truly, "the land of the free and the home of the brave." As the name of Moses has long lived in the memories of his people, so will the name of Abraham Lincoln live in the hearts of his countrymen.

"Johnson's army surrenders to Sherman. Jeff Davis has escaped, disguised in wo-man's clothing."

So says an entry in the journal of

January, 1865.
Crops were good the year of 1865. That year I bought another horse, a bay filly, 3 years old, and paid \$135 for her. I sold my yoke of oxen for \$100. I was now the proud owner of a team, but I had no harness. I bought a riding bridle and for a saddle I put straps around the body of the horse and attached stirrups to it. Then for my health and to break the horse, I took frequent rides.

I find this entry in my diary:

"The worst luck I ever had! My two horses are stolen. They were taken out of the stable last night. Too bad! Just as I was about to buy a harness and have a team! Stolen! And I never drove them

In reviewing my life I still think that



with no means to replace them, the loss of my team was the hardest luck I ever had in a financial way; in effect, I mean, for I have lost more horses since then—three at one time—but their loss was not felt as the loss of this, my first team. I was left without horses or oxen, but even this might have been worse, for in about three months the filly re turned to Auburn to her old home and I got her back with also a large war horse bearing the brand, U. S.

I advertised this one and when his owner came for him he said that he had bought my horse at a livery stable at Fort Scott and taken her to Wabaunsee County and had turned her loose with his horse, and they both disappeared. My other horse I never heard

#### THE GRASSHOPPER YEAR.

In 1866 the State was invaded with grasshoppers—millions of them. After twenty-four hours not a blade was left on the corn-stalks and then the 'hoppers commenced to eat down on the ears of corn. They stripped the leaves from the trees and then ate all the garden truck and even the peaches on the trees, leaving the bare seeds hanging on the trees. I believe they even liked growing tobacco. Sorghum they did not touch, perhaps because we wanted it stripped to make molasses. In the winter of '67 we began to burn

coal. It cost 14 cents a bushel at the mines.

In 1868 times improved some. prairie pastures soon began to be fenced up. I believe that on the whole it was better that we were compelled to pasture our stock. I lost three horses by their running at will on the I think that they entered a prairies. drove that was passing along and the driver did not compel them to stay out. know that much cattle was lost in that way. I nearly lost three 3-year-old steers that way. The drivers had them, but denied it, but I pointed them out and they said, "O well, if they belong to you, drive them out." The loss of my horses would have fenced more land than I owned.

I have related a history of my first ten years of life in Kansas. I had by this time made a good start. My small house, though continually added to was still not comfortable; but I was ac-cumulating stock that would build me

Railroads were being pushed in every direction; early hardships were over, and the State was prospering. A man going out of Kansas, years before, with the cow tied beind his wagon, going to his wife's folks, asked me if I was contented in my little cabin. I replied that I was contented to stay by Kansas. He answered that he would not live on the best farm in Shawnee County or take it as a gift if he had to live on it. I believe that man was running away from the best county he had ever struck. Certainly farms in Shawnee County to day are not begging for some one to live on them. Farms are increasing in value and are desirable property. Even on the high prairie we can once in a while, semi-occasionally, raise a fairsized nubbin.

As a State we have prosperity. cranks we beat the Nation; and some think that if that crankiest crank no-tion (as it strikes them)—the prohibition law-had not been enacted, this would be a pretty good State in which to bring up a family of children.

### Liquid Air Plant.

The new chemistry building of the University of Kansas is now equipped with a complete liquid air plant, the only one west of the Mississippi, and with one or two exceptions, the most efficient in this country. This plant is composed of two distinct parts; an air compressor, by which chemically puri-fied air is subjected to a pressure of 310° below zero, at which it is transformed into a slightly blueish, almost colorless liquid, of the density of water. The compressor is an American machine, and is driven by a twenty horse-power electric motor. The liquifier is of English manufacture, and has a capacity of one and a half quarts of liquid air per hour. The wonderful liquid produced by it is preserved in double walled, silvered glass flasks, the space between the two walls being reduced to a vacuum. Though produced by such great pressure, the liquid remains un-changed for many days at the low temperature named, even though the flasks are left open and exposed to ordinary atmospheric conditions.

Good appetite and cheerfulness follows the use of Prickley Ash Bitters. It purifies the blood, liver, and bowels and makes life worth living.

## LIKE A MIRACLE

### Blind and Helpless from Paralysis, this Man Now Sees, Walks and Works.

John Hunter, of Orient Street, Chico, Butte Co., Calif., was a blind and help-less paralytic, who had lost even the power of speech. In the spring of last year he was pronounced incurable, but now he can see, talk, walk, and work. To the San Francisco Examiner representative he said:

"About four years ago I was suddenly stricken with paralysis. I lost all sense of feeling and all power of movement in my right side, from head to foot. I also partly lost the power of speech. I soon became totally blind and was so perfectly helpless that for three years

I was confined to my bed.
"Doctors diagnosed my case as locomotor ataxia and my family physician gave me every care and attention possible but all his prescriptions during two years were powerless to alleviate my sufferings or in any way afford the slightest relief.

"After being virtually given up as a dead man by friends and physicians, and resigning myself to my apparent fate, I determined to try Dr. Williams' Pink Pills for Pale People. I mentioned it to my doctor and he not only gave his consent to my trying Dr. Williams' Pink Pills but strongly advised my doing so.

"From a blind, helpless paralytic, unable to move and so broken down and nopeless that life was a burden, I can now walk, do any odd jobs about the place, go down town, and—most won-derful of all—can see. And I owe it all to Dr. Williams' Pink Pills.

"Improvement began while I was taking the second box. I continued taking the pills and from that time on it was gradual but sure. My awful stomach troubles have disappeared, my eyesight has been restored, my brain is clear and active, and if ever a man should be grateful and anxious that others should know the wonderful properties of Dr. Williams' Pink Pills, that man is myself."

The fact of Mr. Hunter's cure is widely known and is vouched for by all who know him, including Mayor O. L. Clark, the Rev. W. G. White, Cashier A. H. Crew, and Postmaster W. W. Wilson, all of Chico, Calif.

Dr. Williams' Pink Pills for Pale People are sold at fifty cents a box or six boxes for two dollars and fifty cents, and may be had of all druggists, or direct by mail from Dr. Williams Medicine Co., Schenectady, N. Y.

### Kansas Loses Another Competent Man.

The University of Kansas is soon to lose another of the most distinguished and valued members of its faculty, the third, of those who have been long con-nected with the institution, to be called within a brief period to a more attractive and remunerative position elsewhere. Dr. Samuel W. Williston, for the past twelve years professor of historic geology and vertebrate anatomy, and since its organization in 1899 the dean of the Kansas University School of Medine, has accepted an invitation to become the head of the department of paleontology, and director of the paleontological museum, in the University of Chicago. In the departure of Dr. Willitson the State of Kansas and the University will sustain a loss which can be appreciated only by those who are closely in touch with the institution. By his untiring labors Dr. Williston has 3,000 pounds to the square inch, and a liquifier, by which the compressed air is reduced to a temperature of it is one of the most complete and valuable in America; his contributions to scientific literature have brought distinction to himself and to the university both here and abroad; and his work as dean of the medical school has gained for it full recognition by the best medical colleges of the East.

> How to cultivate well is a great accomplishment, and has a broad field to work in: There is cultivation of the soil, of generosity, loving kindness, charity for a neighbor's dog, patience with his fowls, and even his disposition for lending things!

### FOR OVER SIXTY YEARS

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

Twenty-five Cents a Bottle.

### The Houng Folks.

Conducted by Ruth Cowgill.

#### RUE.

They leaned above the cradle, though none their presence knew;
Roses had one, one lavender, and one held bitter rue.
And she who held the roses looked steadily at those
Who held the lavender and rue, as if they were her foes.

It was the pale rue-bearer who answered to that gaze;
"Ah, sister, sweet are roses, and sunny, rose-lined ways.
But in the scent and sunshine the weak heart falls asleep,
And never learns the lesson, to weep with those who weep.
The little lad shall have them, thy roses, for his own,
But we are here to teach him that they are not good, alone."

And then the three, in silence, bent o'er the little bed,
And she who held the roses laid them softly at the head;
And she who held the lavender, the pledge of service sweet,

of service sweet,
Strewed it in mazy patterns about the little feet.
But she, the pale rue-bearer, knelt as at some command.
And clasped her gift securely in the tiny sleeping hand.
—Catholic Standard and Times.

### Seeing the Sights in Indiana.

A window-glass factory is the most fascinating place one can imagine. One thinks that he has gone to Fairyland or some far-distant enchanted place where

some far-distant enchanted place where the Fire-god, Vulcan, reigns supreme. His subjects in the shape of men, rush hither and thither to do his bidding, shricking some outlandish gibberish to each other in the midst of their toil.

Externally, the plain-glass factories are very different from the plate-glass works. Here everything is done by men, there machines do the work. The process, however of making the glass, is the same wherever it is found. It is simply the melting together of silica (sand), lime, and potassium. The difference is in the handling, afterwards. These factories are kept going night and day. It is extremely exhausting

and day. It is extremely exhausting work, so that the men are able to endure only about five hours' work a day, for which they sometimes receive as high as \$5. The glass-blowers are al-most exclusively foreigners, who drink and gamble, squandering their money shamefully when work is plenty and living in utter wretchedness when the fac-

tories shut down.

We chose the night-time for our visit. We entered a long, low building, lighted only by the glare of the furnaces and the glow of the swinging globes of glass. The men weer singing in their queer, unintelligable jargon. They ceased their singing when we entered, working in stolid silence, except when they called loudly to each other from distant parts

of the room. We first went to the furnaces. Dripping, grimy workmen stood near them constantly shoveling sand and bits of broken glass into their hungry looking red monster-mouths. We tried to look into them, but closed our eyes quickly into them, but closed our eyes quickly before the intense hot brilliance, that reservoir of flame. A queer dumb dirty fireman handed us a broad wooden paddle, which contained in its center a piece of smoked glass, through which we looked with some degree of comfort and satisfaction. It seemed to us that the flercely glowing mass that we saw must be a very little like our glorious sun, which we had been taught, is a mighty ball of liquid flame. We turned with relief from the painful glare of the furnace to the soft dim glow of the hot

The men would rush to the furnace with long, hollow poker-like rods upon whose end they gathered the liquid glass. Through these they blew their life of E. P. Roe, and name a few of his breath, until the glass became hollow and in shape somewhat like an electriclight globe. Then they began to swing them back and forth on their long sticks, stopping now and then to blow their breath into them, then, swinging, swinging, until finally the little ball of red hot glass had become a large hollow globe, clear and brittle but still hot. These globes were three or four feet long and at least one foot in diameter. They were laid upon racks that stood ready for them. The blower seized a long stick which was dipped in water, and drew it through the globe, touching one side in a straight line. The touch of the water upon the hot glass caused it to crack along the line of the contact. The globe was then laid upon a flat table and sent into a furnace. We watched the process of its gradual unfolding with fascinated eyes. It grew red and glowing again in the heat, and it became soft again and lay flat and smoothe upon the slab. It was

drawn out and laid aside, ready for use. On the same night we saw the manufacturing of lamp chimneys. The process is the same, only that it does not go so far. The whole success of a lamp chimney depends upon the skill of the man who swings it. It was wonderful to see the little ball of fire grow into a perfect lamp chimney by the swinging of an arm.

#### It is Good to Be Out of Doors..

"Out door habits depend upon the personal tastes of the individual, and are best cultivated by educating these. If a young girl is born and bred with a love of any of these, happy is she; for the mere unconscious interest of the pursuit is an added lease of life to her. It is the same with all branches of art It is the same with all branches of art whose wanderings among mountains and pastures, alternating with the vigorous work of the studio, need no other appliances for health. The same advantages come to many in the habits of household labor."—T. W. Higgenson.

"To live well you must be in the open air every day. This rule is well-nigh absolute. Women offend against it terribly in America, and women are very apt to break down. Rain or shine, mud or dust, go out of your house and see what God is doing outside. I do not count that an irreverent phrase which says one feels nearer God when under the open sky, than he is apt to do shut up in a room. I know a very wise man who used to say, 'People speak of going out, when thew should speak of going in.' He meant that you do plunge into the air as when at the seaside you go into the water. Be quite sure of your air bath. I do not dictate the time, but on an average an hour is not too long. You will fare all the better, digest the better, and sleep the better if instead of an hour it is two hours or nine."— Edward Everett Hale.

"Now the heart is so full that a drop o'er-fills it, We are happy now because God wills it; No matter how barren the past may have 'Tis enough for us now that the leaves

"Now is the high tide of the year, And whatever of life hath ebbed away Comes flooding back with a ripply cheer, Into every bare inlet and creek and bay.

Every clod feels a stir of might,
An instinct within it that reaches and
towers,
And, groping blindly above it for light,
Climbs to a soul in grass and flowers,
—James Russell Lowell.

In one of the public schools recently, number of the small pupils were busily engaged in working problems in multiplication, with more or less satisfactory results.

After some time the teacher noticed one little fellow who seemed most un-happy. His cheeks were flushed, his hair tumbled, and tears were very near the surface. The teacher said, in a kindly tone, "Well, John, what is the matter?"

"Oh, dear, I wish I was a rabbit!" re-

oli, dear, I was a transfer of the boy.

"A rabbit!" exclaimed the teacher, in astonishment. "Why on earth would you like to be a rabbit?"

"Well, my papa says they multiply so fast."—The Gentleman's Magazine.

Be thrifty, but not covetous; therefore give Thy need, thine honor, and thy friend his due.

Never was scraper brave man. Get to live; Then live, and use it; else it is not true That thou hast gotten. Surely use alone Makes money not a contemptible stone.

—Men.

### QUESTION BOX.

E. P. Roe.—Give a brief sketch of the General Chetlain's staff in Memphis: principal works. Where can the book "Practical Eti-

quette" be obtained?

Give pronunciation of the word Phil-"FARMER'S DAUGHTER." ippino.

Edward Payson Roe was born at New Windsor, in Orange County, New York, March 7, 1838. He was a Presbyterian clergyman. The first of his fame as novelist began in 1872 when "Barriers Burned Away" kindled the flame of a popularity which still burns lightly. He died at Cornwall, N. Y., July 19, He died at Cornwall, N. Y., July 19, 1888. Some of his most interesting books are "Opening of a Chestnut Burr," "From Jest to Earnest," "A Knight of the Nineteenth Century," "A Face Illumined," "Without a Home," "He Fell in Love With His Wife."

You can obtain the book, "Practical Etiquette," by writing to any reputable book company, who will send for it, if

### FOR THE LITTLE ONES

### THE CASTLE AND THE KING.

"I'll build a castle," said the king—
"A castle rich and fair;
And I'll have birds of every wing
To grace the garden there;
And round it all I'll build a wall
As high as high can be,
And no one in the world shall call
To share the joys with me;
Bright streams shall dance in fountains gay,
And, as I pass along,
Sweet birds shall greet me all the way
In happy woodland song;
What books and pictures I will get,
What books and pictures I will get,
What stories I will buy,
To pelase me when it's cold or wet,
And clouds are in the sky!
I'll build a seat within the grove,
A boat to sail the lake;
And from each day, where'er I rove,
Fresh pleasure I will take;
But round it all I'll build a wall
As high as high can be,
And not a soul shall ever call
To share the joys with me."
"I'll build a home," a peasant said—

"I'll build a home," a peasant said—
"A simple home and fair;
Bright birds shall flutter overhead,
And flowers shall bloom there;
A stream shall through the garden flow
With sweet and pleasant trill;
And as the seasons come and go
New grace my home shall fill;
And round it all I'll build a wall,
But not too high to see
The friends who pass or those who call
To spend a time with me;
The wall shall have an open gate,
My fire with 'welcome' flame,
For oh! I should be desolate
If no one ever came."

The king built up his castle gay,
And, strange though it may sound,
Not half a dozen yards away
The peasant planned his ground,
The king within his stately pile
Was shut away from all;
But oft the peasant's cheery smile
Was seen above his wall;
He greeted those who passed him by,
They greeted him again,
And underneath the summer sky
He was a happy swain.

He was a happy swain.

But ere the year had passed away,
"Tis said by those who know,
The king sat on his wall one day
To watch the swain below.

He called to him in plaintive tone:
"O, peasant, sir," he cried,
"It's very hard to live alone,
However well supplied!
Though lakes and books and birds to me
Are pleasant in their way,
I want a little company
To cheer the lonely day.

My time has been but sad and drear;
I long to find a friend.
Oh! could you rear a ladder here?
For fain would I descend."

Up to the king the ladder went,
And gayly stepped he down;
And oh! the jolly time he spent
Was worth a monarch's crown.
And from that day, the records state,
He started life anew,
And, throwing wide the castle gate,
Let Love and Friendship through.
His eyes grew bright and full of mirth,
His heart was much at ease,
For lo! the king had learned the worth
Of such sweet guests as these.
—John Lea, in Our Children's Friend.

This tale was told by Judge Pennypacker in beginning a response to a toast at a Pennsylvania-German ban-quet in Philadelphia. The story, he said, showed the readiness of the Pennsylvania Dutchman to obey those in authority:
"In 1864 Sheridan, under orders,

burned every barn from a valley above Staunton to a certain point below Winchester. A band of angry rebels followed his raid, watching for a chance to pick up any stragglers. Among others who fell into their hands was a little Pennsylvania Dutchman, who quietly 'Vat you fellers goin' to do mit me?'
"The reply came short and sharp,
'Hang you.'

"'Vel,' he said, meekly, 'vatefer is der rule.'

"His good-natured reply threw the Confederates into a roar of laughter, and saved his life."—Philadelphia Times.

Eli Perkins told the following Irish story that occurred when he was on

"After scouting down in Mississippi one day I sent Corporal Mike Donan into the hospital tent to see how badly

Patrick Kelly was wounded.

"'Howly Moses, Pat,' said Mike, 'yez pale as a ghost. In th' name iv th' virgin, do yez be afther dyin'?'

"'Mike Donan,' said Pat, opening his eyes, 'an' is thot yers'lf?'

"'Tis.'

"Well year known that blatherin'

"'Well, yez knows that blatherin' spalpeen iv an Oirish drummer from Kalamizoo?' " 'Thot I do.'

"'He bet me a dollar to a pint just an egg widout breakin' th' shell—th' shell iv it.'
"'Naw!"
"'Yis."

"'Did ye do it?'
"'I did.'

"Then fwat's ailin' ye?'
"It's doon there,' laying his hand on
his stomach. 'If I joomp about I'll
br'ak it an' cut me stummick wid th'

### COOL COLORADO

THE PLACE TO GO.

Think of a round-trip rate of only

**\$**15.00

To Denver, Colorado Springs (Manitou), and Pueblo.

On certain days in June, July, August, and September, via the



Write for books entitled

- "CAMPING IN COLORADO,"
- "FISHING IN COLORADO,"

#### UNDER THE TURQUOISE SKY."

The Camping book tells how, where, and at what cost parties of two, four, and six can enjoy an inexpensive vacation in that delightful cilmate.

E. W. THOMPSON, A. G. P. A., Topeka, Kans. JNO. SEBASTIAN. G. P. A., Chicago.

shell. If I kape quiet th' thing'll hatch oot an' I'll have a Shanghai rooster a-clawin' me insides.'"

#### Quick as Lightning.

Bill-Have you seen that woman

lightning-change artist at the theater?

Jill—No. Is she good?"

Bill—Great! Why, she puts on her bonnet in less than fifteen minutes.— Yonkers Stateman.

Our lives are songs;
God writes the words,
And we set them to music at leisure;
And the song is sad, or the song is glad,
As we choose to fashion the measure.

We must write the song,
Whatever the words,
Whatever its rhyme or metre;
And if it is sad, we must make it glad,
And if sweet we must make it sweeter.

All that you do, do with your might;
Things done by halves are never done right.
One thing each time, and that done well,
Is a very good rule, as many can tell.
—M. A. Stodard.



**NEW FAST TRAIN** 

Between St. Louis and Kansas City and

OKLAHOMA CITY, WICHITA, SHERMAN, DALLAS, **FORT WORTH** 

And principal points in Texas and the Southwest. This train is new throughout and is made up of the finest equipment, provided with electric lights and all other modern traveling conveniences. It runs via our now completed

### **Red River Division.**

Every appliance known to modern car building and railroading has been employed in the make-up of this service, including

### Café Observation Cars,

under the management of Fred. Harvey. Full information as to rates and all details of a trip via this new route will be cheerfully furnished, upon application, by any representative of the



#### CROP AND STATISTICAL REPORT. (Continued from page 623.)

ly adopted by the board of directors of the Cincinnati Chamber of Commerce:

"Whereas, The House of Representatives of the United States, incident to its consideration of the agricultural appropriation bill, has passed a measure providing that the work of the Statistical Division shall be transferred to and consolidated with the work of the Weather Bureau of the Department of Agriculture on or before July 1 1902; and

partment of Agriculture on or before sai, 1, 1903; and
"Whereas this action was had manifestly under misapprehension or lack of sufficient knowledge of the nature of these two branches of Governmental service, which are both of very great importance to commercial interests throughout the country, but unlike in methods and requirements in the prosecution of the work in charge; and

but unlike in methods and requirements in the prosecution of the work in charge; and "Whereas the Weather Bureau service is distinctly one of meteorology, including presentation of information relating to current climatic conditions and influences upon vegetation, while the work of the Statistical Division is more specific and technical, covering a wide range of inquiry, statistical deductions and comparisons, which call for experienced and especially qualified service; therefore "Resolved, That the interests of the country, both agricultural and commercial, call for the continuance of the work of the Statistical Division and of the Weather Bureau on separate lines as now existing, with all possible strengthening of facilities at command for the conduct of these important services. "Resolved, That the board of directors of the Cincinnati Chamber of Commerce believes that the United States Senators should not concur in the action herein noted by the House of Representatives, providing for the consolidation of the work of the Statistical Division of the Department of Agriculture with that of the Weather Bureau of that Department."

There are some facts about this service which it is well to consider.

At present the Crop and Weather Bureau collects and publishes each week, from its permanent and carefully selected corps of observers, detailed reports of the condition of crops during the growing season. In each State this work is under the supervision of a trained director, who is in no wise amenable to political influences. In Kansas this director is Mr. Jennings, who has held his place through all political changes of the last twenty years. His competency and honesty are above suspicion. He has selected correspondents after his own kind throughout the State. If given authority to do so this organized force could furnish as accurate estimates of the crops from a statistical basis as any possible set of observers.

While Mr. Jennings has been in office the State statistical agent has with the changing administrachanged tions at Washington. The incumbents have been good men, but most of them have lacked the special training which has characterized the crop and weather

Is there any special reason based on trader's interests which prompts resolutions like the above?

#### THE DAIRY INTERESTS OF NE-BRASKA.

During a recent and somewhat extended trip through the State of Nebraska, the writer has learned some facts which show at once for the advancement of the agriculture of our enterprising sister State and which may prove of interest to the farmers of Kansas. Not only is Nebraska coming rapidly to the front as a center for the development of the beef and pork breeds of animals, but she is taking care of the milk-producers as well. With the enormous development of the alfalfa area a new possibility for the new farmer has been opened with.results that are astonishing to one who has had no previous knowledge of the facts. Largely through the instrumentality of a large greenways of the state of Kansas, or indeed in the United tality of a large creamery company a renewed interest has been awakened in that State. This company, which is the largest in Nebraska, has by judicious advertising gotten its busiful harvest, but Kansas will have a supplied that not only will there be a bountiful harvest, but Kansas will have a people that there has been a real revival of interest in dairy matters with the result that this industry has rapidly become one of the prominent ones of the State. To illustrate, the little town of Beaver City, which is located in the midst of an alfalfa region, has taken an interest in the dairy business to such an extent that its shipments of cream amount to \$600 per day. This same large creamery company, above referred to, also handles a separator of approved pattern, and now reports that it has already sold and delivered more than 100 of these separators in the single county of Custer since January 1, last. What more telling argument could be used in favor of the proper development of the dairy industry of any State, than such facts as these? The milk cow is a sure and regular source of income and is able to furnish her product at seasons of the year when the farmer has his investment in his growing crops and when is more than ever satisfied that he fact scholar.

he has nothing else to sell, while the prices paid for dairy products in Kansas, which boasts of the larg-he has traveled the crop prospects est creamery company in the world, the Continental Creamery Company, of Topeka, are such as to give a satisfactory income and a most profitable return on the investment of any farmer who will engage in milk farming. Our boundless resources in pasture-grass and alfalfa ought to make of this State the greatest dairy State in the world, the facilities for disposing of the milk or cream are better and more profitable here than elsewhere.

#### THE HEREFORD OFFICE MOVED TO CHICAGO. While it may be claimed that it is

for the advantage of the association to have its central office in Chicago, it is with regret, which must be shared by breeders in the Kansas City territory, that we learn of the decision of the directors of the American Hereford Breeders' Association to remove their home office to the "Windy City." While it must be admitted that Chicago is the greatest live stock market in the world, it will be conceded by all that Kansas City is rapidly coming to the front as Chicago's only rival. The writer expects to live to see the time when Kansas City will become the very center of the pure-bred cattle industry and he may reach an age when this same city shall prove even a better market for fat stock than Chicago now The breeders and feeders of the great Central States are becoming more handicapped as the years go by with the advancing prices of land and the constriction of the grazing area. This will militate against Chicago and in favor of Kansas City, whose resources lie in the boundless pasture areas of cheap land, and the miles of corn and alfalfa fields of the great Southwest. In this latter territory it is possible to produce the finest quality of beef at a less cost than in any other territory on earth, and it is no idle boast to say that this will, in a few brief years, become the greatest center for the breed ing of pure-bred stock that the world has ever known. When this time comes the Hereford headquarters will be removed to Kansas City. The enterpris-ing management of the stock yards at Cuicago has arranged to erect a threestory brick building, 70x140 feet in dimensions on the corner of Exchange Avenue, for the accommodation of this and possibly of other breeding associations. It is suggested that this new building will be named the Live Stock Record Building, and it is expected that other breeding associations will make their headquarters in Chicago and be given quarters in this new building. While from some points of view we regret the removal of this association from Kansas City, we think that all must admit that the inducements offered were exceedingly tempting.

### OUR POTATO PROSPECTS.

Eastern Kansas, and particularly that portion which lies in the valley of the Kansas River just west of Kansas City for thirty or forty miles, has long been known as the home of the "Potato of Kansas. A passenger on any train traveling west from Kansas City can not but be struck with the enorm ous acreage of potatoes in the Kansas Valley this year. A rapidly moving train passes through miles of potato falfa area a new possibility for the new farmer has been opened with results that are astonishing to one who has had no previous knowledge of the States, where there is so large an area of continuous potato fields as this same the possibilities of dairy farming in that State. This company, which is crop at this time seems to indicate number of 'potato kings." instead of one as heretofore. We were told of one man who had 1,400 acres in potatoes while another one not far distant had 1,200 acres. These potatoes are planted with potato-planters run by horse-power and are harvested with potato-harvest ers, also propelled by the same motor. The custom obtains in this neighborhood of securing Northern-grown seed for planting on the river bottoms, and then of using bottom-land seed for planting on the uplands. In this way the stock is kept fresh and vigorous It is also a custom for these several potato kings to dispose of their entire crop in the field to men who visit the farms for the purpose of buying. appearances go for anything, this section of Kansas will probably have a record breaking crop this season.

> During a recent trip of some thousands of miles through Kansas, Nebraska, Iowa, and Missouri, the writer

cultural region on earth. Everywhere he has traveled the crop prospects were much above the average. Indeed he has never seen a corn crop that had so uniformly an even stand and was so free from weeds as are the present crops in all these States. The grass crop is bountiful and the oats of the best. The wheat crop, which has long been in doubt, will probably surprise a good many people as the recent rains have enabled it to develop more straw and apparently to fill the heads with larger sized berries. The long continued dry weather of spring delayed the crops until many were discouraged. but with the advent of the rain has come a wonderful development which warrants the prediction of a better wheat crop than was expected and a record breaking corn crop. The corn in Iowa stands from two to eight inches high at this writing, while some in Kansas is waist high. The wheat in Iowa has formed its head and shows vigorous growth, while that in Kansas is beginning to be harvested. A trip through this region at this season of the year makes one fall more deeply in love with this section of the universe and feel assured that the farmer of the future will be the dominant fac-tor in our national make-up.

#### The Herefordshire of Kansas.

One of the things which has made Marshall County, Kansas, the home of so large a number of registered Hereford cattle is the fact that blue-grass has gradually crept in and, before even the residents were aware, has taken the country. The umber lands adjacent to the streams are becoming well seeded to blue-grass through nature's own agency, while with the advance of years this same grass, which Senator Ingalls once described as "The forgiveness of nature," has been creeping gradually up to the hilltops. Of course the main dependence for summer pas-ture is still the prairie-grass and for winter hay the alfalfa, but with the rapid spread of blue-grass has come the added advantage of an early and late pasture which is most highly appreciated by those who raise cattle. Marshall County seems to have been constructed primarily as the home of the cattle breeders, and the excellent quality of the Hereford cattle that are now found there in possession of the County Hereford Breeders' Association, which now numbers about thirty-five members, is proof that some men, at least, have taken advantage of it. The other breeds of cattle are well represented in the county as are the pure breeds of swine and poultry, but in no county in the United States with which we are familiar is there so large a number of herds of pure-bred Hereford cattle as in Marshall County, which is appropriately named the Herefordshire of Kansas.

#### Another Champion Hereford Bull for America.

A paper in Leominister, England, of ate of May 27, says: "Mr. Edward date of May 27, says: "Mr. Edward Farr, of Court of Noke, Pembridge, has disposed of the champion Hereford bull Britisher 19261, at a high figure to Mr. George Leigh, of Aurora, Ill., who, with other Americans, are just now buying a considerable number of pedigree Hereford cattle for exportation to the United States. This magnificent 5year-old bull is, if possible, more massive and better-looking than ever. Bred by Mr. Allen E. Hughes, of Winter-cott, Britisher is by the many-times cnampion bull, Albion 15027, dam Plum 4th by Cheerful 6851. At the agricultural shows last season he cleared everything before him. His winnings include champion of all breeds at Lord Tredegar's show, 1899; 1st B. and W. E. S., at Bath, 1900; first and champion Herefordshire and Worcestershire at Evesnam, 1901; first and champion R. A. S. E., at Cardiff; first Shropshire and West Midland, 1901; first Leomin-ster, 1901; special Brecon, 1901."

### Sale of Hereford Herd.

R. H. McNatt, of Fort Worth, Texas, has sold his herd of Herefords to W. T. Hutchinson, of Arlington. It consists of twenty-seven registered cows and is headed by the fine bull, English Lad, whose dam was one of the Armour importations. Thirteen cows have calves, all eligible to registration. The price was \$6,000, an average of about Mr. McNatt has been in the Hereford business about two years. Mr. Hutchinson is just making his bow as

"What kind of children go to heaven?" asked the young lady Sundayschool teacher.
"Dead ones," replied the matter-of-

#### Kansas.

MRS. J. K. HUDSON, IN THE TOPEKA HERALD.

Four hundred miles of valley, plain, and slope, stretching from a mighty river to the wondrous mountains. For thousands of years this garden lay fallowing. The lavish sun poured down its life-giving rays many days in every The streams brought alluvial richness from the North and the West for ages. The soft south winds swept it from boundary to boundary, summer after summer, and the north wind tempered its flercest blasts for Kansas in the succeeding winters. Thus was the garden made.

Then came the gardener. First, from New England, for the New Englander first came to plant the truth. The men who came to sow the tares of slavery in free soil were not gardeners. The descendant of the Puritan planted in Kansas the seed that has borne richest harvest.

We have the corn of Egypt, that, buried again in the pyramids, would retain its germ of life for more uncounted years; we have the golden apples of Hesperides in our fruits; we have mines under the earth and cattle on a thousand hills, but these are not our richest harvests. The little swarming places of the world do not dream of the exaltation of the great outdoors. Ere history began, or learning builded temples, there were favored spots of earth where men were reared to do, to lead. Here, in the open, is such a spot.

Whom the gods call forth are men of purpose. Our pioneers were men of both purpose and action. Their blood yet flows in the veins of every Kansan born. Their spirit is in the free air. High-born or low-born, it matters not. Time nor chance can put out his will. In all the lists the Kansas man takes second place to none. He plows and sows and reaps, the while he cons the greatest book of all-nature's unblemished page—and while he plows he plans.

A Kansas man said that when he was introduced in the East the Eastern man always greeted him thus: "Ah, you are from the West, I believe?" And the Kansas man answered: "No, not from the West; from Kansas—there is a dif-ference." That is the way all the peo-ple of Kansas feel. Why should they not? When Coronado marched north from Mexico to search for the seven fabled cities he found Kansas instead and turned back to carry the glad tidings. But his followers came not so far. The Spaniards and the Jesuits stopped just short of Kansas. It was reserved for the Protestant—and we have been protesting ever since. Sometimes too much, perhaps; not always wisely; maybe, but always earnestly. It has been said by another Kansan that a man with a black past would give his all to wipe it out in Kansas. Well, what more could be said? Wealth and lineage lay no claim to greatness on the prairies. Whom the gods call forth are men of purpose—born to lead the many that must follow. Kansas nurtures her share.

Heavy hogs gyrating around the \$7.50 mark in the Chicago market ought to make the young pigs at home look good enough to insure them the best possible care.

A United States National administration is antagonizing trusts! No wonder volcanoes are on the rampage, and earthquakes rend the globe!

There is good reason for mixing hope with seed-corn when planting; the new crop will not find much old corn in its way next winter.

"Sin has many tools, but a lie is a handle that fits them all.

M. W. Savage, manager of the International Stock Food Company, of Minneapolis, Minn., recently received a very complimentary letter from J. Lewis Draper, manager for Dairy and Creamery. It is as follows: "Dear Mr. Savage:—We are in receipt of your favor of the 17th saying that you have just been putting up Factory No. 3. I am sure if the stock-raisers of this country should pay a visit to Minneapolis and go through the plant you have there, it would open their eyes somewhat. The writer has had considerable experience with manufacturers of stock foods but never before has he seen a business of this nature assume such large proportions and make such a wonderful growth. Of course after having had the pleasure of making your acquaintance, he can readily understand how this is possible. It is all the result of the man behind the gun. I want to congratulate you upon your success. You have certainly made a most wonderful record and one that you should be justly proud of. I sincerely hope that the future has in store for you still greater achievements. I have watched the growth of your business from a very small beginning to its present large proportions and I can not help but admire your business ability, push, and energy. Wishing you every success in the future and with best regards, I am, Very truly yours, J. Lewis Draper."

#### WEEKLY WEATHER CROP BULLE-TIN.

Weekly weather crop bulletin for the Kansas Weather Service, for the week ending June 10, 1902, prepared by T. B. Jennings, Station Director.

### GENERAL CONDITIONS.

GENERAL CONDITIONS.

A warm week, with very heavy rains in the eastern half of the State, reaching over four inches in Brown, Atchison, Coffey, Labette, Montgomery, and Chautauqua, over five inches in Wilson and Jefferson, and over six inches in Morris and Cherokee. Light showers occurred in the central western counties, extending southeastward into Sedgwick and Harper. A frost occurred in Gove on the 3d. A hailstorm moved from the northeast part of Trego into the northern part of Russell.

RESULTS.

EASTERN DIVISION.

### EASTERN DIVISION.

RESULTS.

EASTERN DIVISION.

Wheat harvest began the first of the week in the southern counties, but was stopped by the wet weather; wheat is ready to harvest in Anderson, is filling well in Shawnee, ripening in Pottawatomie, improving in Wyandotte and Jackson, but remains short in Nemaha, and has rusted some in Morris. Corn is growing rapidly, but it is now getting weedy and needs cultivation; some fields were badly washed. Oats are generally in good condition and improving, except in the eastern part of Douglas, where they are reported poor; they are heading well in Shawnee and are ripening in Labette. Much of the first cutting of alfalfa has been lost owing to the wet weather. Grass is growing finely. Early potatoes are being marketed in many counties.

Anderson County.—Too much rain; corn waist high, weedy, and losing color; wheat ready to harvest, but ground too wet; too moist for fiax; grass fine.

Brown.—Oats and wheat doing well; corn fair; grass good.

Chautauqua.—Too wet for farm work; wheat-harvest stopped; corn and weeds

Wyandotte.—Everything looks well; wheat stretching up; corn growing finely; pastures good; meadows improving; new plotatoes being marketed; black raspberries ripening; strawberry crop about over.

#### MIDDLE DIVISION.

Wheat is improving rapidly in the northern counties, with harvest progressing under difficulties in the southern. Corn has grown rapidly. The first crop of alfalfa has been secured in some counties, but damaged by the wet weather in others. Oats have made good growth and are in inne condition; the crop is heading in Washington. Grass is now in very fine condition. Late cherries are ripening in Pratt, and ripe in Sumner. Potatoes are doing well and are large enough to use. Barton. Wheat sown in stubble fields is being damaged by something, many believe it to be the fly; all crops are fine; first cutting of alfalfa nearly all in stack; corn cultivated the second time; potatoes large enough to eat; forage crops growing nicely.

Clay.—Rain retards corn cultivation; danger of rust in wheat and oats if rain continues; grass and alfalfa being cut; pastures fine.

Cloud.—Much alfalfa cut first of week; too wet to nlow corn or cure the election.

tinues; grass and alfalfa being cut; pastures fine.

Cloud.—Much alfalfa cut first of week; too wet to plow corn or cure the alfalfa; wheat, oats, potatoes, gardens, and pastures growing rapidly; corn and wheat getting weedy; oats heading; much alfalfa hay damaged.

Cowley.—Harvest progressing slowly, too wet; corn growing rapidly, but very weedy; alfalfa hay damaged by rain; gardens fine; raspberries full crop; grass rank; cattle getting fat.

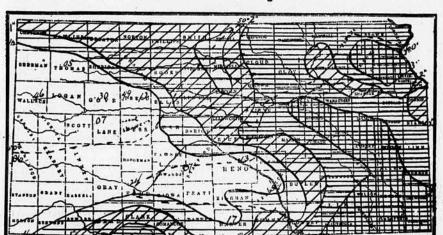
Dickinson.—Low land wheat under water, other crops in good condition; potatoes setting well; feed abundant.

Ellsworth.—Wheat prospects vastly improved; corn not a very good stand; sorghum and Kafir-corn doing nicely.

Harper.—Good week for farm work; corn being cultivated; harvesting soft wheat begun; oats fine.

gun; oats fine. Harvey.—Corn cultivation progressing

Rainfall for Week Ending June 8.



SCALE IN INCHES.



1 to 2.



T. trace.

Less than 1/2. 1/2 to 1.

growing rapidly; oats very heavy; potatoes rotting.

Cherokee.—Corn getting very weedy, early planted doing well where cultivated; other crops doing well.

Coffey.—Much damage to crops on bottom lands; grass fine; too wet to work. Crawford.—Fields flooded, farm work suspended; some wheat ready to cut; corn growing, but becoming weedy; potatoes, turnips, beans, and other truck plentiful. Doniphan.—Corn being cultivated first time, last days too wet to work; new potatoes on market.

Douglas.—All crops helped; corn growing finely; wheat doing well, but not equal to last year; oats poor in east part; flax ordinary.

Filk—Theo wet to harvest wheat or cultivated.

dinary.

Elk.—Too wet to harvest wheat or cultivate corn; some fields washed out; grass

Elk.—Too wet to harvest wheat or cultivate corn; some fields washed out; grass fine.

Franklin.—All crops doing nicely except where washed out.

Geary.—Good week for growing crops, but too wet to work; wheat and oats doing finely, some rust but not serious yet; fruit scarce; will be some apples.

Jackson.—Rains retarding corn cultivation, but fields fairly clean, corn has made good growth; grass fine; wheat somewhat improved; oats doing well; early potatoes being used.

Jefferson.—Wet; very little work done; all crops making rapid growth and are in good condition; early potatoes on tables; prospect for a light crop of apples.

Johnson.—Crops doing finely; too wet to work; clover ready to cut; much damage to crops and gardens by hail in south part.

Labette.—Ground very wet, wheat dead

Labette.—Ground very wet, wheat dead ripe but can not be cut, very little has fallen; oats ripening rapidly; corn getting very weedy, but growing rapidly.

Marshall.—Last half of week too wet to handle alfalfa or cultivate corn; wheat coming out better than expected; oats will be good crop; potatoes very good.

Montgomery.—Wheat harvest stopped by heavy rains.

will be good crop; potatoes very good.

Montgomery.—Wheat harvest stopped by heavy rains.

Morris.—Highest water in river for forty years; corn badly washed on slopes; first cutting alfalfa almost total loss, second crop making good growth; some hail east part; wheat rusted some; oats looking well.

Nemaha.—Fine weather for crops; oats improving and promise well; wheat remains short, and in some fields has been hurt by chinch-bugs; corn clean and growing well; pastures improving.

Pottawatomie.—Fine growing week: rye harvest begun; wheat ripening; alfalfa haying retarded by rains; new potatoes abundant; cherries ripening.

Riley.—Corn generally clean in central part, getting weedy in southern; much alfalfa laying out in the rain and very little in stack; new potatoes ready to use.

Shawnee.—Wheat filling well; oats heading finely; corn growing rapidly; good stand; grass fine; cherries ripe.

Wilson.—Corn growing rapidly; gardens look well; upland wheat good; grass fine.

Woodson.—Too wet for farm work; corn getting weedy; apricots) plums, cherries, and gardens doing well.

slowly, where not too weedy corn is growing rapidly; wheat doing fairly well, needs drier weather; oats very fine; pastures good; alfalfa needs cutting.

Jewell.—Corn, potatoes, and alfalfa doing

good; alfalfa needs cutting.

Jewell.—Corn, potatoes, and alfalfa doing finely.

Kingman.—Oats promise heavy crop; wheat doing better than was thought possible earlier in the season; corn growing well, cultivation in progress; cherry crop light; ground in fine condition.

Lincoln.—Fine growing week; corn all planted and up; some complaint of chinchbugs in corn and wheat; wheat left standing has come out finely; potato-bugs are doing much damage.

McPherson.—Wet, but crops coming forward finely; corn growing rapidly, also Kafir and cane; wheat turning color.

Ottawa.—Wheat is filling very well; oats give fine promise; corn, Kafir-corn, and alfalfa injured by heavy rains.

Phillips.—Wheat doing well; alfalfa growing rapidly, also corn; potatoes fine.

Pratt.—Corn growing rapidly; wheat developing a fine head and grain; new potatoes; cherries ripening, light crop; much work done in fields.

Reno.—Cultivation progressing rapidly; wheat looks well; oats fine: rye turning; cane and Kafir being sown for fodder; some alfalfa being cut.

Republic.—Too wet to handle alfalfa; corn growing finely; wheat and oats will fill better and will make good half crops.

Rice.—Wheat and corn good, latter weedy; oats very good; first crop alfalfa damaged by rain or washed away by overflows.

Russell.—Bad hallstorm in north part, gardens and notatoes damaged; mestives

nows.
Russell.—Bad hallstorm in north part, gardens and potatoes damaged; pastures

Russell.—Bad hailstorm in north part, gardens and potatoes damaged; pastures good.

Saline.—Wheat beginning to turn; corn growing well, but getting weedy; alfalfa making fine growth.

Sedgwick.—All crops have made fine growth, wheat and oats gaining most; too wet to cultivate; most of the first crop of alfalfa has been cut, and in some cases it is about ready to cut again; much alfalfa was lost by rains.

Smith.—Too wet part of week for field work; alfalfa being cut, a good crop; corn is clean and looks well; wheat improving, what looked like a fallure will make a good half crop; new potatoes large enough to use; pastures good.

Stafford.—Wheat filling well; corn doing well; pastures good.

Sumner.—Ground drying; corn growing rapidly; oats and potatoes fine: harvesting soft wheat where ground is dry enough; late wheat hurt by wet weather; late cherries ripe.

Western Division.

Western Division.

### WESTERN DIVISION

Wheat has continued to improve; the early is filling well in Thomas and is in the dough in Norton. Corn is in fine condition and growing rapidly, it is being cultivated the second time in Ness. The first crop of alfalfa has generally been se-

cured in good condition, but in the extreme northern and southern counties cutting has been retarded by wet weather. Oats, barley, and grass are in very good condi-

tion.
Clark.—Crops growing well; too wet to harvest alfalfa.
Finney.—Seasonable weather for putting up the alfalfa crop; all crops growing rap-

up the alfalfa crop; all crops growing rapidly.

Ford.—Fine growing week; wheat still improving; oats, barley, and corn are fine; first crop alfalfa mostly cut, fine crop; range-grass very good and cattle doing

well.

Gove.—Frost first of week did a little damage to potatoes; corn growing.

Greeley.—Crops growing nicely; some planting being done.

Hamilton.—All crops growing; grass is

Hamilton.—All crops growing; grass is good.
Lane.—Good growing week; first crop of alfalfa has been cut, yleid good; pastures good, stock doing well.
Ness.—Corn fine, being cultivated; forage crops coming up, generally good stand; harvest a little late; alfalfa doing very well.
Norton.—Rainfall one to four inches; haying difficult; wheat, rye, and oats fine; some wheat in the dough; some corn weedy; corn growing rapidly.
Sheridan.—Fine weather for small grain; corn getting weedy, wet weather stopped cultivation, also delayed alfalfa-cutting.
Thomas.—Early wheat filling well, need rain for all stubble-ground wheat; corn growing rapidly, fine weather for cultivating it.
Trego.—Alfalfa nearly all cut, good week

Trego.—Alfalfa nearly all cut, good week for stacking it; all crops in fair growing condition.

Wallace.—Wheat, rye, and barley doing well; corn and other crops growing finely; first crop of alfalfa cut, good crop; rangegrass fine.

#### Gossip About Stock.

(Continued from page 628.)

(Continued from page 628.)
ford sale were either ranchmen or farmers
with grade herds. And the fact that 127
buils could be sold in one sale speaks volumes for the success of the sale and the
skillful management of Mr. Sotham. There
is perhaps no man in the country better
able to manage a large sale of this kind
than Mr. Sotham, and certainly no man
who has a more thorough knowledge of
Herefords, and the success which he has
obtained in the past both as a breeder
and a sale manager, insures him greater
success for the future.

Attention is called to the breeder's card on page 644 of W. J. Smith, of Oketo, Kans., who has long been known as a breeder of pure-bred Shorthorns and Poland-China swine. He now has an elegant herd of Scotch-topped Young Marys, with 9th Knight of Elmwood as herd-header. This makes a combination that is exceedingly hard to beat, and Mr. Smith's customers in Kansas and Nebraska prove to be his best advertisers in that they always come back. A little later we shall have some interesting facts regarding this herd as well as of the Poland-Chinas to be found on North Elm Creek Farm.

At the Shorthorn sale at Victor, Iowa, Col. Woods opened the sale with one of his characteristic speeches in which he paid tribute to the Biglers as being men who have done more for the Shorthorn business than any others in the United States. But especially important was his advice to young men to engage in the pure-bred stock business, but only to do so after they had thoroughly mastered the science of breeding, and the no less important one of feeding. Many young men have made fortunes within the last five years by breeding pure-bred cattle, and the business is as safe and as profitable as that of banking.

Harry Evans, of Pleasanton, Kans., has recently added to his sensation herd a son of Chief Perfection 2d 21701, out of a Missouri Black Chief sow. He is probably one of the finest sons of Old Chief Perfection 2d. This gives Mr. Evans four great herd boars. Chief Model 24360 by Missouri Black Chief 18399 out of Lady Shortstop (49090): Evans' Sensation Chief by Chief's Model out of Sensation Beauty 51444 and "901 Fine" 26580 by "900 Fine" out of Chief's daughter (63038). Mr. Evans' herd is not as large as some but for quality is rapkly approaching the front rank. He will have some fine-bred sows and gilts ready for farrow in October for sale.

On May 22 and 23, was held a combination sale of Hereford cattle at Chicago. Among the contributors to this sale we notice the names of F. A. Nave, Attica, Ind.; Giltner Bros. Eminence, Ky.; Tom Smith, Crete, Ill.; S. H. Godman, Wabash, Ind.; F. L. Studebaker, Warren, Ind., as among the more prominent and well-known breeders. The crowd of buyers was quite large and the cattle were well scattered through the States. Lady Wiltona, a daughter of the great Dale, was bought by Mr. Ed. Hawkins, of Earl Park, Ind., for \$2,100. Lady Dewdrop 2d went to Clem Graves, of Bunker Hill, Ind., for \$1,200. The average of the eighty-three head was \$323.01.

of the eighty-three head was \$223.01.

Mr. W. W. Gray, of Fayette, Mo., whose advertising card appears on page 644, has a herd which has some very valuable characteristics. In the first place they are all the descendents of one cow and so preserve a wonderful uniformity, and then they are all remarkable as free milkers, and he has never used a nurse cow in raising his calves. Indeed, their capacity for milk is such that the calves are unable, at times, to take care of it and a restraint of the flow becomes necessary. Again, they are remarkably easy keepers and have been wintered in the open without grain, and would now be considered by beef men as ready for market. As elsewhere mentioned his contribution to the Omaha sale stood well at the top, on account of their condition and quality.

Early in May there were shipped to Colfax, Wash., under the auspices of the American Shorthorn Breeders' Association, eighty-three head of pure-bred Shorthorn cattle. This shipment consisted of five fe-

males and seventy-eight bulls and was sold at auction to the highest bidder. The five females sold for \$325, \$300, \$285, \$250, and \$200 respectively. The remaining seventy-eight bulls were sold for an average price of \$150, the highest price being \$400. Buyers attended the sale from Oregon, Idaho, and Washington, and the animals found new owners widely apart. Stockmen in the territory expressed themselves as believing that this introduction of new purebred stock will have a very beneficial effect, and will serve to open a new market for the products of the pure-bred herd.

for the products of the pure-bred herd.

The Angus bull sale at Sioux City last week brought out a fair crowd for what was almost entirely a bull sale. There were sixty-four bulls and four females in the sale, and while the prices were not phenomenal the consignors do not feel discouraged. They realize that wherever a black bull has gone there will be an increased demand for this breed. The average of the whole of sixty-eight head was about \$100, the top price being \$550 paid by M. A. Karr, of Ireton, Iowa, for Snowdrift of Longbranch 29756, a 4-year-old daughter of Heather Lad of Emerson 2d. The top price for bulls was \$290, received for Dutchman Luzon 2d, a yearling of the Easter Tulloch Duchess family who went to Chris. Smith, of Jackson, Neb. For a purely bull sale this may be regarded as a very satisfactory one.

We take pleasure in introducing Mr. Harry W. Graham, who is rapidly coming into prominence as a live stock auctioneer. Mr. Graham has his headquarters at Chillicothe, Mo., and being near the center of the pure-bred cattle region has had great opportunities to develop as an expert in the sale ring. He was one of the auctioneers who conducted the great Hereford sale at South Omaha, where Mr. Sotham disposed of so large a number of bulls and the results obtained by this sale are greatly to the credit and ability of the auctioneers who conducted it. Mr. Graham is an active, energetic young man who is well up on pedigrees and stock and who is willing to go anywhere at any time to hold a sale. His progressive and up-to-date character is best illustrated by the fact that he carries an advertising card on page 645 of the Mr. W. W. Gray of Feyette Mr.

Mr. W. W. Gray, of Fayette, Mo., contributed thirteen bulls to the Omaha Hereford sale, managed by T. F. B. Sotham, and feels proud of the fact that he stood well at the top of the sale. As this was a sale made up of animals from many different herds there were present in the ring animals in all sorts of conditions and the general concensus of opinion seemed to be that the sale as a whole was a good one. The better class of animals offered bringing fair prices and the poor ones all they were worth. Mr. Gray's offering of thirteen head averaged him about \$200.00 and was a great card for his herd bull Printer, and at once created a demand for the get of this great sire. Mr. Gray's advertising card will be found on page 644 and breeders will keep an eye on this herd for an opportunity to get some of these Printer caives which have the record of topping the United Stores.

In the June K. King combination Shorthorn sale to be held at the Kansas City Stock Yards on June 17, Mr. F. M. Marshall, Blackwater, Mo., contributes four head, of which one is a red Rose of Sharon helfer by 53d Duke of Airdrie and bred to Orange Hero 152689, who is considered to be the best son of Godoy now living. Also a red Hilpa helfer, which traces to Imp. Hilpa by Cleveland Lad bred by Bates. She is by Charming Scotchman and will at the time of the sale have a calf at foot by Orange Hero. Of the two bulls contributed one is a roan Scotch topped Constance and the other, also roan, is a pure Bates, Fenel Duchess bull by Grand Springdale 3d. These bulls would be extra quality for the man who raises steers and would be good for use in any herd. Mr. Marshall prides himself on having a pure Bates herd and the record he made at the Bigler sale shows that he has good ones.

One of the problems which confronts every farmer is the question of dehorning his cattle and we think the average farmer regards this job as a disagreeable as well as expensive one. It is perhaps held in the catimation of the farmer much in the light of the old-time butchering and soap-making time. It is also perhaps true that very few farmers know that the horns may be removed, while the animal is very young, by a chemical application which is entirely harmless to the animal and which entirely prevents the growth of unsightly knobs such as are frequently seen in cattle dehorned in the ordinary way. Mr. E. S. Nichols, Room 123 Exchange building, South Omaha, has perfected a chemical paste which has proved to be eminently satisfactory for this purpose. It is very cheap and when applied under directions to the young horn which is just starting it will entirely prevent its growth and leave the head smooth and symmetrical. Write him.

The man who loves his business and is patriotic to the State in which he lives is the man who is sure to write success in big letters before he dies. We had the pleasure of meeting Mr. H. M. Harrington, of Clearwater, Kans., while he was wandering around in the wilds of Missouri in quest of a Crulckshank herd-bull. And we confess that we felt a little sorrow that he did not know of all the good herd-bulls to be found in his own State. He now writes to say that "Kansas is way ahead on bulls and I did not find anything in Missouri that would compare with what I found in the herd of Hanna & Co., of Howard, Kans., and so we bought the best Crulckshank calf I saw during my whole trip." He is by the Royal American prize-winner, Imp. Inglewood, out of Seamstress of Oakland 8th. His sire, it will be remembered brought a long price in the sale, and Mr. Harrington feels that he now has a young bull of great promise and is well content with his purchase, as he has reason to be.

NO MONEY TILL CURED, 25 YEARS ESTABLISHED. We send FREE and postpaid a 200 page treatise on Piles, Fistula and Diseases of the Rectum; also 100 page illus, freatise on Diseases of Women. Of the thousands cured by our mild method, none paid a cent till cured—we frunish their names on application. DRS. THORNTON & MINOR, 1807 Oak St., Kanaas City, Mo.

we hav

sw He for

the

the tio lar but good alm

bee

hiv

ver cha

not

swa and cor bei

per ver

hiv the hiv

reta

edy Th

the loss tion

ins fro the

wed but tha

que

Win

tan

gra is at

det

one the put on ter the the bees

are dire Afte

### Miscellany.

### The Business Outlook.

The business world keeps a sharp eye on every circumstance likely to affect values or business activities. The crops are really the most important element to be considered and their promise at this time of year is carefully reviewed. The interest of those represented by the commercial agencies is chiefly on the side of big crops and low prices for farm products with correspondingly high prices for manufactured products. Whether this interest colors facts presented depends upon the ability of the reviewer to maintain his judgment on a plane above his preference. Following is Bradstreet's review for last week:

Crop prospects taken as a whole are really brilliant, railroad earnings are enormous, despite the small grain ton nage, bank clearings are quite heavy notwithstanding the speculative dullness, and failures are fewer in number than in recently preceding years. The ending of the Boer war, it is also thought, will have a tendency to stimulate export business in manufacturers, though interfering with trade in horses, mules, and other articles of export. On the other hand the industrial situation, though improved by the ending of blast furnaces and teamsters strikes, is still a depressing one owing to the prospect of the anthracite coal strike proving a long and bitter one, threats of a strike in the Virginia bituminous fields and the general unrest noted among workin a number of industries. In connection with the industrial unrest, it is to be observed that many of the demands made now and for some time past have been based upon higher prices for food.

Corn and cotton crop reports are positively excellent and in striking contrast with a year ago. Winter wheat is turning out better than expected in such States as Kansas, though recent rains have interfered with harvesting in Oklahoma. Fruit crops promise to be very large and a favorable reflection of this is already noted in sugar prices which are firmer. Vegetables and other country products, shortened a year ago, promise a heavy yield. Oats, barley, and hay are doing splendidly in the West and Northwest. Spring wheat advises a constitution.

vices are optimistic. has stimulated Warmer weather spring reorder business in dry goods, rather more activity being noted by jobbers the country over. The Eastern shoe trade is quiet, though reports from the West favor encouragement. East-ern shipments are 9 per cent less than a year ago for the season. Leather is rather quiet, though firm except for off grades, and shoe factories are not ac-tively employed. Rather more is doing in men's wear woolens than of late, and overcoatings have been well sold ahead. Woolen machinery is actively employed, except where labor troubles exwhile wool is quiet with but a fair inquiry.

Industries are active except where interfered with by strikes. The feature in the steel trade is the conservative action of producers, who have fixed the price of steel rails for next year at \$28, this being partly caused by the carry-ing over of large orders, delivery of which is impossible this year. A large volume of new business is also reported in this line. Steel bars are reported stronger. Agricultural implement men have placed most of their orders in finished products a year in advance and are now bidding freely for pig iron for next year's delivery. The nominal price for steel plates will not be advanced. Pig iron for immediate delivery is

### Alcohol for Traction Engines.

In Germany immense quantities of alcohol are produced from the molasses incident to the manufacture of beet sugar. When "denaturized" this fluid pays no tax, and is very cheap. Over thirty million gallons of it were consumed for technical purposes in 1901. Some of it was used in heating and cooking, but a great deal was used explosively, like gas, in engine cylinders. Racing automobiles, slow-going trucks for merchandise, locomotives and sta-tionary motors for farm work are run with alcohol. An engine that resembles the American traction engine is also made, to drive threshing machines. This is powerful enough to haul the lat-ter about the country.

The United States Consul General at

Berlin, Mr. Manson, says in "Cassier's Magazine" for June: "Theoretically, alcohol has only three-fifths of the ther-the country and he should never be an

mal value of petroleum, but it has been found that for motor purposes 28 per cent of the theoretic energy of alcohol can be utilized, against a maximum of 15 per cent in case of petroleum and its products. This advantage in favor of alcohol is still further increased by an admixture of 16 per cent of benzol. other important advantage of alcohol, which applies especially to its use in motor carriages and in engines for creameries, is it absolute cleanliness and freedom from the mephitic odors which make hydro-carbon engines so offensive to many people.

"'Denaturization' is accomplished by mixing with the spirit a small proportion of some foreign substance, which, while not injuring its efficiency for technical uses, renders it unfit for consumption as a beverage. The 'denaturizing' substances employed depend upon the use to which the alcohol is to be subsequently applied. They include pyridin, picolin, benzol, toluol, and xylol, wood vinegar, and several other similar products." This grade of alcohol costs about 13½ cents a gallon.

### A Good Selection.

Prof. Charles S. Plumb, director of the Indiana Agricultural Experiment Station and professor of animal husbandry in Purdue University, has been elected professor of animal husbandry in the Ohio State University, Columbus. It is the purpose of the agricultural col-lege of this institution to enlarge the instruction in animal husbandry and an appropriation of \$2,000 has been made by the board of trustees to add specimens of pure-bred animals to the existing herds of the college. It is expected further appropriations will be made from time to time.

Professor Plumb graduated from the Massachusetts Agricultural College in He was assistant editor of the 1882. He was assistant editor of the Rural New Yorker from 1883 to 1884; from latter date until 1887, he was assistant director of the New York Agristant director dir cultural Experiment Station; in 1887, he was elected professor of agriculture in the University of Tennessee. He began work in his present field on May 1, 1890, and on July 1, 1891, was made director of the station. At present, Profesor Plumb is president of the In-diana State Dairy Association and president of the American Cheviot Sheep

Besides the bulletins of the experiment station, he published a book in 1895 on "Indian Corn Culture," and has contributed many articles on agricultural topics to magazines, live stock and agricultural periodicals. He also founded and until 1891 edited, "Agricultural Science.

Through his work as director and as professor of animal husbandry, Professor Plumb has become well and favorably known throughout the United States. Probably no other professor of animal husbandry has a wider or more intimate acquaintance with the captains of this great industry.

Professor Plumb brings to his new

position a mature mind, ripe scholarship, an enthusiasm for his work, and above all, an excellent record as a teacher. It is not stated what salary Professor Plumb is to receive, but men in his class are not cheap.

### "Uncle Sam's" Mistakes.

To Americans Uncle Sam is a great name; even the unique picture of Uncle Sam portrays great wisdom, weight and force. He has done many good deeds for the people. He protects, watches over, and encourages them with a pen-etrating yet never-tiring eye. He has established fast mail service, free rural delivery, public schools and a bureau of animal industry. And who can name really as scarce as ever. Foreign pig iron and steel billets are being more liberally bought. Coke is 25 cents higher. iron and steel billets are being more rally bought. Coke is 25 cents higher. vancement of his people? He employs erally bought. Coke is 25 cents higher. the best talent in the many departing the best talent in the many departments under his control. Uncle Sam is ments under his control. The people respect his wise and honest; the people respect his judgment and have confidence in him. Yet he can make mistakes, which are very far-reaching. These mistakes are usually made by the heads of departments.

I have enduring confidence in our Government and believe when Uncle Sam makes a mistake he prefers to correct it rather than continue in the wrong. The best breeders of live stock believe the greatest menace to progress to-day is the grade sire, yet Uncle Sam has recently purchased 105 grade bulls for the Indians whom he has undertaken to educate. Grade bulls are bad for the farmer, bad for the Indians, and bad for Uncle Sam. The example is bad, the principle is bad, and the educa-tion is in the wrong way. Neither is there any excuse for purchasing grades. Uncle Sam has a class of men who are trying to elevate the cattle standard of



HORSE ANSTEAM POWER CATALORS KANSAS CITY HAY PRESS CO MILL STKANSAS CITY MO

obstacle in the road to progress. Purebred bulls can be had cheap enough if be will call for bids on them. They will be more remunerative than grades, the example will be better and surely more in line with progress and education for the Indians. When Uncle Sam gets through with his grade bulls and the beef trust will he tell us how much he has benefited the breeder of improved cattle and the grower of high-priced beef in a famine year?—W. P. Harned, in Breeder's Gazette.

#### For Sick Pigs.

EDITOR KANSAS FARMER:-I notice in a recent issue of your valuable paper an inquiry from a man of Pratt, Kans. asking for a cure for sick pigs. For his benefit and for the benefit of my neighbor farmers, I will give my cure and preventive. His pigs had pin-worms in their throats. He should take black lubricating oil, obtained at any drugstore, pour at least a pint in a common mind the should take black lubricating oil, obtained at any drugstore, pour at least a pint in a common mind the should common mind t slop-bucket of shelled corn, mix it well with a stick, and pour it in the hog trough. If the hogs refuse to eat it, pour some clean corn over it. In eating the clean corn they will get some of that with oil on it. After that you will have no trouble in getting them to eat it.

I would say to my Pratt, Kans., friend feed a little oil in a mixture of corn and shorts, at first at least three times a week, and you will soon discover that your hogs will quit coughing. If you will take a common sprinkler and fill it with oil, and while the hogs are eating sprinkle it all over their backs, it will be "good bye lice." I can give three years' experience in using oil for this purpose to prove that by using it once week as a preventive hogs will be healthy with no lice or worms, and the owner's pocketbook will be heavier.

M. M. GALLAGHER. Leavenworth, Kans.

### Humble Wives of Great Men.

The man out West who caused his family great pain and anger the other day by marrying his servant girl can plead the example of many celebrated men as an extenuation or a justification of his act.

There was William Cobbett, the great writer and the "liberator of the English press," as he is frequently called. He was only 21 years of age when, walking out in the streets of Halifax, Nova Scotia, one morning, he chanced to see a buxom servant girl busily engaged in washing the family linen. The girl, though only 13 years of age, was pretty, so Cobbett spoke to her, learned her parents, and said he would like to marry their daughter. This is probably the origin of the expression, "This is so sudden," which blushing maidens have made use of ever since. The parents of the girl informed the young man that they had no objection to him as a son-in-law, but that he would have to wait Hall's Family Pills are the best.

until their daughter was of a marriageage. Accordingly Cobbett gave the girl all the money he had, which amounted to \$700, and she went to England and became a domestic in the family of a clergyman. Five years later Cobbett returned to England and married her.

Sir Henry Parkes, Premier of New South Wales, is another example. One night, when dining at a friend's house, he was struck by the appearance of a servant girl who waited upon the table and persuaded his host to allow her to enter his employ. This she did, and for a short time held the position of cook in Sir Henry's household. Then his love for her overcame all conventionalities and he made her Lady Parkes.

Sir Gervaise Clifton, whose history of Jamaica is one of the finest books of its kind in existence, married no less than seven times, and each time selected his lady from among his domestic servants. The seventh Lady Clifton outlived her lord, but the other six he buried in a family mausoleum which

But more illustrious than all these examples is that of Peter the Great. One day the founder of the Russian Empire, the great and terrible Peter, was dining at the house of Prince Menshikoff. He noticed one of the serving maids particularly, and, though she was not handsome, she caught the fancy of Peter. Her name, the Prince told the Czar, was Martha. She had been a servant in the house of a Lutheran minister of Marienburg, and when that city was captured by the troops of Russia she had been taken prisoner by General Bauer, who had passed her over to the Prince, whose serf she was. The Count politely made a present of her to the Czar, who eventually married her, renamed her Catherine, and she reigned after him as Catherine I, Empress of all the Russias.—Baltimore Sun.

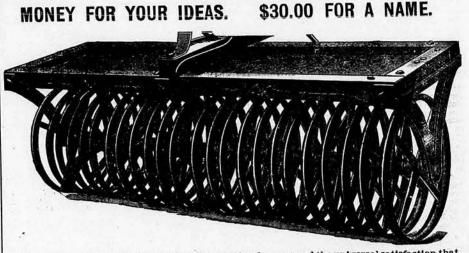
"I don't see why Long Jim Jones shouldn't be happy," said the Georgia native. "He's got six fiddles, ten children, and a moonshine still that the Government ain't spotted yet."—Atlanta Constitution.

### \$100 Reward \$100

The readers of this paper will be pleased to learn that there is at least one dreaded disease that science has been able to cure in all its stages, and that is Catarrh. Hall's Catarrh Cure is the only positive cure known to the medical fraternity. Catarrh being a constitutional disease, requires a constitutional treatment. Hall's Catarrh Cure is taken internally, acting directly upon the blood and mucous surfaces of the system, thereby destroying the foundation of the disease, and giving the patient strength by building up the constitution and assisting nature in doing its work. The proprietors have so much faith in its curative powers, that they offer One Hundred Dolars for any case that it fails to cure. Send for list of testimonials. timonials.
Address, F. J. CHENEY & CO., Toledo, Ohio.

There's Success, Happiness, and Independence for the Farmer Who Sends in the Most Appropriate Name for Our Soil Packer, Pulverizer, and Roller.

\$30.00 FOR A NAME.



Our many sales made this season to progressive farmers and the universal satisfaction that has been expressed by the use of our Packer has led us to believe an appropriate name should be given the implement. We have decided to place the naming of it in the hands of its friends. To the farmer who first sends us the most appropriate name (to be determined by ourselves) we will make a present of one Packer. Put your thinker to work. The prize is worthy the game. Any farmer can send in a name free of cost. Write for descriptive circulars, sending 4 cents in stamps. TOPEKA FOUNDRY, Topeka, Kans. cents in stamps.

### The Apiary.

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

Run-away Swarms, Hives, etc.

Apiary Department, Kansas Farmer: I am in a peck of trouble about my bees and come to the good old re-liable Kansas Farmer for some help out of my difficulties; for I know that the bee department can be relied upon, as well as all the other departments. I have had two strong swarms of bees leave me for parts unknown from one of the new Hedden hives. The first swarm had been in the hive a week, and had made a nice start of comb. We did not see them leave, but the second swarm which we hived in the same Hedden hive, remained only three or four hours, and rose from the hive high up in the air and made straight for the woods. A few settled on a limb, but the main bulk of the bees rose immediately from the parent hive and were off, and the remaining few went back to the hive. I had put in some foundation comb for the second swarm. Would you discard the hive, or keep trying to make the bees use it? Is there anything better than throwing water on the swarm after the bees rise to go off? Mrs. E. S. Clarke, Wagoner, Ind.

Perhaps the trouble was in both the hive and the management of same. The Hedden hive is a sectional hive, each section being just one-half the size of the regular brood chamber, and two sections of the same making up the regular brood chamber size. If you used but one section of this hive to hive a good strong swarm in, the bees would almost be forced to leave on account of lack of room in the hive. Swarms of bees, and especially very strong swarms, must have abundance of room and plenty of ventilation, and the most common cause of swarms leaving their hives after being hived, is lack of ventilation. The two-section brood chamber of the Hedden hive should have not known of the Hedden hive being defective in this respect; but it certainly would be, at least to some degree, on account of the divisable brood chamber. Yet certain management would have possibly prevented the swarming.

possibly prevented the swarming.

It is a very rare thing for swarms to act as those two swarms you report have done, yet occasionally it occurs. have kept bees for more than thirty years and as yet have never had a swarm to come out of the parent hive and leave without first clustering, or come out of a new hive and leave after being hived in it, but I know that in exceptional cases others have had experience the same as yours. To prevent swarms from discarding a new hive, it is now quite common to give them a frame of comb from some other hive containing eggs or newly hatched hive containing eggs or newly hatched brood. This, in most cases, is a safe retainer, but, in a few cases, I have known this to fail. The sure remedy is to clip the wings of the queens. This is now largely practiced and for the express purpose of preventing the loss of swarms. Under certain conditions this is certainly a success, as for instance if you have an apiary away from home so that you can only give from home so that you can only give them attention one day out of each week, or such occasional management; but if you have your bees located so that you have your eye on them every day, I do not think it best to clip the queens. Troubles are many with clipped queens, and I would rather lose a swarm or two than to have my queens' wings clipped. A clipped queen can never fly after-

ward if she is properly clipped, and when a swarm issues from a hive with a clipped queen the queen comes alone, and being unable to take wing with the swarm crawls off on the ground, and after traveling some distance from the hive, rests on a blade of grass or weed. The result is the queen is lost unless you are on the ground at the time the swarm is issuing and detect and secure her in a cage, which you should have prepared for the occasion. After the swarm is well out of the hive, move the parent hive to one side with the entrance turned in the opposite direction, and in its place put the new hive to receive the swarm on its return; for surely the swarm, after missing the queen, will return to the place where the old hive stood, with the intention of returning home. If the new hive is on the old stand, the bees will go into it. Then, when they are going in, liberate the queen and direct her into the hive with the swarm. After the swarm is well in, remove it to a new location and place the old parent hi-, back on the old stand, and the job is completed. This is really a nice method of handling swarms, and it is an absolutely sure method of keeping the nees all at home, but it requires you to be on the watch for swarms constantly if you wish to save all the queens. If you do not care particularly for the queens but only for the present force of bees for storing honey during the honey harvest, not wishing any increase of colonies, then you can let them do business in this line as they choose; for the bees will always return and in some cases the queens may also find their way back, but in most cases they will be lost.

One aid in finding a clipped queen is that in nearly every case a few bees will find her, possibly from scent, and will cluster about her, and if you notice a little ball of bees on the ground anywhere in the vicinity of the hive you will invariably find the queen there with this little escort, which is tenaciously sticking to her. It is well to look out for the queen as the bees are coming out of the hive, but if the queen is not discovered and is not found crawling about the hive, watch for the group of bees that have found her, as in most cases some of the swarm will locate her.

I do not know of anything better than water thrown in a swarm to confuse the bees and make them come down and settle. But it is only with a good spraying outfit that we can thoroughly get control of them. Fine earth is also good to throw among them when the swarm is so low that we can reach them. But unless the swarm is liable to leave, as in the cases you report, it is not necessary or to advantage to use anything, but let them settle as they choose.

### Brange Department.

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

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

NATIONAL GRANGE.

KANSAS STATE GRANGE.

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

### Grange Meetings.

E. W. WESTGATE, MASTER OF KANSAS STATE GRANGE.

Under the auspices of the Kansas State Grange a series of grange picnics will be held commencing July 17 and extending to the 28th.

The Hon. Aaron Jones, Master of the National Grange, will give ten days of hard work for the building up of the Grange in Kansas. Mr. Jones, as chairman of the legislative committee of the National Grange, has been very influential in securing legislation at Washington beneficial to the masses of the people and in preventing the enactment of laws intended to benefit the few at the expense of the many. He is an energetic, forceful speaker and his words command the attention of his hearers.

The Grange and the agricultural colleges in the several States work hand in hand for the common purpose of advancing the interests and elevating the character of the rural population. In accordance with this fact we have engaged Prof. D. H. Otis and Mrs. Henrietta Calvin of the Kansas Agricultural College to accompany us and participate in the meetings. Professor Otis needs no introduction to a Kansas audience and Mrs. Calvin commands respect and wins friends wherever she goes.

The master of the State Grange will act as pilot and skirmisher for the campaign.

The National Master has been very liberal with the time devoted to Kansas work and yet several applications for his presence have been refused for want of time. As a rule, the earliest and most urgent invitations have been accepted. Several granges have not realized the advantages of the "early bird." These meetings have to be designated several weeks in advance and a large amount of correspondence is necessary before the schedule is complete, hence delays are dangerous and in some cases fatal.

Dates have been assigned as follows: Overbrock, July 17; Shawnee County, July 18; McLouth and Jarbalo, July 19; Cadmus, July 21; Mantey, July 22; Garnett, July 23; Lyndon, July 24; Madison, July 25; Arkansas City, July 26; Florence, July 28.

# Weak Women Must Go to the Wall.

It is laid down as the fundamental law of evolution that "the weak must go to the wall." They are pushed aside, crowded out by the strong and healthy. The same law rules in store and office, the weak woman worker is crowded out and pushed aside by her stronger sister. There seems no way to avoid this condition of affairs. When the clerk is late to business it may be



perfectly true that she felt hardly able to come at all, but the manager thinks only of the time lost and the inconvenience to the department in which the clerk is employed. If the typewriter has to give up and go home early in the day, or now and again fails to come to the office because she feels too weak to work, her employers may be sorry but they will surely look around for some one else who can "stand the work." How many a young woman knows these facts by sad experience.

WEAKNESS IS WOMAN'S GREATEST HANDICAP.

The weakness which is distinctively womanly is woman's greatest handicap in life. Give her strength and she is often man's superior in the work of store and office. Womanly weakness is not like a birthmark which can not be removed, though many women so consider it—it is a disease which can be cured by the use of the proper means. It is claimed for Dr. Pierce's Favorite Prescription that it makes weak women strong and sick women well. That claim is substantiated by thousands of grateful women who have found permanent health and strength by using "Favorite Prescription."

"I suffered from female weakness for

"I suffered from female weakness for three years so that I could not work," writes Miss Clara Peterson, of Manhattan, Ill. (Box 253). "Was all run-down, only weighing ninety pounds (used to weigh one hundred and thirteen pounds). I used your 'Favorite Prescription' and one box of your 'Lotion Tablets,' and can now do all kinds of work, thanks to Dr. Pierce's medicines."

Dr. Pierce's Favorite Prescription

Dr. Pierce's Favorite Prescription cures the diseases peculiar to women. It establishes regularity, dries weakening drains, heals inflammation and ulceration and cures female weakness. It is unsurpassed as a tonic and nervine for weak nervous women who are wornout and run-down. It cures backache, headache, nervousness and sleeplessness, encourages the appetite, restores lost flesh and improves the complexion.

"When I wrote you I could hardly walk across the room," says Miss Viola Abbott, of Montpelier, Ohio. "Had one stamp chronic disease and female weakness. I doctored with several physicians, but falo, N. Y.

received no help. Had been sick about four years, and was nothing but a skeleton when I commenced the use of your medicine. To-day I weigh one hundred and twenty pounds, ten pounds more than formerly. I will praise Dr. Pierce's medicines as long as I live."

FREE CONSULTATION BY LETTER.

Miss Abbott "doctored with several physicians but recieved no help" until she wrote to Dr. Pierce. The help freely given to her is open to every ailing woman.

Dr. Pierce invites weak and sick women to consult him by letter, free. All correspondence is held as strictly private and sacredly confidential, and the written confidences of women are guarded by the same strict professional privacy observed in personal consultations with sick women at the Invalids' Hote. and Surgical Institute, Buffalo, N. Y. Address Dr. R. V. Pierce, Buffalo, N. Y.

falo, N. Y.

"I am so much better since I commenced taking your 'Favorite Prescription,'" writes Miss Jessie Simmons, of Thurston, Frederick Co., Md. "I am very much improved in health, and feel as though I had a new lease of life. It was just what I needed. Am more than thankful to you for the kind interest you have taken, and hope that others will find the same benefit from your valuable books and medicines that I

Women should be taught to understand that the general physical health is so closely related to the local womanly health, that womanly diseases invariably leave their mark upon the body. Many a woman takes tonics and treatments in the effort to restore lost flesh and cleanse the sallow skin, wasting time and money. The real cause of these conditions is womanly disease, and when this is cured, the body rounds out anew in graceful curves and the cheek regains its fairness. Women who have used Dr. Pierce's Favorite Prescription only expecting to be cured of womanly disease, have written with astonishment and delight of the great improvement in looks and figure which resulted from their cure. The result was natural. The dull complexion and wasted form were the effects of disease of the womanly organism. When 'Favorite Prescription' cures the disease it cures the consequence of disease.



"Favorite Prescription" makes weak women strong, sick women well. Accept no substitute for the medicine which works wonders for weak women.

A VALUABLE BOOK FREE.

Dr. Pierce's Common Sense Medical Adviser is sent free on receipt of stamps to pay expense of mailing only. This great medical work, full of valuable help and hints for women, contains more than a thousand large pages and over seven hundred illustrations. Send thirty-one one-cent stamps for the volume in cloth binding, or only twenty-one stamps for the book in paper covers. Address Dr. R. V. Pierce, Buffalo, N. Y.

# The Farmers' Mutual Hail \* Association \* OF TOPERA, RANSAS

Insures all growing crops against damage by Hail. One-half of all premium receipts placed in Reserve Fund to pay losses only. Association is bonded to the state in the sum of \$50,000. All Application and Policy Forms approved by the Insurance Department. County and local agents in every part of Kansas. Call upon them or write home office.

W. F. BAGLEY, Secretary, Columbian Bidg., TOPEKA, KANSAS.

### The Poultry Yard.

Why Poultry-raising is Profitable on the Farm.

There are many reasons why poultry raising can be made profitable on a farm. One very important reason is that all the food necessary to raise chickens is grown on the farm, ready for use. A great part of the living of a chicken can be picked up by himself, especially is this true where cattle are fed extensively. Much of the chicken's living is made from things that would otherwise go to waste. The insects that might be very bothersome indeed serve for old Biddy's relish. All farm animals, to thrive well, need some shelter from winter's storms and summer's heat. This is one of the most expensive items in the care of horses or dairy animals, but with all kinds of poultry a very small shelter will accommodate a large number. Just along the same line comes the thought of enclosures. All other farm animals have to be fenced in to keep them home or in the right place at home, while the poultry roam over the whole farm.

Another great thing in favor of poul try-raising is the comparative ease with which it can be done. Think a minute of the drudgery necessary in making a pound of butter for sale, and then com-pare that with the labor required fn marketing a dozen eggs which would give the same returns. To be sure, there is a time in the year when closest attention is needed to make a success of raising poultry of any kind, but when that time is over the marketing of poultry or gathering in the eggs is very easily done and requires no great amount of time.

There must be some way of stopping the little leaks in the family pocketbook if farming is to be made success ful, and poultry and eggs to take to town is just the right thing to stop that leak. If the egg and chicken money pays all the living expenses, money from the sale of other produce can be used to great advantage somewhere else. Poultry brings in returns all the time, every week in the year, just as the family need it. Many cases might be cited where farmers' wives have paid all the living expense of large families,

simply by the poultry sales. One of the greatest reasons why poultry-raising is profitable, on the farm, is because the eggs and chickens held the farmer's wife in preparing the meals. Nothing we can raise on the farm is more valuable as food than eggs. Nothing contributes more to the farmer's good appetite than good fried chicken, in hot weather, when other fresh meat can not be obtained.—Extract from an address of Mrs. A. J. Pattrof at the Kansas State Agricultural College.

### Wholesale Chicken Slaughtering.

The following description of chicken killing at the St. Joseph house of Swift & Company, is interesting reading. It is from the St. Joseph Stock Yards Journal:

A visit to the poultry house brings one, upon entrance, into an aggra-vated duplicate of all the noises heard on a large poultry farm when the fowls are disturbed. The Babylonic cackling, quacking, cooing, etc., of thousands of fowls transports the visitor in fancy from urban exterior surroundings to an intensified rural scene. Turkeys, ducks, geese, chickens, doves and all edible domestic fowls are represented by hundreds, and their peculiar calls, in unison, afford a music no composer could

hope to attain. The building contains coops for 14, 000 head. The dressing room differs greatly from that of a theater, and there is no play there; it is work, expeditious work. Nine men handle each chicken from the dressing rod until it is placed on the drier, when it is sent down a chute to the cooler.

Ninety-nine men working on eleven rods, with half a dozen assistants at each end will "dry" pick 800 chickens an hour. The first process is to "stick and rough" them. Colored boys place either leg of the fowl in a V-shaped opening at the end of an iron bar, which is suspended from the iron rod. which is suspended from the iron rod

at which the nine men are working. An expert sticker, Ainsworth, one of the best in this line in the country, then sticks them with a sharp-bladed knife, which enters the neck near the head and penetrates the brain. The knife is quickly withdrawn, and he will stick them as fast as three or four

men can hang them for him.

Death is instantaneous and the fowl is weighted with a small bucket into which the blood drops; then it passes along the rod to the rougher, who rough

picks it. Each man has a particular work to do; one man will pick a wing, and so on until, when the end of the rod is reached, the fowl is dressed.

It goes thence into the cooler on the floor below, and later in all probability to the freezing room, where a tempera-ture of zero is maintained. There are eight of these freezing rooms, each opening into a passage-way used for conveying the poultry to and from the freezers. Men work in this room in overcoats.

Some markets demand dry-picked and others scalded-picked fowls. The Swift & Company meet both demands. The scalded picking differs little from the methods employed by the house-wife, except that is done on a much larger scale and by experts in their line.

The champion chicken picker of the world, George Fisher, is employed in this branch of the poultry department. He has appeared in many public chicken-picking contests, but broke his own record and all others last May at the packing-house before a party of traveling men, when he picked fifty chickens in eight minutes and one sec ond, lowering the world's record by one and a half minutes.

These figures, as remarkable as they seem, fail to convey an adequate idea of the dexterity with which he handles the fowls. It is almost impossible to follow the movements of his hands as he works, and the eye is kept constant-ly engaged to follow the movement of the fowl from the scalding vat to the

After passing through the cooler, and perhaps the freezing rooms, the chickens are packed, a dozen in a box, six in either of the two rows, with paper between them, presenting after packing an appearance not wholly dissimito a large box of candy, with the

candy covered.

The box factory is, in itself, an interesting study, especially the two nailing machines, the operators of which mere-ni touch a pedal with their foot when desiring to drive a nail, the machine doing the rest. The sides of the box are put together at one of these machines and the bottoms added at the other. Egg crates are also made in the box factory.

There are two egg storage houses, in which thousands of egg cases are piled one on top of the other. The company handles large quantities of eggs, all of which pass through a testing room, where they are subjected to examination under electric lights before being packed.

### Make a Start.

It is never too late to make a start in the right way.

The right way in poultry-raising is to find out what kind of poultry you need and try to get that kind.

The cheapest way is to buy eggs of some reliable breeder.

Eggs are now better for setting than they were earlier in the season—more likely to be fertile. They are also cheaper.

Get some Get a plenty. Raise enough chicks

to start a flock next spring. Eat or sell all the cockerels you have r raise of the common stock before another spring.

Save the eggs from the pullets you raise. Set no others.

Then when the hens you keep over for setting have raised their broods, get them out of the way.

Now you have a flock of pure-bred chickens. Take some care of them.

Cull them, or if you don't know how get somebody that knows the breed to do it for you. Mark for the pot what you don't want

to keep for breeding. Learn something about them. Then you become a poultry-breeder—with try's enemy?

ts to learn. Don't think that a poultry-breeder must have a fine house, a lot of pens,

If he culls out closely he can have chickens away above the average if he

never mates up a breeding pen. Farm range produces the best, hardiest, most hustling poultry. Many a fancy breeder would give a great deal

for a good range. Don't think fancy poultry is all fuss

and feathers. Some few breeders are fancy, for the fancier only; but there are others. Get the others

The poultry standard is not a purely fancy matter. The requirements are mostly for utility.

Look at the purpose of the bird, remembering that "form is everything to purpose." The standard requirements are to meet certain purposes or requirements of market

The pleasure to be derived from pure-

bred poultry is incomparably greater than from mixed or mongrel stock. It

costs little, is worth much. Have it.
Interest the boys and girls in fancy Interest, enthusiasm over something, is a great thing for a youngster.

Try this. If it doesn't pay the first time try it again. It's bound to pay because it's the right way.

Later on come the incubators, brooders, etc. Get ready for them by next You can dispense with common hens for mothers at the start if you do. No mixing of eggs or stock then.-National Stockman and Farmer.

### New Breeds in Poultry.

The last quarter of the nineteenth century saw the appearance of many new breeds and varities of fowls. fanciers of the United States and England were especially active in such production, and the list of the new, or comparatively new, breeds and varie-ties is formidable. The knowledge that the greatest profits were to be derived from improved breeds and varieties, and that the promise of such improved breeds and varieties lay in the manufacture of new, rather than in the development of the older breeds of fowls. serves to explain and to justify this pronounced activity.

The first essential toward the crea

tion of a new breed or variety is the formation of an ideal. The clearer the ideal the more accurately directed will be the breeder's efforts. But a clearly formed ideal may require to be changed during the progress of his operations The results may prove that in its original form it is either impractical or imperfect. Having formed his ideal of the new breed or variety, the breeder should select from existing breeds or varieties the ones which will give him the best materials for the accomplishment of his purpose. For example, it is known that when a fowl with the black-red type of coloration—such as is seen upon the Brown Leghorn or Blackbreasted Red Game male crossed with a pure white fowl, the black disappears, while the red remains, and the red pile coloration is produced. Why black should be an evanescent color and red a permanent one is mysterious; but the fact is as has been stated, and needs to be known in making crosses. So, too, it is a fact that the light Brahma marking—a white body coloring, with black stripes in the hackle, black in the wings and a black tail—can be produced by crossing a fowl traversely barred upon one pure white in color.-Outing.

### A Big Pigeon Ranch.

There are eight acres of sandy ground near Los Angeles, Cal., devoted to pigeon-raising. Fifteen thousand pigeons cover the ground and the immense pigeon loft. If the demand for pigeons would fail the owner of this ranch would have in two years 1,000,000 birds on his hands. Fortunately for him, the demand is greater than the supply, and the pigeon ranch sends out about 40,000 squabs a year to market. The estimated output of the ranch for the month is 3,000 birds. The average price per dozen for the birds ranges from \$3 up to \$10. The birds are fed three times per day, each meal costing about \$5. The food consists mainly of wheat, screenings, boiled meal and stale bread. The daily consumption is about twelve sacks of screenings, eight sacks of wheat, and many gallons of boiled meal. The bread is an additional fattener given at intervals.—National Stockman and Farmer.

"Politics are corrupt and dirty, I will have nothing to do with them." Such Such politics, neighbor, are your country's most dangerous enemy. Is it patriotic to have nothing to do with your coun-

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

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

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

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

### POULTRY BREEDERS' DIRECTORY.

ROSE COMB WHITE LEGHORNS—White guineas. Leghorn eggs, \$4 per 100; guinea eggs, \$1 ber 16. Mrs. Winnie Chambers, Onaga, Kans.

WHITE WYANDOTTES—Exclusively. Eggs for hatching, \$1 per 15. Mrs. E. F. Ney, Bonner Springs,

FOR SALE—World's greatest laying strain, Black Minorcas, beautiful in shape, color, and comb; grand winter layers. Eggs, \$1.50 per 15. Address George Kern, 817 Osage St., Leavenworth, Kans.

BLACK MINORCAS, biggest layers of biggest eggs. Eggs for hatching, \$1.50 per 15. Also at same price eggs from choice matings of Houdans, Buff Laced Polish, White Crested Black Polish, Buff, Brown and White Leghorns, and American Dominiques. Satisfaction guaranteed. Write for illustrated descriptive catalogue. James C. Jones, Leavenworth, Kans.

NO MORE PUPS FOR SALE until after May 1, but LV can furnish B. P. Rock eggs from large, vigorous, and finely-marked birds; 15 years' experience with this breed. Send me your order; you will be pleased with results. \$1.50 per 15.

W. B. WILLIAMS, Stella, Neb.

## Gem Poultry Farm.

C. W. PECKHAM, Prop'r, HAVEN, KANS.

Four Yards—15 Acres. Exclusively taken by the largest and best flock of Buff Plymouth Rocks in Kansas. Eggs sold from two best yards only, at \$2 for 15. Prize-winning M. Bronze Turkey Eggs, \$2 for 11.



All our Fine Breeders of this season, also Spring Chicks for sale after the first of June. Barred Rocks, White Rocks, Buff Cochins, Partridge Cochins, Light Brahmas, Black Langshans, Silver Wyandottes, White Wyandottes, Silver Spangled Hamburgs, S. C. Brown Leghorns, and Belgian Hares. Buy the best now at the lowest prices. Write your wants. Circulars free. Choice Breeders and Show Birds.

A. H. DUFF, Larned, Kan. <del>-------</del>



### **Low Round** Trip Rates UNION PACIFIC

FROM MISSOURI RIVER

\$15.00 To Denver, Colorado Springs, and Pueblo, Col June 22 to 24, inclusive. July 1 to 18, inclusive.

\$19.00 To Denver, Colorado Springs, and Pueblo, Col June 1 to 21, inclusive. June 25 to 30, inclusive.

\$25.00 To Salt Lake City and Ogden, Utah. August 1 to 14, inclusive.

To Glenwood Springs, Col. June 22 to 24, inclusive. July 1 to 18, inclusive.

\$30.00 To Salt Lake City and ogden, Utah.

June 22 to 24, inclusive. July 1 to 13, inclusive.

\$31.00 To Glenwood Springs, Col. June 1 to 21, inclusive. June 25 to 80, Inclusive.

\$32.00 To Salt Lake City and Ogden, Utah.

June 1 to 21, inclusive. June 25 to 30, inclusive. July 14 to 31, inclusive.

\$45.00 To San Francisco or Los Angeles, Cal. May 27 to June 8, inclusive. August 2 to 10, inclusive.

\$45.00 To Portland, Ore., Ta-coma and Seattle, Wash.

May 27 to June 8, inclusive. July 11 to 21, inclusive.

Full information cheerfully furnished on application to F. A. LEWIS, City Ticket Agent, 525 KANSAS AVENUE.

J. C. Fulton, Depot Agent.

SEVEN GREAT SCHOOLS.

Chillicothe Normal School Chillicothe Commercial College Chillicothe Shorthand College
Chillicothe Telegraphy College
Chillicothe Pen-Art College
Chillicothe School of Oratory
Chillicothe Musical Conservatory

Last year's enrollment 729. \$130 pays for 48 reek's board, tuition, room rent, and use of text-books For FREE Illustrated Catalogue, address

ALLEN MOORE, President, Box O. CHILLICOTHE, MO

### Sharples"Tubular" **Dairy Separators** the latest product of the world's leading Cream Separator manufactory. HIGHEST PRIZE (KNIGHT'S DECORATION) AWARDED AT PARIS. No disks to bother with and wash. Are very easy Guaranteed to produce enough more butter than the best competing separator to pay 6% on whole first cost of machine each year. Five sizes—\$50 to \$200 each. Valuable book on "Business Dairying" and Catalogue No. 165 free. Sharples Co., P. M. Sharples, Chicago, III. West Chester, Ps.

## In the Dairy.

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

Action of Starter on the Ripening of Cream.

W. H. OLIN. We will note some of the facts the tains. added bacterial growth a starter gives to ripening cream. The number of bacteria in fresh cream is often vari-able, but I will take the average of nine experiments made in April and we will not take it up as being the best May, 1901. This average was 5.8 million per centimeter. A teaspoonful, we will say, will hold three centimeters. This would mean 17.4 million

The description of the state was a feed which is the best and surest producer in the western half of the State.

In taking up dairying as a life work, bacteria in a teaspoonful of cream. That which normally takes forty-eight hours, or two days, is by starters accomplished in from eighteen to twentyfour hours in ripening cream. Theretwelve hours from the cow showed in year. the above test 68,000,000 per centimeter, or 204,000,000 in a teaspoonful of corn, soy-beans, millet, mile maise, 279,000,000 per centimeter, or 864,000,000 to a teaspoonful of cream; at the end of thirty-six hours, 643,000,000 per centimeter, or 1,929,000,000 in a teaspoonful of cream; at the end of fortyor 2,373,000,000 bacteria in a small teaonstrate that the ripening of cream is due to bacteria present in the cream. Then if a larger number of bacteria can the cream will be ripe or ready for is the principle of the commercial start- twelve bushels of seed per acre. er and in recent years creamerymen are coming to realize what a time-saver the starter culture is. Besides the bacteriologist has learned to add the desirable flavor germ to this culture and today the best flavored and highest scor-

cially ripened. To show the value that is placed upon the words of the bacteriological dairyman, permit me to quote from Mr. F. A. Leighton, an authority among dairymen, in an article on "Butter making and Buttermakers" in the Chicago Dairy Produce for March 15, 1902. He says, "Aroma is the only feature that distinguishes the gilt-edge creamery butter from the lower grades. The best of butter can be perfect in grain, color and salt and only be worth 3 cents a pound—the price of grease on the market; but let it be perfect in

ing butter is made from cream artifi-

to 25 cents. So then the one thing needful to create is aroma.

"The butter-maker who can make butter that is perfect on color, grain and salt is not much of a man after all. Any one with ordinary common sense can do that. If I was to hire a buttermaker I think I would hire him in this way: If his butter was perfect in grain, I would give him \$5 a month; if perfect in color, \$5 more; if a clean packer, \$5 more; if perfect on salt, \$5 a month; this would give him \$20 a month the wages of an ordinary farm hand, and all he would be worth. If his butter was perfect on flavor and aroma I would add \$80 a month more, and if he had the knack of getting on with his patrons and keeping them contented and happy I would increase his wages \$25 more. This would make \$125 a month, not a cent too much. He could get this anywhere."

You see that 64 per cent of his wages is determined by his skill in bringing good butter around. This aroma depends primarily upon the laboratory.

pends primarily upon the laboratory culture known as the "starter," and sec-ondly upon care and cleanliness at the farm and in the creamery. The butter of to-morrow will be measured in value by the percentage of desirable organisms growing in its golden contents, relished by the aroma coming from its teeming life and rated in the market by the bacteria per gram that it con-

> Sorghum for the Dairy Cow. RAY ARNOLD.

In considering sorghum for roughness

we must first consider the conditions under which we are placed and the crop on which we can depend year after year, as nothing will ruin a dairy herd much quicker than to be kept fore, to get a conception of what this on short rations for a time. Sorghum means let us follow the normal ripen- is a crop which we have been raising ing to forty-eight hours, where the for the past twelve years on our farm lactic acid ferments are generally at in southwestern Clay County, and one their best, having outgrown or subdued all others. Ripening cream in are becoming more enthusiastic every

cream; at the end of twenty-four hours, 279,000,000 per centimeter, or 864,000,-000 to a teaspoonful of cream; at the which has stood the various climatic conditions the best and always gave the largest returns was sorghum. This was especially noticeable during the eight hours, 791,000,000 per centimeter, past season, when we we had Kafircorn, sorghum, and soy-beans side by spoonful of cream. This tends to dem- side, giving the most care and attention to the Kafir-corn and beans. The Kafir-corn did not head out but yielded about two tons of roughness per acre, be grown in a shorter length of time the soy-beans gave us two bushels of seed off of ten acres, and the cane churning just so much quicker. This yielded over four tons of fodder and

> Cane may be handled for a dual purpose, that is for both feed and grain. In this way you will not get quite as good quality of feed, but the sale of the seed will more than balance the difference.

> Sorghum handled in this last manner gave us last season \$15 worth of seed per acre and over four tons of feed. As to the feeding value of sorghum it depends a great deal on the way it is handled, and we also find that if it freezes and thaws it will injure its feeding qualities, as this tends to make the juice acid. The nutritive ratio is wide, that is it is poor in protein, and should always be fed with nitrogenous feeds.

We think by sowing sorghum and cow-peas broadcast and cutting for hay we will be able to produce a more balanced ration. Sorghum is fast becomaroma and flavor and the price jumps ing a soiling crop and is also used to

# DE LAVAL CREAM SEPARATORS ARE SO MUCH BETTER THAN OTHER CREAM SEPARATORS

BECAUSE.—They are constructed after the "Alpha" Disc and "Split Wing" patents, which cannot be used by any other manufacturer and which enable De Laval machines to skim cleaner and produce a more even and more thoroughly churnable cream than is otherwise possible, at much less speed and wear, and much greater ease of operation.

BECAUSE.—The De Laval makers have ever been first and foremost in the manufacture of Cream Separators throughout the world—have ever led where others follow-their factories being among the finest machine shops in the world and their knowledge of Cream Separators far greater and more thorough than that of any comparatively inexperienced would-be competitor.

BECAUSE.—The one purpose of the De Laval makers has ever been the production of the best Cream Separator possible regardless of cost, instead of that mistaken "cheapness" which is the only basis upon which any would-be competitor can even make pretense of seeking a market.

BECAUSE.—The vastly greater sale of De Laval machines—ten times all others combined—enables the De Laval makers to do these things and much more in the production of the perfect Cream Seprator that no one else could attempt.

A De Laval catalogue explaining in detail the facts here set forth may be had for the asking.

## The De Laval Separator Co.

Randolph & Canal Sts.,

CHICAGO.

1102 Arch Street, PHILADELPHIA

217-221 Drumm 8t., SANFRANCISCO. General Offices:

74 Cortlandt Street, **NEW YORK.** 

327 Commissioners St., MONTREAL.

75 & 77 York Street. TORONTO.

248 McDermot Avenue, WINNIPEG.

take the place of pasture land. It can safely be used for these purposes if care is taken in getting the stock on feed. The best way is to feed them a stalk or two a day at first and gradually increase till they are getting all they will eat. By using this method you will have no trouble. Another good use is to mix it with corn in filling your silo, especially if your corn is a little dry, for the sorghum will furnish the necessary moisture.

Clean, Cold Milk.

A New York dairy, a New Jersey dairy, and an Illinois dairy each sent milk to the World's Exposition at Paris in 1900, which was sweet fifteen or twenty-one days after it was drawn from the cow. How are these things posible? By extreme care in excluding dirt of every kind with its load of bacteria, then keeping the milk so cold that the bacteria which do get in in spite of the care can not grow so rap-

Milk sours because in the process of growth and multiplication of the bacteria the milk sugar is changed to lactic acid. When there is enough acid present to be apparent to the taste the milk is said to be sour. Bacteria, like



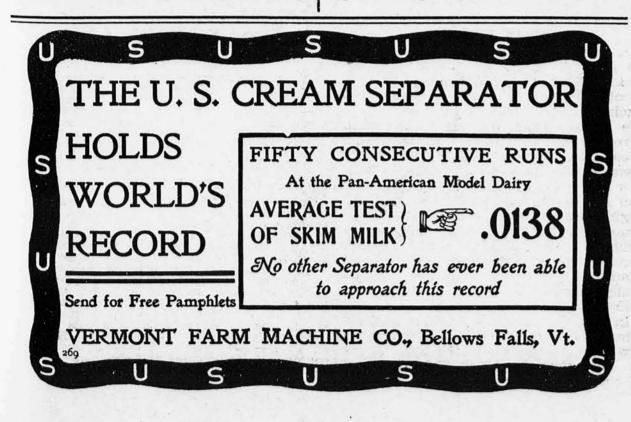
## **Notice to** Dairymen

If you are thinking of buying a Cream Separa-tor, write us for catalogue and information. We manufacture the best machine on the market.

DAVIS CREAM SEPARATOR CO. to 62 No. Clinton St., CHICAGO, ILL.

The Easiest to Operate, the Closest Skimmer, Simplest and most Durable, is the KNEELAND OMEGA

When writing our advertisers please corn or any higher form of plants re- | don't fail to mention this paper.



quire food, moisture and sufficient heat quire 100d, moisture and sumcient neat in order to grow and multiply. Milk has the necessary moisture, is a per-fect food and is usually at the right temperature for rapid growth of bac-teria. Since the keeping quality of milk bears a direct relation to the bac-teria which gain access it is important teria which gain access, it is important to prevent their getting into the milk. The udder and adjacent parts of the body which are much shaken during milking is one of the chief sources of infection, while the dust of the stable, the hands and clothes of the milker together with the pails and cans used are only slightly less important sources Experiments show that:—milking in a stable where the circulation of air can carry the dust out; wiping the ud-der with a damp cloth, and scalding utensils with live steam or boiling water, will not only reduce the bacterial content of the milk but increases the keeping quality of the milk materially. A covered milk pail, with only a small opening to milk into, reduced the number of germs falling into the pail one-fourth as compared with a common pail, and the milk kept sweet twenty hours longer. Immediate cooling after milking is next in importance. Milk allowed to stand two hours without cooling contained twenty-three times as many germs as when milking was finished, while that which was cooled to 54° only had four times as many at the end of two hours. This emphasizes the importance of quick and thorough cooling.

Milk when first drawn has a peculiar flavor, or "cowy taste," less noticeable, which if not driven off by aeration (exposure to the air) frequently gives the milk an unpleasant taste even before it becomes sour. Aeration may be accomplished by stirring or by pouring from one vessel to another. The can of milk may be set in a tub of water to cool. The cooling and aeration may be better and quick-er done by running the milk over a combined cooler and aerator, such as the Star, Champion, Perfection or other similar apparatus having provision for running cold water through it. Finally—cleaner cows, cleaner milkers, scalded utensils, quick and thorough cooling aeration, less exposure to dust of street when delivering, will increase keeping quality of mar-ket milk. If properly done one deliv-ery a day will be all that is necessary. H. E. VAN NORMAN,

Dairyman Purdue (Ind.) Experiment Station.

### Value of Keeping Records.

J. C. CHITTY.

Kansas was, at one time, a very sparcely settled country. Land could be had by simply settling upon it. The great rolling prairies attracted the wideawake man's eye; he saw a future before him. He could come to these barren plains with a little money and invest it in cattle. After the cattle were once in possession it would cost noth-

ing to keep them except to hire a cow-boy to look after them.

To-day, things are different. People have pushed farther into the West and settled on these barren plains, making them attractive to the person who likes free life and fresh air. You will find a family on ever quarter-section of land, trying to make the land produce to its very utmost. In order to make the most from the land and its products one must know from what source he is making it pay or lose.

The farmer of to-day keeps in touch with the rest of the world by reading. He will naturally read along his line of business and for that reason the agricultural reports are watched with great interest. At the present day the leading farm papers are discussing the dairy question and telling what great facilities Kansas has for dairying. The farmer sees what other men are doing in the dairy line, at a less advantage than he and he decides to invest in dairy cows. Every cow that he can find, just so she has four teats and an udder, is drafted into the dairy herd and then the farmer puts forth his best efforts to put these cows on a paying basis. He works from early morn till late at night and finds at the end of the year that he has just made a living and nothing more. He must stop and open his eyes, for, considering the amount of money he has invested, he is not receiving what he should. He looks at his dairy herd and says that the dairy business is not profitable. He does not stop to consider that some of his cows are better than others and that the poor cows bring down the average of the herd and are causing the whole herd to lose him money. He can not tell which cows are the cause for he has kept no record of how much each consumed or how much each gave.

Another important thing on the farm is the hog question. In summer the hogs are turned on the pasture and kept there until it is time to put them in the fattening pen in the fall. This pasture land should be figured in at the price the land would sell for on the market. The farmer should mark down what the hogs are worth when put in the fattening pen, and he should weigh them from time to time to see if the corn he is feeding them is making him anything. If not, it is high time to sell. By keeping a record of this the farmer can tell at any time where he is standing. Another way the farmer's money will

dwindle away without knowing where it is going is in keeping an oversupply of horses. The horses he has no use for are put out on pasture in the spring and are kept there until fall. He could sell these horses and buy a few calves and put them in the same pasture and they would be growing in value all the time, while the horses would be at a standstill. We are considering here that the horse is four years old or over. The only reason that the farmer is keeping the horse is that he thinks the price he has been offered is not enough.

More Milk. More Money.

Cows will give 15 to 20 per cent. more milk if protected from the annoyance of files with Childs' So-Bos-So.

Kilfly. It is a thorough fly and insect killer, and it absolutely destroys all bacterial germs. It aliays nervousness in horses as well as cows and keeps both in better general condition by the comfort it gives. For scours in calves, hog cholera, and foul in calves' feet it has no equal.

It is perfectly harmless to man and beast and may be rapidly applied with Childs' Electric Sprayer.

It is a true antiseptic and it will keep stables, cow sheds, chicken houses and pig pens in a perfectly sanitary condition. Convenient. Cheap. Practical.

Mr. Jacob Steibel, Supt. to the Hon. John E. Parsons, Lenox, Mass., says: "I have used So-Bos-So Kilfly with good results. It is a comfort to both man and beast at milking time."

Ask your dealer for SO-BOS-SO or send \$2.00 for 1 gallon can and sprayer complete, express paid to any point east of Misstasippi river.

CHAS. H. CHILDS & CO., Sole Mfrs., 18 LaFayette Street, UTICA, N. Y.

The horse is kept in pasture all sum mer, brought home in the fall to be fed in the barn with the work horses and fed the same ration. Here is the lack of good, common horse sense. If the farmer would keep a little record he would see wherein the fault lies.

Let us go away from the farm and see some of the ways they carry on business in the large cities. First we will go to the wholesale men who are at work packing away things that have been received. Another man is standing close at hand keeping tab on every-thing that has come in. Going through the building we see men packing things in boxes to be shipped out. Another man is standing at hand with paper and pencil taking down every-thing that is being packed. Why do they do this? It is not because they have more money than they want and just hire a man to give him a good salary to get rid of the surplus money They find that it is necessary and by doing this they can go to the books and in a short time tell just where the firm is standing and whether it is making or losing money.

We will take a look at the seaport where a large vessel is next to the port being loaded with different kinds of material to be shipped to foreign ports. There is a Government official at the head of each gangway taking down everything that is being loaded into the vessel. Just stop and think where the greater part of this material is coming from. It is coming from these farms out here in Kansas. If the Government of the United States finds it necessary to keep a record of all these little things can the farmer out here in Kansas neglect to do the same thing?

We will now bring to mind a few individual men who have made a success in this line of business. E. N. Cobb, of Illinois, one of the most widely known breeders of Jersey cattle in the West, and one of the principal speakers before the Kansas State Dairy Associa-tion in 1902, keeps a record of everything that is consumed and everything that is produced on the farm. In his he emphasized the fact very lecture strongly that it paid to keep records.

The next man is T. A. Borman, of our

own State, who realized \$81.17 from each cow in his herd last year. He can go to his record book and tell at a glance which are the cows that are making him the money and the ones that are losing money for him. When he finds that he is losing money on a cow she is disposed of and another one bought to take her place.

These men have a little government of their own out on these farms. They are the presidents, their employes are the officials, and the live stock their citizens. If every farmer would consider his farm a republic with himself the president and use good judgment in selecting his officials it would be but a short time until the republic in the State of Kansas would be one of the greatest republics in the United States.

### Cleanliness in Milking.

V. NEEDHAM, BEFORE THE TONGANOXIE FARMERS' INSTITUTE.

In my practice we tear a gunny sack up into pieces of convenient size and each milker keeps a piece with his stool. On sitting down to a cow, the bucket is set back on the rack while the milker wipes the teats and udder carefully and brushes off all loose dirt around the flank. This, if not roughly done, makes milking agreeable to both cow and man. It takes very little time

quart bowl. I am pleased to testify that in this respect I have no very serious charges to make against our patrons except sometimes, in rainy and muddy weather, there is far more than is ab-solutely necessary. Still there is room for improvement, as every particle of dirt and every hair has a bad odor.

#### Publisher's Paragraphs.

The Clark's Cutaway disk plow claims to The Clark's Cutaway disk plow claims to be the only disk plow which turns a square-cut furrow. It is light in weight. Notice the cut of the plow in advertisement on another page and then write to J. C. Conley, general agent, 119 North Water Street, Wichita, Kans., and ask him to send you circulars showing the different sizes of plows manufactured by the Clark's Cutaway Company.

Clark's Cutaway Company.

The great wholesale house of Bradley-Alderson Co., of Kansas City, is one with whom it is a pleasure to do business as is testified by their customers all over the country. They handle almost everything that a farmer can want but now are making special offerings of the splendid Bradley buggles as shown by their advertisement on page 612 of the Kansas Farmer. These buggles are up to date and can be had in almost any style fitted with harness, whip, and lap duster. In fact they offer to furnish everything necessary to a delightful buggy ride, except the horse and the girl. If your dealer does not handle the Bradley buggles, go after him, or write to Bradley, Alderson & Co. If you need anything from a thresher to a manurespreader in the way of farm implements ask your dealer for the Bradley. If he won't get into line write to the Kansas City house and get their prices direct. It will save you money.

One of the great institutions of Topeka

One of the great institutions of Topeka is the W. W. Gavitt Medical Company, which has won fame as a manufacturer of Gavitt's System Regulator, and which has built up so large a business that his receipts of daily mail are said to be the largest in Topeka, if not in the State. In order to accommodate this enormous business three large brick buildings are necessary. The immense volume of business means but one thing, namely, the popularity of the manufactured product which is sold by this institution, and its popularity has but one meaning, namely, the excellent quality of the remedy offered and the fact that it does cure the aliments for which it is prescribed. At this season of the year, when the human system is readjusting itself to meet the demands which the hot weather will make upon it it is always best and safest to be prepared with a bottle of some reliable remedy in the house. Write to W. W. Gavitt Medical Company, Topeka, Kans., for information in regard to this great remedy with the feeling that it will cost you little to secure it and may save you years of suffering and large doctor bills. See their large advertisement on page 609 of the Kansas Farmer for their offer of prizes. Do not fail to write at once. It will pay you.

### Century Easy Runners.

The Century Manufacturing Company, Dept. 54, East St. Louis, Ill., is doing a great business with their own make of buggies and surreys, which they sell di-rect from factory to user, and the customer



thereby saves all middlemen's profit. This firm claims to save the buyer from \$20 to \$40 on every vehicle which is warranted in every respect as high class goods at low prices. Look up their advertisement on page 642, and write for further information, which will be sent to any reader of this paper free, and without delay.

### Kansas Seeds for South Africa.

cow and man. It takes very little time, and no time is lost, in fact, as the cow begins to let down her milk by the time the cleaning is done. We use a double strainer and there are three members of my family who are so particular that a cloth strainer is seldom really needed, as it is but slightly soiled.

In the first creamery I ever visited, after a run of about 1,500 pounds, I saw the operator clean the bowl and I am sure that the black filth, dirt and manure would have nearly filled a lower of the Kansas Seed House, have clust received a large order for seeds to help to reseed the Boer farms that were devastated by the express by way of Pensacola, Fla., under a "hurry order" as it is desirable to get the seeds at once so that the restoring of the seeds at once so that the restoring of the seeds at once so that the restoring of the seeds at once so that the restoring of the seeds to help to reseed the Boer farms that were devastated by the express by way of Pensacola, Fla., under a "hurry order" as it is desirable to get as it is seed as the seeds to the farms can be immediately begun. Kansas is always at the front and this large order for seeds to the farms can be immediately begun. Kansas is always at the front and this large order for seeds to the Kansas Seed House the seeds at once so that the restoring of the seeds at once so that the restoring of the seeds at once so that the restoring of the seeds at once so that the restoring of the seeds at once so that the restoring of the seeds at once so that the restoring of the seeds at once so that the restoring of the seeds at once so that the restoring of the seeds at once so that the restoring of the seeds at once so that the restoring of the seeds at once so that the restoring of the seeds at once so that the restoring of the seeds at once so that the restoring of the seeds at once so that the restoring of the seeds at once so that the restoring of the seeds at once so that the restoring of the seeds at once so that the restoring of the seeds at once so t



### RECORD BREAKER.

The long list of new patrons that were influenced by the experience of their neighbors to ship us their cream in May, and the sudden change of hundreds to this market since pay day in June, all testify to the merits of our system and is farther proof that these cuts represent the keys that unlock the safe containing ALL the money that is to be had in the dairy



They are the Corner Stones of a modern, live, wideawake, up-to-date 20th Century Oreamery Business



They are the gateway to the Dairyman's Klondike which he has been seeking for forty years as he wandered through the gathered cream and skimming-station wilderness.

They remove difficulties and make dairying profitable. This is the business. This is the year. This is the plan, and we have the market. Remember,

### We Want Your Cream

Write to us immediately. We are "The Pioneers" of the plan that increased the revenue of the Kansas and Missouri Dairyman one-quarter Million Dollars in one Month.

BLUE VALLEY CREAMERY CO., ST. JOSEPH, MISSOURI. 



the devastated Boer land. When you want to reach a wide constituency advertise in the Kansas Farmer; Barteldes & Co. do.

### For Those Who Believe in Signs.

For Those Who Believe in Signs.

Sir Edwin Arnold contributes an entertaining article to the July Delineator on the ceremonies attending the crowning of King Edward, in the course of which he recalls a singular incident that occurred at the crowning of King George III. A large diamond fell from the crown of the King as he passed up the choir to his throne in the chancel, and those who believed in such things as portents and previsions looked for some event presaged by the accident. They found it afterwards, to their own content, in that separation of the American colonies from the mother country, which was the beginning of the great United States of to-day.

#### King Corn Is Coming.

"Not for triumphs in the battle,
And renown among the warriors,
But for profit of the people."
King Corn is coming with a message of
prosperity and plenty to the growers of
the king of cereals. He brings a notice
of double profit to the corn-growers of the
world. Readers of the Kansas Farmer
should write to McCormick Harvesting
Machine Company, Chicago, U. S. A., for
"King Corn," a finely illustrated book
which tells how to double the value of the
corn crop.

### National Educational Association, Min-neapolis, July 7-11, 1902.

For this popular gathering the Chicago Great Western Railway will on July 5-7 sell excursion tickets to Minneapolis, good to return July 14 (or September 1, by payment of 50 cents extra) at one fare plus \$2 (membership fee) for the round trip. For further information apply to any Great Western Agent, or J. P. Elmer, G. P. A., Chicago, Ill.

#### Christian Scientists.

meeting in Boston, June 15 to 18. It will be to your advantage to obtain rates ap-plying over Nickel Plate Road before pur-chasing alsewhere. Tickets on sale June 12, 13, and 14. Final return limit July 31. Call on or address, John Y. Calahan, Gen-eral Agent, 111 Adams St., Chicago. (17)

### THE MARKETS.

### Kansas City Live Stock Market.

Kansas City Live Stock Market.

Kansas City, June 11, 1902.

All previous records were broken here last week, when beef steers sold at \$7.60 per hundredweight. The former record was \$7.40, given on June 10, 1882, just twenty years ago. A. Hirsh, of Formosa, Kans., marketed one bunch of the \$7.60 cattle and Peter Tribble, of Richmond, Mo., brought in another string that sold for the same price. Receipts, 23,200 head, showed an enlargement over the previous week. From the opening of the week until Friday satisfactory prices were paid, the strength culminating with the record-breaking prices of Thursday. Despite the decline of 150@25c on the last market day of the week, prices closed fully as good as those current in our last report. The big strike of the teamsters and yard employees at Chicago brought some cattle to this market that would otherwise have gone to Lake City. Grass steers, half fat Westerns, and butcher stock declined 25c@50c during the week, owing to the liberal supply. Quarantine receipts are beginning to show liberal gains from a year ago and this is telling on prices of all native cattle with the exception of corn-fed stock. Stockers and feeders showed weakness, but excellent rains continued to strengthen the market from time to time. Heavy feeders commanded \$5@5.50, although the latter grades were fit to go to the killers. Shippers are advised to be chary of buying half-fat grassers unless they can be secured cheap.

Hogs also touched the high mark of the year, selling for \$7.45 on Thursday. W. R. Gibson, of Winchester, Kans., marketed the swine at that figure. Hog receipts for the week amounted to 48,900, comparing favorably with previous weeks, but showing a big decrease when ranged alongside last year's figures for the corresponding period. Prices opened weak, but strengthened as the runs falled to develop into bullish proportions. Values closed a little higher than those current in last week's report. Good swine from 200 pounds to 300 pounds or better command \$7.15 to top-price, which at pre

\$3.25.62.50 that a short time ago commanded \$164.75.

Horse and mule receipts were the lightest of the year, amounting to 713 head. Prices ruled firm on account of the scarcity of stock. Few drafts were offered, the better kinds bringing \$175. A strong inquiry exists for mine mules, especially the little pitter grades.

A slight weakness was noted in the spring chicken market, although the demand was good enough to clean up all offerings. Eggs are a little stronger. Quotations are springs 20c, hens 9c, young roosters 20c, and old roosters 17½c each; old ducks 7½c, young 15c; geese 4c; turkey hens 9c, gobblers, 7½c; eggs 14c a dozen.

One of the largest sales of Angora goats ever hold at this point occurred on Thursday. They were almost all Texas offerings, and amounted to 2,600 head. About 500 of these were grade does, the balance wethers suitable for brush-cleaners. Top wethers sold for \$5.50, going to Frank Haris, Tremont, Ill; J. W. Hunolt, Edina, Mo., gave \$4 for a string of does. This was the top price for females. Iowa, Kansas, Missourl, and Illinois furnished the buyers. Prices were about on the same basis as those current in the May sale, although some sales looked weaker. The lowest price was \$1.70 given for a bunch of wethers that were thin in flesh.

H. A. POWELL.

### Last Week's Grain Market Review.

Crain markets were weak throughout the week. The splendid growing weather is contributing to the decline in prices, and it seems wheat has not a friend left. The crop prospects in Europe, too, are said to be splendid, and consequently it is impossible to create an advance at this time, especially when our government officials indirectly assist in breaking prices, as was done by Secretary Wilson in St. Louis one day last week. The Secretary during his visit in St. Louis was entertained by the Board of Trade men and incidentally referred to the bumper winter wheat crop now ready for harvest and immediately wheat declined a half a cent per bushel. The statistical position on wheat is still strong; the visible supply decreased over two million bushels, and exports were again over five million bushels for the week, while Argentine and Russian shipments were less than usual. From present indications the Government report due tomorrow afternoon at 3 o'clock will be bearish in contrast with last month's reports, and consequently not much reaction in price can be expected.

Lower prices also ruled in corn, caused largely by the very splendid crop outlook for that cereal.

Markets for cash grain closed as follows: Chicago.—No. 2 red wheat, 79@80c; No. 2 hard wheat, 74½@76c; No. 2 corn, 63@63½c; No. 2 corn, 63@63½c; No. 2 cots, 44½c.

Kansas City.—No. 2 red wheat, 72c; No. 2 hard wheat, 69½c; No. 2 corn, 63c.

F. W. FRASIUS.

### Special Mant Column.

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

SPECIAL.—Until further notice, orders from our subscribers will be received at 1 cents word or 7 cents a line, cash with order. Stamps taken.

### CATTLE.

FOR SALE-26 head of young cattle. A. Vining, Narka, Kans.

FOR EXCHANGE—Twelve head of thoroughbred Shorthorn cows and helfers, all dark red; will furnish pedigree with each anamal. Want to trade for dairy cows and young cattle. John G. Howard, Morgan Chase Co., Kans.

FOR SALE—Ten registered Hereford bulls, \$100 each; sired by imported Southington, I ord Pretty Face, Young Kansas Lad, Leaureate; 1 to 2 years old Don't write, come and see. Two miles south and twelve west of Hutchinson, Kans. D. W. Hart, R. R. D., Hutchinson, Kans.

RED POLL BULLS FOR SALE—From 7 to 11 nonths old. D. F. Van Buskirk, Blue Mound, Kans.

D P. NORTON, Dunlap, Kansas, has a few young pulls, by British Lion, itt for service the coming season.

TEN REGISTERED HEREFORD BULLS FOR SALE—\$75 to \$125; 3 unregistered thoroughbred bulls, \$50 to \$60; 60 grade cows, \$35 to \$50; with calves. R. J. Simonson, manager Cherry Red HEREFORDS, Cunningham, Kingman Co., Kans.

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

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

FOR SALE—Three pure Cruickshank-Shorthorn bulls. Call on or address H. W. McAfee, Topeka Kans.

SHORTHORN CATTLE SALE—I will offer at public sale, 1½ miles south of Marysville, at 2 o'clock p. m., on Tuesday, October 15, 17 registered Shorthorns, 19 high grade Shorthorns, and 3 thoroughbred Jerseys. Lewis Scott, Marysville, Kans.

### FARMS AND RANCHES.

 $FREE_{5}^{200}$  printed farm and ranch descriptions in statistical book. Write G. Winders, Ottawa, Kans.

FARM FOR SALE OR EXCANGE—I have a large farm in eastern Kansas. I would like to exchange for a smaller one, or land that would do for a sheep ranch. For further particulars inquire of John Morrison, Drexell, Mo.

160 Acres, 7-room house, timber, bottom land, well located. Buckeye Agency, Agricola, Kans.

SOME BARGAINS in farms and ranches. Correspondence solicited. J. M. Patten and Co., Dighton Kans.

### SWINE.

FOR SALE-QUICK-One EXTRA good young Poland-China herd boar and a few very fancy gilts. Excellent breeding. Leon Calhoun, Rural Route No. 1, Potter, Atchison Co., Kans.

DUROC-JERSEY—Bred gilts for sale; also spring males and sow pigs, good color and shape. M. H. Alberty, Cherokee, Kans.

CHESTER WHITE BOAR—For sale, 20-months boar by Eclipse. Sure breeder and guaranteed to be all right. Call at Seabrook, or address Robert Stone 501 Jackson Street, Topeka, Kans.

### SEEDS AND PLANTS.

FOR ALFALFA, wheat, corn land, and ranch es write Charvoz & Co., Emporia, Kans.

SOY BEANS FOR SALE—Early yellow variety; will grow; \$2.25 per bushel; sacks free. S. Segrist, Avoca, Kans

CANE-SEED—KAFIR-CORN—Choice white Kafir, choice cane-seed. All home-grown, thoroughly tested and warranted to grow; \$2 per 160 lbs., sacked in jute sacks f. o. b. Kremlin, O. T. M. T. Williams & Co.

SEED CORN FOR SALE—Choice white. Grown in Kaw Valley. Crops of 1900 and 1901 tipped, shelled, and sacked \$1.25 per bushel f. o. b. J. F. Godwin, North Topeka, Kans.

WANTED—If you wish to buy or sell corn, oats, hay, cane seed, Kaffir-born, corn chop, or anything in the feed line, correspond with us. Western Grain & Storage Co., Wichita, Kans.

### HORSES AND MULES.

FOR SALE—Big, black jack, mealy nose, 4 years old, very cheap; reasons for selling—have sold my farm. G. A. Stites, Burns, Kans.

FOR SALE—Shetland ponies. Address J. T. Marshall, Concordia, Kans.

FOR SALE—3-year-old Percheron Stallion, Favorite, dark bay, blocky, and heavy boned, will make a heavy horse; has proved sure; price \$400. Reason for selling, going to Oregon. G. W. Southwick, Riley, Riley Co., Kans.

FOR SALE—One Clyde stallion, 3 years old May 14, weight 1,610 an extra good horse, fine style and action will sell him right if sold soon. H. W. McAfee, Topeka, Kans.

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

#### MISCELLANEOUS.

FOR SALE—Five hundred Angoras with registered outles. Three hundred-acre ranch, excellent water and climate; price \$2,000. Write for particulars. L. H. Hall, East Las Vegas, New Mexico.

GAS-RELEASING BIT—Write to Wilbern Bush
711 North Market Street, Wichita, Kans., and ask for
his circulars showing his great invention for preventing bloat in dairy cattle and other stock. Every farmer would save money by using this bit.

DR. CLARK'S Instant Relief and Absolute Ca-tarrh Cure. One month's treatment 50 cents. J. C. Whitaker Medical Co., 375 Oak Street, Chicago, Ill.

WANTED—Pasture for cattle, or will lease a good pasture. E. W. Melville, Eudora, Kans.

COLLIE PUPPIES for sale, 3½ months old, unexcelled in breeding, and individual qualities, \$6 and \$4. Address J. W. Babbit, Hiawatha, Kans.

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

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

THE BEST CUP OF COFFEE and plenty of good things to est. Farmers' trade a specialty. Come and get something good. The Two Minute Restaurant, 532 Kansas Ave., Topeka, Kans.

FOR SALE—Feed mills and scales. We have 2 No.1 Blue Valley mills, one 600-pound platform scale, one family scale, and 15 Clover Leaf house scales, which we wish to close out cheap. Call on P. W. Griggs & Co., 208 West Sixth Street, Topeka, Kans.

WOOL WANTED—We have just completed our New Woolen Mill in North Topeka and want at once 20,000 pounds of wool for which we will pay the mark-et price. Write us if you have wool for sale. Western Woolen Mill Co., North Topeka, Kans.

#### SHEEP.

WANTED—To get pasture for 400 grade Shropshire sheep, or put them out on shares, or sell them Would give time on part. W. W.Cook, Russell, Kans

### PATENTS.

#### UNITED STATES PATENTS FOREIGN

F. M. COMSTOCK & CO., Office, 529 Kansas Avenue, Topeka, Kans

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

### The Stray List.

### Week Ending May 29.

Montgomery County-D. S. James, Clerk. Montgomery County—D. S. James, Cierk.

MARES—Taken up by J. H. Brinker, five miles
southeast of Coffeyville, in Cherokee tp., (P. O. Coffeyville), May 12, 1902, one iron grey mare, 5 or 6 years
old, weight 800 or 800 pounds, branded half moon and
double bar underneath brand on left hip; valued at \$20.
One light bay mare, branded H on left shoulder, weight
900 or 1,000 pounds; valued at \$30.

### Week Ending June 5.

Neosho County—B. W. Garvin, Clerk.

PONY—Taken up by J. R. Pierce, in Mission tp.,
4 miles southwest of St. Paul, May 1, 1902, one sorrei
mare pony, white spot in forehead, hind feet white,
branded "E' on left shoulder; valued at \$25.

Butler County—H. A. J. Coppins, Clerk.

MABE—Taken up by M. W. Fresh in Fairytow to

MARE—Taken up by M. M. Fresh, in Fairview tp. (P. O. Potwin), one dark bay mare, both hind feet white, branded on left hip, about 3 years old, weight about 700 pounds.

Montgomery County-D. S. James. Clerk. HORSE—Taken up by M. H. Ross, in Caney tp. (P. O. Havana), May 11, 1902, one black horse, 9 years old.

### Week Ending May 12.

Wallace County-O. N. Thorene, Clerk. STALLION—Taken up by W. H. Seaverns, in Harrison tp., May 5, 1902, one bay stallion, about 3 years old; valued at \$25.

Smith County-Jno. A. Crabb, Clerk. COW-Taken up by Charles Barrett, in Pawnee tp., May 6, 1902, one roan cow, medium size, point cut off of left ear; valued at \$25.

Elk County-G. J. Sharp, Clerk. STEERS—Taken up by A. D. Mahoney, in Painter-hood tp. (P. O. Busby), May 6 1902, three red steers, 3 years old, underbit in each ear; total value \$75. Also one red steer, 3 years old, underbit in each ear, also each ear split; valued at \$25.

Shawnee County-J. M. Wright, Clerk. HEIFER-Taken up by Vital de Donder, in Ross-ville tp. (P. O. Rossville), April 8, 1902, one red year-ling heifer; valued at \$15.

## BUY DRUGS AT CUT PRICES! City people buy drugs at cut prices; so can you, send for our free catalog of all drug store goods at wholesale prices. Write to-day and save money.

wholesale prices. Write to-day and save money. K. STILES & CO., STATION M, CHICAGO.

## A NEW INDUSTRY

THAT WILL CREATE ENORMOUS WEALTH NATIONAL FIBER & CELLULOSE CO.

NATIONAL FIBER & CELLULOSE CO.

OF CHICAGO,

owns and controls machinery, patents, and processes for manufacturing all grades of paper, feed, and by-products from the wasted corn stalks. This waste in the corn belt of the U.S. amounted to over 58 million tons in 1900. This enterprise will create more wealth than the utilization of the once wasted cotton seed. It will add \$3.00 per ton to all this waste corn field tonnage, giving millions to the farmer, furnishing new avenues of labor and new freight to railroads. Every pound of paper pulp is made from vegetable fiber. The timber for pulp in the U.S. is nearly exhausted. Paper manufacturers are now forced into Canada for their supply. Every paper mill in this country will use this pulp. Every city in this and foreign countries will use and deal in this feed. Manufacturers of celluloid, leather and rubber substitutes, insulating material, linoleum and pipe covering will be users of this cellulose.

Contracts for machinery for the first plants have been let with Torris Wold & Co., Chicago.

THE STOCK OF THE

NATIONAL FIBER & CELLULOSE CO. MAIIUMAL FIBER & CELLULUSE CO.
Will as an investment surpass everything in the history of industrial money-makers A limited amount of stock is offered at \$1.50 per share, par value \$10.00, fully paid and non-assessable. BUY BEFORE THE ADVANCE IN PRICE as the stock is selling rapidly. Investors are invited to examine machinery, patents, processes, products, and everything pertaining to the business.

For highly interesting illustrated pamphlet fully describing this new industry and subscriptions, write or wire

SANFORD MAKEEVER, Fiscal Agent, \$4 Adams Street, CHIOAGO, ILL.

84 Adams Street, CHICAGO, ILL.

HAVE YOU SEEN THE

### **Jack** of All Trades?

**PUMPS** WATER-SHELLS CORN-**GRINDS** FEED-**CHURNS** BUTTER-

—and hundreds of other jobs with the strength of 15 men. Most Convenient and useful power ever invented. Costs only TWO cents per hour to run. Especially adapted to farm work.

IT IS A NEW ENGINE MADE BY Kanses City St. Paul

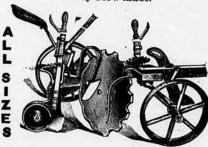
Fairbanks Morse & Chicago Cleveland Cincinnati COmpany

Minneapolis Omaha Denver Detroit Salt Lake City Louisville San Francisco Indianapolis Los Angeles St. Louis Portland, Ore.

### Clark's Cutaway

The only Disk Plow turning a Square Cut Furrow.

Most Efficient, Durable, Light Draft, and Easy-to-buy Plow made.



f your dealer does not handle them, write to J. C. CONLEY, General Agent, 119 North Water Street, - WICHITA. KANSAS.

### THE COATES HOUSE. Absolutely Fire Proof.

Broadway and 10th, Kansas Olty, Me.

Comfortable and Homelike in Winter.
Cool and Attractive in Summer.
Cuisine and Service Unsurpassed. American and European Plan. SPECIAL RATES TO STOCKMEN. Electric cars direct to Union Depot and Stock Yards.

Interstate Hotel Co., Proprietors.

### SHORTHORN CATTLE.

Bulls, Cows, and Helfers, and Poland-China Boars.

One Jack and one Saddle Stallion for sale in each all. Write your wants.

George Manville, Dearborn, Mo.

When writing advertisers please mention this paper.

#### 20 Shorthorn Bulls For

Three of them, 8 years old, balance 10 to 20 months, in good, serviceable condition, by Cruickshank and Scotch-topped sires. This is the best and evenest lot of bulls we ever raised. Prices moderate. A. B. & F. A. HEATH, Republican, Neb.

### OUR INTEREST IN SOUTH AFRICA.

The declaration of peace in South Africa, which is to be followed by the reopening of the greatest gold-producing mines of the world and presumably by a general revival of business in that greatest consuming section of Africa, lends especial interest to a monograph entitled "Commercial Africa in 1901," just issued by the U. S. Treasury Bureau of Statistics.

The commerce of Africa, according to this publication of the Bureau of Statistics, amounts to over \$700,000,000, of which 429 millions represented the value of the imports. Necessarily in so large an area with so many tribes and peoples who keep no records of their transactions, a considerable amount of commerce must pass without being re-corded in any way. The total imports at the ports where records are kept at the ports where records are kept amounted in the latest available year to \$429,461,000, and the exports to \$263,907,000. Of the exports, a large share, especially those from the south, is gold and diamonds; in the tropical region, there relies and gums: ivory, rubber, palm nuts, and gums; and in the north a fair share of the exports are products of agriculture-cotton, coffee, cacao, spices, dates, etc. The export figures of recent years are less than those of former years, owing to the hostilities in South Africa, which have both reduced production and increased local consumption.

About three-fourths of the imports of Africa are through the ports of the extreme north and south of the continent, those at the north being for the consumption of the more densely populated regions bordering on the Mediterranean and considerable guartities, soing to the and considerable quantities going to the interior by caravans—a large part across the Sahara to the densely populated regions of the Soudan. At the south, a large share of the imports is, under normal conditions, for use at the gold and diamond mines, which lie a few hundred miles north of the Cape, and are reached by railway lines from Cape Colony and Natal at the south, and from ports of Portuguese East Africa on the southeast. The class of imports in the south differs materially from that at the north, the demand of the mining region being for management. the mining region being for ma-chinery, mining tools, dynamite, pow-der, flour, meats, and clothing; while at the north cotton goods, tobacco, spirits, clocks, and trinkets form a larger share of the imports, as is also the case on the coast of the tropical regions.

A very large proportion of the trade of Africa is with England. There are numerous reasons for this, the most important, however, being that her colonies—Cape Colony and Natal—on the south are the avenues through which pass most of the goods for that section and that a resulting and the south are the south as a south are the south are t tion, and that a very large share of the growing trade is also carried by British vessels, while the bulk of the mining, as well as the stock raising and general development of that section, is in the hands of British colonists or capitalists. nands of British colonists of capitalists. In the north a large share of the trade of Egypt is given to Great Britain, whose influence in the management of Egyptian affairs is well recognized, while in Algeria, which has a large trade, a very large proportion is with France, the governing country. The total recorded imports into Af-

The total recorded imports into Africa, aggregating in the latest available year, \$429,461,000, were distributed as follows: Into British territory, \$157,575,000; French territory, \$92,004,000; Turkish territory, \$77,787,000; Portuguese territory, \$20,795,000; German territory, \$8,336,000; and into the Congo Free State, \$4,722,000. Of this importation of \$429,461,000, about 5 per cent was furnished by the United States, the total for 1901 being \$25,542,618. Our total for 1901 being \$25,542,618. total exports to Africa have grown from \$6,377,842 in 1895, to \$18,594,424 in 1899, and \$25,542,618 in 1901. This rapid increase is largely due to the fact that or ders sent to the United States for mining machinery and other supplies so much in demand in South Africa are promptly filled with goods of the latest pattern and most acceptable character.
Africa occupies fourth place in the

list of the grand divisions of the world in its consuming power in relation to international commerce, the imports of the grand divisions according to the latest available figures being as follows: Europe, \$8,300,000,000; North America, \$1,300,000,000; Asia, \$900,000,000; Africa, \$430,000,000; South America, \$375,rica, \$430,000,000; South America, \$375,000,000; and Oceania, \$325,000,000. Of this total of \$11,630,000,000, the United States supplies 5 per cent in the case of Africa, 10 per cent of the imports of South America, 10 per cent of those of Asia and Oceania, 14 per cent of the imports of Europe, and 40 per cent of the imports of North America, exclusive of the United States. of the United States.

Railroad development in Africa has been rapid in the past few years and

seems but the beginning of a great sys tem which must contribute to the rapid development, civilization, and enlightenment of the Dark Continent. Already ment of the Dark Continent. Already railroads run northwardly from Cape Colony about 1,500 miles and southwardly from Cairo about 1,200 miles, thus completing 2,700 miles of the proposed "Cape of Cairo" railroad, while the intermediate distance is about 3,000 miles. miles. At the north numerous lines skirt the Mediterranean coast, especialskirt the Mediterranean coast, especially in the French territory of Algeria and in Tunis, aggregating about 2,500 miles; while the Egyptian railroads are, including those under construction, about 1,500 miles in length. Those of Cape Colony are over 3,000 miles in length, and those of Portuguese East Africa and the Transvaal are another thousand miles in length. Including all of the railroads now constructed or unof the railroads now constructed or under actual construction, the total length of African railways is nearly 12,500 miles, or half the distance around the earth. A large proportion of the rail-ways thus far constructed are owned by the several colonies or states which they traverse, about 2,000 miles of the Cape Colony system and nearly all of that of Egypt belonging to the state.

That the gold and diamond mines of South Africa have been and still are wonderfully profitable is beyond question. The Kimberley diamond mines, about 600 miles from Cape Town, now supply 98 per cent of the diamonds of compense although their existence was commerce, although their existence was unknown prior to 1867, and the mines have thus been in operation but about thirty years. It is estimated that \$350,-000,000 worth of rough diamonds, worth double that sum after cutting, have been produced from the Kimberley mines since their opening in 1868-9, and this enormous production would have been greatly increased but for the fact that the owners of the various mines there formed an agreement to limit the outputs so as not to materially exceed the world's annual consumption.

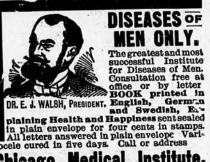
Equally wonderful and promising are the great "Witwatersrand" gold fields of South Africa, better known as the "Johannesburg" mines. Gold was discovered there in 1883, and in 1884 the value of the gold product was about \$50,000. It increased with startling rapidity, the product of 1888 being about \$5,000,000; that of 1890, \$10,000,000; 1892, over \$20,000,000; 1895, over \$40,000,000; and 1892, over \$40,000,000; and 1892, about \$55. 1892, over \$20,000,000; 1898, about \$55,000,000; and 1897 and 1898, about \$55,000,000. Work in these mines has been practically suspended during the war that has been in progress in that section of the tion during the past two years. The gold production of the "Rand" since 1884 has been over \$300,000,000, and careful surveys of the field by experts show beyond question that the "gold in sight" probably amounts to \$3,500,000,000, while the large number of mines in adjacent territory, particularly those of Rhodesia, whose output was valued at over \$4,500,000 last year, gives promise of additional supplies, so that it seems probable that South Africa will for many years continue to be, as it is now, the largest gold-producing section of the world.

Pa (from upper landing, to daughter entertaining her "steady" in the parlor)—Gladys, what time is it?
Gladys—I don't know, pa; our clock

isn't going. Pa—How about George?—Richmond

### \$19 To Boston and Return \$19 \$22 To Boston and Return Via New York \$22

via Nickel Plate Road, account of meeting of Christian Scientists, June 15 to 18. Tickets on sale June 12, 13, and 14, with open return limit of June 21st. By depositing tickets with Joint Agent in Boston on or before June 21st, extended limit returning until July 31 may be obtained. Stop-over at Niagara Falls, in either direction if desired. Three trains daily. Through vestibuled sleeping-cars. American Club Meals served in dining-cars on the Nickel Plate Road; also meals A la Carte. Address John Y. Calahan, General Agent, 111 Adams St., Chicago, for reservation of sleeping-car space and other information.



### Chicago Medical Institute. 513 Francis St.,

ST. JOSEPH, MISSOURI.

CASH Catalogue OR FREE. CREDI

It will pay you to send for our Cata-

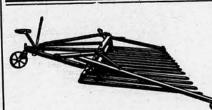
to send for our Catalogue No. 6, quoting prices on Buggies, Harness, etc. We sell direct from our Factory to Consumers at Factory Prices. This guaranteed Buggy only \$33.50; Cash or Easy Monthly Payments. We trust honest people located in all parts of the world.

of the world.

Write for Free Catalogue. MENTION THIS PAPER.

DEP'T 54, E East St. Louis, III.

Make arrangements now for consigning that clip of yours to the trade marts, so you can avail yourself of the high prices quickly when they come. Better take an old time house of known responsibility where the wool trade centers. The one place in the west where you are sure of all this and where you can have ample advances of money at low interest is Silberman Bros. Their immense storage lofts attract the rool manufacturers from far and near. Sell upwards of 20,000,000 lbs. annually on commission. No storage or insurance charges. Low rates of commission. We furnish sacks to parties consigning to us, and keep you posted on the market by our wool circular. Sent free to any one. Write for it.



### SWEEP RAKE

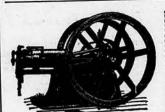
Three Styles, Two and Three Wheels.

Silberman Bros ..

122, 124, 126, 128 Michigan St., Chicago, III.

Simplest, Strongest, Best For Alfalfa and other heavy crops. If your dealer does not handle it, write to

The Smith & Sons Mfg. Co., Kansas City, Mo



### OLDSMOBILE.

Olds Gasoline Engines. Olds Engine Oil.

Olds Pumping Engines Elevator Supplies. Shafting, Pulleys and Hangers.

OLDS GASOLINE ENGINE WORKS,

1114-16 Farnam Street,

J. W. Crawford, Mgr. Mention Kansas Farmer.

Omaha, Neb.

Th

Th

"Pitless Wagon"

METAL FRAME—STEEL JOISTS—REQUIRES NO PIT—Nothing to decay. Will endure more service and retain its accuracy for a longer period of time. Scales of other designs offer you a few castings and a receipt to build a scale. We offer you the scale complete except the few planks for flooring. Guaranteed for five years. Write for particulars.

McDONALD BROS., Pleasant Hill, Mo

### Secretary Coburn's Great Books.

### SWINE HUSBANDRY.

A practical manual for the breeding, rear-ing, and management of swine with a chap-ter on swine diseases and their remedies.

A Book Without a Rival. The Standard Authority. Cloth Bound, Postpaid \$1.50.

### ALFALFA.

Practical information on the production, qualities, worth, and uses of Alfalfa in the United States and Canada. No single crop has so much interest and value for the Kansas farmer.

Worth Many Times Its Cost. Cloth Bound, Postpaid 50 Cents.

ents to furnish these books to its THE KANSAS FARMER has made specia Write direct to this office and we will prepay the postage for you. 

A safe, painless, permanent cure guaranteed. Twenty-five years' experience. No money accepted until patient is well. Consultation and Valuable Book Free by mail or at office. Write to



26th & Wyandotte Street, Kansas City, Mo.

915 WALNUT STREET,

### is There Any Reason ADVANCE FENCE wholesale prices? There is no etter farm fence m Entirely interwoven—no ends to get loose and injure stock or ravel ont. Many heights. Circulars and special discounts free. ADVANCE FENCE CO. 180 E St., Peoria, Ill.

everybody likes for hard usage is The PAGE. PAGE WOVEN WIRE FENCE CO., ADRIAN, MICH.



### GASOLINE ENGINES. INTERCHANGEABLE SYSTEM.

Describe work to be done and we will send specifications of what your power will cost you. E. S. Shockey, 274 Exchange Bldg.

Stock Yards, Kansas City, Mo.

ENSILAGE? If not, write us and we will

CUTTERS

tell you about Profit-Making Ross Ensilage

The E. W. Ross Co., Springfield, O. Our Illustrated Catalogue No. 49 is Free.

### The BEST Mills, the LOWEST Prices



Geard back mills, steel tow'rs, steel tanks, untanks, un-geared and

triple geard feed grinders. Write for our

free catalogue. CURRIE WINDMILL CO., Topeka, Kansas,



with steel roller bearings, easy to push and to pull, cannot be thrown off the cannot be thrown off the track—hence its name—"Stayon." Has no equal.
Thousands sold. Ask your dealer or write us for descriptive circular D. F. E. MYERS & BRO., Ashland, Ohio.

### Special Machine Designers and Builders





### THE BLUE VALLEY MFG. CO.,

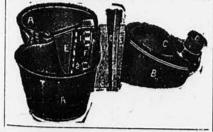
MANUFACTURERS OF

The B. V. Sweep and Power Feed Mills; The Imp. B. V. Safety Corn Harvesters, Oak Stoves, and Stove Repairs. Structural Iron Work, Window Weights, Cast Thresholds, Chimney Caps, etc.

WRITE TO US. MANHATTAN, KANSAS.

### **Buy the Double Dewey** Hog Waterer

from your dealer or write us. We Guarantee Every Fountain. If not satisfactory return and get another, or your money back. We this guarantee to every dealer. VERY CHEAP THIS YEAR.



The B-B Mfg. Co., Davenport, Iowa Mention the Kansas Farmer.

When writing advertisers please mention

### Catalogue Free.

FROM MANUFACTURER DIRECT TO USER

Road Wagons, \$24.25; Top Buggies, \$30.25; Harness, \$4.80; Saddles, \$2.65; Farm Wagons, \$55.00. We are the largest manufacturers of Vehicles and Harness on the Missouri River. Patronize home industry and write for Catalogue. THE ERHARDT WAGON MFG. CO., Atchison, Kansas

Steam or Horse Power. We are the eldest and larged manufacturers of Drilling Machinery in this country. Our machines are faster, stronger and easier operate than any other machine on the marks. They are no experiment. Thousands are successful operation. Special attention gives repair work. Send for Free Illustrates catalogue to

The Kelly, Taneyhill & Woodruff Co.

Ask for Catalog No. 33.

3 to 3 Chestnut St.

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

Fifty car loads of new galvanized wire, in short lengths, Never was used. Comes from 6 to 10 gauge. Put up 100 lbs. to a coil and only one size wire to each bundle.

Prices range from \$1.40 to \$1.90 per Our Free Catalogue No. 61 for the asking. We handle all kinds of sup-plies from Sheriff's and Receiver's Sale. Chicago House Wrecking Co. West 35th and Iron Sts., Chloage.



DONKEY PAINT

One Coat will last 5 Years on metal, wood or felt. Rust Proof and

Proof and proof against black. Read; ammonia, coal smoke, heat and cold. Good fire resister; preserver.

One gallon will cover 300

square feet of surface. Requires no thinning. Comes ready to apply. Write for our low cash prices and descriptive circular. THE KANSAS CITY ROOFING & CORRUGATING CO., 218-220 W. 3rd St., Kansas City, Mo.

## Bicycles Below Cost

cost New 1902 Models. gellise. "Cossack," Guarantee \$8.75
"Siberian," a Beauty \$10.75
"Neudorf," Road Racer, \$11.75 Choice of M. & W. or Record tires and best equipment on all our bicycles. Strongest guarantee. We SHIP ON APPROVAL allow 10 DAYS FREE TRIAL efore purchase is binding. 500 good 2nd-hand wheels \$3 to \$8.

Do not buy a bicycle until you have written for our free catalogues with large photographic engravings and full descriptions.

MEAD CYCLE CO. Dept. 245 F Chicago.

## Sore Shoulders on Horses and Mules while they are working. Warranted. Feed our Stock Food. It dealer, or write us. STOCK FOOD CO., Minneapolis.

## Your Summer Outing.

Unite health, rest, pleasure and comfort on the handsome, luxurious

Steamship MANITOU



Sailings Each Week.

Three

Between Chicago, Frankfort, Charlevoix, Petoskey, Harbor Springs, Bay View, Mackinac Island, etc., connecting with all Steamship Lines for Eastern, Canadian and Lake Superlor Points.

Descriptive reading matter, giving particulars about the voyage, terms and reservations can be secured by asking local Railroad agent or addressing

JOS. BEROLZHEIM, G. P. A.

Manitou Steamship Company, CHICA GO. Manitou Steamship Company, CHICAGO.

# New Fast Train Colorado VIa Santa Fe.

Pullman Palace Sleeper, Composite Car, Observation Sleeper and Chair Car. Connecting Sleeper between San Antonio and Colorado Springs. Cafe Car Colorado Springs to Denver.

Leave Topeka daily 8.35 p. m., beginning June 1. Arrive Colorado early next morning. Just as desirable service eastbound.

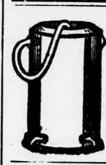
This train is in addition to the Colorado Express leaving Topeka 11.50 a. m., and arriving Colorado following morning, and carrying free Chair Cars, Pullman Sleepers and Observation Car.

For particulars about the reduced rates to Colorado in effect this summer and copy "A Colorado Summer," apply to

T. L. KING, Agent, Topeka.

T. M. JAMES,

P. O. Bidg., North Topeka.



### THE SMITH CREAM SEPARATOR.

The only separator on the market that does not MIX the milk and water, and sold under a positive guarantee. More Cream, Better Butter, Milk fine, and no labor at all. Get a SMITH. Agents wanted. Mention Kansas Farmer. Smith's Cream Separator Co. E 6th & Court Ave., DesMoines, Ia



### @ The @ Superior Cream Extractor. "It Gets the Cream "-20 per cent more than by setting in pans.

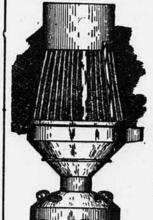
WATER IS NOT MIXED WITH MILK

Therefore, impure water does not taint the Cream and the skim-milk is left pure and sweet. ... WE PAY THE FREIGHT.

Descriptive circulars, reliable testimonials, and prices mailed on request. Write to-day. Can't get in touch with such a money-maker too quick. : : : : :

SUPERIOR FENCE MACHINE CO., 172 Grand River Avenue, Detroit, U. S. A.

#### STANDARD MILK COOLER.



USED AS Strainer. Cooler, and Aerator

By actual tests milk has kept 36 hours longer than under other conditions. Indorsed by practical dairymen and creameries. Write for price and testimonials

STANDARD MFG. CO., Topeka, Kansas



Bought at Recei vers' Sale. Sheets either flat, corrugated or "V" crimped. No tools except a hatchet or hammer is needed to lay the roofing. We furnish free with each order enough paint to Asquare means 100 square ft. Write for Free Catalogue No. 61 on General Herehandise. Chicago House Wrecking Co., West 35th and Iron Sts., Chicago, Ill.



## Nobility Recommends Nervine.

The above portrait is that of Countess Mogelstud, of Chicago, Ill., whose gratitude for the benefit received from the use of Dr. Miles' Nervine prompted her to make this statement:

"It affords me great pleasure to add my testimony to the very excellent merits of Dr. Miles' Nervine. Although I am past 80 years of age I find it soothes the tired brain, quiets the irritated nerves and insures restful sleep. I never feel contented without a bottle of it in the house." Gratefully yours, CHRISTIANA MARIA, Countess Mogelstud.

## Miles Nervine

is a nerve tonic and strengthbuilder that starts right in restoring health immediately.

Sold by all Druggists. Dr. Miles Medical Co., Elkhart, Ind.

# Farming in Colorado, Utah and New Mexico.

The farmer who contemplates changing his location should look well into the subject of irrigation. Before making a trip of investigation there is no better way to secure advance information than by writing to those most interested in the settlement of unoccupied lands. Several publications, giving valuable information in regard to the agricultural, horticultural and live stock interests of this great western section have been prepared by the Denver & Rio Grande and the Rio Grande Western, which should be in the hands of all who desire to become acquainted with the merits of the various localities. Write

S. K. HOOPER,

G. P. & T. A., DENVER, COLO.

## VARICOCELE

A safe, painless, permanent cure guaranteed. Twenty-five years' experience. No money accepted until patient is well. CONSULTATION AND VALUABLE BOOK FREE, by mail or at office. Write to Suite Q. DR. C. M. COE, SIS WALNUT ST.

C. F. MENNINGER, M. D.,

## Consulting Physician.

727 Kansas Avenue, Topeka, Kans. Specialties: Chronic, and Obscure Diseases Heart and Lungs.

BED-WETTING I will send FREE to any mother a sample of a simple remedy that cured my child. Mrs. G. SUMMERS, Box C, Notre Dame, Ind.

Ladies Our monthly regulator never fails. Bex FREE. DR. F. MAY, Bloomington, Ill

BED-WETTING CURED. Sample free. DR.

### Breeders' Directory.

DUROC-JERSEY SWINE.

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

Registered Stock, DUROC-JERSEYS, contains breeders of the leading strains.

N. B. SAWYER, - - Cherryvale, Kansas

M. H. ALBERTY, - - Cherokee, Kansas

DUROC-JERSEYS.

DUROC - JERSEYS.

J. U. HOWE,
Wichita, Kansas.
Farm 2 miles west of city on Maple Avenue

FAIRVIEW HERD DUROC-JERSEYS Has a few September and October pigs at private sale. Everything not sold May 15 will be held for fall sale. J. B. DAVIS, FAIRVIEW, BROWN CO., KANS.

ROCKDALE HERD OF REGISTERED DUROC-JERSEY SWINE Stock for Bale at all times.

J. F. CHANDLER, - - FRANKFORT, KANSAS

DUROC-JERSEY SWINE-REGISTERED. "Bred sows gone. June, July, August, September, October, November, and December pigs for sale

NEWTON BROTHERS, Whiting. Kansas.

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

ROSE HILL HERD OF DUROC-JERSEY HOGS

Boars ready for service, glits bred for fall pigs, and also for early spring farrow. Pigs now ready for shipment. S. Y. THORNTON, Blackwater, Mo. STANDARD HERD OF

Registered Duroc-Jerseys PETER BLOCHER, Richland, Shawnee Co., Kans. Herd headed by Big Joe 7363. Only male pigs for sale S. C. B. Leghorns.

POLAND-CHINA SWINE.

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

Dietrich & Spaulding, Pichmond, Kans. Have FOR SALE six boars 1 year old. Fall pigs both sexes. Sows bred for fall litters.

We have Up-to-date POLAND-CHINAS.

Kansas Herd of Poland-Chinas Has some extra fine glits bred; also some fall boars Will sell Sen. I Know, he by Perfect I Know. Address—

F. P. MAGUIRE, Haven, Reno County, Kans

SENSATION HERD OF Practical Poland - Chinas. The blood of Missouri's Black Chief, Knox All Wilkes, Chief Perfection 2d, Black U. S., and Corwin represented by typical individuals. Big boned, large litters, quick maturing. My references are my customers. Call on, or write me. Harry Evans, Pleasanton, Kans.

VERDIGRIS VALLEY HERD OF POLAND-CHINAS

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

SHADY BROOK STOOK FARM North Topeka, Kans.

Devoted to Breeding High-class POLAND-CHINAS

Address all communications to H. W. CHENEY, Owner, NORTH TOPEKA, KANSAS

**THOROUGHBRED** Poland - China Hogs.

Special price for next 20 days on 10 bred gilts, to far-row in April and May; they weigh from 200 to 275 pounds, and most of them are bred to Black Perfection 27132, the best breeder I ever owned. Also 20 fall pigs, and 4 boars large enough for service. 100 head in herd. Write for anything you want in Poland-China hogs. JOHN BOLLIN, R. F. D. No. 5, Leavenworth, Kans

KNOLLWOOD FARM HERD

LUE BLOODED IG BONED ROAD BACKED ERKSHIRES . .

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

Poland-China Hogs!

I will sell registered sows or gilts open or bred, 6 months old boars and weaned pigs of the most fashionable breeding, at reason-able rates. Pairs, trios, and small herds not akin. Missourl's Black Chief, Perfection, and Black U. S. blood. Can also sell a few choice Berkshire boars of the very best breeding; 4 Shorthorn bull calves for sale.

J. CLARENCE NORTON, Moran, Allen Co., Kans.

POLAND-CHINA SWINE.

POLAND-CHINA SWINE. E. A. Sumner, Hope, Kans., breeder of Shortho cattle and R. C. Leghorns. Pigs, \$5—none better.

High-Class Poland-China Hogs

Jno J. Marshall, Walton, Harvey Co., Kans Breeds large-sized and growthy hogs with good bone and fine finish and style.

SHADY LANE STOCK FARM

HARRY E. LUNT, Proprietor,
Burden, Cowley Co., Kans.
A few choicely bred Poland-China Boars for
sale, some choice open gilts and bred sows. B. P. Rock,
eggs from pens \$2 for 15, free range flock \$1 for 15, \$5
per 100, from high scoring, line bred stock. Satisfaction guaranteed.

BERKSHIRE SWINE.

SPRING CREEK STOCK FARM. LARGE ENGLISH BERKSHIRES. Fine lot spring pigs, few bred sows. Choice stock.
Prices right. : RICE & GILES, Abilene, Kas

Ridgeview Farm Herd of LARGE ENGLISH BERKSHIRES Pigs of fall farrow for sale. No more bred gilts. White Wyandotte eggs, \$1.50 per 15.

MANWARING BROS., Lawrence, Kans

CHESTER WHITE SWINE.

OHESTER WHITES.
I am offering 80 head of Chester White fall and spring pigs, either sex, at reasonable prices. The best strains of this breed. Will Michael, Selma, Iowa.



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

### ...IMPROVED ... Chester White Swine.

Best blood in the Union represented

Largest Chester herd in the West. All Immuned. Fine, Illustrated Catalogue Free. Spring pigs ready to ship. E. W. BROWN, Box 30, SHELBY, NEB.

CATTLE.

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

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

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

RED POLLED CATTLE. Herd numbers 115 head. Geo. Groenmiller & Son, Centropolis, Franklin Co., Kans

A. BUMGARDNER & SON, Holton, Kansas, Breeders of RED POLLED CATTLE A herd bull and a few young ones for sale.

HEREFORD CATTLE.

Twenty head of thoroughbred cows, all with calves, this spring. For particulars, write to E. S. COWEE, Rural Route 2, Burlingame, Kans.

MAPLE LEAF HERD OF THOROUGHBRED

Shorthorn Cattle, and Poland - China Swine.

Farm is 2 miles south of Rock Island depot.

JAMES A. WATKINS, Whiting, Kans

ALLENDALE HERD OF Aberdeen-Angus Cattle The Oldest and Largest in the United States

Splendid recently imported bulls at head of herd Registered animals on hand for sale at reasonable prices at all times. Inspect herd at Allendale, near lola and La Harpe; address, Thos. J. Anderson, Mana-ger, Iola, Allen Co., Kans., R. R. 2, or—

ANDERSON & FINDLAY, Prop's, Lake Fore

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

tch-topped Young Mary females with 9th Knight of Elmwood 181507 at head. (See Vol. 48, Short-horn herd book. Call on, or write, W. J. Smith, Oketo, Kas.

SUNFLOWER HERD OF Scotch and Scotch-tepped



Eskridge,

SHORT HORN CATTLE and POLAND-CHINA SWINE Two Scotch bulls in ser-

vice. Representative stock for sale. Address Andrew Pringle, County, Kansas, Wabaunsee

CATTLE.

Registered Herefords

Ten extra good bulls, one year old and over: 8 are sired by Klondike 72001, and 2 by Young Autocrat 101417. Will sell cheap. ALBERT DILLON, HOPE, KANS

SHORTHORN BULLS. FOR SALE: Registered and high-grade Shorthorns of Cruickshank breeding. No better bulls anywhere. Bargains for quick buyers. Address

A. C. JORDAN, Lyons, Kans.

Forest Park Stock Farm FRED COWLEY, COLUMBUS, KAS., BREEDER OF REGISTERED SHORTHORN CATTLE FOR SALE: FOUR YEARLING BULLS.

Aberdeen-Angus. EVERGREEN STOCK FARM.

Have 15 registered bulls—7 to 21 months old, sired by Niel of Lakeside 25645; also registered cows and heifers highly bred. Will sell in lots to suit. Call or address BEO. DRUMMOND, Elmdale, Chase County, Kansas

SCOTCH-TOPPED

SHORTHORN CATTLE. **FASHIONABLE** POLAND-CHINA SWINE.

REGISTERED BULLS FOR SALE. A. MEAD, Carbondale, Kansas

**Wayside Herd of Registered** *HEREFORDS.* 

Anxiety-Wilton females with Printer 66684 and March On 14th-

Ten Heifers For Sale. W. W. GRAY, Fayette, Mo. RICE COUNTY STOCK FARM

PURE-BRED SHORTHORN CATTLE AND

POLAND-CHINA SWINE. First-class young stock for sale. Just ready for use of the range.

Address GEO. B. ROSS,
Alden, Rice County, Kansas.

**MEADOW BROOK FARM** F. H. CONGER, Proprietor, YATES CENTER, KANS.

Devoted to the Breeding of Registered Shorthorn Cattle Lavender's Best No. 151639 in service. Eleven head of bulls and 15 helfers of St. Valentine blood, through St. Valentine 12th, one of his best sons. Also a few young cows for sale at very reasonable prices.

Inspection and correspondence invited.

GLENWOOD Shorthorns and Poland-Chinas

Shorthorns headed by Victor of Wildwood, by Golden Victor, he by Baron Victor. Late herd bull Gloster 137952. Polands headed by Glenwood Chief Again. For sale choice young bulls; also females. Prices right. Choice fall boors and glits cheap. Visitors invited. Cor respondence solicited. Address

C. S. NEVIUS, Chiles. Miami Co., Kans. 40 miles south of K. C., on main line of Mo. Pac. R. R.

H. R. LITTLE,

HOPE, DICKINSON CO., KANS., Breeds Only the Best, Pure-Bred

SHORTHORN CATTLE

Herd numbers 135, headed by ROYAL CROWN, 125598, a pure Cruickshank, assisted by Sharen Lavender 143002. assisted by Shareh Lavenuct 1800.
FOR SALE JUST NOW-16 BULLS
of serviceable age, and 12 Bull
Calves, Farm is 1½ miles from town.
Can ship on Mo. Pac., R. I., or Santa
Fe. Foundation stock selected from
three of the great herds of Ohlo.

CLOVER CLIFF FARM REGISTERED GALLOWAY CATTLE.



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

Fatherville, lowa. E. H. WHITE, IMPORTER AND BREEDER OF

GALLOWAY CATTLE

Herd Foundation Stock A Specialty. A few choice Females and
14 Bulls for sale.
Inspection or Correspondence invited.

A Carload of Bulls

AND THEN SOME. HEIFERS

Sired by the biggest Shorthorn bull in Kansas — Royal Bates 123675, one of the best sires of the breed. Young stock in fine condition. Can ship at once.

LOUIS HOTHAN, Proprietor, Carbondale Shorthorn Farm, Carbondale, Kans

CATTLE.

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

....INGLEFIELD HERD.... Pure-bred Shorthorns.

A few choice, young bulls, sired by Baron Ury of Inglefield 131581, for sale. H. G. Slavens, Neosho Falls, Woodson Co., Kans

Norwood Shorthorns V. R. ELLIS Gardner, Ks.

Sir Charming 4th at the head of herd. Crui ikshank-top crosses on best American familes. Young stock for sale.

ESKDALE HERD OF ABERDEEN - ANGUS CATTLE

YOUNG STOCK FOR SALE.
JAMES FRATER, Fredonia, Wilson Co., Kas PIPE CREEK HERD REGISTERED



Silver Creek Shorthorns.

The Scotch bull, Gwendoline's Prince 139913, in ser-rice. Also the imported Scotch Missle bull, Aylesbury Duke. 100 head of the best Scotch, Bates, and Ameri-an families. High-class Duroc-Jersey swine for sale. J. F. STODDER, Burden, Cowley Co., Kans.

Rocky Hill Shorthorns and ...Saddle Horses...

Three extra good young bulls and 20 first-class females, stred by Waterloo Duke of Hazelhurst 11th and Golden Victor Jr., for sale right. Helfers old enough are bret to the Scotch bulls Sempstress Valentine and Mayor. J. F. TRUE & SON, Proprietors.

Postoffice, Perry, Kans. Railroad station, Newman, Kans., on Union Pacific R. R., 12 miles east of Topeka. JAMES A. FUNKHOUSER PLATTSBURG, MO., BREEDER OF

HIGH-CLASS HEREFORDS

Bulls in Service: Heslod 2d 40679, March On 6th 96537, Heslod 85th 116352, Onward 2d 118599.

Scotch Shorthorns

FOR SALE The Great Missie Bull, Imp. Mariner 135024, BRED by W. S. Marr, Uppermill, sired by Golden Ray (67132), dam Missle 88th by Ventriloquist (44180), also SIX YEARLING BULLS of choicest Scotch breeding.

HANNA & OO., Howard, Kans.

THE GEO. H. ADAMS  ${f HEREFORDS}$ 

AT LINWOOD, KANS. YEARLING Bulls and Heifers for sale, stred by Or pheus 71100, and Ashton Boy 52058, and out of Choice imported, and home-bred cows. Address all correspondence to GEORGE F. MORGAN,
General Manager, Linwood, Kans.

Vinewood Herd of Registered

SHORTHORNS. Armor Bearer and Lavender King cows with

American Royal prize-winner Orange Lad 171599 and Lavender Gloster 166056 in service. Advance Guard and Lavender King yearling D. K. KELLERMAN & SON, Mound City, Linn Co., Kas

MT. PLEASANT HERD OF SHORTHORNS.

Herd headed by Acomb Duke 18th 142177. Herd composed of Young Marys, Galateas, and Sansparells.

Thirteen young bulls for sale; also some cows. A. M. ASHCRAFT, Atchison, Kans. R. F. D. NO. 3. Inquire at Sagg's Livery Barn, Main Street.

BLOSSOM SHORTHORNS

Herd headed by the Cruickshank bulls lmp. Nonpareil Victor 132573 Sire of the champion calf and junior champion bull of 1900

Grand Victor 115752

himself a show bull and sire of prize-winners FEMALES are Scotch, both imported and home-bred, pure Bates, and balance 8 to 6 Scotch-tops.

Stook For Sale. BEO. BOTHWELL, Mettleton, Caldwell Co., Me. On Burlington Railroad.

### Marshall County Hereford Breeders' Association.

Wm. Bommer, Marietta. Vice President, Wm. Acker, Vermillion.

Secretary, E. E. Woodman, Vermillion.

Treasurer, F. J. Faulkner. Cottage Hill.



Directors:

The President, the Secretary, Fred Cottrell, Irving; Chas. Drennan, I. D. Yarick, Blue Rapids; J. H. Whiting. Frankfort; B. M. Winter, Irving.

👺 First Annual Sale at Blue Rapids, November 18 and 19, 1902

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

#### Wild Tom Herefords. SUNNY SLOPE TOM 14th AT HEAD.

Contributor to Annual Sale Marshall County Hereford Association. A. H. BIRD, AXTELL, KANSAS.

### Weston Stamp Herd HEREFORD CATTLE REGISTERED . . . . HEREFORD CATTLE Anxiety 4th females with Weston Stamp 9th at head. Contributor to Annual Sale Marshall County Hereford Association. WM. ACKER, Vermillion, Kansas.

### Capital Bluff Stock Farm PURE-BRED

### HEREFORDS.

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

I. D. YARICK, Blue Rapids, Kansas.

When writing advertisers please mention Kansas Farmer.

### VERMILLION HEREFORD CO. Spring Branch Herd Original Stocks & Sons HEREFORDS.

Alliant females with Jim Wilton 106761 at head MRS. A. J. STOCKS and C. D. HOLMES,
OWNERS.
Address C. D. Holmes, Mgr., Blue Rapids. Kas.
Contributors to Annual Sale Marshall County
Hereford Association.

### BLUE VALLEY HERD Herefords and Poland-Chinas

FOR SALE-25 Bulls, 12 to 20 months old, 25 Cows and Helfers, 1 to 3 years old, 75 to 100 Gilts, and a few aged Sows, bred for March, May, and June farrow. Write for prices.

COTTRELL BROS., Irving, Kans.

### Ash & Creek & Herd **REGISTERED HEREFORDS**

Anxiety 4th females with Edwards 113325 at head

WM. BOMMER, Marietta, Kas. Contributor to Annual Sale Marshall County Hereford Association.

#### CATTLE.

### Registered Herefords.

THOS. EVANS, Breeder,

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

### LIVE STOCK AUCTIONEERS.

R. EDMONSON, late of Lexington, Ky., and Tattersall's (of Chicago, limited), now located at 208 Sheldley Building, Kansas City, Mo., offers his services as Live Stock Auctioneer. All the Herd and Stud Books. Wire before fixing dates.

### COL. JOHN DAUM, Nortonville, Kans., Live Stock Auctioneer

Am ready to book dates for sales anywhere in the West.

### CAREY M. JONES,

Live Stook Auctioneer, Davenport, Iowa. Have an extended acquantance among stock breeders. Terms reasonable. Write be-fore claiming date. Office, Hotel Downs.

#### HARRY W. GRAHAM, Live & Stock & Auctioneer

Chillicothe, Mo. Fine Stock Sales a Specialty. Up to date on breeding and values. SALES MADE EVERYWHERE.

### Live Stock Auctioneer

### COL. 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.



R. L. Harriman LIVE STOCK AUCTIONEER, Bunceton, Mo.

SALES made everywhere. Thoroughly posted and up-to-date on breeding quality and values. Have a large acquaint-ance among and am selling for the best breeders in the country. Terms low. Write for dates.

### AFE BURGER WELLINGTON, KANSAS,

LIVE STOCK AUCTIONEER

Fine Stock Sales a Specialty

Am booked for the best coming sales. I want your next sale. Write or telegraph your dates.:,::::





Sales Made Anywhere. Have been and am now booked for the best sales of high-class stock held in America. Thoroughly posted on pedigrees and individual merit. Large acquaintance among the leading stockbreeders of America. Terms reasonable. Write me before claiming your date.

# The Colorado Santa Fe.

A Convenient Train for Summer Tourists.

Composite Car, Palace Sleepers, Free Chair Cars, Observation Sleeper, Cafe Car between Colorado Springs and Denver. DAILY, BEGINNING JUNE 1.

> Leave Topeka 8.35 p. m. Arrive Colorado early next morning.

This train is in addition to the Colorado Express leaving Topeka 11.50 a. m., and arriving Colorado following morning, and carrying free Chair Cars, Pullman Sleepers and Observation Car. Reduced rates to Colorado and Utah daily from June 1 to September 15.

For particulars and copy "A Colorado Summer," apply to

T. L. KING, Agt., Topeka.

T. M. JAMES,

P. O. Building North Topeka.

Mention this paper in writing to advertisers

HORSES AND MULES.

### PEROHERON HORSES, and ABERDEEN-ANGUS CATTLE.

GARRETT HURST, Breeder, Zyba, Sumner County, Kansas. Young stock for sale of either sex. All registered.

### Pleasant Hill Jack Farm.

PHILIP WALKER, Breeder, Moline, Elk Co., Kans.,

25 Mammoth, Warrior, and Spanish Jacks New For Sale. Quality and Breeding Unexcelled

Inspection and Correspondence Invited.

Cheyenne Valley Stock Farm.



F. H. Schrepel, Ellinwood Kans., -Breeder of-

### PERCHERON HORSES, AND POLAND-CHINA HOGS

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

HORSES AND MULES.

HENRY AVERY & SON,

### PURE PERCHERONS.

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

Wakefield, Clay County, Kansas.

### Range Horses AT AUCTION.

Every Wednesday.

WOLCOTT, BEERS & GRANT, STOCK YARDS, KANSAS CITY, MISSOURI.

Prospect Farm.



H. W. McAFEE, Topeka, Kansas, Breeder of OLYDESDALE HORSES, AND

SHORTHORN OATTLE. For Sale—25 Clydesdales, including 3 registered tallions of serviceable age, and 13 mares.

Inspection and correspondence invited.

When writing advertisers please mention this paper.



J. W. & J. C. ROBISON,

IMPORTERS AND BREEDERS, TOWANDA, BUTLER CO., KANS. Largest Herd in the State. CASINO (45462) 27830 at head of herd. Prize-winner at last National Show of France. Highest priced stallion imported from France to America, in 1901. Inspection Invited......

### Percheron, and Belgium German Coach,

OLTMANNS BROS., Importers and Breeders, WATSEKA, ILLINOIS. Three importations in 1901. 100 Stallions For Sale.

to other firm enjoys such buying facilities; the senior member being a resident of Germany is person-lly acquainted with the best breeders in France, Germany, and Belgium. We can save you money, tome and see us.

### SNYDER BROS., Winfield, Kans.,

POLAND-CHINA SWINE, SHIRE and PERCHERON HORSES, and POLLED DURHAM CATTLE.

Stallions of both popular Draft breeds for sale; also two jacks.

### America's Leading Horse Importers

We import not only far the greatest number of stallions from France, but far the best ones.

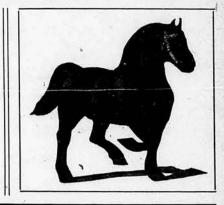
We import more prize-winning stallions than all others combined at the three greatest shows of France, at Nogent-le-Rotrou, Nantes, and Mortagne.

Our Percherons won every first prize including grand championship over all draft breeds at the great Pan-American Exposition.

Our success at the Iowa State Fair and Ohio Exposition was equally as good.

Our French Coach Stallions did not sustain one defeat at any one of these great shows. The best horses and just and honorable treatment of customers have given us the lead.

McLAUGHLIN BROS., COLUMBUS, OHIO. BRANCHES: EMMETSBURG, IOWA: LAWRENCE, KANS.



### \$1,000 FOR \$1.00

Pay us \$1.00 a week for 20 years and we will guarantee you \$1,000. You also are entitled to dividends on your money and if you die after the first annual payment is made, we pay your estate \$1,000 at once.

The securities for this contract are held by the State of Iowa.

If this interests you fill out coupon below and mail to

PALMER S. WILSON, Mgr., THE "ROYAL UNION", Care of Kansas Farmer.

(give day and month.)

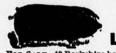
### H. O. TUDOR, HOLTON, KANSAS. BILL BROOK BREEDING FARM, (REGISTERED SHORTHORNS),

Comprising cattle from the following well-known families, (topped with the best Scotch and Bates blood): Rose of Sharon, Zelia, Belina, Ruby. This is a select draft from my herd and will constitute one of the best offerings of the year 1902.

Also breeds registered and high-grade Angora goats.

### ROME PARK STOCK FARM.

HUBBARD, Rome, Kans.,



.. BREEDER OF ... Poland-Chinas and Large English Berkshires.



For Salm-12 Berkshire boars and 20 bred sows and gilts, 20 Poland-China boars, and 50 bred sows and gilts

STEELE BROS., Belvoir, Douglas Co., Kans., # # Breeders of SELECT #

### HEREFORD CATTLE

Young Stock For Sale. Inspection or Correspondence Invited.



Bulls Cut Price 30 Days.

We have a carload of registered Bulls, 12 to 20 months old, several are pure Scotch and herd headers. Will sell singly, or in lots to suit purchasers. These bulls were sired by Lord Mayor 11277 and Knight's Valentine 157068, both Scotch bulls. The dams of these bulls are splendid cows with from two to five Scotch-top crosses. We desire to close these out tine 157068, both Scotch bulls. The dams of these bulls are splendid cowith from two to five Scotch-top crosses. We desire to close these o during the next 30 days and for that reason will sell at reduced price T. P. BABST & SONS, Auburn, (R. F. D.), Shawnee Co., Kans.



### **CLENDALE SHORTHORNS.**

Imp. Prince Lovely 155860 and Scotland's Charm 127264 IN SERVICE-

0 Young Bulls, Cows, and Heifers for sale at all times.

O. F. WOLF & SON, Ottawa, Kans.



### SCOTT& MAR

ULLS in service, MISSIOD 29th 66904, Imp. RODERICK 80155, MONITOR 58275, EXPANSION 23662, FRISCOR 28674, FULTON ALAMO 11th 83731. 25 miles south of Kansas City on Frisco; Ft. Scott & Memphis; and K. C., P. & G.



YOUNG BULLS FOR SALE

sired by the Cruickshank bulls La-fitte 119915, and Baron Ury 2d 124970, ranging in age from 8 months to 2

Inspection Invited

C. W. TAYLOR, Pearl, Dickinson Co., Kans

## 

A. E. Burleigh of Knox City, Mo., and F. F. Failor of Newton, Iowa,

will sell 45 head of Double Standard POLLED DURHAMS ON JUNE 26, 1902.

Cattle of show yard character and very best of breeding may be secured at this sale.

Catalogues after June 1.

### 100 ABERDEEN-ANGUS CATTLE FOR SALE



50 Aberdeen - Angus Bulls

Coming 1 year old, weighing about 750 pounds.

50 Yearling Heifers

Sired by the registered bulls: Hummel 23993, Ebbit 31509, Heather Lad of Estill 2d 17440, Emment P 86788, Regnal Doon 27728, and Gardner Mine 32240,

Bulls from my herd have, probably, during the last three years produced more market-topping steers than have been produced from the bulls of any other herd of Angus cattle in the United States during this time. My cattle are full bloods by breeding up but are non-registerable. These cattle are on my farm adjoining Frankfort, 75 miles west of Atchison on the Missouri Pacific Railread.

For further information, call on or address C. H. BUTLER, Frankfort, Kans

### એમાં સામાં સ્ટ COMBINATION SALE

# **SHORTHORN** CATTLE

TUESDAY, JUNE 17, 1902, AT 1 P. M.,

SALE PAVILION, AT KANSAS CITY STOCK YARDS, KANSAS CITY, MO.

The cattle are all selected, and from the following well-known herds:

N. H. GENTRY, Sedalia, Mo., 6 head. SAM W. ROBERTS, Pleasant Green, Mo., 16 head.

A. A. WALLACE, Bunceton, Mo., 10 head.

GENTRY BROS., Sedalia, Mo., 6 head.

JUNE K. KING, Marshall, Mo., 10 head.
GALLAGHER & MEYER, Highland Station, Kans., 7 head.

F. M. MARSHALL, Blackwater, Mo., 4 head. M. B. GUTHRIE, Mexico, Mo., 14 head.

The cattle represent the Scotch and Bates in their purity and other good standard families, well topped with the best of Scotch and Bates bulls. ... Catalogues on application to

JUNE K. KING, Marshall, Mo., Or Any Consignor.

₴*₦*₡₦₡₦₡₡₡₡₡₡₡₡₡₡₡₡₡₡₡₡₡₡₡₡₡₡₡₡



## BLACKLEGINE

Pasteur Blackleg Vaccine ready for use.

Single Blacklegine (for common stock): No. 1 (10 doses) \$1.50; No. 2 (20 doses) \$2.50; No 3 (50 doses) \$6.00. Double Blacklegine (for choice stock) \$2.00 for 10 doses, first lymph and second lymph inclusive. Blacklegine Outfit, for applying Blacklegine, 50 cents.

### Pasteur Vaccine Co.,

Chicago, New York.

Ft. Worth. Denver. San Francis

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 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 one 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 atockmen. Write for it; it is free.

PARKE, DAVIS & CO. - DETROIT, MICH.
Branches: New York, Kanasa City, Baltimore, New Orleans, Chicago;
Walkerville, Ont.; Montreal, Que.; London, Eng.