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Agricultural Matters.

THE COMING SHORTAGE OF BREAD-STUFFS.

From the annual address of Sir William Crookes, President of the British Association for the Advancement of Science.

(Continued from last week.)

WHEAT-PRODUCING COUNTRIES.

The present position being so gloomy, let us consider future prospects. What are the capabilities as regards available area, economic conditions, and acreage yield of the wheat-growing countries from whence we now draw our supply?

THE UNITED STATES.

For the last thirty years the United States have been the dominant factor in the foreign supply of wheat, exporting no less than 145,000,000 bushels. This shows how the bread-eating world has depended, and still depends, on the United States for the means of subsistence. The entire world's contributions to the food-bearing area have averaged but 4,000,000 acres yearly since 1869. It is scarcely possible that such an average, under existing conditions, can be doubled for the coming twenty-five years. Almost yearly, since 1885, additions to the wheat-growing area have diminished, while the requirements of the increasing populations of the States have advanced, so that the needed American supplies have been drawn from the acreage hitherto used for exportation. Practically there remains no uncultivated prairie land in the United States suitable for wheat-growing. The virgin land has been rapidly absorbed, until at present there is no land left for wheat without reducing the area for maize, hay, and other necessary crops.

It is almost certain that within a generation the ever-increasing population of the United States will consume all the wheat grown within its borders, and will be driven to import, and, like ourselves, will scramble for a lion's share of the wheat crop of the world. This being the outlook, exports of wheat from the United States are only of present interest and will gradually diminish to a vanishing point. The inquiry may be restricted to such countries as probably will continue to feed bread-eaters who annually derive a considerable part of their wheat from extraneous sources.

But if the United States, which grow about one-fifth of the world's wheat and contribute one-third of all wheat exportations, are even now dropping out of the race, and likely soon to enter the list of wheat-importing countries, what prospect is there that other wheat-growing countries will be able to fill the gap, and by enlarging their acreage under wheat replace the supply which the States have so long contributed to the world's food? The withdrawal of 145,000,000 bushels will cause a serious gap in the food supply of wheat-importing countries, and unless this deficit can be met by increased supplies from other countries, there will be a dearth for the rest of the world after the British Isles are sufficiently supplied.

RUSSIA.

Next to the United States, Russia is the greatest wheat exporter, supplying nearly 95,000,000 bushels.

Although Russia at present exports so lavishly, this excess is merely provisional and precarious. The Russian peasant population increases more rapidly than any other in Europe. The yield per acre over European Russia is meager—not more than 8.6 bushels to the acre—while some authorities consider it as low as 4.6 bushels. The cost of production is low—lower even than on the virgin soils of the United States. The development of the fertile though somewhat over-rated "black earth" which extends across the southern portion of the empire and beyond the Ural mountains into Siberia progresses rapidly. But, as we have indicated, the consumption of bread in Russia has been reduced to danger point. The peasants starve and fall victims to "hunger typhus," whilst the wheat-growers export grain that ought to be consumed at home.

Considering Siberia as a wheat grower, climate is the first consideration. Summers are short—as they are in all regions with Continental climates north of the 45th parallel—and the ripening of wheat requires a temperature averaging at least 65° F., for fifty-five to sixty-five days. As all Siberia lies north of the summer isotherm of 65°, it follows that such region is ill adapted to wheat culture unless some compensating climatic condition exists. As a fact, the conditions are exceptionally unfavorable in all but very limited districts in the two westernmost governments. The cultivable lands of western Siberia adapted to

grain-bearing neither equal in extent nor in potential productive powers those of Iowa, Minnesota and Nebraska. There are limited tracts of fair productiveness in central Siberia and in the valleys of the southern affluents of the Amoor, but these are only just capable of supporting a meager population.

Prince Hilkooff, Russian Minister of Ways and Communications, declared in 1896 that "Siberia never had produced, and never would produce, wheat and rye enough to feed the Siberian population." And, a year later, Prince Krapotkin backed the statement as substantially correct.

BRITISH AMERICA.

Those who attended the meeting of the British Association last year in Canada must have been struck with the extent and marvelous capacity of the fertile plains of Manitoba and the Northwest Provinces. Here were to be seen 1,290,000 acres of fine wheat-growing land, yielding 18,261,950 bushels, one-fifth of which comes to hungry England. Expectations have been cherished that the Canadian Northwest would easily supply the world with wheat, and exaggerated estimates are drawn as to the amount of surplus land on which wheat can be grown. Thus far, performance has lagged behind promise, the wheat-bearing area of all Canada having increased less than 500,000 acres since 1884, while the exports have not increased in greater proportion. As the wheat area of Manitoba and the Northwest has increased, the wheat area of Ontario and the eastern Provinces has decreased; the added acres being little more than sufficient to meet the growing requirements of population. We have seen calculations showing that Canada contains 500,000,000 acres of profitable wheat land. The impossibility of such an estimate ever being fulfilled will be apparent when it is remembered that the whole area employed in both temperate zones for growing all the staple food crops is not more than 580,000,000 acres, and that in no country has more than 9 per cent. of the area been devoted to wheat culture.

The fertility of the Northwest Provinces of the Dominion is due to an exceptional and curious circumstance. In winter the ground freezes to a considerable depth. Wheat is sown in the spring, generally April, when the frozen ground has been thawed to a depth of three inches. Under the hot sun of the short summer the grain sprouts with surprising rapidity, partly because the roots are supplied with water from the thawing depths. The summer is too short to thaw the ground thoroughly, and gateposts or other dead wood extracted in autumn are found still frozen at their lower ends.

AUSTRALASIA.

Australasia as a potential contributor to the world's supply of wheat affords another fertile field for speculation. Climatic conditions limit the Australian wheat area to a small portion of the southern littoral belt. Professor Shelton considers there are still 50,000,000 acres in Queensland suitable for wheat, but hitherto it has never had more than 150,000 acres under cultivation. Crops in former days were liable to rust, but since the rust in wheat conferences and the dissemination of instruction to farmers, rust no longer has any terrors. I am informed by the Queensland Department of Agriculture that of late years they practically have bred wheat vigorous enough to resist this plague. For the second season in succession, the wheat crop last year was destroyed over large areas in Victoria; and in South Australia the harvest averaged not more than about 3½ bushels per acre, after meeting colonial requirements for food and seed, leaving only 634,000 bushels for export. In most other districts the yield fails to such an extent as to cause Europeans to wonder why the pursuit of wheat-raising is continued.

NEW ZEALAND.

New Zealand has a moist climate resembling that of central and southern England, while South Australia is semi-arid, resembling western Kansas. Only two countries in the world yield as much wheat per acre as New Zealand—these are Denmark and the United Kingdom. Notwithstanding the great yield of wheat due to an equable climate, New Zealand finds fruit and dairy farming still more profitable. The climatic conditions favorable to wheat are also conducive to luxuriant growths of nutritious grasses. Thus the New Zealander ships his butter more than half way round the world and competes successfully with western Europe.

AUSTRO-HUNGARY.

During the last twenty-seven years the Austro-Hungarian population has increased 21.8 per cent., as against an increase of 54.6 per cent. in the acreage of wheat. Notwithstanding this dispar-

ity in the rates of increase, exports have practically ceased by reason of an advance of nearly 80 per cent. in unit consumption. There can be little doubt that Austro-Hungary is about to enter the ranks of importing nations, although in Hungary a considerable area of wheat land remains to be brought under cultivation.

ROUMANIA.

Roumania is an important wheat-growing country. In 1896 it produced 69,000,000 bushels, and exported 34,000,000 bushels. It has a considerable amount of surplus land which can be used for wheat, although for many years the wheat area is not likely to exceed home requirements.

FRANCE.

As a producer of wheat France comes next to the United States, but for our purpose she counts but little, being dependent on supplies from abroad for an average quantity of 14 per cent. of her own production. There is practically no spare land in France that can be put under wheat in sufficient quantity to enable her to do more than provide for increase of population.

GERMANY.

Germany is a gigantic importer of wheat, her imports rising 700 per cent. in the last twenty-five years, and now averaging 35,000,000 bushels. Other nations of Europe also importers do not require detailed mention, as under no conceivable conditions would they be able to do more than supply wheat for the increasing requirements of their local population, and, instead of replenishing, would probably diminish the world's stores.

ARGENTINA.

The prospective supply of wheat from Argentina and Uruguay has been greatly over-rated. The agricultural area includes less than 100,000,000 acres of good, bad and indifferent lands, much of which is best adapted for pastoral purposes. There is no prospect of Argentina ever being able to devote more than 30,000,000 acres to wheat; the present wheat area is about 6,000,000 acres, an area that may be doubled in the next twelve years. But the whole arable region is subject to great climatic vicissitudes, and to frosts that ravage the fields south of the 37th parallel. Years of systematized energy are frustrated in a few days—perhaps hours—by a single cruelty of nature, such as a plague of locusts, a tropical rain, or a devastating hail storm. It will take years to bring the surplus lands of Argentina into cultivation, and the population is even now insufficient to supply labor at seed-time and harvest.

URUGUAY.

During the next twelve years, Uruguay may add a million acres to the world's wheat fields; but social, political and economic conditions seriously interfere with agricultural development.

SOUTH AFRICA.

At the present time South Africa is an importer of wheat, and the regions suitable to cereals do not exceed a few million acres. Great expectations have been formed as to the fertility of Mashonaland, the Shire Highlands, and the Kikuyu plateau, and as to the adaptation of these regions to the growth of wheat. But wheat culture fails where the banana ripens, and the banana flourishes throughout central Africa, except in limited areas of great elevation. In many parts of Africa insect pests render it impossible to store grain, and without grain stores there can be little hope of large exports.

NORTH AFRICA.

North Africa, formerly the granary of Rome, now exports less than 5,000,000 bushels of wheat annually, and these exports are on the decline owing to increased home demands. With scientific irrigation, Egypt could supply three times her present amount of wheat, although no increase is likely unless the cotton fields of the delta are diverted to grain-growing. In Algeria and Tunis nearly all reclaimed lands are devoted to the production of wine, for which a brisk demand exists. Were this land devoted to the growth of wheat, an additional 5,000,000 bushels might be obtained.

INDIA.

The enormous acreage devoted to wheat in India has been declining for some years, and in 1895 over 20,000,000 acres yielded 185,000,000 bushels. Seven-eighths of this harvest is required for native consumption, and only one-eighth on an average is available for export. The annual increase of population is more than 3,000,000, demanding an addition to the food-bearing lands of not less than 1,800,000 acres annually. In recent years the increase has been less than one-fourth of this amount.

In surveying the limitations and vicis-

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situdes of wheat crops I have endeavored to keep free from exaggeration and have avoided insistence on doubtful points. I have done my best to get trustworthy facts and figures, but from the nature of the case it is impossible to attain complete accuracy. Great caution is required in sifting the numerous varying current statements respecting the estimated areas and total produce of wheat throughout the world. The more closely official estimates are examined the more defective are they found, and comparatively few figures are sufficiently well established to bear the deductions of an drawn. In doubtful cases I have applied to the highest authorities in each country, and in the case of conflicting accounts have taken data the least favorable to sensational or panic-engendering statements. In a few instances of accurate statistics their value is impaired by age; but for 95 per cent. of my figures I quote good authorities, while for the remaining 5 per cent. I rely on the best commercial estimates derived from the appearance of the growing crops, the acreage under cultivation, and the yield last year. The maximum probable error would make no appreciable difference in my argument.

THE INTERPRETATION.

The facts and figures I have set before you are easily interpreted. Since 1871, unit consumption of wheat, including seed, has slowly increased in the United Kingdom to the present amount of 6 bushels per head per annum; while the rate of consumption for seed and food by the whole world of bread-eaters was 4.15 bushels per unit per annum for the eight years ending 1878, and at the present time is 4.5 bushels. Under present conditions of low acre yield, wheat cannot long retain its dominant position among the foodstuffs of the civilized world. The details of the impending catastrophe no one can predict, but its general direction is obvious enough. Should all the wheat-growing countries add to their area to the utmost capacity, on the most careful calculation the yield would give us only an addition of some 100,000,000 acres, supplying at the average world-yield of 12.7 bushels to the acre, 1,270,000,000 bushels, just enough to supply the increase of population among bread-eaters till the year 1931.

At the present time there exists a deficit in the wheat area of 31,000 square miles—a deficit masked by the fact that the ten world crops of wheat harvested in the ten years ending 1896 were more than 5 per cent. above the average of the previous twenty-six years.

APPALLING QUESTIONS.

When provision shall have been made, if possible, to feed 230,000,000 units likely to be added to the bread-eating populations by 1931—by the complete occupancy of the arable areas of the temperate zone now partially occupied—where can be grown the additional 330,000,000 bushels of wheat required ten years later by a hungry world? What is to happen if the present rate of population be maintained, and if arable areas of sufficient extent cannot be adapted and made contributory to the subsistence of so great a host?

Are we to go hungry and to know the trial of scarcity? That is the poignant question. Thirty years is but a day in the life of a nation. Those present who may attend the meeting of the British Association thirty years hence will judge how far my forecasts are justified.

If bread fails not only us but all the bread-eaters of the world—what are we to do? We are born wheat-eaters. Other races, vastly superior to us in numbers, but differing widely in material and intellectual progress, are eaters of Indian corn, rice, millet, and other grains; but none of these grains have the food

value, the concentrated health-sustaining power of wheat, and it is on this account that the accumulated experience of civilized mankind has set wheat apart as the fit and proper food for the development of muscle and brains.

It is said that when other wheat-exporting countries realize that the States can no longer keep pace with the demand, these countries will extend their area of cultivation, and struggle to keep up the supply pari passu with the falling off in other quarters. But will this comfortable and cherished doctrine bear the test of examination?

COST OF PRODUCING WHEAT.

Cheap production of wheat depends on a variety of causes, varying greatly in different countries. Taking the cost of producing a given quantity of wheat in the United Kingdom at 100s., the cost for the same amount in the United States is 67s., in India 66s., and in Russia 54s. We require cheap labor, fertile soil, easy transportation to market, low taxation and rent, and no export or import duties. Labor will rise in price, and fertility diminish as the requisite manurial constituents in the virgin soil become exhausted. Facility of transportation to market will be aided by railways, but these are slow and costly to construct, and it will not pay to carry wheat by rail beyond a certain distance. These considerations show that the price of wheat tends to increase. On the other hand, the artificial impediments of taxation and customs duties tend to diminish as demand increases and prices rise.

(To be continued.)

The Stock Interest.

THOROUGHbred STOCK SALES.

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

OCTOBER 24—E. E. Axline, Poland-Chinas, Oak Grove, Mo.
 OCTOBER 25-26—K. B. Armour, Herefords, Kansas City, Mo.
 OCTOBER 27—C. P. Shelton, Poland-Chinas, Paola, Kas.
 OCTOBER 31 AND NOVEMBER 1, 2, 3—C. H. Whitman, Herefords, Kansas City, Mo.
 NOVEMBER 3—John Bollin, Poland-Chinas, Kickapoo, Kas.
 NOVEMBER 3—Guss Aaron, Poland-Chinas, Leavenworth, Kas.
 NOVEMBER 15-16—Gudgell & Simpson and Jas. A. Funkhouser, Herefords, Kansas City, Mo.
 NOVEMBER 17-19—W. T. Clay and H. C. Duncan, Short-horns, Kansas City, Mo.
 NOVEMBER 22—George Bothwell, Short-horns, Nettleton, Mo.; sale at Kansas City, Mo.
 NOVEMBER 23—W. F. Harned, Short-horns, Bunce ton, Mo.
 NOVEMBER 30—Scott & Marsh, Belton, Mo., Herefords, Kansas City, Mo.
 DECEMBER 8—Miles Bros., Poland-Chinas, Peabody, Kas.
 DECEMBER 15 AND 16—C. G. Comstock, Albany, Mo., Herefords, Kansas City, Mo.

THE WATER SUPPLY AND HOG CHOLERA.

The Purdue Agricultural Experimental Station recently sent out a bulletin treating on the above subject, and as it ought to prove of inestimable value to hog men generally, we reproduce it in full and recommend it for serious consideration of all breeders:

"Water is not a food within the strict meaning of the word, but it is necessary to the maintenance of animal life. It forms a part of every bone, muscle, nerve and tissue in the body, and in such large proportions that it aggregates nearly 60 per cent. of the total weight. In young animals the per cent. is somewhat higher, and in old or very fat animals the per cent. is somewhat lower. Water is not only necessary because it is such an important component of the tissues, but also as an aid to digestion. Food can only be assimilated when in a soluble state, and hence a large quantity of water is required to carry on this physiological process.

"It is not surprising that a relationship may exist between the water supply and disease. This relationship may exist in two ways; first, by not furnishing an adequate supply of water or not being accessible when needed; and second, by the water being the carrier of matter which may cause disease.

QUANTITY OF WATER REQUIRED by the different animals has not been determined for all conditions. The horse requires from sixty-four to eighty pounds, or eight to ten gallons per day, a gallon of water weighing eight pounds. During the months of February and March, five horses drank from forty-eight to sixty pounds per head when not at work, and from sixty-two to eighty-four pounds while at work. Forty-four per cent. of the water was drunk in the forenoon and 56 per cent. in the afternoon.

"Cattle drink more than horses. During the period above referred to, cows not giving milk drank seventy-eight pounds, and cows in full flow of milk drank 112 pounds per day. The largest drink was 122 pounds and the greatest

amount taken by one animal in one day was 176 pounds. The Utah Experiment Station (1) found that steers feeding upon dry feed required eighty-three pounds of water per day, while those fed upon green food consumed only thirty-three pounds per day.

"Cattle drank 72 per cent. of water in the morning and 28 per cent. in the evening.

"We have conducted no experiments to determine the quantity of water required during the summer months.

"No attempt has been made to determine the quantity of water needed daily for sheep, and I find no satisfactory tests recorded. Owing to the close grazing habits of sheep, they drink comparatively little water while on pasture. They can endure privation as regards water far beyond other domestic animals. This has led to the common belief among farmers that sheep do not need water, and that the dew is sufficient. This is a serious mistake and accounts for the loss of many hundred lambs in this State every year.

"The number of times an animal will drink during the day, when allowed full opportunity, is not known, but is indicated in a general way by the stomach.

"The stomach of the horse is small, and, as might be supposed, does not require much water at a time, but often. The stomach in cattle is very large, and rumination (chewing the cud) is performed. This necessitates saturating the food with water before rumination can take place, and probably explains why so much water is drunk in the morning.

DISEASES FROM INFECTED WATER.

"The diseases which arise as a result of supplying water in insufficient quantities, or not providing water in accessible places, are sporadic in character, that is, affect only an occasional animal or a few in a herd or a flock. Probably the most serious disease having such cause is mad itch in cattle. This occurs especially in the fall of the year, when the cattle are upon dry pasture, or when turned in upon a dry stalk field. It may occur at other times, and also be due to other causes, but without doubt 90 per cent. of the cases occurring in this State are directly traceable to this cause. Sheep also suffer from impaction and constipation, and large numbers die for want of proper water supply. Hogs, especially young ones, often succumb from like treatment. Horses probably suffer least loss, because they receive the greatest care in this respect, but no doubt many cases of colic, impaction and constipation are traceable to this source.

"It is not the intent to give the symptoms or prescribe treatment for the diseases arising from an insufficient water supply, but to indicate that animals require large quantities of water, and that losses may be expected when not supplied in sufficient quantity or at the proper time. The remedy lies in prevention.

"The losses that arise from an insufficient water supply are compared with the losses that arise from supplying water of an improper character. Whether water will act as an agent for the carrying of the germs of disease, the ova, larvae and special stages of parasites, will depend upon the source from which the water is obtained. If it comes from a deep well that is properly protected, these organisms will not be present. If it is obtained from the surface, as small ponds, ditches and streams, they may be present. Not all surface waters are dangerous, but all are more or less exposed to infection and may become dangerous at any time. The time it becomes dangerous cannot be detected by the eye, and may not be detected by laboratory tests.

TUBULAR WELLS A PREVENTIVE.

"The earth acts as a filter for all germs that fall upon it, no matter what may be their character. Only a small per cent. will pass through the first inch of soil, and a very small number will pass through the first ten feet. In the first few feet of soil most disease germs are destroyed by the forms that inhabit it, but should they pass further down they are restrained only by the mechanical action of the earth. If, however, a soil becomes saturated with germs, as for example in a barn-yard, or if the pollution is delivered below the surface, as in a cess vault, little purification will take place, and the germs may find their way into near-by wells. In order to be certain of water supply, wells should penetrate an impermeable layer of earth, and the sides be perfectly sealed, as with the iron tubular forms, so that no water can gain entrance except from below. A tubular well twenty feet deep is a much deeper well, from a sanitary standpoint, than a dug well of the same depth. It is also true that a shallow

well may produce pure water at one time and afterwards become contaminated because of the saturation of the soil with germs, either by the barn-yard or vault.

"Water from different sources has frequently been tested in the veterinary laboratory, and some conception of the number of germs that are present in water and the filtering property of the soil may be obtained from the following. The quantity in each case is one cubic centimeter, or half a thimbleful:

	Germs per cubic centimeter.
Very filthy hog wallow.....	2,680,000
Ordinary hog wallow.....	730,000
Wabash river above Lafayette.....	12,000
Wabash river below Lafayette.....	112,000
Clean-looking pond.....	290,000
Filthy water trough.....	248,000
Stock troughs.....	5,000
Tile drains.....	8,000
Six cisterns, without filters.....	5,000
Four cisterns, with filters.....	580
Dug well receiving surface drainage.....	420,000
Dug well fourteen feet deep in corner protected barn lot.....	398,000
Eight tubular wells 60 to 150 feet deep.....	4

PURE WATER PREVENTS CHOLERA.

"Of the different diseases of live stock in the State, none produce greater loss than hog cholera. For the year ending June 30, 1897, the loss in the State of Indiana was 899,457 head, valued at \$5,396,742. A careful analysis of the statistics for each township in the State shows that the streams play an important part in its distribution. An investigation made in 1895 and 1896 showed that the breeders of pure-bred swine, who escaped hog cholera, nearly all used well water. Doctors Salmon and Smith came to this conclusion in their investigation of hog cholera: (2) 'Perhaps the most potent agents in the distribution of hog cholera are streams. They may become infected with the specific germ when sick animals are permitted to go into them, or when dead animals or any part of them are thrown into the water. They may even multiply when the water is contaminated with fecal discharges or other organic matter. Experiments in the laboratory have demonstrated that hog cholera bacilli may remain alive in water for four months. Making all due allowance for external influences and competition with the bacteria in natural water, we are forced to assume that they may live at least a month in streams. This would be time enough to infect every herd along its course.'

"If the larger streams have such a marked influence upon the percentage of loss along their courses, it is only reasonable to suppose that the smaller streams and ponds have a like effect. It is common practice to dig out a pond to receive the surface water from buildings and yards, to dam ravines and creeks, to catch the water from tile drains and springs for water for hogs. In such cases it follows that they receive only surface water. It is apparent, then, that the first step to be taken in the prevention of hog cholera is the securing of a wholesome water supply."

Experience With Aborting Cows.

Editor Kansas Farmer:—In 1890 I lived in Greenwood county, Kansas. My cows commenced aborting and I lost seven calves out of fourteen. At that time I was breeding from a Durham bull. I was advised to change my bull, so, in 1891, I bought a grade Hereford bull. In 1892, out of fourteen cows, eight aborted. I was almost discouraged in the cow business, but met E. W. Crall, who was very successful in raising calves. He told me to get a Galloway bull and he would guarantee that I would lose no more calves. So I bought a thoroughbred Galloway bull, and the next year I bred twenty cows to him, including the eight that had aborted the year before. The next season I had twenty calves, and up to 1897 I had no aborting in my herd. In 1896 I had a sale and sold my bull and my cows, except ten of my best Durhams, and moved to Waverly, Coffey county. I bought a Hereford bull. Last season, out of the ten cows, I lost five calves. Then I sold my bull and again bought a Galloway bull. My cows seem all right, up to date. Two of the cows that aborted last winter have calves, and I am sure that I shall never be bothered again.
 Waverly, Kas. P. H. McGRATH.

Dipped Texas Cattle.

A significant resolution was passed by the Interstate Sanitary convention, at Omaha, last week, as follows:
 "Whereas, The experiments recently conducted have demonstrated that Southern cattle dipped in dynamo oil saturated with sulphur will effectually destroy the Southern tick, and that such cattle without danger of communicating Texas or Southern fever thereto;
 "Resolved, That the quarantine regu-

Salt Rheum

Intense Suffering—Could Not Sleep
 —Cured by Hood's Sarsaparilla.

"I had salt rheum on my arms, which itched intensely and kept me from sleeping. The skin on my hands would crack open. My friends believed I was suffering from blood poisoning. I decided to take Hood's Sarsaparilla. I did not see any improvement with the first bottle but continued with the medicine and after taking five bottles I was completely cured. My hands are now as smooth as I could wish." A. D. HAGEY, Elroy, Pa.

Hood's Sarsaparilla

Is the best—in fact the One True Blood Purifier. Sold by all druggists. \$1; six for \$5.

Hood's Pills are prompt, efficient and easy in effect. 25 cents.

lations may be amended with safety so as to permit the passage of dipped Southern cattle, on the certificate of a designated inspector of the State or of the United States Department of Agriculture, to Northern States during any portion of the year."

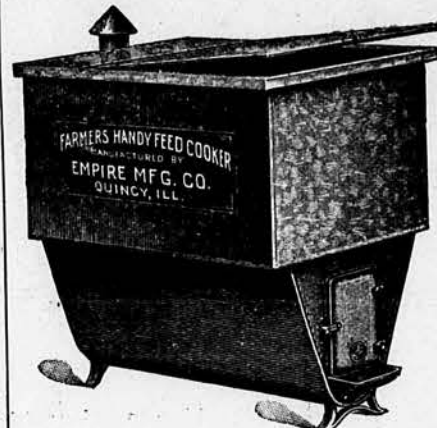
Deafness Cannot Be Cured

by local applications as they cannot reach the diseased portion of the ear. There is only one way to cure deafness, and that is by constitutional remedies. Deafness is caused by an inflamed condition of the mucous lining of the Eustachian Tube. When this tube is inflamed you have a rumbling sound or imperfect hearing, and when it is entirely closed, Deafness is the result, and unless the inflammation can be taken out and this tube restored to its normal condition, hearing will be destroyed forever; nine cases out of ten are caused by catarrh, which is nothing but an inflamed condition of the mucous surfaces.

We will give One Hundred Dollars for any case of Deafness (caused by catarrh) that cannot be cured by Hall's Catarrh Cure. Send for circulars; free.
 F. J. CHENEY & CO., Toledo, O.
 Sold by Druggists, 75c.

Farmer's Handy Feed Cooker.

We desire to call our readers' attention to the Farmer's Handy Feed Cooker, which is sold at the low price of \$12.50 for fifty gallon capacity.



By feeding poultry and stock with cooked food during the winter months, at least one-third of the food is saved; also having stock in a healthy condition, prevents hog cholera among your hogs and insures the hens laying freely during the winter months, when eggs are always wanted at high prices. This Cooker will pay for itself in a short time and is without doubt one of the best and cheapest on the market—just what its name implies, a Farmer's Handy Feed Cooker. Upon application to the Empire Manufacturing Co., Quincy, Ill., a catalogue, giving a full description, may be obtained. They are made in all sizes.

Do You Intend Moving?

Why not investigate southwest Missouri, southern Kansas, northwest Arkansas, Indian Territory or the Texas coast country? The manufacturing, farming and stock raising industries of these sections are attracting considerable attention. The chief centers are reached via the Frisco line. For ticket rates and full particulars, address Geo. T. Nicholson, Gen'l Pass. Agt. St. Louis, Mo.

Among the Ozarks,

The Land of Big Red Apples, is an attractive and interesting book, with views of south Missouri scenery. It pertains to fruit raising in that great fruit belt of America, the southern slope of the Ozarks, and is of interest to fruit growers and to every farmer and home-seeker looking for a farm and a home. Mailed free. Address J. E. Lockwood, Kansas City, Mo.

THE LIVE STOCK SHOW

At the Trans-Mississippi Exposition, at Omaha, Neb.

Never before in the history of America was there so much activity among the breeders of improved stock of all classes as at the Exposition at Omaha.

AWARDS FOR GALLOWAY CATTLE.
The American Galloway Cattle Association left no stone unturned to promote the interest of the breed. Secretary Frank Hearne opened up comfortable headquarters in the Dairy building, next to the live stock department, where he did effective missionary work for the Galloways.

The great live stock arena, where cattle and horses were judged, was crowded with exposition visitors, who evinced lively interest as the expert judges compared the merits of the different animals in each class and awarded the much-coveted ribbons. David McKay, of Port Wayne, Ind., was expert judge on Galloways.

Those shown were highly creditable for the breed, and comprised the herds owned by T. J. Davis & Son, Triumph, Ill., Edward Paul, Dundee, Minn., and James H. McAllester, Joy, Neb.

The complete list of awards for Galloways is as follows:
Bull, 3 years old and over, four entries—First J. H. Davis & Son, second Edward Paul, third James H. McAllester.
Bull, 1 year and under 2, three entries—First Edward Paul, second McAllester, third and fourth, Davis & Son.

Everett E. Day, Weeping Water, Neb.; C. H. Elmendorf, Lincoln, Neb.; J. A. Funkhouser, Plattsburg, Mo.; Clem Graves, Bunker Hill, Ind.; Gudgell & Simpson, Independence, Mo.; Aug. T. Hunwaldt, Randolph, Neb.; Z. T. Kinsell, Mt. Ayre, Iowa; Peter Mouw, Orange City, Iowa; F. A. Nave, Attica, Ind.; Stewart & Hutcheon, Greenwood, Mo.; T. F. B. Sotham, Chillicothe, Mo.; Scott & March, Belton, Mo.; VanNatta & Son, Fowler, Ind.

In the class for aged Hereford bulls there was only shown Mr. Funkhouser's Free Lance 51226 and Mr. Sotham's Sir Bredwell 63685. Sir Bredwell received first place and Free Lance second place.

In the two-year-old class for bulls there were ten entries. Prizes were awarded as follows: First, to Dale 60481, owned by F. A. Nave; second, to Thickset by Corrector 48776, owned by Sotham; third, to Hesoid 29th, owned by Funkhouser; fourth, to C. S. Cross's imported bull, Keopon; fifth, to Mr. Nave's Gold Dollar 73652; sixth, to Stewart & Hutcheon's Rose Chief 68945.

In the ring for yearling bulls, first place, Stewart & Hutcheon's Bovic 79124; second, VanNatta's Lincoln 2d by Cherry Boy 26495; third, Cross's Archibald 8th; fourth, Gudgell & Simpson's Dandy Rex 71689; fifth, Sotham's Grande, the son of Corrector; sixth, Geo. H. Adams's Spanish Boy 75015; seventh, Adams's Orpheus 71100; eighth, Gudgell & Simpson's Bangle 2d 46807; ninth, Cross's Nobleman; tenth, Scott & March's Premier; eleventh place, to E. E. Day.

In the bull calf class under 1 year there were eighteen entries. The awards were: First, Funkhouser's Hesoid 50th 76440; second, Hesoid 46th 76436; third, Cornish &

Beau Real's Maid 60927, Pretty Maid 65910, Diana 71049 and Miss Grove 2d 76040. Fourth prize to Sotham's herd, headed by Sir Bredwell 63685, and the females, Benita 58542, Lady Brenda, Benison and Silence. The fifth prize went to Gudgell & Simpson's herd, headed by Gudgell & Simpson's Douglas 68604, and the females, Petrola 68666, Blanch 11th 71641, Mischievous 71758 and Dolorosa 3d 71696.

The next ring consisted of young herds, one bull and four heifers, all under 2 years old. The first prize was awarded to Funkhouser's herd, headed by Hesoid 50th 76440, and the heifers, Level 71740, Olga 71749, Nadane 76451 and Rollela. The second prize was awarded to C. S. Cross's young herd, headed by Cilmox 4th 71031, and the heifers, Diana 71049, Grave Beau Real 71062, Lady Hesoid 76017 and Miss Grove 2d 76040. Third prize to Sotham's bull, Grande, and the heifers, Benefice, Benison, Silence and Genevieve. Fourth prize to Gudgell & Simpson's bull, Dandy Rex 71689, and the heifers, Mischievous 71758, Blanch 11th 71641, Dolorosa 3d 71696 and Miss Calle. The fifth prize to Adams's young herd, with the bull Orpheus 71100 and the heifers, Florence 70022, Mountain Queen 70028, Graceful Gift 75010 and Vera 75018.

In the class of four animals the get of one sire, there were eight entries. The get of noted herd bulls stood at a premium. This was strictly a breeders' ring. The first prize went to Sotham, on calves of his herd bull, Corrector. The four were Sir Bredwell, Thickset, Benefice and Solace. The second prize went to Funkhouser, on the get of Hesoid 2d. The four shown were Dewdrop, Magnet, Olga and Hesoid 50th.

ON THE BIAS.
That's the secret of the 5/A Bias Girth Horse Blankets. The girth is on the bias—that means crossed. It works automatically. The blanket can't slip. If you pull one side, the other side keeps the blanket from sliding, and yet it doesn't bind the horse. He couldn't displace it if he rolled in it.

5/A Bias Girth
Horse Blankets are made in all styles—to fit any horse—to suit any purse. Ask your dealer for 5/A Bias Girth Blankets, and look for the trademark. A book on the subject sent free.

WM. AYRES & SONS, Philadelphia.

ribbons were tied by Richard Gibson, the well-known judge in Short-horn circles, in connection with Mr. S. H. Thompson as consulting judge.

Awards were as follows for the different classes:

Bulls, 3 years old—H. F. Brown, Minneapolis, Minn., first on Nominee; G. E. Ward, Hawarden, Iowa, second on St. Valentine.
Bulls, 2 years old—H. F. Brown, first; Westrope & Son, Harlan, Iowa, second; G. E. Ward, third; Iowa Agricultural College, fourth.



A GROUP OF C. W. TAYLOR'S CEDAR HILL SHORT-HORNS.

We present herewith an illustration drawn by KANSAS FARMER live stock artist, Mr. F. D. Tomson, of a roan quartette from the Cedar Hill Herd of Short-horns, owned by C. W. Taylor, Pearl, Kas. Golden Knight, the herd bull, was bred by W. A. Harris, at Linwood, and used with fine results by the breeder. He was sired by Imp. Craven Knight and out of Norton's Golden Drop, the cow to which much of the Linwood fame is due. He is the sire of Dora's Knight and Gleeful 3d, which appear in the group. Seraphina B. is sired by Lord Mayor 112727, and was purchased at the Harris dispersion sale.

Bull, under 1 year, four entries—First Edward Paul, second McAllester, third Davis & Son, fourth (highly commended) Davis & Son.

Cow, 3 years and over, five entries—First Davis & Son, second Paul, third Davis & Son, fourth and fifth McAllester.

Heifer, 2 years and under 3, six entries—First Paul, second Davis & Son, third McAllester.

Heifer, 1 year and under 2—First Paul, second Davis & Son, third McAllester.

Heifer under 1 year—First Davis & Son, second Paul, third McAllester, fourth Davis & Son.

Aged herd, three entries—First Edward Paul, second Davis & Son, third McAllester.

Young herd, three entries—First Edward Paul, second Davis & Son, third McAllester. Four animals of either sex, the get of one sire—First Paul, second Davis & Son, third McAllester.

Two animals of either sex, the produce of one cow—First Paul, second Davis & Son, third McAllester, fourth Davis & Son.

Sweepstakes bull, any age, eight entries—First and second Edward Paul, third Davis & Son, fourth McAllester, fifth Davis & Son.

Sweepstakes cow, any age, four entries—First Davis & Son, second Edward Paul, third Davis & Son, fourth McAllester.

HEREFORDS.

The entries in the Hereford division exceeded 150 animals of different ages, and all exhibitors making entries were present except Thos. Clark, Beecher, Ill., and Thos. Mortimer, Stanton, Neb. Claude Makin, of Florence, Kas., was the expert judge. The following breeders took part in the greatest Hereford show ever made in America:
Geo. H. Adams, Crestone, Col.; Chas. G. Comstock, Albany, Mo.; Cornish & Patten, Osburne, Mo.; C. S. Cross, Emporia, Kas.;

Patten's Prince Otto; fourth, Stewart & Hutcheon's Dixey; fifth, Nave's Duke of Fairview 4th; sixth, Cross's Elvira's Archibald.

The aged cow class brought out a string of seventeen cows in their fullest bloom, and, after two or three hours of careful comparison, Judge Makin placed them in the following order: First, Funkhouser's Dew Drop 61351; second, Cross's Beau Real's Maid; third, Nave's Atoka 58383; fourth, Nave's Maud Muller 61274; fifth, Stewart & Hutcheon's Fowler Queen 2d.

In heifers, 2 years and under 3, there were eighteen entries. The prizes were awarded as follows: First, Nave's Dolly V. 71986; second, Funkhouser's Magnet 66320; third, Geo. Adams's imported cow, Luminous; fourth, Cross's Pretty Maid; fifth, Adams's Miranda 60979.

In the yearling heifer class there were seventeen entries. Prizes took the following order: First, Cross's Diana; second, Sotham's Benison; third, Funkhouser's Olga 71479; fourth, Gudgell & Simpson's Mischievous 71758; fifth, Funkhouser's Level 71470.

In the heifer class under 1 year there was a ring of seventeen heifers. The awards for the first five prizes were: First, Nave's Carnation; second, Cross's Miss Grove; third, Funkhouser's Rollela; fourth, Sotham's Silence by Corrector; fifth, Stewart & Hutcheon's Queenie.

In the class for herds, consisting of one bull 2 years old or over, one cow 3 years old or over, one heifer 2 years old and under 3, one yearling heifer and one heifer calf, F. A. Nave won first, with Dale 60481, Atoka 58383, Dolly 5th 71986, and Brocade and Carnation. The second prize went to Jas. A. Funkhouser with the herd headed by Free Lance 51226, and the females, Dew Drop 61351, Magnet 66320, Olga 71479, and Rollela. The third prize to C. S. Cross's herd, headed by imported Keopon 76015, and the females,

The third prize went to C. S. Cross's Archibald calves, Archibald V, Miss Wellington 8th and Elvira's Archibald. The fourth prize was awarded to Stewart & Hutcheon, on the get of Benson 64017, consisting of Bovic, Dixie, Queenie and Hazel. The fifth prize was earned by the get of Gudgell & Simpson's herd bull, Lamplighter 51834, Douglass, Dandy Rex, Mischievous and Dolorosa 3d.

Section 26 was devoted to the best two animals, either sex, the produce of one cow. First was won by Sotham, on Sir Bredwell and Benefice, the produce of Beatrice 8015. Second was won by Nave, on Carnation and Atoka, the produce of Erica 51st. Third was won by Sotham's Grande and Genevieve, the produce of Galty 21120. Fourth went to Gudgell & Simpson's Mischievous and Dolorosa, the produce of Charming 4th 33752. Fifth went to Stanton Breeding Farm Co., on Orphan Boy and Bow Belle, the produce of Harebell 37495.

Sweepstakes best bull, any age.—There were six entries and the prizes were awarded in the following order: First, to Sotham's Sir Bredwell 63685; second, Nave's Dale 60481; third, Stewart & Hutcheon's Bovic (twin) 79124; fourth Sotham's Thickset; fifth, Funkhouser's Hesoid 50th 76440, and sixth to VanNatta's Lincoln II.

SHORT-HORNS.

Our report of the Short-horn exhibit concerns itself with the mere statement of awards made. The exhibit brought out some of the best herds and most thoroughly representative animals of this most estimable and popular breed of cattle. The

Bull 1 year, one entry—C. C. Norton, Corn- ing, Iowa, first.

Bull calf—Thos. Andrews & Son, Cambridge, Neb., first; H. F. Brown, second, W. P. Harned, Bunceton, Mo., third; John Creswell, Bonaparte, Iowa, fourth.

Aged cows—H. F. Brown, first; G. E. Ward, second; Thos. Andrews, third; H. F. Brown, fourth.

Two-year-old heifer—G. E. Ward first, Westrope & Son second, Ward third, Brown fourth.

Yearling heifers—Ward first and second, Harned third and fourth, C. C. Norton fifth.

Heifer calves—Brown first, Norton second, Westrope & Son third, Brown fourth, Ward fifth.

Herds—Brown first, Ward second, Westrope & Son third.

Young herd—Norton first, Brown second, Westrope third.

Get of one bull—Ward first, Brown second, Westrope & Son third.

Produce of one cow—Ward first, Brown second, Westrope & Son third.

Sweepstakes bull, any age—Brown first, Ward second, Brown third, Andrews & Son fourth.

Sweepstakes cow, any age—Brown first, Ward second and third.

[Note.—Awards for the other breeds of cattle and grand sweepstakes held over until our next issue.]

Dr. Bull's Cough Syrup prevents consumption. One-fifth of the deaths in cities is from consumption, caused by neglected colds. Dr. Bull's Cough Syrup always cures colds.

A lusty drinker of the ardent said he abjured water for fear it would rust his iron constitution!

AMONG THE BREEDERS.

THE ARMOUR HEREFORD SALE.

Next week, on Tuesday and Wednesday, K. B. Armour's public sale of Herefords will take place at Kansas City, Mo., when will be sold 115 head of cows, heifers and serviceable bulls, selected out of his own herd and from the three different importations of last year. It may not be presuming too much to state that no offering during recent years has contained an offering of individuals equal in noted ancestry behind them, as no money has been spared to obtain them, both in this country and in England. All interested in the better class of beef cattle, active Hereford breeders and prospective buyers, are cordially invited to attend the sale.

THE GREAT FIVE DAYS' SALE.

At no time since the early 80's has there been offered at Kansas City a larger or more attractive lot of Herefords and Short-horns than those that will be offered November 15, 16, 17, 18 and 19, by the well-known breeders, Messrs. Funkhouser with Gudgeon & Simpson, representative of Herefords, and W. T. Clay and H. C. Duncan, Cruickshank and Scotch-topped Short-horns. The reader interested in the better class of beef cattle may obtain, if he consults the sale announcement elsewhere in this issue and writes each of the parties, obtain by return mail free copies of the sale catalogues, that give full information concerning the cattle and the sale.

AXLINE'S SALE NEXT MONDAY.

Mr. E. E. Axline, one of Missouri's most noted and successful breeders of pedigreed Poland-Chinas, will hold his regular annual public sale, at his farm, near Oak Grove, Jackson county, Missouri, where he will offer sixty head, fifty-one early spring pigs, both sexes, four yearling sows, one fall boar, three winter boars, and the great breeding and herd boar, Western Wilkes 12846 S. If the reader wants size, the best of backs, big bone and extra quality, he can get it in Western Wilkes. Trains will be met on morning of the sale at both Napoleon, on Missouri Pacific, and at Oak Grove, on the C. & A. Sale under cover, hence no postponement on account of weather.

WALSH'S HEREFORD SALE.

Next week, on Thursday, the day following the Armour sale, Richard Walsh, manager of the noted Panhandle, Texas, Adair ranch, will offer 400 head of unregistered Hereford heifer calves at the Kansas City stock yards sale barn. As has been stated before in these columns, these youngsters on inspection cannot be distinguished from registered animals. They are the kind that up-to-date feeders prefer to have coming on for future gains from the feed lots. The lot strongly illustrates what can be done breeding Herefords in the "short grass" country and confirms the fact that it is more profitable to breed the best rather than the scrub.

MAINS' POLAND-CHINA SALE.

Next week, on Friday, at Oskaloosa, Jefferson county, Kansas, Mr. Jas. Mains, one of the oldest Poland-China breeders in the State, will hold his fifth annual public sale, on his farm, near Oskaloosa, when he will offer about 100 head, consisting of herd boars, tried brood sows, fall yearling boars and spring pigs of both sexes. The older sows will have pigs at foot, sows bred to farrow, young sows and open gilts. Also a strong serviceable young boar. The herd is in excellent condition, not overfed, but grown out on the grass and rounded out on a little extra feed, finishing them in that way that insures future usefulness in the hands of new masters. The offerings are mainly by sons of Chief Tecumseh 2d 9115 S. and Klever's Model. In the female division one finds the descendants of some of the best known to the Poland-China breed. The sale catalogue contains about all the information usually sought for by the prospective buyer.

RIDGEWOOD FARM HEREFORDS.

Pointers Concerning the Cattle and the Coming Public Sale.

The writer takes pleasure in jotting some notes while here, at the Ridgewood farm, looking over the 125 head, twenty-seven serviceable bulls and ninety-eight cows and heifers that will go to the highest bidder at the Kansas City stock yards sale barn on October 31 and November 1. If the reader be interested and up in Hereford history, he will find, on consulting the tabulated pedigrees in the sale catalogue, that the foundation stock are very strongly Lord Wilton and The Grove 3d, topped with Heslod 2d and Anxiety 4th blood. This is not only true of a few pedigrees but runs through the pedigrees throughout the entire 125 head catalogued. The visitor will find them sure grown out right and certain to do well in new hands. Twenty-four of the females have had calves and fourteen of these will have calves at foot on sale day. There are seven three-year-olds, twenty-eight two-year-olds and thirty-nine yearling heifers. A major portion of the two-year-olds have been bred to either the Imp. Soudan 75136 or Imp. Randolph 79296. A few of this draft are in expectancy to Heslod 20th 61362, a son of Heslod 2d 40679, that was the sire of Mr. Funkhouser's prize-winners at Omaha last week. All the female division are specially selected animals and there are but few of them, if any, that any white-face devotee would cast aside. The twenty-seven bulls are headed by the Duke of Cumberland 53658, a son of Star Wilton 18th 3254, he by Lord Wilton 5739. His dam, Ristoria 15100, is a granddaughter of Old Success 2, while on his paternal line he is but three removes from The Grove 3d 2490. Twenty-two of his half sisters and seven of his sons will go in the sale. The old standby, Star Wilton 18th 3254 by Lord Wilton 5739 and out of the Grove Maid 3d 16756, she a daughter of The Grove 3d 2490, will have thirty daughters and five sons ready for the prospective buyer. There will be thirteen bulls and thirty-five females by Brainard 51770, he by Anxiety 4th 9904 and out of Bracelet 9951, a granddaughter of The Grove 3d 2490. Here is a commingling of blood that is certainly strong enough to meet the ambition of the most fanciful of white-face breeders. Heslod 20th 61362 by Heslod 2d 40679 and out of Orinda 83680, the first a grandson of The

Grove 3d 2490 and the latter a granddaughter of Success 2. This Heslod 20th will have seven daughters in the offering. There are far too many to specially individualize, but the writer does not hesitate to feel warranted in stating to the reader that may be unable to look over this lot of sale offerings before they will have come to Kansas City, that they are as good individually as is their breeding. A part of the representatives of the herd will be at Kansas City for inspection a few days prior to the sale day, and among them will be the Imp. Randolph, Heslod 20th and the Duke of Cumberland. Any one that has had experience in feeding animals for market will, it is thought, be pleasantly surprised on looking over the 500 head of weanling Hereford calves that will be offered in lots of ten head on November 2 and 3. These calves were specially selected out of the last spring crop of calves at the noted L. S. ranch, owned and operated by Messrs. Scott & Whitman, and situated in the northwest Texas Panhandle. These calves are a living illustration of what may be done from the Hereford breeder's standpoint out in the "short grass" country, and ultimately top the market when held and finished in the corn belt section.

GUSS AARON'S SWINE SALE.

The attention of readers interested in the better class of pedigreed Poland-China swine is called to the public sale announcement of Mr. Guss Aaron, of Kickapoo, Leavenworth county, Kansas, found elsewhere in this issue, wherein one finds that he will offer forty head of specially serviceable boars and spring gilts. The sale will be held at Leavenworth, Kas., on Thursday, November 3, 1898. The herd is in excellent condition. His herd boars, Chief You Want 19921 S. and U. S. Model 20078 S., are both individually as is their breeding. The first mentioned one is by the noted sire of prize-winners, Chief I Know 11992 S. and out of What You Want 44543, a daughter of What's Wanted Jr. 10026 S. Individually he is a smooth, broad, arched-backed, low to the ground, level top and bottom lines and stands on good legs and feet. Best of all he, like his sire, gets extra good pigs. His co-worker, U. S. Model 20078, is by the famous Klever's Model 14664 S. and out of Black U. S. Lady (33892), she a daughter of old Black U. S. 4209 S. The reader will at once recognize the value of his breeding and his sons and daughters in the sale attest his worth as a breeder. If any one who is interested in up-to-date Poland-Chinas will take a glance through the sale catalogue he will find that each and every tabulated pedigree shows that every individual animal catalogued has noted breeding in both paternal and maternal lines. It is perhaps not saying too much when we state that no sale catalogue issued by any one in the State during the present year excels this one of Aaron's in high-class breeding. Five of the offerings are by Fortunate I Know, nine are by Chief You Want, one by Chief I Know, eleven by Look's Chip 39977 A. (a son of the noted Look Me Over 9011 S.), three by young Hadley, seven by U. S. Model, and four by Corwin I Know. Individually the offerings are as good as is their breeding and grown out in the way that they insure profitable returns in the hands of their future owners.

W. P. BRUSH.

Walsh's Hereford Sale.

Next week on Thursday, the 27th, Richard Walsh will offer 500 head of Hereford heifer calves, the best selected out of this year's calf crop in the Adair Hereford herd, that was founded in 1883. The surplus stock from this herd has been an annual favorite for many years with the stockmen of the West. The youngsters will be on exhibition the day before the sale, affording prospective buyers an ample opportunity to examine the merits of the youngsters, whose Hereford color, marking and individuality is the equal of registered stock, from a beef breeder's standpoint. The blood of Lord Wilton, The Grove 3d, Horatius, Anxiety and Sir Richard is very strong in the breeding of their sires and dams. They are and ought to be good.

Sure of Its Victim.

Dr. Bye, of Kansas City, Mo., the great cancer specialist, who has cured over six thousand cases of cancer within the last three years with soothing, balmy oils, says that one time he selected a list of five hundred names of persons who had written to him relative to taking treatment, but who, from some cause, had neglected to do so, and wrote to them several months later inquiring after their condition; to his surprise and grief he learned that nearly twenty per cent. had died within five months from the time they had written their letters of inquiry. If left to itself cancer is always sure of its victim. Books sent free, giving particulars and prices of Oils. Address Dr. Bye, Box 464, Kansas City, Mo.

BELGIAN HARES.

Thoroughbred high-grade stock. Any farmer can raise them and the flesh is in constant demand at fancy prices. Write for circular. LANPHERE BELGIAN HARE CO., Kansas City, Kas.

ITALIAN BEES.

Bred from queens imported from Italy. Full colonies: two, three and four frame nucleus shipped anywhere and safe arrival guaranteed. We ship bees any time from March to November. Queens, hives and supplies generally. A. H. DUFF, Larned, Kas.

BARNYARD DOCTOR.

A wonderful soap for all sores and wounds on animals. Warranted to cure horses injured on barb wire, all running sores, injured hoofs, Cows with Sore Bags, Scabs on Sheep, Footrot. Does it better and quicker than any other remedy. Every farmer should have it. By mail for 15 cents. Cincinnati Soap Co., Cincinnati, O.



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Rifles, Repeating Shotguns, Ammunition and Loaded Shotgun Shells. Winchester guns and ammunition are the standard of the world, but they do not cost any more than poorer makes. All reliable dealers sell Winchester goods.

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188 Winchester Ave., NEW HAVEN, CONN.

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PASTEUR "VACCINE."

Write for particulars, prices and testimonials of thousands of American stockmen who have successfully "vaccinated" their stock during the past three years in Dakota, Nebraska, Wyoming, Colorado, Kansas, Texas, etc.

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In sending here for their Dry Goods—and the only way they can save—is getting choice goods for less prices. That's what brings us mail orders from Maine to California. All you need do to find out how you can save here is to write us what kind of Silks or Dress Goods or other sampleable goods you're interested in—we'll send samples by return mail—goods and prices will tell their own convincing story.

Fifty inch all wool black Cheviotte and Diagonal, 50c yard.

Lupin's dollar Black Camel Hair, 47 inches wide, 50c yard.

Other new Black Goods, 25c, 35c to finest novelties.

Forty-eight inch all wool Cheviotte Mixtures, 35c, made to sell at half a dollar.

See what choice all wool Dress Goods, 25c yard, 36 to 40 inches wide.

Most extensive offering dressy Dress Goods, 50c, 65c, 75c, \$1.00 up—silks 50c, 75c, \$1.00 up, yet shown.

SEND NAME AND ADDRESS FOR NEW CATALOGUE—READY SOON.

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GEORGE W. BARNES, Auctioneer, Valenoia, Kas. Lowest terms. Extensive experience both as breeder and salesman. All correspondence given prompt attention.

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Cabled Field and Hog Fencing with and without lower cable barbed. Steel Web Picket Fence for Lawns and cemeteries. Steel Gates, Posts, etc.

DE KALB FENCE CO., 23 High St., DE KALB, ILL.

THE STRAY LIST.

FOR WEEK ENDING OCTOBER 6, 1898.

Haskell County—S. E. Cave, Clerk.

COW—Taken up by Rufus Wyatt, in Haskell tp., September 5, 1898, one white cow, about 6 years old, brand similar to F.F.; valued at \$18.

COW—By same, one white cow, with red neck, about 6 years old, brand similar to F.F.; valued at \$18.

COW—By same, one red and white cow, about 7 years old, brand similar to F.F.; valued at \$18.

COW—By same, one red and white cow, about 6 years old, brand similar to F.F.; valued at \$18.

FOR WEEK ENDING OCTOBER 13, 1898.

Dickinson County—R. B. Jacobs, Clerk.

BULL—Taken up by E. A. Sumner, in Hope tp., (P. O. Hope), September 22, 1898, one red and white bull, dehorned, about 3 years old, branded on back with letter L; valued at \$35.

Miami County—L. Flanagan, Clerk.

COW—Taken up by James Shipley, in Sugar Creek tp., September 17, 1898, one red and white cow, about 8 years old, weight about 800 pounds, branded on the left hip with the figures 3 and 5; valued at \$15.

FOR WEEK ENDING OCTOBER 20, 1898.

Lyon County—H. E. Peach, Clerk.

MARE—Taken up by Alfred Keelander, in Pike tp., (P. O. Plymouth), October 8, 1898, one dark bay mare, about 9 or 10 years old, about 16 hands high, one white front foot, white stripe in forehead, weight about 1,000 pounds.

Notice.

All persons interested will take notice that my petition is on file in the office of the Shawnee county, Kansas, Probate court, asking for authority to sell the following described real estate situate in Shawnee county, Kansas, belonging to the estate of William Firey, deceased, for the purpose of paying the debts of said estate and the expense of administration, to wit: Lot 368 Taylor street, Topeka, Kansas. Lots 651 and 653 south Kansas avenue, Topeka, Kansas. North 25 feet of lot 108 and south 25 feet of lot 110 Jackson street, North Topeka. Lots 19 to 61 inclusive Jackson street, North Topeka, Firey's addition. One-half interest in lot 123 (43 feet) Central avenue, Firey's addition, North Topeka. One-half interest in lot 31 (25 feet) and fractional 33 (17 feet) Central avenue, Wineberger's addition, North Topeka.

Said petition is set for hearing at the office of the Probate Judge, in the city of Topeka, said county, on Wednesday, the 2d day of November, 1898, at which time and place you can make known any objections you may have to the granting of such order of sale.

Dated October 18, 1898.

J. B. McAFEE,
Administrator of said estate.

BED-WETTING CURED. Sample FREE. Dr. F. E. May, Bloomington, Ill.

W. E. SPEARS

RICHMOND, KAS.

For Sale—22 Head of Herefords

Five registered cows—Lord Wilton and Anxiety-bred to Dial 3d No. 71453; fifteen grade cows, all bred one yearling bull, Lord Wilton and Anxiety; one five-year-old bull, sired by Banker No. 1834, by Illinois No. 920 (6896).

WRITE FOR PARTICULARS.

The Home Circle.

THE QUIET HOUR.

Who hath desire for higher life a way
Shall find thereto; though rough the climb-
ing space.
There intervenes to bless each wearied day
The twilight plain where souls have resting
place.

And at the quiet hour, if but one thing
Be learned, rest thou content. The heavenly
light
Shall lead thee hence; thy soul's uncertain
wing.
Poised o'er dull care shall soar in nobler
flight.

Learn thou thyself—thy aims, thy needs, the
scope
Of thy resources, limit of thy powers.
Limit? Hath God set limits? Doth not hope
Transport to wider spheres in that still
hour

Between the day and night, when angels sing,
Such songs our souls grow faint with joy and
fold
Their trembling wings lest their glad fluttering
Disturb the message longing hearts would
hold?

Between the day and night! Oh, holy plain,
Where we who climb may rest and almost
feel
That G. d. above our little griefs and pain,
Somewhat of His large wisdom doth reveal.
—Boston Transcript.

MANILA MEN OF LOUISIANA.

Dewey having made the far away Manila man an object of curious interest to the civilized world, it may be of further interest to hear that we need not gaze so far a-sea for a look at the now world-over talked about Philippiner. We have his brother and sister right here in Louisiana. How they got here nobody exactly knows. There are traditions that they are the descendants of Malay pirates. Be that as it may, they are there to-day, a quiet, peaceful fisher folk, from whom the last drop of pirate blood seems vanished. They live on the shore of Barataria Bay, in a village composed of queer-looking thatch-roofed huts, squatting low on the oozy marsh. Barataria Bay, once the hiding place of the pirate Lafitte, is a part of the great watery network of bays, lakes and lagoons which is a strikingly beautiful feature of extreme South Louisiana. This village is said by travelers to be almost an exact reproduction of those in which the Philippine Islanders live. The contact of the Louisiana Manila man with Americans, which after all is but slight, has not led to any change or any modifications of his architecture. It is simple, but it suffices. So does his raiment. The change of fashion affects him not, nor does his wife seem to know or care anything for the dictates of that arch dictator who rules unhappy woman elsewhere. She wears but a sack and skirt, short and scant, made of some bright-colored cotton stuff. Her long, coarse, black hair she wears in two tightly braided tails, "hanging down her back." No shoes confine her feet and little she reckons whether her head is protected from the sun.

No household cares vex her worry-free soul. For her there is neither spring nor fall styles—no canning or preserving and pickling—no making of beds and sweeping of floors and tedious dusting of bric-a-brac. Every year a child is born to her, but the children are no trouble. The great sparkling bay is their nursery, and into it the little brown creatures dart and swim about almost as soon as they are born. No Manila child is trammelled with clothes before it is 6 years old, when he is put into a single garment best described as an "excuse." The Manila man's mission on this earth is to catch fish. He will not sow, neither will he reap, nor dig, nor build. Fish is his diet, and fish his sole source of income. No Manila man troubles the serenity of his life by any dark dealings with the alphabet, but if he did he would spell fish with a capital F. For all that he cannot eat he finds ready market, for the boats which go up and down these waters buy up the "catch" of every fishing village for the New Orleans markets, and always get a good "haul" from Manila Man Town.

The buyer pays him in kind on his return trip—whisky, tobacco, coffee, sugar and cotton cloth.

The Manila man has conserved all the physical, mental and moral traits of his race. He has short, thick-set legs, but his trunk and arms are well developed; mighty of muscle. This, no doubt, is due to his habit of life. His color is brown-yellow, but his features and facial outlines are decidedly Mongolian.

He preserves his language, presumably with adaptations, and condescends to jabber English only to the great power who buys his fish. Of the movements of the world he knows nothing nor cares nothing. It would be a sad waste of words to tell him of recent events in the Philippines. To the enchanted traveler who drifts down those

broad, beautiful, lily-clad sheets of silvery water, the whole scene is like something from fairyland. All things are mistily remote, so that when at length he touches a point seemingly Asiatic there appears to be no geographical incongruity about it. He is in a land where all things may happen.

Louisiana has digested many strange people and customs, but she cannot digest her Manila men.—Chicago Times-Herald.

The Daughter of the Confederacy.

The life of Varina Anne Jefferson-Davis, or Winnie Davis, as she was more commonly called, began amid the storms of war, June 27, 1864, in the White House of the South, in Richmond. Miss Davis was educated in France and Germany, and became her father's companion and secretary, and assistant in his literary work.

In social life Miss Davis took the rank to which her birth, natural talents and education entitled her. According to a writer in Harper's Bazar, she was gracious in manner, kindly in disposition, and counted her friends by the score,



VARINA ANNE JEFFERSON-DAVIS.

without regard to lines, sectional or geographical. At an early age she showed marked literary inclinations, and this tendency in later life she turned to active use. Her first novel was "The Veiled Doctor," a story of Southern life, which showed elements of strength and dramatic power. The book was very well received; and her second one, "A Romance of Summer Seas," which appeared about two months ago, shows a great advance in story-telling power, and is marked by a sprightly style and an undercurrent of humor often verging on wit. Miss Davis was just making for herself a position in the field of literature, when death stopped the busy pen. But the love which was hers in life goes beyond the grave, and holds in tender recollection one who combined in her person all that was noble, gentle and true in Southern womanhood.

Naval Uniforms.

When Commodore Dewey stood on the bridge of the flagship Olympia, during the memorable engagement at Manila, he wore what is known in the navy as the "service" coat. This is a coat of dark navy blue cloth or serge, shaped to the figure, to descend to top of inseam of trousers. There is a slit over each hip extending on the right side as high as the sword-belt. It is single-breasted, with fly front, fitted with plain flat gutta percha buttons and a standing collar. The collar edges of the coat are trimmed with lustrous black mohair braid, one and a quarter inches wide, laid on flat. Beside this, at a distance of one-eighth of an inch is shown a narrow black silk braid one-eighth of an inch wide, with an overhand turn three-eighths of an inch in diameter. The coat is worn closely buttoned.

Commodore Dewey wore a pair of trousers with a stripe of gold lace down their outer seam one inch in width. The Commodore's rank was shown by his shoulder straps, collar devices and braid on the sleeves. Being a Commodore, he had a silver star and a silver fowl anchor on each side of the collar. On the sleeve was a two-inch broad braid with gold star above. On his head the hero of Manila had a new-style broad-top cap, with gold strap and gold ornaments, consisting of anchors, and silver shield with eagle above. The visor was trimmed with gold oak leaves.

No man of fashion, with an income of from \$10,000 to \$50,000 a year, is a whit more particular in regard to the selection of his suits than an ensign in the navy. The chances are that he has more of them, but they are of no better quality and cost no more than do those of a naval officer. One of the first things that a naval cadet is taught is to keep his uniforms in good condition. He must have a number of them for special occasions. The regulations of the navy are strict and exacting in regard to the dress of its officers. It takes most of a young officer's salary to keep himself

looking as his superior officer thinks he should look.

Naval officers are 50 per cent. more particular about the making of their uniforms than are those of the army. The reason is plain. Naval officers are continually cruising about the world, and may enter a foreign port at any time. In order to uphold the honor of the country they represent, they must be fitly attired, and, according to the regulations, which fill a good-sized pamphlet, laid down by the department, they must have at least four or five different coats, such as the special full dress, social full dress, frock, service dress, besides caps, chapeaux, helmets, gloves, boots and shoes of the best quality, of special design.—Washington Post.

An Episode of Santiago.

Lieut. Col. Edgar R. Kellogg, of the Tenth regular infantry, who commanded his regiment during the terrific fighting at Santiago, July 1, in which the Tenth suffered severe loss, is at the Arlington, and relates an incident of the famous battle that is worthy of a place in history as illustrating one characteristic of the American soldier that distinguishes him from the soldier of any other country. The incident, related by the Colonel, is as follows:

During the hottest of the fight, when Spanish bullets were flying thickest and men were falling, killed or wounded, a private of the Ninth infantry, who had been accidentally separated from his command, and whose name the Colonel could not recall, asked permission of an officer of the Tenth to fight in his company, saying that he wanted to do his duty and could not find his own regiment. Permission was granted him, and all day the soldier did his part toward winning the battle with as much skill and vigor as though he belonged to the Tenth. When night came the private accosted Col. Kellogg and asked for a certificate showing that he had performed a soldier's duty all through the battle.

"For," said he, "my Captain might think I had been skulking all day unless I fought with your regiment."

Colonel Kellogg questioned the man sharply, and sent his adjutant to the Captain under whom the man said he had fought to see if his story was true. He found that it was true, and that the soldier had performed valorous service all day in his strange position. Quickly writing the proper certificate, the Colonel dismissed the man, who started at once to hunt up his own regiment.

Late in the evening, as Col. Kellogg was walking the lines of his regiment to cheer up his men and to see that all was well with them, he made a ghastly discovery, stumbling over the dead body of a soldier who had fallen, pierced by a Spanish bullet. A hasty examination in the moonlight showed that the dead hero was the faithful and conscientious soldier of the Ninth who had fought all day with the Tenth. In his pocket was the certificate so recently given him by Col. Kellogg. He had gone but a few steps on his journey to his own regiment when he was struck down by a stray Spanish bullet. Thus is illustrated, in the strangest light, as the Colonel remarked, the self-reliant and independent character of the American soldier. If separated from his command he is not lost and helpless, sitting down to await an order from some officer, but, on the contrary, he hunts up another place to fight and gives a good account of himself wherever he may be.—Washington Star.

Dr. Bull's Cough Syrup is a very efficient remedy. For coughs and colds it has no equal. It is good for adults and children. For croup and whooping cough it is invaluable.

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No soap, no soda, no borax, no ammonia—nothing but water is needed to make things white and bright and beautifully clean with

GOLD DUST Washing Powder.

It cleans everything quickly, cheaply, thoroughly. Sold everywhere. Largest package—greatest economy.

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Drying preparations simply develop dry catarrh; they dry up the secretions which adhere to the membrane and decompose, causing a far more serious trouble than the ordinary form of catarrh. Avoid all drying inhalants and use that which cleanses, soothes and heals. Ely's Cream Balm is such a remedy and will cure catarrh or cold in the head easily and pleasantly. A trial size will be mailed for 10 cents, large for 50 cents. All druggists keep it. Ely Brothers, 56 Warren Street, New York.

The Balm cures without pain, does not irritate or cause sneezing. It spreads itself over an irritated and angry surface, relieving immediately the painful inflammation.

Provided with Ely's Cream Balm you are armed against Nasal Catarrh.

"HOME DRESSMAKING FREE."

VALUABLE 32-PAGE BOOK GIVEN FREE TO OUR READERS.

An Expert Dressmaker Tells How to Make Over and Re-Color Old Dresses, Wraps, etc., to Look Like New.

It is astonishing how little money and work are required to make fashionable, up-to-date gowns and wraps from last year's cast-off clothing, if one only knows how. "Home Dressmaking" is a 32-page book, written by an expert dressmaker, that gives pictures of fashionable dresses, wraps, and coats for women and children, and tells just how they can be made from old garments that are faded, unfashionable in color, or out of style.

The Kansas Farmer has made special arrangements with the publishers to give the book free to any of its readers who send a two-cent stamp for postage to Wells, Richardson & Co., Dept. Y, Burlington, Vt. The edition is limited, and any one who wants the book should send at once.

TRY IT FREE!

PEOPLE ARE PLEASSED WITH
The Farmer's Friend.

C. C. More, Clyde, Kas., says he tried everything he knew to relieve a sick cow, when one of his neighbors brought Wasatusa and one dose relieved and cured the animal in thirty minutes.

Mrs. J. C. Dodge, Idana, Kas., says: "Wasatusa is the best medicine we ever used."

SAMPLE BOTTLE OF
WASATUSA
THE GREAT HEALER.

Sent FREE to any address on receipt of three two-cent stamps to pay the postage.

CURES
Rheumatism, Neuralgia, Earache, Toothache, Headache, Croup, Sore Throat, La Grippe, Colic, Cholera Morbus, Diarrhoea and Summer Complaint, Pains in the back by acting on the kidneys, Corns, Bunions, Pain of all kinds.

An excellent remedy for Horses and cattle in cases of barbed wire cuts, colic, etc.
Price 50c and \$1.00 per Bottle.

If your druggist does not handle our goods write for an agency for your neighborhood. Address

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Ask your grocer for Dr. Seelye's Flavoring Extracts. Triple strength. The best on the market.

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The Young Folks.

BUBBLES.

I. I stood on the brink in childhood,
And watched the bubbles go
From the rock-fretted, sunny ripple
To the smoother tide below;

And over the white creek bottom,
Under them every one,
Went golden stars in the water,
All luminous with the sun.

But the bubbles broke on the surface,
And under, the stars of gold
Broke; and the hurrying water
Flowed onward, swift and cold.

II.

I stood on the brink in manhood,
And it came to my weary brain,
And my heart so dull and heavy,
After the years of pain—

That every hollowest bubble
Which over my life had passed,
Still into its deeper current
Some heavenly gleam had cast.

That, however, I mocked it gayly,
And guessed at its hollowness,
Still shone, with each bursting bubble,
One star in my soul the less.

—Wm. Dean Howells.

Written for Kansas Farmer.

YOUNG FOLKS IN THE OLD COUNTRY.

BY ANNA MARIE NELLIS.

NUMBER 43.

WEIMAR.

It was after 4 o'clock in the afternoon of June 25, when we started on our journey toward Weimar. The road was smooth and hard, the weather fine, the slight wind was blowing in the direction we were going and it required but little more than an hour to travel the twelve or thirteen miles between Erfurt and our next stopping point.

The country, during the month of June, is usually pleasant everywhere, and this portion of Germany was not an exception. The harvest fields were ripe for the farmer and we saw many workers binding and "shocking" wheat. The greater number of laborers in the fields were women, but we had observed before that women and oxen are the most useful animals that German farmers employ.

The city of Weimar is the capital of the duchy of Saxe-Weimar-Eisenach, and is situated in a pretty valley on the left bank of the little river, Ilm. It has about 30,000 inhabitants, and though it really does exist in the present, its principal greatness is in its historical past—in the times of the Duchess Amalie and Duke Charles Augustus, the patrons of literature and art. The years of Goethe, Schiller, Herder and Wieland were the years of Weimar's greatness. These are the names which gave to this Teutonic city the title of "Athens of Germany."

We wheeled into this modern Athens before 6 o'clock, and found it was enjoying a glorious "fest," this time it was a firemen's congress which was making merry, and they hadn't participated in a "fest" since the day before, when the Grand Duke's birthday gave them occasion.

It was too late in the day to do much city inspecting; but after a good supper, we enjoyed a delightful open air concert near our hotel, which entertained us until a late hour, when we retired to dream of attending church on the morrow, as we had done two weeks before when ready to start on our journey to Hildesheim for a similar purpose.

On the morning of June 26 rain prevented us from attending early mass, as we desired to do, but the weather cleared in time for us to go to our own Lutheran church—the "Stadt Kirche"—for the forenoon service. In fact, there was no afternoon church service, for in a German city there seems to be no time that can be devoted to such purposes. Of all the week, Sunday afternoon is the gayest portion, and everybody in Deutschland endeavors to make it a jolly holiday.

Our own party did not seem inclined to sit quietly all the afternoon, but proceeded in a perfectly solemn manner to visit the various places of interest, which are in better condition for inspection Sunday than on any other day of the week. My German reading for the past few months had been the works of Goethe and Schiller, and naturally our first thought was to visit the houses in which they used to live and where they passed the invisible line which divides the mortal and spiritual existence.

We first visited Schiller's humble abode, which is now owned by the town of Weimar. A sign on the door directed us to ascend the stairway to the second floor above if we wished to see the rooms occupied by the famous poet years ago. The second floor in Germany is always in the third story of a building, as the

rooms opening on the street are the ones from which the floors above are counted. Opening the very small door, we saw the little flight of steps and proceeded to ascend. The stories of this house are very low and the stairs so narrow that we had to go up in single file. Arriving at the top, we found another little door, which, upon being opened, disclosed a very small room, and a very large Dutch woman who sat by a table and sold us our entrance tickets.

This room is one of the four very small ones that Schiller occupied during the happiest days of his life, and here he died in 1805. Not yet is he appreciated for his full poetic worth, for that older and greater light, Goethe, has always overshadowed him.

The entrance room is devoted to the sale of souvenirs, and the next two rooms are the Schiller museum, which contain a few mementos of the poet, medals, pictures of himself and wife, and presents he had received.

The next room beyond is the one in which the poet died, and it contains his bed, literally buried beneath wreaths, which are laid upon it every year on the anniversary of his death. A little room opening from this bed-room is what, in an American house, would be considered a small closet; but it was Schiller's study, where he wrote the beautiful poems which have given him an enduring monument in the German heart. This is where the great poet lived a few years of comfort and enjoyment, for his whole life before he came to this little house had been one largely filled with poverty and distress. Of the two great German poets, Schiller is considered ideal and Goethe real—one who could only write what he himself had experienced. How remorseful and sad would have been Schiller's writings if taken from his own experience only, but "Don Carlos," "Maria Stuart," "Joan D'Arc" and many others of his beautiful works were written in this little house.

A short distance from Schiller museum is the Goethe house, in which that poet lived during the greater portion of the fifty-six years of his life in Weimar. The house was presented to Goethe by Duke Charles Augustus (son of the famous Duchess Amalie), about 1792, and here he lived and died in 1832. The house was closed to the public until 1885, when it was bequeathed to the state for a museum by the last grandson, Walter von Goethe. From the outside it appears not very imposing, but in comparison with the Schiller home it was a grand affair.

Ascending the spacious stairs, we entered the reception-room, which has small rooms connecting on all sides, but those open to the public are furnished nearly as they were in Goethe's lifetime. The furniture is scarce, but the lack of it is not noticeable, for the rooms are well filled with the poet's collection of paintings, drawings, medals, Italian majolica, plaques of the Italian renaissance, ancient and modern bronze statuettes, busts, portraits and masks of friends, his rugs and many beautiful and costly presents.

In one room is the piano on which young Mendelssohn played often before he became famous. Next to the reception-room, toward the rear of the house, is the room of busts, containing many fine ones, especially those of Goethe and his wife and of the famous preacher, Herder. The little room overlooking the garden, behind the house, was Goethe's study and bed-room, in which, on March 22, 1832, he passed from life to join his faithful Charlotte, who preceded him by nearly a score of years. The bed has the same covering under which Goethe slept in life and began that other sleep which "knows not waking" on earth.

The Goethe museum contains many interesting objects, but a full description would make tedious reading.

As we went down the steps in front of the house, the guide told us of the poet's wife, Charlotte, who in 1813 successfully withstood the French army which invaded Weimar. Her only weapon was her broom. The enemy wished to search the house, but the woman and the broom declared that they should not, as it would disturb the husband who was writing upstairs. They would have laughed at guns and cannon, but they had discretion enough to beware of a woman with a broom. Goethe kept on writing; he was not disturbed.

Passing through "Goethe Platz" and one block beyond, we came to the market place, which was well filled with women selling fruit and vegetables. Although it was Sunday, they seemed to be having a fine trade.

The Rath-house (city hall) of Weimar faces the market place, and it is only interesting on account of its great age, but when we saw it it was all bedecked with garlands and roses which had been placed two days before in honor of the

Grand Duke's birthday. On the balcony was a huge bust of the Grand Duke, crowned with roses and a laurel wreath, and above it was a brilliant red canopy, the whole resembling a throne-room, with the Grand Duke in regal state. Near the city hall is the Herder Platz, named for the renowned preacher, who died in Weimar in 1803. Opposite Herder place is the Stadt Kirche, in which Herder used to preach and where his body was buried. We saw the large brass slab in the nave of the church which tells that underneath it reposes the honored preacher. Beneath the inscription is Herder's motto: "Licht, Liebe, Leben" (light, love, life).

From the church we passed on to the palace, but a short distance away. The front is shielded by a high iron fence, with a large gate in the center and little black and white coops on either side for the guards.

I approached one of the guards and asked him where we could gain admittance to the castle. He looked at me in a dazed fashion, as though he did not understand. I repeated my question and still he made no answer. By and by a brilliant thought seemed to strike into his head somewhere, and he pointed with his bayonet toward the left wing of the palace. We went that way and succeeded in arousing the portier and obtained our tickets. We were reminded that soldiers on guard, in Germany, are not allowed to answer questions, and that accounted for the mute direction we received.

As we ascended the steps to the front door, we were met by a guide, a pretty girl about 20 years of age, who was very kind in explaining everything, and she said she had Americans "sehr gern," by which she meant that she liked them quite well. I think the most interesting portion of our party, for the guide, were the American gentlemen, and she told us she wanted to go to America, as she had heard the women didn't have to work there, and that they could do as they pleased.

The first rooms we saw were those occupied by the mother of the present Duke, during her lifetime, she having passed away more than forty years ago. She was a Russian Princess, and her wedding gifts are displayed in these rooms. I cannot describe them, for they are so very many and all exquisitely beautiful, the green malachite of Russia figuring quite prominently in the display. We noticed three bronze gilded dishes or stands for fruit. These, when struck with the finger gave out the sounds of the chimes from Moscow cathedral—a soft, far-away, echoing sound. These were made by a famous metal worker of Russia, so that the chimes the princess loved could be heard by her in her far-away Saxony home. If I understand it correctly, she was the mother of Empress Augusta, the wife of "Wilhelm der Grosse."

We were next shown the most interesting rooms of the palace—four in number—one for each of the great literary geniuses of Weimar at the beginning of the present century: Goethe, Schiller, Herder and Wieland. Each room was ornamented with beautiful frescoes representing scenes from the principal works of the writers, or events in their own lives.

The present ducal family consists of only three members—the Grand Duke and two grandsons, the one 27, the other 23 years old. These young men are near relatives of Emperor William, who is their father's father's sister's son's son; you know what relation that is.

Our pretty guide told me many things about this princely family. Prince William, the younger son, will probably become the husband of Queen Wilhelmina of Holland, and the little queen had been here recently on a visit, only a few weeks ago. The guide showed me exactly where Wilhelmina sat in chapel during church service; and she hoped that Prince William would marry the Holland Queen.

From the palace of living royalty, we went to the "Fuerstengruft," the princely vault, where defunct royalty holds continual court. It was after 4 o'clock, and the vault would be closed at 5 p. m. It appears like a small church, and, indeed, the upper portion is used as a chapel for mortuary services. In the center of this chapel room is a circular iron railing surrounding an opening in the floor through which the coffins are lowered to the vault beneath.

We found the old sexton, and told him our desire was to visit Schiller and Goethe. He lighted a candle and led us down the stairs. With considerable clanking he unlocked and opened a huge iron door and we passed into a very dark and gloomy room. He showed us first the coffins of Goethe and Schiller completely covered with wreaths and ornaments. These men, of humble birth, by their literary works, won for themselves a place beside Princes and Dukes. Each

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one has a gold and a silver wreath at the head of his casket.

Next was the resting couch of the late Grand Duchess, who died a little over a year ago. Her's is of red velvet with golden trimmings. Then followed the ducal family for the last century. The sexton led us to the opposite side of the vault from the door, which is divided by a curtain from the rest of the room. Behind this curtain were the caskets of the ducal line from Duke William, who died in 1662. We did not linger long, as we had never met any of them before. Adjoining the ducal vault is a small but richly decorated Russian Greek chapel, beneath which the Grand Duchess Maria Paulowna has rested since her death, in 1859.

Turning from sepulchral scenes, we enjoyed a carriage ride of two miles to Belvidere palace, near which is the natural stage on which Goethe's plays were placed—an open-air theater. A thick hedge forms the walls of this theater. The stage is raised considerably higher than the pit in front, and has six wings on each side formed by hedge.

I would like to mention Liszt's house, Goethe and Schiller monument and many other objects of interest in Weimar, but my letter is now too long.

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"PORK-PRODUCTION."

In his new book, "Pork-Production," Secretary Coburn has again shown himself an expert gatherer of information. The value of the matter presented and the excellent classification must again silence the critic who might like to suggest that these official publications should be filled with original matter prepared expressly for these books. Neither can the Secretary be accused of having joined a Kansas society of mutual admiration, for, in the entire book of 227 pages, it is only by including twelve pages "From the Commission Salesman's Standpoint" and "From the Packer's Standpoint," the table of contents and the index, that it is possible to count fifty pages credited to Kansas origin.

But, like its predecessors on other branches of Kansas agriculture, this book is a good thing to have in the house, a good thing to read and study, a helpful source of information to the swine producer, especially helpful to the farmer whose province it is to produce pork for the barrel and for the market. It is a good book to quote from; it is good for reference, and it bears the name of one of the best informed men of the present day on swine husbandry, viz., F. D. Coburn.

HOW THEY VOTED.

The Kansas Farmer has an inquiry as to the record of Kansas Congressmen on the anti-option bill which was before Congress a few years ago. From a prominent citizen of Kansas who took great interest in the bill, we have the following facts:

But two of the present representatives of Kansas had a seat in either the House or Senate. These were Case Broderick and Jerry Simpson. In view of this fact, it is impossible to say what was, or is, the position of most other aspirants for Congressional honors on that measure. It is true, however, that after his election in 1892, and some eight months or more before he took his seat, Charley Curtis went to Washington—this before the final defeat of the bill in March, 1893—and was both earnest and active in advocating the passage of the measure, and with one exception the then representatives of Kansas in both the House and Senate were loyal and active in the same direction.

From the first efforts in support of the measure its friends had the most cordial relations with and assistance from Judge Broderick, and were able, through him, to reach and interest many members from other States.

While Senator Peffer had at an early day introduced his own "anti-option" bill in the Senate, and was naturally very much biased in its favor, yet not for one moment did he relax his efforts in support of the Hatch-Washburn bill, at all times giving it loyal as well as effective aid, his reputation, with brother Senators, for integrity and scrupulous truthfulness aiding in bringing other Senators to the support of the bill.

Jerry Simpson reached Washington at about the same time, in the latter part of 1891, and volunteered the statement that aside from its being a party tenet of his people, he had long desired the

passage of an "anti-option" bill, and that its friends might rely with complete confidence upon his active and earnest assistance, and to "call on him night or day" if there was the least thing he could do in securing the end had in view. When the bill came before the House, on suspension of the rules, in June, 1892, Mr. Simpson voted for the bill. The bill was amended in the Senate, and therefore had to go back to the House, where it again received votes enough to pass it by a very close margin, Mr. Simpson voting for it. On the recapitulation of the vote, however, Mr. Simpson changed his vote from "for" to "against" the bill. The bill was defeated by a bare majority on recapitulation.

WHEAT ESTIMATES.

Crop statisticians have busied themselves with the world's wheat crop of the current year and have arrived at somewhat variant results. The three great authorities in England, representing, largely, dealers in bread-stuffs who desire reliable information to guide them in buying and selling, are Beerbohm, Broomhall and Dornbusch. Their estimates, compiled from official returns and such other sources of information as are thought to be credible—the latter used only in the absence of official data—are, in bushels, as follows:

	Beerbohm.	Broomhall.	Dornbusch
Europe.....	1,440,000,000	1,381,000,000	1,453,000,000
All other.....	1,180,000,000	1,223,000,000	1,178,000,000
Totals.....	2,620,000,000	2,607,000,000	2,631,000,000

It is stated that Broomhall includes in his figures estimates of harvests yet to be gathered in the southern hemisphere, placing them at 28,000,000 bushels above those of the preceding year, while the other authorities base their computations on the past year's harvests for these countries. This reduces the disparity as to the crop outside of Europe, but increases it as to the totals.

It is the purpose of the Kansas Farmer to keep its readers informed as to facts and opinions affecting their management of the business end of their interests, so that they may be in position to judge as wisely as anybody as to the course to pursue in selling their products. It is not possible to lay down any hard and fast rule in such matters, and only by careful study of available data and giving due consideration to the views of other students of the problem can the best course be determined. Without in any way indorsing them, we submit the comments of the three English statisticians, some of them subsequent to their tabulations, as follows:

BEERBOHM.

There has been less animation in the trade this week, but firmness has continued to prevail, with the demand for immediate requirements keeping quite up with the supply; otherwise, there is no change in the position. The opinion that the world has produced, or will produce, 330,000,000 quarters [2,640,000,000 bushels] of wheat this season, compared with 280,000,000 quarters [2,240,000,000 bushels] last year, is now pretty general; but it is recognized that the effects of this comparative abundance, coming after two lean seasons, during which the reserves have been reduced to what may be called an irreducible minimum, cannot, it is very properly argued, be felt for some considerable time. This lack of old wheat is being felt in practically every country, but especially in America and Russia; its effect upon the world's export movement, so far this season, is very marked, and apart from the circumstance that less wheat will be required by Europe than probably in either of the previous five years, the falling off in the world's shipments since August 1 is very marked. The total shipments of wheat and flour for Europe in the eight weeks since August 1, compare, in fact, as follows for the past eight years:

	Quarters.	Quarters.
1898.....	5,890,000	5,850,000
1897.....	8,165,000	7,960,000
1896.....	6,845,000	7,200,000
1895.....	6,075,000	6,500,000

With such small shipments the reserve stocks in the importing countries cannot hope to be reconstructed, and until that is done the wheat seller ought to remain the master of the situation at present comparatively low prices.

BROOMHALL.

The tone of the wheat market continues firm, and it would seem as if farmers throughout the world were gradually proving themselves to be masters of the situation; for while there is undoubtedly a plentiful production of wheat this season, yet the void created by two lean seasons is so enormous that it is becoming to be generally admitted that with the big consumption which always accompanies low prices there will be none too much available in com-

mercial channels at any time this season. Even supposing that the world's crop of 1898 amounts to the big total of 330,000,000 quarters [2,640,000,000 bushels], it would still be only about 15,000,000 quarters over the annual requirements, reckoning on the 1894-96 basis, so that the reserves at the end of the current season would be still quite moderate, say rather less than 30,000,000 quarters, which compares with 14,000,000 quarters in 1898, 21,000,000 in 1897, 30,000,000 in 1896, 37,000,000 in 1895, 41,000,000 in 1894, 42,000,000 in 1893.

Moreover, it is reasonable to assume that the requirements of the current season will be more than they were in 1894-96. In reckoning them at 315,000,000 quarters we are purposely adopting a conservative estimate. Then again it is important that we should not lose sight of the possibility, or we might say probability, of one or more of the important crops of next season making a bad start, or receiving a severe check, in which case a portion of this year's crop would be held back. For instance, France, it is reckoned, has raised this season fully sufficient for her own requirements, but if anything were to go wrong with the next crop, farmers would almost certainly hold back 10 to 20 per cent. of their present production, and consequently that country might become an importer of five to six million quarters.

DORNBUSCH.

The foregoing statement has been compiled from latest official or other reliable sources, and is as near the truth as can be at present ascertained. In a few months, when crop movements bear witness to the facts of the situation, a readjustment of figures may be necessary, but enough evidence can be produced to demonstrate that this year the world has grown, or is growing, 330,000,000 quarters, compared with 282,677,000 quarters in 1897 and 298,407,000 quarters in 1896. The contributions from South America and Australasia may leave more room for emendation of estimate, and it is believed that under ordinary conditions the estimate will be found to err on the side of moderation.

The deficiency in European importing countries is assumed to be about 45,000,000 quarters, and there should be no difficulty in filling this vacuum. The United States and Canada apparently have 37,000,000 quarters surplus, but in view of depleted home stocks and lower prices the output cannot be expected to exceed that of last season, when over 26,000,000 quarters were sent to Europe alone. Let it be supposed that 25,000,000 quarters will come from the west, and 20,000,000 quarters from Russia, Roumania and eastern Europe, and the tale is complete without bringing up reserves from India, Australia, Argentina, and other countries. It is this assumption by millers, that there will be plenty of wheat this cereal year, that underlies the dullness and supineness which prevails in all branches of the bread-stuff trade. There is no monopoly of knowledge of patent facts, and although farmers fondly hope and wait for a higher run of values, it will be impossible to convince those engaged in handling wheat for the feeding of nations, and, with abundance, permanent high rates of value must prevail. In some quarters it is believed that politics will play a dominant part in the future of the trade, but such ideas are too vague to influence public opinion. The present improvement in price is clearly due to the fact that values were allowed to drop below a reasonable level and increment may proceed until a point is reached that will prove sufficiently attractive to holders.

The broad tire movement in the interest of good roads has received a practical impetus in the regulations as to the use of the Kansas City boulevards. Three-inch tires are required on all one-horse wagons used for hauling, and four-inch tires must be on all such wagons drawn by two or more horses.

Word and Works, published by Rev. Irl R. Hicks, of St. Louis, is the popular journal devoted to weather forecasts, discussions of meteorology and to general home reading. The Kansas Farmer and Word and Works, both for one year, and Hicks' Almanac and Forecasts for 1899, all for \$1.50, sent to this office.

Notice our "Blocks of Three" proposition in "Want column." You are a reader of the Kansas Farmer and know its value. You will confer a favor upon two of your neighbors by explaining its value to them, procuring their subscriptions for one year, and besides, you will secure the "Old Reliable" for yourself for another year free for your trouble. Do it.

TO SAVE DOCTORS' BILLS
Use "Garland" Stoves and Ranges.

WIRE-WORMS.

An inquiry as to wire-worms reached Secretary Coburn, from Saline county. The Secretary referred the letter to Chancellor Snow, of the State University, and received the following reply:

CHANCELLOR SNOW'S REPLY.

The larvae sent are so-called wire-worms, and are the larvae well known under the name of click beetle or snapping beetle. The most famous entomologists of the largest experimental stations of the United States have practically failed in their endeavors to find a practical poisonous remedy that will destroy the wire-worms. They do agree, however, upon the practical advisability of destroying this terrible pest by the method of rotation of crops, by fall plowing, and trapping the adults by poisonous bait. Prof. Forbes says, in his report for 1894:

"The most promising remedy for wire-worms, in my judgment, is one which has unfortunately not been experimentally tested, but which is, nevertheless, precisely based upon our knowledge of the life history, food and habits of these insects. It consists of a rotation in which clover follows always upon grass, and is itself followed by corn. According to this plan, pastures and meadows of grass might lie unchanged for several years, being plowed when broken up, in late summer or early fall, and sown to clover in the spring—either with oats, or in winter wheat or rye sown the fall before. The clover should be allowed to stand a second year, and might then be followed with corn, with positive assurance that the wire-worms originally in the sod would by that time have entirely disappeared. From the regular rotation for grain lands, grass would thus be excluded. In such a rotation corn might be followed by small grain, this by clover, and this by corn. While the wire-worms might produce some visible effect on the small grain the first year after grass, this would usually be much less serious, at any rate, than the damage to corn.

"The general entomological effect of some such management could not fail to be beneficial, since it would apply to cut-worms and white grubs as well as to the wire-worms now under discussion. This system of rotation now common in central Illinois is, indeed, seriously defective in the fact that the plants composing it—Ind corn, small grains and grasses—are all of the same botanical family and consequently subject, in a large measure, to the same enemies. Any variation of this system which will introduce as a regular link in the chain a crop belonging to some other and widely different family of plants, will serve the general purpose of that here proposed."

Trapping with poisonous baits for destroying the adults, thus preventing them from laying eggs, has been carried on with promising results by Professors Comstock and Slingerland, by placing wisps of green clover and little piles of corn meal dough sweetened with sugar under boards in various parts of badly infested corn fields. This was done soon after the field had been planted and after the corn had come up.

"The clover attracted by far the largest number (655) of the beetles. Twelve traps, after being undisturbed for only three days, yielding nearly five hundred beetles. When it was found that large numbers of the click beetles could be trapped with baits of clover and dough, experiments were begun to ascertain if the labor of collecting the beetles from the traps could be saved. The baits were poisoned, with the result that most of the beetles were destroyed, proving that they fed upon those substances and suggesting a practical method of combating them. The best results were obtained by dipping a small handful of freshly-cut clover into Paris green water and placing the bunches under boards in various parts of the field.

"When we take into consideration the small amount of labor involved in distributing poisoned baits, as described, and renewing them once or twice per week during the early part of the summer, and consider also the large number of beetles that can be destroyed, many of them doubtless before they have laid eggs, we feel warranted in earnestly recommending that these important pests be fought in this way."

An experiment which has not been successfully proved by Professors Forbes, Comstock and Slingerland is the use of the fertilizer, Kainit. Professor Smith, of New Jersey, however, says, "That Kainit will kill even true wire-worms I have proved experimentally." It does not act very promptly but it does kill eventually. "At least 1,000 pounds of Kainit per acre when the ground is bare. This seems exceedingly disagreeable to the in-

sect at all ages and fatal to the younger forms."

At last, Professor Smith says: "Conditions vary so much in different parts of the country, and rotations are so diverse in character, that it is impossible to suggest any course that will be universally applicable, except the fall plowing."

The suggestions above mentioned should be sufficient, however, to guide the intelligent farmer in adopting the practice best suited to secure exemption in his case. F. H. SNOW.

Gossip About Stock.

Dr. G. H. Grinnell, breeder of Poland-China swine and Jersey cattle, has removed from Pottawatomie county to Virgil, Greenwood county, Kansas.

Mr. Jas. Mains, the well-known breeder of Poland-Chinas, will hold a public sale at his farm, near Oskaloosa, Kas., on Friday, October 28, 1898. This offering consists of 100 head of pure-bred swine of the right sort of breeding, as will be noticed by the advertisement in this issue.

We are pleased to note that Kansas won great honors in the sheep department at the Trans-Mississippi Exposition, at Omaha, last week. Both classes of Merinos were passed on last Saturday, and E. D. King, of Burlington, Kas., won all first prizes competed for except two.

Hon. C. M. Irwin reports that the Elm Beach farm booked a number of good Poland-China sales at the Exposition, at Omaha, last week, with a number more to be closed this week. While inquiry is very brisk, there seems to be a disposition among buyers to buy them very cheap this fall.

The special attention of our readers in northeastern Kansas is called to the public sale of seventy-three pure-bred Poland-China hogs and seven Short-horn bull calves, to be held at Muscotah, Atchison county, Kansas, October 25, 1898. The offering is of a class that will not disappoint the visitors to this sale. Get catalogue at once and don't fail to be present.

Col. J. F. True, one of our Short-horn advertisers, at Newman, Kas., is anxious to buy Volume XXXIII of the American Short-horn Herd Book, and all old volumes back of Volume XXXI. Any of our readers having the same for sale should communicate with him at once. Col. True recently purchased ten young bulls sired by the famous Lord Mayor, owned by Thos. Babst, of Dover, Kas.

Kirkpatrick & Son, of Connor, Kas., hold their annual Poland-China sale on Wednesday, November 2, at their farm. W. P. Goode, of Lenexa, Kas., holds his big sale at Olathe, Kas., on November 1, and John Bollin and Gus. Aaron hold their combination sale at Leavenworth, Kas., on the 3d. Trains leave Olathe and Connor just right to make connection. You can attend all three sales at one expense.

There will be a grand public sale of Ohio Poland-Chinas, at Paola, Thursday, October 27, 1898, by C. P. Shelton, who had a successful sale last year. The offering consists of the most noted families. It is doubtless one of the best offerings of boars and gilts that has been placed before intending purchasers of Poland-Chinas. Notice advertisement in another place, get catalogue, and attend the sale and take all your friends. You will make no mistake in attending this sale.

R. S. Cook, of Wichita, who is showing Poland-China hogs at the Omaha Exposition, at the present time, reports the following sales: Mr. Brown, of California, bought a boar out of his World's Fair prize-winning litter for \$100; Mr. J. Mandelbaum, Blue Hill, Neb., a Darkness sow for \$30; H. E. Lunt, Burden, Neb., a yearling sow for \$35; F. B. Harvey, of Lehi, Neb., a King Hadley boar for \$25; Dr. Fast, Stella, Neb., a King Hadley boar for \$25; a trio of pigs was also sold to W. H. Ely, Lincoln, Neb.

The opportunity to secure Berkshires at public auction for the next few months will be rare. There will doubtless be no sale held in Kansas at all, but we have advertised in this issue of the Farmer a great Berkshire sale, to be held at the Seven Oaks stock farm, New Sharon, Iowa, November 11, 1898, by Mrs. Ida Haworth, Prof. Haworth, of the State University, at Lawrence, is interested in this sale. Those of our readers who cannot attend should get catalogue and send bids to Col. Jas. H. Maxcy, auctioneer.

A Farmer representative met Messrs. Hanna & Co., of Howard, Elk county, Kansas, at the Omaha Exposition, last week, and received from them a private catalogue of the pedigrees of thirteen yearling pure-bred Cruickshank heifers, which were selected by Mr. Hanna during a recent visit to Scotland. These animals are from noted sires owned by the following famous breeders: Wm. Douthie, George Bruce, Wm. S. Marr, Earl of Roseberry, and A. Cruickshank. The importation will arrive from quarantine and be on Kansas soil during December of the present year.

C. A. Stannard, Hope, Kas., while at the Trans-Mississippi Exposition, at Omaha, last week, purchased ten head of Lincoln sheep. They were prize-winners at Omaha, also at the great Canadian fairs. From Gibson & Walker, of Canada, he purchased the first-prize yearling ram, also a two-year-old ewe and a ewe lamb, prize-winners in Canada this season. Of Wm. Oliver, Avon Bank, Ontario, Canada, he purchased six ewes and a ewe lamb that won first at the Royal show, England, this year, paying \$50 and \$100 each for the imported sheep. This lot of imported Lincoln sheep in Kansas will be watched with much interest by all interested in the long-wooled mutton breeds.

A close inspection of the sale catalogue issued by C. P. Shelton, describing the animals to be offered at his public sale, on October 27, reveals the fact that some of the very finest of Poland-China blood will be shed abroad for the enriching of the great herds of the West. His famous boar, Sixteen to One 41627 O., is descended from Welch's Black U. S. 33521 O., Black U. S. 13471 O., Success 1999 O., and Tom Corwin 2d 2037. Whoever is the lucky purchaser of this animal will surely draw a prize. His numbers 8 and 9 are two gilts, bred to Priceless 30169, and these will be the only two bred to this famous boar that will be sold this year. These gilts are two handsome daughters of 900 Fine 35563 O. and the fine brood sow, Lady Warren, which was sold



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UNDER THE EVENING LAMP HALF HOURS WITH SONG AND STORY



A page bearing this title gives an entertaining collection of short bits of that sort of reading that one does not care to miss— anecdotes, information, the strange and the wonderful are all touched upon interestingly.

THE PASSING OF THE OLD NAVY

Two charming articles on the romance, antique customs and duties of the old trading-vessels, the progress of modern naval science, and how invention has killed much of the poetry of sea life. One of the best American illustrators of marine life is now painting pictures that will accompany this series.

THE PERSONAL SIDE OF AMERICA'S GREATEST ACTORS

A series of articles portraying our best-known actors in their home life, and showing its relation to their struggles and successes. The series will open in an early number with the "Personal Side of Sol. Smith Russell," to be followed by four others, profusely illustrated by photographs and original drawings.

The regular subscription price of the Post is \$2.50 per year. It is offered on trial for so small a sum simply to introduce it.

There are 16 pages every week, the same size as THE LADIES' HOME JOURNAL, and as handsomely illustrated and printed.

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THE BOOK OF THE WEEK

Will deal with the week's foremost offering from American publishers—an extensive review will be given in many cases, a reading from the book itself, a brief story of the author's life—all fully illustrated.



at Mr. Shelton's February sale. The last named boar is the head of the herd for Mr. Shelton, and will be on exhibition at the sale. Too much space would be required to mention all the fine points of the many animals to be offered in the sale. Write Mr. C. P. Shelton for his catalogue, and remember the time and place—October 27, Paola, Kas.

William Plummer, of Osage City, had a very successful sale of Poland-Chinas, last Friday. Fourteen sows and spring gilts averaged \$17.85, seventeen boars averaged \$14.76, making an average of \$16.12 for thirty-one hogs. Col. S. A. Sawyer presided at the block.

H. H. Hague & Sons, of Walton, Kas., write that their orders for sheep have been so numerous this summer that of their large flock they have left only the number mentioned in their advertisement, which are of the very best of the breed, and any one in need of Cotswold or Merino stock will do well to write these gentlemen for description and prices.

It is a matter to be regretted that Hadley Jr., the great breeding boar, should be lost from service in the very prime of his life. He was the best known boar of the breed in the State of Kansas, and enjoyed a national reputation unsurpassed. There is probably not a Poland-China breeder in the United States that has not some acquaintance with this great show hog and producer of prize-winners. He was selected by Secretary Coburn as a typical Poland-China, a cut of which he published in his last report. Those who visited the Omaha Trans-Mississippi Exposition and looked over the display of Poland-Chinas made by

Kirkpatrick & Son, will be able to appreciate the loss these gentlemen and the public have sustained. A large proportion of these show pigs are catalogued for their sale, at their farm, November 2, together with about forty head of fall and spring pigs largely sired by Hadley Jr. This will be the last opportunity the breeders will have to get this fashionable blood into their herds. These enterprising breeders have changed nearly their entire plant of brood sows into choice selections from the most noted families, viz., Chief Tecumseh 2d, Hadley Jr., Hidestretcher, Chief I Know, Klever's Model, Look Me Over, Chief I Am, and others of high quality. This is a sale that breeders cannot afford to overlook. Send for catalogue, by all means.

Publishers' Paragraphs.

Newton Stover, of Stillwater, Okla., writes us as follows: "We have used the Kansas Farmer sewing machine a year and a half, and we think it just perfect."

The Des Moines Incubator Co., of Des Moines, Iowa, has been meeting with fine success in their business. This firm reports the following sales made during the past season. In each case the buyer first purchased one machine and gave it a test before placing an order for a greater number: L. G. Fisher, proprietor Chatham Fields farm, Chicago, twenty-four 300 capacity incubators and twenty 200 out-door brooders. M. Hartsoog, proprietor Iowa Poultry & Supply Co., Ottumwa, Iowa, twenty-two 300 and two 200 capacity incubators. J. W. Darby, Greenfield, Iowa, fifteen 300 capacity incubators. C. F. Newman, Rossville,

Huguenot, Staten Island, N. Y., eight 300 and four 200 capacity incubators. Besides these large orders, a great many foreign shipments have been made, including one to Bombay, India, one to Sidney, New Zealand, and an outfit weighing 700 pounds to Roumania, Europe.

The George Ertel Company has again succeeded in taking first premium on incubators and brooders at the St. Louis fair. This is the fourth successive year that this company has landed the first prize on these machines, and always over strong competition and a spirited contest. The news comes also from the company's representatives at Taunton, Mass., and Watertown, N. Y., where the company made full displays of its complete line, that first premiums had been awarded in each case. One of the most satisfactory exhibits at the Omaha Exposition is that made by this firm and which is under the direct supervision of Wm. R. Coleman, Superintendent, and Charles Ertel, Secretary of the company.

Comstock's Hereford Sale.

Elsewhere in this paper will be found the public sale announcement of C. G. Comstock, of Albany, Gentry county, Missouri, who will offer from his herd of about 500 head of registered Herefords, 100 head—seventy bulls and thirty heifers, at Kansas City, Mo., on Thursday and Friday, December 15 and 16, 1898.

Horticulture.

THE POLLINATION OF FRUITS.

Address by Professor F. A. Waugh, as reported by the Montreal Star:

"Facts and Theories Regarding the Pollination of Fruits" was the title of a most interesting address delivered at the recent meeting of the Quebec Fruit Growers' Association, at Cowansville, by Professor F. A. Waugh. Before taking up his subject, Mr. Waugh showed photographs of a number of varieties of hybrid plums. Cultivated plums, he pointed out, belonged to a number of species; most of these had been kept distinct, but lately there had begun the work of hybridizing, that is, producing new varieties in which two or more varieties were combined. Some of these hybrids that had been produced had proved to be worthless, but others were likely to yield good results. So far this work had been done principally in the South, in Texas, California and Florida, but a beginning had been made in the North, and he himself had been engaged in this work during the last two years. The results obtained showed what could be done, and Professor Waugh suggested that experiments in this direction be tried in the province of Quebec.

Proceeding with the subject of his address, Professor Waugh said that fruit-growing was a complicated subject, and if success was to be secured there were many details to be attended to, such as propagation, planting out, cultivation, fertilizing, pruning, selection of varieties, hardness of trees, etc. There was also the matter of pollination, which was more important than was supposed. In order to understand this process thoroughly it was necessary to have a knowledge of the structure of the organs by means of which it was accomplished, and these the speaker proceeded to describe. Taking as an example of a typical fruit blossom that of a plum, Professor Waugh explained the arrangement and function of the various parts of the flower, dealing particularly with the essential organs, those absolutely necessary to the process of pollination, namely, the stamens, bearing on their tips the anthers filled with pollen, the yellow dust which fertilizes the incipient seeds; and the ovary, surmounted by the stigma, to the viscid or sticky surface of which the pollen readily adheres. Mr. Waugh described the process of pollination, telling how, when the blossom had ripened, the anthers burst and discharged their pollen, which, falling upon the stigma, lodged there and sent down minute threads or filaments to the ovary and thus fecundated or fertilized the seeds. When fertilization did not take place the seeds, and likewise the fruit, failed to mature.

Simple as this process appeared, there were many things that interfered with it. The strawberry plant was an example of this, but it was not thought of in the case of orchard fruits as it should be, though it was very necessary. In some fruit blossoms part of the flower was missing, some trees being quite defective in this respect. The speaker said he had been told of trees that were defective in this way year after year and so produced no fruit. In other cases embryonic fruit was present, but as it was not pollinated it did not come to maturity. This condition received the term of self-sterility, because the pollen of a blossom would not fertilize the stigma of the same blossom. The remedy for this state of affairs was to plant different varieties among the self-sterile trees or top-graft them with other varieties. This condition, said Prof. Waugh, was much commoner than might be supposed, and he gave a list of varieties of apples, pears, grapes and plums, which careful and repeated experiments had shown to be self-sterile. His own work in this direction had been confined to plums, and he gave a general review of the results he had obtained. The American plums he had found were almost all self-sterile; there was only one real exception, namely, the variety Robinson. All the Japanese plums tried had also been found self-sterile. A few European varieties had been experimented with and he was of the opinion that there were more self-sterile than the others. This, however, was only an opinion. The same lack of ability to self-fertilize was found in currants and gooseberries.

Besides the inability to self-fertilize there were other conditions to be looked after. For one thing, it was necessary to secure varieties that bore plenty of pollen, a difficult matter sometimes. Moreover, the pollen must be adapted to the variety it is intended to pollinate. This was an important point, for there was sometimes not sufficient affinity between certain varieties. Apple pollen, for in-

stance, would not pollinate plums, and in narrower limits the pollen of one variety of fruit might not suit another variety of the same fruit. Another point that required attention was that the two varieties to be pollinated must blossom at the same time. That this was necessary was very evident, but it was not always provided for. Professor Waugh gave the example of an apple orchard containing Northern Spies, a self-sterile variety, and Rhode Island Greening, which blossoms earlier than the Spy. This orchard blossomed freely every year, but seldom bore any Spies worth mentioning. The question arose in considering this matter, could two varieties which blossom together one year be depended upon to blossom at the same time every year? Experiments showed that as a rule they could be depended upon, though there were exceptions. Another question was whether observations as to the time of blossoming, etc., were of any value in another locality. Statistics seemed to show that they were, but of course within certain limits. Not only was the time of blossoming to be considered, but also the duration of the blossoming period. This differed more as a matter of opinion than of fact. One man to whom the inquiry had been put said the blossoming period lasted not more than two hours and sometimes only one hour, while another maintained it lasted about twenty-seven days. Professor Waugh's own observations led him to believe that it lasted from two to five days. When the weather was good and the conditions favorable, the whole crop would be pollinated in one day, but if not favorable it might take almost a week.

In concluding, Professor Waugh said self-sterility and self-fertility were largely matters of degree. A fair crop might be obtained from an orchard under existing conditions, but if the trees were cross-pollinated a better crop would be had and there would also be a difference in the size and appearance of the fruit, and it was said that the quality was also affected.

Apples for Commercial Orchard.

"What kind of apple trees shall I plant for a commercial orchard to bring the most money?" is the usual question. Only one out of five ask, "What varieties shall I plant for family use?" This proves that money predominates over health and comfort—the dollar for the short time on this earth is paramount.

I don't feel able to advise what varieties of apples to plant, as the letters are from different latitudes. Kinds that succeed best on my soil, in southwest Missouri, may fail in other localities. There is no better way than to see what succeeds best in your locality, in soil like yours.

In southwest Missouri, for commercial orchard, out of every 100 trees, I would plant sixty Ben Davis, twenty Jonathan, the other twenty Little Red Romanite. This selection lengthens the picking season, which is quite an item. The Jonathan will ripen about four weeks before the Ben Davis, and can be marketed and the money used to gather the Ben Davis. The Red Romanite ripens about four weeks after Ben Davis and can be left on the trees until frost. It keeps for me until the next crop ripens.

It should be remembered that the planter should select varieties adapted to his soil. Grimes' Golden will succeed much the best on limestone soil. With most varieties, the soil don't make much difference, so it is rich enough and well cultivated. The Sweet June apples, that ripen the last of June and first of July, may be called the commercial hog breeder's apple. One acre is worth, for pigs and sows, ten of corn.

I am asked my opinion of the prospect for fruit next year. I never saw the prospect for all kinds of fruit better than they are at present. Apple, pear, cherry and plum had rest this year. This summer the weather was very favorable for trees to recover from the injury to last year's growth, and this fall the weather has been favorable for the forming of fruit buds for the next year's crop.

Strawberries made a good, healthy growth this summer and fall and have good crowns, promising a full crop. The same is true of raspberries and blackberries. Both made strong, well-matured canes to yield a full crop.

Peach trees and buds are more subject to winter cold and spring frost killing. No one can tell what the next year's crop will be. The peach tree will endure more drought than other fruit trees, and was not injured the past year like most other fruit trees, and bore a fair crop this year. Many of your readers will remember, about a year ago, that I reported the prospect for apples and strawberries as unfavorable. JACOB FAITH. Montevallo, Mo.

GROW BERRIES There is money in growing berries if you produce the right varieties in proper quantity. Start **EXTRA FINE PLANTS** of the leading standard sorts of Raspberries, Gooseberries, Strawberries, Blackberries, Currants, Grapes, etc. All stock disease free, under certificate of State Entomologist. Largest grower in the world. Best selection. Don't buy until you get my free catalogue and prices. **ALLEN L. WOOD, ROCHESTER, N. Y.**

MAKE MONEY

Another Kind of Kieffer Pear.

Editor Kansas Farmer:—My effusion in the Kansas Farmer seems to have stirred up a hornet's nest among the friends of the Kieffer pear, from several private letters, and Mr. W. A. Theman-son, of Wathena, Kas., sent a little better argument than any of them, a genuine Kieffer pear, which came to hand in good condition. The size and quality was really good—not as good as the Bartlett, yet fair and of fair size, but the pear Mr. Theman-son sent me is no more like my Kieffers (except in shape) than day is like night. His is really meritorious, while mine is not. My trees did not bear this year, and if they do next year I am going to send all my enemies some. M. F. TATMAN. Rossville, Kas.

If you have any disease due to impure or impoverished blood, like scrofula, salt rheum, dyspepsia, or catarrh, you should take Hood's Sarsaparilla and be promptly cured.

Hood's Pills are easy to take, easy to operate. Cure indigestion, biliousness. 25 cents.

20 BUSHELS MORE PER DAY is what you can hulk and save your hands by using **Kees Improved Corn Husker**. See your dealer or sent postpaid on receipt of 50c. (No stamps.) Address, **F. D. KEES**, Beatrice, Neb.

PEACH Trees are a specialty with us and no other firm in the U. S. can show more or finer. Strawberry Plants by the million—70 varieties. Asparagus Roots, Plums. Write for catalogue. **HARRISON'S NURSERIES, BERLIN, MD.**

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VALLEY GROVE SHORT-HORNS.
THE SCOTCH BRED BULLS
Lord Mayor 112727 and Laird of Linwood 127149
HEAD OF THE HERD.

Address **T. P. BABST, PROP., DOVER, SHAWNEE CO., KAS.**

SUNNY SLOPE,
EMPORIA, KANSAS.

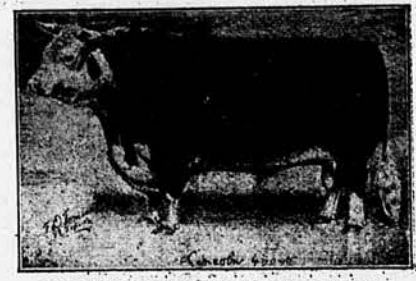
WILD TOM 51592, the great son of the great sire, Beau Real 11055, heads the herd.

Other Bulls in service are: **CLIMAX, LOMOND, Imp. KEEPON,** and others.

Registered Hereford Cattle.

At the spring sales of 1898 we sold the highest-priced male and highest-priced female, and also had the highest averages for 5, 10, 20, 40, 60, 80 and 100 head. These averages were higher than that of any Hereford sale of recent years. Salisbury, sold to Mr. Murray Boacock, brought the highest price any Hereford bull ever sold for at public sale in America. Last year the herd won more premiums than any other Hereford herd. We point to the above facts as the best evidence of the superior character of the animals comprising the herd. The attention of discriminating buyers is called to the fact that we have for sale a splendid lot of males and females, bred in the purple, which will be sold as low as equal merit and equal breeding can be purchased elsewhere. Sixty head of the females are bred to imported bulls. Visitors always welcome.

THOS. EVANS, Mgr. C. S. CROSS, Emporia, Kas.



SPRING VALLEY HEREFORDS.
Lincoln 47095 by Beau Real and Klondyke 42001, at the head of the herd. Young stock of fine quality and extra breeding for sale. Personal inspection invited. **ALBERT DILLON, Hope, Kas.**



CEDAR HILL FARM.
Seventy head richly-bred Short-horns. The leading families represented. Golden Knight 108068 and Baron Ury 2d 124970 in service. Twelve young bulls of serviceable age for sale. Also 100 head high-grade heifers, 100 high-grade heifers and fifty head yearling heifers. 100 well-bred roadster horses. Address C. W. TAYLOR, Pearl, Dickinson Co., Kas.



GLENDALE SHORT-HORNS, Ottawa, Kas.
Leading Scotch and Scotch-topped American families compose the herd, headed by the Cruickshank bulls, Glendon 118970, by Ambassador, dam Galanthus, and Scotland's Charm 127264, by Imp. Lavender Lad, dam by Imp. Baron Cruickshank. Young bulls for sale. **C. F. WOLF & SON, Proprietors.**

In the Dairy.

Conducted by D. H. OTIS, Assistant in Dairying, Kansas Experiment Station, Manhattan, Kas., to whom all correspondence with this department should be addressed.

Are the Farmers of Kansas Willing to Meet This Kind of Competition?

The following prices are taken from a Kansas City paper of September 29:

BUTTERINE.	
Magnolia.....	Per lb.—cents. 11 1/2
Crescent, high-grade, solid packed.....	12 1/2
Silver Churn, solid packed.....	14 1/2
Solid packed tubs, net wt., 10, 20, 30, 40, 60 lbs.	
1-lb. rolls, packed in tubs, net wt., 42, 52 lbs.	
2-lb. rolls, packed in tubs, net wt., 52 lbs.	
1-lb. prints, packed in cases, net wt., 50 lbs.	
1-lb. bricks, packed in cases, net wt., 18 lbs.	
With solid packed butterine as a basis, we quote:	
Over—cents.	
All 1/4-lb. prints.....	1 1/2
All 1-lb. prints.....	1
All 2-lb. prints.....	1 1/2
All other prints, rolls, lumps, dumps.....	1 1/2
All solid packed, less 25 lbs. each.....	1 1/2

Is it any wonder that Kansas creameries cannot afford to pay over 16 to 18 cents for September butter fat? The great menace to the dairy business, in Kansas as elsewhere, is the manufacture and sale of butterine in imitation or under the name of creamery butter. Any one has a right to eat butterine if he wants to, but no dealer has a right to sell it under an assumed name, any more than a butcher has a right to sell horse flesh as beef steak. A person wishing to eat horse flesh (and some authorities claim it to be a first-class article of diet) should be allowed the privilege, but he should not be led to eat it by misrepresentations.

It is the intention of those who manufacture butterine to add enough color, butter, flavoring matter, etc., to give their product the semblance of butter, and their success is due not so much to the intrinsic value of the product as to its imitation qualities. If this were not so, why should the manufacturers of butterine work so hard to prevent the passage of laws prohibiting them to color their product like butter? Honest business men, in other industries, are willing that their product shall stand on its own merit and not on crutches. They invite you to come, see, and handle and taste and judge for yourself if they are not what they are represented to be, and there the product stands on its own intrinsic value. Not so with butterine; it is easier consumed if it is flavored and colored to represent butter. Few people would care to eat lard if they knew it.

Now is the time for Kansas dairymen and creamerymen to be up and doing. Tell your candidate for Senator or Representative about this matter and ask him how he stands. His mind will be in a much more receptive condition before than after the election. Kansas is a little behind some of her sister States in regard to legislation on butterine. We need a law prohibiting the manufacture, sale or importation of butterine in the imitation of butter, and then see that it is enforced. No honest dairymen will object to butterine being manufactured, sold and consumed as butterine. Let every dairymen in the State take a lively interest in pure food products and help bring Kansas to the front, where she belongs. D. H. O.

Record of Twenty-five Cows, Mostly Registered Jerseys.

Mr. Sam Swayer, Winchester, Kas., has a herd of twenty-five cows, which consist principally of registered Jerseys, with a few high-grade Short-horns. He sold from August 1, 1897, to July 31, 1898, 100,227 pounds milk, which contained 4,548 pounds butter fat, making an average test of 4.53 per cent. Mr. Swayer was unfortunate with his calves, having lost ten from scours. Aside from this loss, his account for the year stands as follows:

Amount received from sale of milk.....	\$747.50
75,171 lbs. skim-milk fed to hogs.....	112.75
100 lbs. butter made at home.....	15.00
12 calves.....	144.00

Total income from herd.....\$1,019.25
Annual income per cow, \$40.77. Each cow produced on an average 4,012 pounds milk and 181 pounds butter fat, equal to 213 pounds of butter.

Mr. Swayer gives the following details of his dairy work:

"None of the cows are over 6 years old, and several are with their first calves, 2 and 3 years old. If I continue in the dairy business, which I will surely do if age and health permits, I would use nothing but Jersey cows, unless some of the Short-horns would give more milk than their calves would take, or in case one should lose her calf, we would then put her in the dairy. We are careful to keep our herds separated, as a cross either way I would consider an injury.

We feed our calves new milk, which greatly reduces the amount of milk sent to the creamery. We are now feeding 100 pounds daily, which would make quite a showing at the end of the week. I have never been able to raise a satisfactory calf on skim-milk.

"We feed the dairy herd in winter corn and cob meal with wheat bran, run the cows in corn stalks as long as the weather permits, have comfortable stables, bed well, keep a constant supply of pure water, tie our cows with chains, which I prefer to stanchions, for the reason the cows have more liberty, without any danger to the attendant, everything being dehorned. I am satisfied that we do not run our dairy with the success that would be if we gave closer attention to it. The reason our calf account does not foot up better was that the early calves scoured and we lost as many as ten; could not account for nor overcome it.

"I cannot account for the irregularity in the test of the butter fat. Milk is now testing 4.4 per cent."

A Segment of Chicago's Internal Revenue District's Oleo Business.

The Chicago Produce publishes an account of the oleomargarine business in the Chicago internal revenue district, for September, and compares it with July and August of the same year. The following figures show the output of factories in that district, in pounds:

	1898.	1897.	Increase.
July.....	1,452,900	695,100	757,800
August.....	2,402,600	923,200	1,479,400
September.....	2,794,150	1,127,750	1,666,400

The number of licenses issued for September, 1898, was 148, against 67 for the same month in 1897, and the collections for stamps amounted to \$55,883.40. The total licenses issued to retailers of oleomargarine for quarter ending September 30, 1898, amounted to 773, against 251 for the same period last year, 499 in 1896, and 609 in 1895. The cause for the sudden rise in 1898 seems to be due to the fact that the law is before the courts and there is no immediate danger of prosecution.

Making Money from Common Cows.

Mr. Joseph Tucker, Walnut, Kas., who patronizes the Greenbush Creamery Co., produced from his herd of twelve cows, during the past year, 72,000 pounds of milk, which yielded 2,500 pounds of butter fat, making an average test of 3.47 per cent. No account is given of the disposition of the skim-milk. Doubtless part of it is accounted for in the value of the calves, but there is probably another portion that was fed to pigs of which no account is given. Without considering the skim-milk, Mr. Tucker's cash account stands as follows:

Received from sale of milk.....	\$325.00
Received from sale of calves.....	220.00

Total receipts from herd.....\$545.00
This gives an average annual income per cow of \$45.41. The average annual yield of milk was 6,000 pounds, butter fat 208 pounds, equal to 224 pounds butter.

Mr. Tucker adds that his herd is composed of common cows, and that he is now using a Baby separator and making money by its use. Sells the cream to the creamery.

A Warning.

The Agricultural College dairy recently received from the patentee and manufacturer a machine that is "guaranteed to keep milk sweet from six to twelve hours longer than any other machine." The inventor writes that his machine will keep milk in hot weather from forty to fifty hours without being cooled. The instrument in question is nothing more or less than an aerator, an arrangement that allows the milk to fall through the air in small streams for the distance of eight inches. It makes no pretention at cooling the milk except as the air cools it, which, in warm weather, amounts to only 2° F. To satisfy the manufacturer, we made a thorough test of the machine, comparing it with the Champion and Star coolers. Without setting the milk in tubs of cool water after running through this machine, we could not keep the milk twenty-four hours, while with the milk coolers we could keep it from thirty-six to forty-eight hours. When the milk was placed in the tubs of cool water, under exactly the same conditions as the milk from the coolers, the latter would keep from twelve to twenty-four hours longer than the former. The number of bacteria per cubic inch increased much more rapidly in the milk from this aerator than in that from the coolers, all of which goes to show that milk should be cooled as soon as possible after being drawn.

The instrument in question is being

advertised in our dairy papers, and every farmer should be warned not to purchase a machine of this kind without knowing what he is getting. Aerators are good things in their place, but they will not take the place of coolers when it comes to keeping milk.

The Cow a Sensitive Animal.

The dairy cow is a very sensitive creature and always shows at the milk pail when she has been abused or ill treated. Her treatment should be such that will always inspire confidence on her part in the one that cares for and feeds her. The feeding and milking should always be done regularly and at the same hour each day, and if possible always by the same person. Where records have been kept it has been found that variation in these points produced variation in the amount of milk secreted and the per cent. of butter fat.

Recent decision of the United States Supreme court on the rights of oleo manufacturers: "State laws prohibiting coloring oleo to resemble butter are valid, but State laws forbidding oleo in its pure uncolored state to be brought in, are not valid; neither are State laws requiring oleo to be colored any particular color. State laws prohibiting the sale of oleo inside of a State, from one citizen to another, are valid, provided the seller is not the importer. State laws prohibiting the manufacture, sale or importation into a State of oleo made into semblance of butter are valid, and the smallest package of oleo that can be originally put in is ten pounds; and no dealer is allowed to sell a package of oleo in excess of ten pounds, unless he holds a license as a wholesaler."

OUR WAR WITH SPAIN.

An Illustrated History by Hon. H. B. Russell, Senator Proctor and Senator Thurston.

This magnificently-illustrated, richly-filled and scholarly volume gives a complete and authentic history of the Spanish-American war from its beginning to its close. Its authors are three widely-known men, Hon. Henry B. Russell, the distinguished historian, Hon. Redfield Proctor, Senator from Vermont and ex-Secretary of War, and Hon. John M. Thurston, Senator from Nebraska. No three living American writers could more fitly assume this responsible task or produce a more honest, truthful, and impartial book. Their entire familiarity with the political history of the country, their fund of statistical information, their independence and fearlessness, all guarantee that this work is one of more than ordinary value.

The magnificent illustrations include a series of seven superb steel-plate portraits of President McKinley (from a photograph approved by himself), Generals Miles, Shafter and Merritt, and Admirals Dewey, Sampson and Schley. It is worthy of note that these are the only steel-plate portraits of these famous men ever published. It also contains colored and elaborate maps, showing in great detail Cuba, the Philippines, Porto Rico, the Hawaiian islands, etc. There are, besides a large number of maps and diagrams inserted in the text to illustrate battles, campaigns, naval operations, etc. There are also thirty-two magnificent full-page illustrations. In the preparation of these maps, steel-plates, and illustrations no expense or pains have been spared to make them all that art, skill and talent could produce.

The book is sold only by agents, and is published by the old and reliable firm of A. D. Worthington & Co., Hartford, Conn., whose imprint is sufficient guarantee of the excellence of this first-class volume.

Notice our "Blocks of Three" proposition in "Want column." You are a reader of the Kansas Farmer and know its value. You will confer a favor upon two of your neighbors by explaining its value to them, procuring their subscriptions for one year, and besides, you will secure the "Old Reliable" for yourself for another year free for your trouble. Do it.

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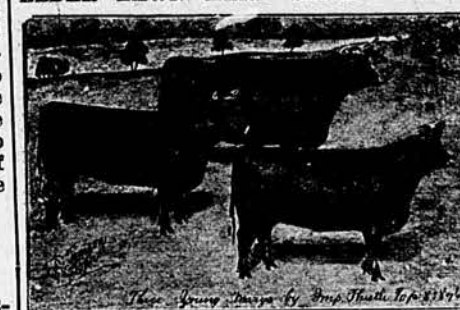


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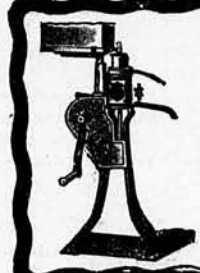
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The Veterinarian.

We cordially invite our readers to consult us whenever they desire any information in regard to sick or lame animals, and thus assist us in making this department one of the interesting features of the Kansas Farmer. Give age, color and sex of animal, stating symptoms accurately, of how long standing, and what treatment, if any, has been resorted to. All replies through this column are free. In order to receive a prompt reply, all letters for this department should give the inquirer's postoffice, should be signed with his full name, and should be addressed direct to our Veterinary Editor, Dr. Paul Fischer, Professor of Veterinary Science, Kansas State Agricultural College, Manhattan, Kas.

FURTHER DIRECTIONS.—I cannot get the horse to drink the tartar emetic in his drinking water, which you prescribed for worms. Though I let him go without water for fifty-four hours, he only took two or three swallows two or three times. The symptoms are about the same, which you will recollect are described in Kansas Farmer for June 2, last. Further advice through the Kansas Farmer will be thankfully received. Jerome, Kas. J. A. V.

Answer.—Have a druggist make the tartar emetic into a pill with powdered althaea root and then administer that.

CATARRH OF BLADDER—MARE INJURED DURING PARTURITION.—(1) I have a mare that, when she is driven or worked, tries to pass water every few minutes, and it is very thick, rather bloody-looking. What is the cause and what is best to do for it? She has been that way about two years. (2) I also have a mare that was all right till she foaled. Afterwards she would throw her right hind foot in under her, and in about six weeks her left hip wasted away. The colt is now about three months old. Modoc, Kas. H. P.

Answer.—(1) Take powdered juniper berries 3 ounces, sodium bicarbonate 2 ounces, powdered althaea root 2 ounces, mix, and give a tablespoonful three times daily. This case is chronic. It ought to have been treated just two years ago, so don't be disappointed if results are not what they might have been. (2) This animal sustained some internal injury during parturition or foaling. If it has not improved since you first observed it, it will probably become permanent.

SCAB IN PIGS—ABSCESSSES.—(1) Some of my little pigs, 6 to 8 weeks old and suckling yet, rub and seem to itch a good deal. After examining them I did not find any vermin on them, but the skin feels hard, and cracks open some. They have a good appetite but don't seem to do so well as my other pigs. I have sprayed them with kerosene emulsion. (2) What causes those big lumps barrows get after trimming, growing bigger all the time? They start after trimming, get bigger and bigger. Some are like a big callous, while others are hollow and pussy. O. R. M.

Answer.—(1) Your pigs have a form of scab. Scrub them thoroughly with strong kerosene emulsion and repeat the operation daily, washing them with clean water after each operation. Don't neglect their diet. (2) These lumps are abscesses, caused by improper castration. As a rule, the incision is made too small, heals at the skin before the other tissue heals, and the result is a collection of wound secretions that soon becomes purulent. The prevention consists in making longer incisions and the use of antiseptics. Abscesses are treated by making a long vertical incision, evacuating contents and applying 5 per cent. solution of carbolic acid. Tumors or fleshy growths must be removed with a knife.

CHRONIC INDIGESTION.—I have a cow, about 6 years old, that, two years ago, got in the corn field and got an over feed of corn, and I think aborted. This year she raised a calf, but the cow has seemed to be out of condition, getting poorer all the time, until now she is very poor. The calf was not allowed to suck but about two months on account of her poor condition. She stands with her nose pointed forward and never chews her cud, is often bloated and seems to have some inclination to eat, but hard for her to swallow and digest her food. There is often a trace of the contents of her stomach around the nostrils, and the last few days she drools at the mouth. What can I do for her? Fostoria, Kas. W. K.

Answer.—This is not a very hopeful case. Give your cow a drench made of one-half pound of Glauber salts and one ounce of powdered Barbadoes aloes, dissolved in a quart of tepid water. If purging does not follow in the course of the next twenty-four hours, repeat the dose. Then give a tablespoonful of the following, three times daily in drinking water, or as a drench, in one-half pint of water: Hydrochloric acid, 4 ounces; dilute alcohol, 8 ounces; mix. This must be kept up for weeks before any improve-

ment can be expected. In the meantime feed small quantities of sweet hay, with ground oats and corn meal. Feed just a little less than the cow will eat. Give pure water, slightly tepid, on cold and chilly mornings.

CONTAGIOUS ABORTION—ROPY CREAM.—(1) I have a dairy herd of fifty cows and have lost ten calves. My cows are in fine condition and milk right up to dropping calf. Most of them abort thirty-five days of right time. I have been in the business for years. I have no ponds—all fresh pumped water. No males with herd. This trouble is all over this part of the country. (2) We are troubled with ropy cream. I thought the pasture caused it. I put my cows on dry feed, but it still continues. Wichita, Okla. C. F. C.

Answer.—(1) Treat your aborting cows as directed in the number of the Kansas Farmer to which you refer (October 6). If you have no copy of the January 20 number, write for one to the Kansas Farmer Co. You are making a mistake by not drying up your cows at least six weeks before calving time; you would get just as much milk and have more vigorous cows and calves. (2) Ropyness in milk or cream is due to the presence of bacteria, and has no connection with the character of ordinary food. You can get rid of this trouble by thoroughly scalding everything with which your milk or cream comes in contact, viz., pans, cans, jars, skimmers, separators, even the walls and floors of your creamery, or wherever you keep your milk. This remedy is guaranteed to be effective. If you don't succeed the first time, you simply were not thorough enough. Whether you are successful or not, I would be pleased to have you make a report.

ABORTION.—Two weeks ago had a cow abort, then another Saturday night. The former cow was two months from parturition, the latter only two or three weeks, but calf dead when dropped. The first cow was run into wire fence by another cow, two or three weeks before, but didn't seem to be injured, only scratched some. Cows have access to water only at night and early morning. Am feeding cane with seed on once a day and young first-growth cane once. Had only been feeding cane about two weeks before first cow aborted. Will cane seed cause abortion? Have fed it before without trouble, but thought possibly it was injurious. Gave no medicine to first cow nor washed her off, but since the other aborted read article in Farmer of January 20, and am following it as closely as possible. The first cow is still discharging slightly. Ought to have tended to her before, but never had any such trouble before and hardly knew what to do. Am giving the well cows chlorate of potassa, one-half ounce daily. Have buried all the remains. Have two more cows to calve this winter. Can the calves be saved? Want to know expressly if unground cane seed is injurious. Ottawa, Kas. C. O. F.

Answer.—It is possible that the first cow aborted as a direct result of the injury received, and the second may have aborted from some other cause. I do not think that your herd is in much danger; however, time will tell. As a matter of precaution, you may treat all your animals as directed in Farmer of January 20. If a cow is going to abort, she will do it in spite of all treatment, if the cause is contagion. All you can hope to do is to prevent its occurrence the second or next time, and protect cows not already infected. I do not think that cane seed will injure them. I know of no reason for it. Sometimes, however, the feeding of green cane may cause tympanitis or bloat, and this in its turn may bring on abortion. Why are you giving chlorate of potash? Most of this is excreted in an unchanged condition, some of it through the milk glands, and those that drink the milk will get just about as much benefit from it as the cow, which is very little.

DISTEMPER.—I have lost three valuable hounds with "dog distemper." Can you give a remedy that is quick and sure? Aulne, Kas. O. L. C.

Answer.—This disease of dogs, cats, wolves, etc., may occur in so many different forms that it is impossible to prescribe for all in one general formula. Many cases require special treatment, depending on the organ or group of organs principally affected. The animals have fever, and besides this the eyes, the digestive and respiratory tracts, the nervous system or the skin, may each or all be affected in one or another way. A great many cases end in perfect recovery without any treatment whatever. Others, even with skillful treatment, will never end in perfect recovery, the usual

after effect being some disorder of the nervous system, such as loss of sight in one or both eyes, loss of the sense of smell or hearing, paralysis of a limb or part of the body, etc. All these cases require special treatment that would require a book to outline and years of previous study to understand. You will, therefore, not blame me if I cannot comply with your request and give you a remedy "quick and sure." If the chief seat of the trouble seems to be in the digestive organs, give ½ to 1 grain of calomel, made up with a little sugar, and repeat the dose two to three times a day. Give with this carefully selected and easily digestible food (milk and raw meat). If the respiratory organs are affected, allow the animal to inhale a spray made of a 1 per cent. solution of carbolic acid placed in an ordinary nasal spray apparatus. The animal's mouth may be held secure, and its eyes protected by means of a towel properly applied. Affections of the eyes must be prescribed for according to their nature, and nervous affections in the same way. In no disease is dietetic treatment of greater value than in distemper. Feed, as above mentioned, easily digestible food in small quantities, and see that the quarters are clean, warm, and comfortable, remembering that the disease is contagious and that other dogs, when exposed, are liable to contract it. After recovery disinfect the patient's quarters with a 3 per cent. solution of carbolic acid in water.

OBSTRUCTION IN URETHRA—STAGGERS OR GID—CASTRATING LAMBS.—(1) I have a horse mule, 5 years old, which has been bothered with his water during the last two months, straining very hard with yard run out. When given spirits of niter and pumpkin seed tea would be relieved, but would pass quite a good deal of blood with water, also clots of blood, and for quite a while after—a week or ten days—would make very small amount of water, but often, and would dribble afterwards quite a good deal. After straining there was a small lump, size of thumb, raised just below his anus on the cord, where the bladder leads out. (2) I have also a sheep that goes around with head held up on one side. Sometimes cannot travel straight. (3) Can lambs 5 months old be castrated with safety? Describe any particular method. A Reader. Prairie Center, Kas.

Answer.—(1) This animal has an obstruction in the urethra, probably gravel resulting from the separation of various salts in the urine and crystallizing into large masses. A skillful surgical operation is the only remedy, and if you can I would advise you to procure the services of a competent veterinarian. It would be useless for me to describe the operation here. (2) Your sheep have what is called staggers or gid, an affection of the brain caused by the presence of a parasite (Coenurus cerebralis) or

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

the cyst form of a tape worm (Taenia coenurus) that lives in the intestine of dogs. Dogs scatter the eggs producing these cysts with their excrement when roaming over pastures, and from there they are taken up with grass or drinking water by the sheep, get into the circulation and develop in various parts of the body, brain and spinal cord, and produce a variety of symptoms. There is no practical remedy for the relief of such animals, but a very practical preventive measure consists in killing every dog that makes its appearance on your farm. (3) Lambs 5 months old can be safely castrated, but it ought to have been done when they were from 4 to 6 weeks old. Let an assistant secure them on a table, lying on the left side, then, grasping the lower testicle with the thumb and fingers of the left hand, make an incision (with a knife dipped into a 5 per cent. solution of carbolic acid) from before backward, press out the testicle and sever it from the body by scraping the cord with the knife blade; this will cause less bleeding than a smooth cut. Then remove the upper testicle in the same way. Be sure to make the incisions large enough that no secretions can collect in the scrotum. Another method is to cut off the lower end of the scrotum with one sweep of the knife and then remove the testicles as just described. This does away with the danger of collecting wound secretions and possible blood-poisoning. In each case, wash the resulting wound with a 3 per cent. solution of carbolic acid in water.

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N. B.—We have secured the services of John Gosling, well and favorably known as a practical and expert judge of beef cattle, who will in the future assist us in this branch of our business.

MARKET REPORTS.

Kansas City Live Stock. Kansas City, Oct. 17.—Cattle—Receipts, since Saturday, 8,112 cattle, 305 calves; shipped Saturday, 1,738 cattle, 888 calves. The market was steady to 10c lower. The following are representative sales: DRESSED BEEF AND SHIPPING STEERS. No. Ave. Price. No. Ave. Price. 28.....1,428 45.00 1.....1.4 85.00 31.....1,299 4.90 22.....1,268 4.75 3 J.....720 3.50

St. Louis Live Stock. St. Louis, Oct. 17.—Cattle—Receipts, 4,000; natives steady to lower, Texans easier; native shipping steers, \$4.60@5.65; light and dressed beef and butcher steers, \$3.25@5.40; stockers and feeders, 3.00@4.40; cows and heifers, 2.00@4.50; Texas and Indian steers, \$3.10@4.25; cows and heifers, \$2.15@3.40.

Chicago Live Stock. Chicago, Oct. 17.—Cattle—Receipts, 20,000; market weak, 10c lower; beefs, 14.05@15.75; cows and heifers, \$2.00@4.70; westerns, \$3.60@4.60; stockers and feeders, 3.10@4.63.

Chicago Grain and Provisions. Table with columns: Oct. 17, Opened, High'st, Low'st, Closing. Rows include Wh't-Oat, Corn, Oats, Pork, Lard, and Ribs.

Kansas City Grain. Kansas City, Oct. 17.—Wheat—Receipts here to-day were 606 cars; a week ago, 558 cars; a year ago, 367 cars. Sales by sample on track: Hard, No. 1, nominally 61 1/4@61; No. 2 hard, 61 1/4@63c; No. 3 hard, 58 1/4@61 1/4; No. 4 hard, 54@59 1/4; rejected hard, 47 1/2@56. Soft, No. 2, nominally 60c; No. 3 red, 62 1/4c; No. 4 red, 58c.

Kansas City Produce. Kansas City, Oct. 17.—Eggs—Strictly fresh, 15c per doz. Butter—Extra fancy separator, 21 1/4c; firsts, 20c; dairy, fancy, 16c; store packed, 14c; packing stock, 11c.

Vegetables—Roasting ears, home grown, @ 26c per doz. Tomatoes, home grown, \$1.00@2.00 per bu. Cucumbers, 2 1/2@45c per bu. Green and wax beans, 35@50c per bu. Lettuce, home grown, 75c per bu. Onions, Red Globe, 40c per bu. Beets, 3 1/2 per bu. Cabbage, home grown, 35c per doz. Celery, 30@45c per doz. Pumpkins, \$1.00 per doz. Squash, 75c per doz. Turnips, 20c per bu. Potatoes—Home grown, 80c per bu. Sweet potatoes, home grown, 40@50c per bu.

Special Want Column.

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

LETTERHEADS, ENVELOPES, etc., printed, 35 cents per 100. A. E. Benn, Amsterdam, N. Y. FOR SALE—Twenty-five choice western yearling steers, tops of herd. C. W. Jenkins, Kinsley, Kas. FARM FOR SALE OR TRADE ON FARM—160 acres improved creek bottom land. For particulars address F. M. Hopkins, Jefferson, Okla.

DUROO-JERSEY PIGS—Eighty head. Best quality, eligible to record, twelve weeks to eight months old, either sex. Price \$5.00 to \$10.00, according to age and quality. Must be sold in next thirty days, as I want room for fall farrow and also want money. Address M. H. Alberty, Cherokee, Kas. WANTED—A reliable, capable farmer to work river bottom land, two miles from North Topeka. Everything furnished. Will furnish work from November 1 till spring at fair wages. Address Box 135, North Topeka, Kas.

FOR RENT—Eighty acres of second bottom land, well improved, six miles northeast of Topeka. For particulars, call on or address John Rollheuser, 122 East Fourth St., Topeka, Kas. AUCTION SALE—At Neosho Rapids, Kas., on October 26. I will sell at public auction eighty (80) head of cattle, of which thirty will be young steers balance young cows and heifers. Of the cows twenty will be fresh during November and December. Farm eight miles east of Emporia. For particulars write for bills. H. B. Williams, Neosho Rapids, Kas.

WANTED—Eight or ten first-class milch cows. Short-horn's preferred. Must give at least three gallons a day; state price, age, when fresh, breed and where they can be seen. No scrubs wanted. Address "Purchaser," Kansas Farmer Office. POLAND-CHINA PIGS—Three dollars to five dollars each, eligible to record and choice breeding; no feed and must sell. M. C. Hemenway, Hope, Kas. WANTED, AGENTS—We want an agent in every county in Kansas. Those acquainted with the farmers and threshers preferred. Liberal commission. For particulars, address The Victor Oil Co., Cleveland, Ohio.

BLOCKS OF THREE—Two new subscriptions for one year for \$2, and in addition a renewal for one year free to any old subscriber who sends two new subscriptions and \$2 in one order. Kansas Farmer Co., Topeka, Kas. TEN THOUSAND MAMMOTH BLACK TWIG apple trees, six feet high, for sale, two years old. S. Sweet, Col. bus. Kas. WANTED—One or two reliable salesmen to represent an old established firm manufacturing a profitable and salable line of staple products. References required. Address Manufacturer, Commercial Bldg., Cleveland Ohio.

WANTED—Ladies and gentlemen to procure subscriptions for the best fifty-cent woman's monthly magazine in the United States. The most beautiful and popular woman's magazine on very liberal commissions. Terms, sample copies, special helps and premiums furnished free. Address THE AMERICAN QUEEN, 78-80 Walker St., New York. WE WANT men to take orders at once for our farm machinery, and other lubricating oils and greases. Liberal commission. Write for terms. Canfield Oil Co., Cleveland, Ohio. ALFALFA SEED WANTED by F. Farteldes & Co. Lawrence, Kas. Correspond with them.

SHORT-HORNS FOR SALE—Forty-six cows and heifers, Cruickshank, Young Marys, Rose of Sharon and others; an extra lot. Nearly all were sired by that grand Cruickshank, Royal Prince 100646. Six bulls ready for service, sired by Young Mary bull, Glendon 11871. Parties met by appointment. Theodore Saxon, St. Marys, Pottawatomie Co., Kas. FOR SALE—Three herd boars which have proven great sires, but now can be spared. These Poland-China boars are Look Me Up 40529 by Look Me Over, 2 years old; Hadley Jr.'s Equal 1915 by Hadley Jr. out of Spot H. 2d, 18 months; and King Tecumseh 19307 by King Perfection and out of Queen Tecumseh, 5 years old. Address, B. H. Wheeler, Lawrence, Kas. WE WANT RELIABLE MEN in every locality at once to sell to farmers, threshermen and mills our high-grade lubricating oils, greases and specialties. Makes an excellent side line for farm implement dealers. We are manufacturers, and with our instructions an inexperienced man can become an expert oil salesman. Write at once for terms. Malone Oil Company, Cleveland, Ohio.

BLOSSOM HOUSE—Opposite Union depot, Kansas City, Mo., is the best place for the money, for meals or clean and comfortable lodging, when in Kansas City. We always stop at the Blossom and get our money's worth.

RICHLAND HERD.—I want to close out the entire herd of Poland-China sows and herd boars, including Klever's 1st Model 18245 S., What's Wanted Jr. 2d 1854, and B.'s Black U. S. 1967. The breeding and quality of these boars ought to suit anybody. Come and inspect, the only way to get suited. F. W. Baker, Council Grove, Morris Co., Kas.

DAIRY WAGON FOR SALE—Good two-horse covered dairy wagon, custom made. A. E. Jones, Topeka, Kas.

FOR SALE OR TRADE—Three Shetland ponies. Call or address H. W. McAfee, Topeka, Kas (Prospect Farm, three miles west of Kansas avenue.)

HIGH-GRADE Shropshire rams, lambs and yearlings. E. W. Melville, Eudora, Kas.

640 ACRES ARKANSAS LAND—Two miles from station, to trade on Kansas farm. Will pay balance or assume incumbrance. E. W. Melville, Eudora, Kas.

BERKSHIRES—Choice bred sows by Imported Lord B. Comely, and boars ready for service. Wm. B. Sutton & Son, Kas.

SHORT-HORN BULLS—Cruickshank-topped, for sale. Choice animals of special breeding. Address Peter Sim, Wakarusa, Shawnee Co., Kas.

ABERDEEN-ANGUS BULLS—Three individuals of serviceable ages; registered. Wm. B. Sutton & Son, Russell, Kas.

FOR SALE—Five first-class registered Clydesdale stallions. H. W. McAfee, Topeka, Kas.

FOR SALE—Thirteen fine Poland-China boars. Call on or address H. W. McAfee, Topeka, Kas. (Farm three miles west of Kansas avenue.)

WRITE TO ALEX RICHTER—Hollywood, Kas. How to sub-irrigate a garden, etc., and cost of same. Send him the size or dimensions of your garden, and he will give full information.

COTTLED RAMS FOR SALE—W. Guy McCandless, Cottonwood Falls, Kas.

HEREFORD CATTLE—Breeding stock for sale. Archibald cattle a specialty. Visitors welcome. J. C. Curry, proprietor "Greenacres Farm," Quenemo, Osage Co., Kas.

WANTED TO EXCHANGE—The pure-bred Cruickshank bull, My Lord 118563, bred by Col. Harris; sire Imp. Spartan Hero 7782; dam Imp. Lady of the Meadow (Vol. 30, p. 615), for a pure-bred Cruickshank bull—can't use him any longer in my herd. H. W. McAfee, Topeka, Kas.

TO STOCKMEN—Feed Mills and Corn-Shellers. Used as samples and at fairs, special bargains. Write or see us. Sandwich Mfg. Co., 1205 Union avenue, Kansas City, Mo.

WANTED—One or two reliable salesmen to represent an old established firm manufacturing a profitable and salable line of staple products. References required. Address "Manufacturer," Commercial Bldg., Cleveland, Ohio.

WE MAKE A GOOD FARMER'S SPRING WAGON, two laxy-acks and let-down end-gate, for \$65. Warranted. We will ship on approval to responsible parties. Kinley & Lannan, 424-426 Jackson street, Topeka, Kas.

MACLEAN FARMERS' SUPPLY CO., Kansas City, Mo. (Between Union Depot and Stock Yards.) Sell machinery and other supplies to farmers direct, saving the consumer middlemen's profits. Send now for 1898 Spring Price List.

HARNESS Write for illustrated catalogue. Largest Harness and Carriage house in the Northwest. NORTHWESTERN HARNESS & CARRIAGE CO., 172 6th St., St. Paul, Minn.

GREAT Short-horn Cattle Sale! Don't fail to attend the annual sale of Short-horn Cattle, to be held at Kansas City, Mo., Nov. 22, 1898. BY GEO. BOTHWELL, Of Nettleton, Missouri, BREEDER OF THICK-FLESHED, EARLY-MATURING SHORT-HORN CATTLE. Watch for further announcements.

Public Sale of Poland-Chinas! AT ROSE CREEK FARM On Wednesday, November 2, 1898. Sixty-five head of selected boars and choice gilts eight to fourteen months old. Take Rock Island or U. P. railroad for Belleville, Kas. Send for catalogue. H. WOODFORD, Mgr., Chester, Neb.

PUBLIC SALE Thursday, Oct. 27, 400 Unregistered Hereford heifer calves from the ADAIR HEREFORD HERD OF PALODURO, TEXAS, AT THE STOCK YARDS SALE PAVILION Kansas City, Mo. COLS. J. W. JUDY and F. M. WOODS, Auct'rs. For descriptive circular and particulars address RICHARD WALSH, Paloduro, Tex., or T. F. B. SOTHAM, Chillicothe, Mo.

GREAT BERKSHIRE SALE At SEVEN OAKS STOCK FARM, New Sharon, Iowa, Nov. 11, 1898, 1 P. M. On above date we will offer at public sale about sixty head of large English Berkshire boars and sows, old and young. Our herd is founded on the best English and American blood, that of the English Windsor, High-clovers, Royal Hayters, and allied strains, mingled with the blood of America's greatest boar, Longfellow, through his most noted sons and daughters, such as King Longfellow, King Lee II, Baron Lee IV, Baron Duke VIII, etc. Our sale will include Baron Duke VIII 4080 (one of the greatest living sows of Longfellow). He is 4 years old, a sure getter, is all right every way, and is offered without reserve. This is undoubtedly the best opportunity of the year to obtain one of the greatest herd headers. SPECIAL NOTICE—Parties buying females may leave them at the farm until bred free of charge. Terms of Sale:—A credit of three, six or nine months will be given on approved notes bearing interest at the rate of 6, 7 or 8 per cent. per annum. A discount of 5 per cent. will be given for cash. Write to the manager for catalogues. If you cannot attend the sale send mail bids to Col. Jas. H. Maxcy, Passfield, Ill. Remember the time and place—November 11, 1898, New Sharon, Iowa. MRS. IDA H. HAWORTH, Prop. SYLVANUS H. WORTH, Mgr. COL. JAS. H. MAXCY, Auctioneer.

FIFTH PUBLIC SALE At my farm, two and one-half miles south-east of Oskaloosa, Jefferson Co., Kas., FRIDAY, OCT. 28, 1898. One hundred head pedigreed Poland Chinas of Klever's Model and Chief Tecumseh and Moorish King 2d strains, consisting of tried sows, herd boar, fall yearling sows, fall yearling boars, spring boars and sows. Some sows with pigs by their side, some due to farrow in a few days. One-half of old sows open. The pigs were sired and sows bred by Combination Model, grandson of Klever's Model on sire's side, and of Chief Tecumseh 2d on dam's side, and One Price Chief, a son of Chief Tecumseh 2d, and dam by One Price. This offering will be taken from the very best of my herd. I have been making such crosses as would tend to fine finish and large growth. The very best and most fashionable breeding and individuality will comprise this sale. Sale 12 o'clock sharp. Lunch at 11:30 a. m. Catalogues furnished on application. COL. J. N. HARSHBERGER, } Auctioneers. ELI ZIMMERMAN, } Send bids to auctioneers in my care. JAMES MAINS, Oskaloosa, Kas. ANNUAL PUBLIC SALE OF POLAND-CHINA SWINE To be held at Olathe, Kas., on the first day of November, 1898. The produce of the best boars and sows. I have two thousand catalogues giving full information. Drop a card for one catalogue, quick. Give your address full and plain. W. B. GOODE & SONS, Lenexa, Kansas.

GREAT FIVE DAYS' SALE OF REGISTERED CATTLE. Hereford Cattle. Short-horn Cattle. 47 BULLS AND 53 COWS AND HEIFERS. AT STOCK YARDS SALE BARN. Kansas City, Mo., November 15 and 16, 1898. FOR CATALOGUE APPLY TO GUDGELL & SIMPSON, Independence, Missouri. Or JAS. A. FUNKHOUSER, Plattsburg, Missouri. Auctioneers—COL. J. W. JUDY, COL. J. W. SPARKS, COL. S. A. SAWYER. 30 BULLS AND 120 COWS AND HEIFERS. AT STOCK YARDS SALE BARN, At Kansas City, Mo., Nov. 17, 18 AND 19, 1898. FOR CATALOGUE APPLY TO H. C. DUNCAN, Osborn, Missouri. Or W. T. CLAY, Plattsburg, Missouri.

The Poultry Yard

Conducted by C. B. TUTTLE, Excelsior Farm, Topeka, Kas., to whom all inquiries should be addressed. We cordially invite our readers to consult us on any point pertaining to the poultry industry on which they may desire fuller information, especially as to the diseases and their symptoms which poultry is heir to, and thus assist in making this one of the most interesting and beneficial departments of the Kansas Farmer. All replies through this column are free. In writing be as explicit as possible, and if in regard to diseases, give symptoms in full, treatment, if any, to date, manner of caring for the flock, etc. Full name and postoffice address must be given in each instance to secure recognition.

KANSAS STATE POULTRY ASSOCIATION.
President, A. M. Story, Manhattan.
Secretary, J. W. F. Hughes, Topeka.

Poultry Show—At Topeka, January 9 to 14, 1899 C. H. Rhodes, Judge.

A CHAPTER ON GRIT.

One of the most important things necessary for the health of poultry is a supply of grit of the right kind. Nature provides a use for every organ of the body, and in every body an organ for each specific duty. Most animals are provided with teeth to enable them to prepare their food for the action of the fluids secreted by the stomach, the pancreas and the liver. It will also be remembered that, besides being crushed in mouth by the teeth, the food is acted on by the saliva. Nature has not endowed birds with teeth, but it has provided a good substitute in the gizzard. This is a tough, strong, muscular organ, so situated in the body that everything taken in by the owner must pass through it. Previous to passing through the gizzard, all food, etc., has been received into a pouch or bag, where it remains some time. There it is soaked with, and acted upon, by a fluid secreted by this pouch, and a modified process takes place like that in the mouth of carnivorous animals. The food then gradually passes through the gizzard, where it is ground up, and thence it goes to the intestines, where, after being mixed with other fluids, it passes on and the nutriment is absorbed.

No doubt a bird may be made to exist for a time, perhaps for a considerable time, without grit, just as a person may live for years with bad teeth, or perhaps with none at all. We all know how little such persons enjoy their food or health, and surely if we deprive the birds of the means of masticating their food, they can neither be healthy nor enjoy their food. If birds have been kept for any length of time without grit and then let out, we shall see that however hungry they may be, they will ignore the choicest food and greedily devour all the grit they can carry. In small runs, the useful portion of the grit will soon all be picked out by the fowls, and it therefore becomes the duty of the fancier or breeder to provide a proper supply of some kind.

If one looks through the advertising columns of this or any other good poultry paper, he will find that manufacturers have laid themselves out to supply grit, while others offer their mills, that the poultry man or woman may make it for themselves. We must bear in mind that when we supply oyster shells or bone broken up, we are by no means supplying sufficient grit. Hard, sharp substances are what we require, and the best are obtained by breaking up or crushing flint, granite or quartz formations. This grit, as also crushed oyster shell, should be placed in a small box—a cigar box is good—in the run, that it may be always within reach of the fowls, just as their water is. Broken china, earthenware, glass, and all such substances broken up may be made to yield a good supply of hard grit, though nothing but white earthenware or clear glass should be used, on account of the coloring matter used, which is often poisonous. This will probably answer all purposes if the flock is small, and one will take the pains to prepare it. But where a large flock is kept, it is more economical to get a mill to grind it up, or to use some of the commercial grits now on the market. The latter probably is the better plan, as it comes ready for use, and a hundred pounds, costing perhaps \$1.25, will last a flock of 150 fowls perhaps a year. Seven or eight pounds of chicken grit is sufficient for forty or fifty chicks for two months, when they should have a larger size.

Good, sharp grit is one of the best remedies for indigestion and its consequent result, diarrhea. If the fowls are troubled in this way, give them a plentiful supply of good, sharp grit, and nine times out of ten a cure will result in a few days.

If the fowls are droopy and seem anxiously searching for something, yet refuse to eat, just feed some grit to enable them to grind up their food, and notice the satisfaction with which they eat it.

When you wish to give "Douglass Mix-

ture," sulphur or other medicine, take the required quantity, throw it away, and try grit instead; it is homeopathic—if it does no good it is perfectly harmless.

Hard flint, granite or quartz, crushed or ground, is on the market for the use of poultrymen in providing grit for their fowls. Any dealer in poultry supplies will sell it, ready prepared, cheaper and better than it can be prepared at home. If interested, turn to the advertising columns of the Kansas Farmer for address of dealers.

Shepherd's Notes.

With matured fowls, at least, from now until the holidays is considered one of the best times to market. But in order to market to the best advantage, securing the highest prices, it will be best to keep them in such a condition that only a few days of feeding with a good rattening ration will be needed to properly finish them for market. Fat, plump, nicely-dressed poultry always sells readily at good prices, and can often be sold when that which is poor and thin is hard to sell at any price.

To a considerable extent, the difference in price is largely prout; and as poultry is sold by weight, it is best to so feed as to have them in as good a condition as is possible. By commencing to feed grain in good season, giving a liberal feed in the morning as soon as they fly down from the roosts, and another at night, allowing them full run of the fields through the day, they can be easily got into such a condition that a few days of full feeding will finish them for the market.

One decided advantage in thus feeding is that it will not be necessary to confine them for any considerable time, and this is always a point to consider, as fowls that have been accustomed to a free range do not bear confinement well. They will do very well for a few days, if given all they will eat and drink in quarters somewhat darkened; but, in a very short time they will begin to fret and become restless, and will not do as well as they should. Hence, it is best to have them in good condition before confining to finish for market.

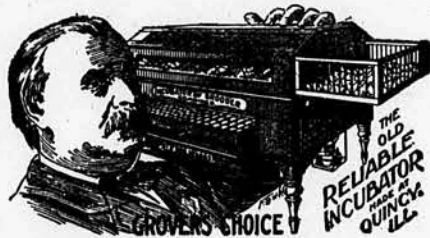
There is no advantage in wintering more fowls than are needed for breeding and laying purposes. Old hens that have passed their prime, roosters not needed for breeding, simply add to the cost of keeping the poultry and bring no returns; and, after it becomes necessary to feed regularly, it becomes an item to fatten and market them as soon as possible, taking care to always have them in such condition that advantage can be taken of a rise in the market, so the best prices can be realized, as selling well is nearly as important as fattening well.

N. J. SHEPHERD.

Eldon, Mo.

Advertising Does Pay.

There is probably no one to dispute the fact, says Agricultural Advertising, that good advertising pays, and it is also the case that the effect of advertising grows from year to year. For instance, if a man spends \$1,000 per year in advertising he will get more and more benefit from it as the years go by.



An excellent example of the benefits of continuous advertising is the Reliable Incubator & Brooder Co., of Quincy, Ill. This establishment has been in business for ten years. It started with comparatively nothing but the plans of a first-class incubator and brooder. The wooden hen has become as much of an institution on the farm as the milk pail or churn. The farmers all have incubators and brooders and find them to be money-making concerns. Recently ex-President Grover Cleveland, who lives at Princeton, N. J., sent an order to the Reliable Incubator & Brooder Co. for a 200-egg machine. The order was promptly filled. Some of the daily newspaper reporters heard of it and immediately they began to make all manner of good-natured sport of the distinguished private citizen. The Reliable people are, however, always ready for business. It did not take them long to discover the advantage of the use of the ex-President's name, and they have issued this very neat picture in connection with their advertising. It will unquestionably be a puller, for there are a

A Minister's Trials.

This narrative from a minister is of greatest value to those whose nerves are unstrung, health shattered or otherwise ailing. It is particularly appropriate in this age of active, nervous, endless labor.

We are living too fast. "Fast as lightning," expresses it, for we talk by electricity, cook by electricity, travel by electricity and so on.

It's a hurry, hurry, hurry from the cradle to the grave.

We crowd too much; crowd our work, crowd our eating, crowd our pleasure, crowd our sleeping.

A "breaking down of the nervous system" is the way of expressing the result.

It means a depleting of the nerves induced by prolonged strain; overtaxing of the nervous system; a product of over-hurry and bustle.

It affects all people in all walks of life. It baffles physicians of all schools.

No one knows the horrors of such a condition better than Rev. J. N. McCready, of Elkton, Mich. For years he labored faithfully and well. He was progressive and aggressive; a leader among men, a deep thinker and a hard worker.

In his zeal, he overworked; overtaxed his mental and physical strength.

The outlook was dark, with health shattered and recovery apparently hopeless.

Many means for a cure were tried, without receiving benefit.

Finally he took Dr. Williams' Pink Pills for Pale People and was restored to health.

He says:

"In April, 1896, the physicians said I must stop preaching or die.

"I had overtaxed myself and was suffering from a complete breaking down of my nervous system and a persistent stomach trouble.

"Several physicians treated me, but no permanent benefit was derived.

"Four times I was stricken with nervous prostration; twice with gastritis.

"These attacks would throw me into spasms.

"I could eat neither meat or vegetables.

"If my bare feet touched the floor I was immediately seized with cramps.

"I was used up; helpless, hopeless.

"I commenced to take Dr. Williams' Pink Pills for Pale People. One box was consumed and I felt no better. This discouraged me.

"My wife urged me to try the pills some more, feeling that my life depended upon the result.

"I continued to take them.

"Since then, and it has been several months, I have enjoyed life.

"Have preached all summer and held revival meetings for fifteen weeks.

"I have had no muscular exercise for years, but recently, have done considerable hard work in my garden, my muscles standing this test remarkably well.

"Every Sabbath I preach three times and now think I am good for another twenty years, if the Lord will."

To add weight to his words, Rev. McCready made affidavit before J. D. Brookes, Notary Public.

Dr. Williams' Pink Pills for Pale People exert a powerful influence in restoring wasted nerve power and in purifying and enriching the blood. Druggists consider them the most effective remedy which they dispense.

THE KANSAS CITY STOCK YARDS

—ARE THE—
FINEST EQUIPPED, MOST MODERN IN CONSTRUCTION AND AFFORD THE BEST FACILITIES

For the handling of Live Stock of any in the World.

THE KANSAS CITY MARKET

Owing to its Central Location, its Immense Railroad System and its Financial Resources, offers greater advantages than any other in the Trans-Mississippi Territory. It is the Largest Stocker and Feeder Market in the World, while its great packing house and export trade make it a reliable cash market for the sale of Cattle, Hogs, and Sheep, where shippers are sure to receive the highest returns for their consignments.

	Cattle and Calves.	Hogs.	Sheep.
Official Receipts for 1897	1,921,962	3,350,796	1,134,236
Sold in Kansas City 1897	1,847,673	3,348,556	1,048,233

C. F. MORSE, Vice Pres. and Gen. Mgr. E. E. RICHARDSON, Secy. and Treas. H. P. CHILD, Asst. Gen. Mgr. EUGENE RUST, Traffic Manager.

ALWAYS SUCCESSFUL. WITH OUR Incubator and Brooder

any one can make a success of poultry raising. Send 10 cents for 228-page Poultry Catalogue. It is filled with valuable pointers and illustrations. It tells all about our famous Reliable Incubators and Brooders. We sell poultry supplies of all kinds too. RELIABLE INCB. AND BROODER CO. Box B 62, Quincy, Ill.

THE IMPROVED VICTOR Incubator

Hatches Chickens by Steam. Absolutely self-regulating. The simplest, most reliable, and cheapest first-class Hatcher in the market. Circulars FREE. GEO. ERTEL CO., QUINCY, ILL.

OUR INCUBATORS EQUAL THE BEST.

They have all the latest improvements and are sold at very low prices and GUARANTEED to please every customer. Send for our 148-page catalogue which contains full descriptions of our extensive line and tells how to raise poultry successfully. Send for it at once. DES MOINES INCUB CO. Box 88 Des Moines, Iowa.

IT PAYS

to do your own grinding if you have a mill that does not take the profit for repairs. A French Burr Mill is the only mill to use on the farm for all kinds of grinding. Built to last. Do fine work. Large capacity. Less power. Easiest to take care of. Better get one. It will pay. Send for new book on Mills and sample meal. NORDYKE & MARION CO., Flour Mill Bldgs., 285 Day St., Indianapolis, Ind.

GOODHUE

Self-acting, Best Governed, Acknowledged to be the most powerful and durable made. We have everything the farmer needs in this line. Towers, Tanks and Pumps, Outlets, Grinders, Shellers, etc.

POWER AND MILLS

Catalogue, full of valuable points, free. Appleton Mfg. Co., 19 Fargo St., BATAVIA, ILL.

PRESERVATIVE

SAVES THE MEAT. NO SLIME—NO SKIPPERS.

NO SOUR MEAT. Box, enough for 500 lbs. post-paid, on receipt of 50c. Preservative Co., 12 Cedar St., N. Y.

great many people in this country who like to do as our leading citizens do. It is indisputably the case that the success of the Reliable Incubator & Brooder Co. is based largely on good advertising persistently done. They have a good machine for which there is a general demand.

Coming Poultry Shows.

- Kansas State Poultry Association.—J. W. F. Hughes, Secretary. At Topeka, January 9 to 14, 1898. C. H. Rhodes, Judge.
- Wichita, State Fair, Kansas.—H. O. Toler, Secretary. Wichita, Kas., September 19-24, 1898. C. H. Rhodes, Judge.
- Garden City Poultry and Pet Stock Association.—A. S. Parson, Secretary. Garden City, Kas., Show September 13-16, 1898. C. H. Rhodes, Judge.
- Abilene Poultry and Pet Stock Association.—Roy O. Shadinger, Secretary. Abilene, Kas., Second annual exhibit, at Abilene, January 25-28, 1898. Theo. Sternberg, Judge.
- Butler County Fancy Poultry and Pet Stock Association.—C. H. Pattison, Secretary and Treasurer, El Dorado, Kas., Second annual exhibit at El Dorado, Kas., December 20-23, 1898. C. H. Rhodes, Judge.
- Topeka Fanciers' Association.—L. V. Marks, Secretary, Topeka. Exhibit January 9-14, 1898, in connection with State show.
- Horton Poultry Show.—J. Chase, Willis, Secretary. Horton, Kas., November 21-24, 1898. C. H. Rhodes, Judge.
- Northwest Missouri Poultry Association.—R. V. Glenn, Kingston, Mo., Secretary. Kingston, Mo., November 24-26, 1898. C. H. Rhodes, Judge.
- Ottawa County Poultry Association.—Mrs. D. Collier, Bennington, Kas., Secretary. Bennington, Kas., November 28-30, 1898. C. H. Rhodes, Judge.
- Manhattan Poultry Association.—S. J. Norton, Manhattan, Kas., Secretary. Manhattan, Kas., December 1-3, 1898. C. H. Rhodes, Judge.
- Mitchell County Poultry Association.—A. Whitney, Beloit, Kas., Secretary. Beloit, Kas., December 6-10, 1898. C. H. Rhodes, Judge.
- Smith County Poultry Association.—S. C. Stevens, Smith Center, Kas., Secretary. Smith Center, Kas., December 12-13, 1898. C. H. Rhodes, Judge.
- Arkansas Valley Poultry Association.—Mrs. H. P. Swedfeger, Wichita, Kas., Secretary. Wichita, Kas., December 13-18, 1898. C. H. Rhodes, Judge.
- Garfield County Poultry Association.—A. F. Rusmiser, Enid, Okla., Secretary. Enid, Okla., December 24-25, 1898. C. H. Rhodes, Judge.
- Chase County Poultry Association.—C. M. Rose, Cottonwood Falls, Kas., Secretary. Cottonwood Falls, Kas., December 27, 1898, to January 1, 1899. C. H. Rhodes, Judge.
- Rooks County Poultry Association.—N. N. Neher, Stockton, Kas., Secretary. Stockton, Kas., January 2-5, 1899. C. H. Rhodes, Judge.
- Glasco Poultry Association.—M. E. Potts, Glasco, Kas., Secretary. Glasco, Kas., January 5-7, 1899. C. H. Rhodes, Judge.
- Central Oklahoma Poultry Association.—H. F. Stephenson, Kingfisher, Okla., Secretary. Kingfisher, Okla., January 16-21, 1899. C. H. Rhodes, Judge.

POULTRY SUPPLIES.

The Peerless brand of Crushed Oyster Shells Bone Mills, Tarrd Roofing, Poultry Toons and remedies, Poultry Netting, etc., etc. Write for price list to T. Lee Adams, 417 Walnut street, Kansas City, Mo.

Administrators' Sale of Real Estate.

Pursuant to the will of the late David R. Youngs, I offer at private sale all the real estate belonging to his estate, as follows:

1. The "Home Place," w. hf. of nw. qr. sec. 26, and e. hf. of ne. qr. sec. 27, t. 12, r. 15, 160 acres. Contains good house, barn and sheds, outhouses, corrals, wells and cisterns, wagon scales, three orchards, and all appurtenances constituting a first-class farm. About 130 acres plow land, 12 acres clover, 5 acres alfalfa, remainder pasture land, timber land and creek, all well and conveniently fenced. Price, \$8,000. Terms, one-third cash, one-third in two years and balance on long time. Interest on deferred payments 7 per cent. per annum, secured by mortgage.
2. Also the e. hf. of nw. qr. of said sec. 27, 80 acres. About 40 acres first-class plow land and about 40 acres hay land. Well and separately fenced. Price, \$3,200. Terms same as above.
3. Also about 101 acres of pasture land in one body, well fenced and well watered, being nw. qr. of ne. qr. frl. and sw. qr. of ne. qr. frl. of said sec. 27, and about 34 acres off the east side of the nw. qr. frl. of said sec. 27. Price \$20 per acre. Terms same as above.
4. Also about 101 acres of good prairie hay land, being w. hf. of nw. qr. frl. of said sec. 27, and about 34 acres off the west side of the e. hf. of nw. qr. frl. of said sec. 27. Price \$25 per acre. Terms same as above.
5. All of the above described land lying contiguous and constituting one large and complete farm and situated about seven miles southwest of Topeka near the Burlingame road, will be sold together for \$15,000, on the same terms already stated.
6. Also 42 acres in se. qr. of sec. 9, t. 12, r. 15, near Six Mile creek. Mostly first-class plow land; well fenced. Small house and some other improvements. Price \$1,250. Terms same as above.

For further information write or call on the undersigned at his office, Bank of Topeka building, Topeka, Kas.

CHAS. F. SPENCER,
Administrator, with will annexed, of said estate.

MICA AXLE GREASE lightens the load—shortens the road. Makes the wagon pull easier, helps the team. Saves wear and expense. Sold everywhere.

Port Arthur's Prosperity Is Based on Business

Over 12,000 tons of export and import freight now being handled over its docks per month.

Three steamship lines now running to British, Continental and Mexican ports.

Over one-half the canal completed to a depth of sixteen feet.

One hundred thousand dollars' worth of property sold in March.

Go to Port Arthur and see what the backing of a 1,227 mile trunk line means.

For information write to **F. A. HORNBECK,** General Manager Port Arthur Townsite Co., KANSAS CITY, MO.

HOOK ON—CUT OFF The easiest-working, closest cutting, simplest, strongest and handiest dehorner is the latest **IMPROVED CONVEX DEHORNER** Never crushes and horn nor pulls it apart. Made on an entirely new principle. Catalogue free. **WEBSTER & DICKINSON,** Box 66 Christiana, Pa. Western trade supplied from Chicago salesroom.

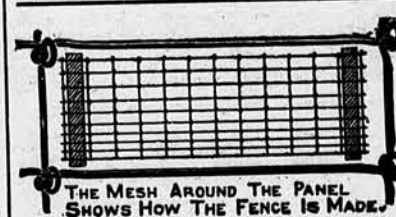
STOCK FEEDERS Listen to this and think before buying a feed grinder. There are **20,000** Peerless Mills now in use. Grinds ear corn and all grains fine or coarse. Make family meal or feed. **AGENTS WANTED.** Prices, \$15, \$25 and \$30. Write for circulars and agency. **STEVENS MFG. CO.,** Box 18, Joliet, Ill.

Steel Wheels Staggered Oval Spokes. **BUY A SET TO FIT YOUR NEW OR OLD WAGON CHEAPEST AND BEST.** way to get a low wagon. Any size wheel, any width tire. Catal. FREE. **Electric Wheel Co.,** Box 46, Quincy, Ill.

Large inside burr revolves twice to sweep's one. Ordinary length sweep. **DAIN DOUBLE MILL GEARED MILL** Sold under an absolute guarantee to do double the amount of work of any other mill of same size or money refunded. Write for circulars and prices. **DAIN MFG. CO.,** Carrollton, Mo.

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Every objection to hog waterers overcome. Valve eight inches in water; can not freeze; has a brass float which can not rust, water log, or allow mud to collect under it. Attachable to tank, barrel, box or pipe. Will water three hundred hogs a day, any number of sheep, calves, chickens, ducks, horses and cattle. Sent on trial, express prepaid, to be paid for if satisfactory. Costs nothing to try. Send for one. Our offer means something. Costs twice as much to manufacture as any other; retails the same, \$3.00. Address, **STOCK FOUNTAIN CO., LAKE CITY, IOWA.**



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PERFECT FARM FENCE Made of best doubly annealed galvanized steel wire. Top and bottom wires No. 9. All other wires No. 11. We use the strongest stay wire in any woven wire fence on the market—hence more strength and durability.

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We make Steel Windmills, Steel Towers and Feed Grinders and are selling them cheaper than the cheapest. Our productions are first-class in every respect and are sold on trial. Send us a postal and we will tell you all about them. **CURRIE WINDMILL CO.,** Manhattan, Kas. AGENTS WANTED.

BULL STRONG The country fence is not good enough. It takes something more than ordinary. Our Duplex Automatic Machine makes 100 varieties of fence at the rate of 60 rods per day. That brings the cost of a first class farm fence to only 12c. per rod. 10c. for poultry fence; 16c. for a rabbit-proof fence—excellent for **HORSE-HIGH** nurseries and orchards, and 12c. for a good hog fence. We sell you plain, coiled spring and barbed wire direct at wholesale prices. Don't buy wire or fencing until you get our free catalogue. We will save you money on all orders. **KITSELMAN BROS.,** Box 64, Ridgeville, Ind. **PIG-TIGHT** When writing advertisers please mention Kansas Farmer.

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ONCE A MAN named his horse "Congress," because, he said, "he never passes anything." Don't pass by our "ads." without asking for "Fall styles and prices." **Page Woven Wire Fence Co., Adrian, Mich.**

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BREEDER OF

The Prize-winning Herd of the Great West. Seven prizes at the World's Fair; eleven firsts at the Kansas District fair, 1893; twelve firsts at Kansas State fair, 1894; ten first and seven second at Kansas State fair, 1895. The home of the greatest breeding and prize-winning boars in the West, such as Banner Boy 28441, Black Joe 28603, World Beater and King Hadley. For Sale, an extra choice lot of richly-bred, well-marked pigs by these noted sires and out of thirty-five extra large, richly-bred sows. Inspection or correspondence invited.

PUBLIC SALE

AT ASHLAND STOCK FARM, ONE AND ONE-HALF MILES NORTH OF MUSCOTAH, ATCHISON COUNTY, KANSAS, OCTOBER 25, 1898.

73 Thoroughbred Poland-China Hogs and 7 Thoroughbred Short-horn Bull Calves.

The hogs consist of thirty boars of last spring's farrow, and forty-three sows sired by Gold Bug 18698 and Tecumseh '96 17789, out of sows sired by Hands Off, Grand Price, W. B. Tecumseh, L. S. Tecumseh, and J. H. Sanders. The Short-horn bulls are of Young Marys and Beauties and are as grand a lot as ever went into a sale ring—they are of that low-down, beefy type, all reds.

Write for catalogue.

Address

M. C. VANSELL,
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COL. JAS. N. HARSHBERGER,
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ANNUAL PUBLIC SALE

Pedigreed Poland-Chinas

At LEAVENWORTH, KAS., THURSDAY, NOVEMBER 3, 1898,

When I will offer FORTY HEAD of specially selected pedigreed boars and sows from my herd, fifteen of which were sired by my herd boars, Chief You Want 19921 S., he by the noted sire of prize-winners, Chief I Know 11992 S., whose sons and daughters won more prizes at the late Great Swine Show at Omaha, Neb., than did those of any other sire. Also by U. S. Model 20078 S., a son of the noted Klever's Model 14664 S. Five of the offerings are by Fortunate I Know, one by Chief I Know, eleven by Look's Chip 39977 A. (a son of Look Me Over), three by Young Hadley, and four by Corwin I Know. I have endeavored to breed the best possible, and the breeding above cited and the individuality of the offerings will attest on sale day how well I have succeeded. Your inspection and co-operation is respectfully invited.

Sale to commence at 1 o'clock p. m., in O. M. Spencer's barn. Prospective buyers from abroad will find accommodation at our headquarters, the National hotel. For terms of sale, etc., write for a free copy of sale catalogue.

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AT PUBLIC OUTCRY

OHIO POLAND-CHINAS

At Paola, Kas., Thursday, October 27, 1898.

FROM OHIO THEY COME.

Lordly Lads and Queenly Lasses, Worthy Representatives of the Great Families, the Bed-Rock, the Substratum of this Famous Breed.

Fifty head selected from the youth of three great herds. No old sows or haggard boars in this offering. To the highest bidder without reserve they go. No distinction between rich or poor, all can pay cash or all can get credit.

W. C. Welch, of Harvey-burg, Ohio, consigns ten head selected from his own great herd and from the great herd of Hadley and Hendricks, Wilmington, Ohio. This unique consignment consists of three boars by Model Look 41129 O., he by Klever's Model, dam Queen Fashion 76334 O., and out of dams of Welch's Black U. S. blood, out of Goldie Wilkes 99432 O., Three by Lookout 32451 O., he by Look Me Over 25343, dam Queen Klever 2d 59408 O., and out of Bell of Gerlan. One out of Belle of '97, a line-bred Look Me Over. Three by I. X. L. Tecumseh, Starbuck's great boar, and of Welch's famous sow, Ric 2d 10.552 O., and one by Chief Again 41215 O., Ed Klever's great boar, by Chief Tecumseh 2d, dam Sineby's Model and out of Welch's fine sow, Fortune by Simpson's Black T. S. 38837.

Twenty boars and gilts by prize winning 900 Fine 35563 O., (our own great sire of Wilkes, Osgood, Corwin blood), and out of dams by Welch's Black U. S. 33321 O., and One Price 18639 O., and four very fine boars by 900 Fine and out of a Victor C., dam consigned by S. D. Condon, of Paola, Kas. Mr. Dietrich, of Ottawa, Kas., says this Condon litter is the finest he ever saw. Three fine yearling gilts safe in pig to Priceless 30169 O the great breeding son of old One Price 18639. Also the grand breeding boar, Sixteen to One 41627 O. by Welch's Black U. S. 33321 O., and out of Nina One Price 81852 O., a descendant of old Black U. S. 13471 by way of his two greatest sons.

TERMS:—All sums of \$25 or less, cash without discount. Over that amount nine months will be given, interest at 6 per cent. Six per cent off for cash. Free entertainment at Hotel Laclede. Sale under cover in town. No postponement on account of weather.

Bids by mail or wire will receive fair, honest treatment. Send for catalogue, you will need to know about these Lords and Queens. Sale promptly at 1 o'clock p. m., October 27, 1898.

C. P. SHELTON,

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I must reduce my herds to the minimum on account of short feed and insufficient accommodations for winter, therefore will sell at prices that should be a big object to purchasers. My offering consists of tried brood sows, gilts and boars, all ages. Will sell singly or in lots to suit. The young stock is by my herd boars Prince Bismarck 1887, Seidom U. S. 18218, Duke of Weston and Corwin. Come now and get a bargain. Also, for sale thirty extra fine young Short-horn bulls, sired by Glendower 10338. None better in Kansas.

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Ridgewood Farm, Leavenworth County, Kansas.

This herd was started in 1882 by Mr. Lucien Scott, President of the First National Bank of Leavenworth, and no expense was ever spared by him to keep it up to the highest standard of breeding. Since 1893 it has been owned by Mr. Scott's widow and Charles N. Whitman. It is made up entirely of Grove 3d, Lord Wilton and Anxiety strains. For many years past Star Wilton 18th 33254 has been at the head of the herd, with Duke of Cumberland 53658 and Brainard 4.770 as assistants; and now the imported bull Soudan 75136 Vol. XVIII is at the head of the herd, with the imported bull Randolph 79296 Vol. XVIII, Hesiod 20th 61362, old Star Wilton 18th, Tom Beau Monde 71126 and Jonathan 71072 as assistants.

125 — Head of Registered Stock — 125

ALL BRED AND RAISED ON RIDGEWOOD FARM, WILL BE OFFERED

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OUR FALL SALE OF POLAND-CHINAS

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GREAT OMAHA SHOW HERD

AT RIVERVIEW FARM, ADJOINING VILLAGE, WEDNESDAY, NOVEMBER 2, 1898.

QUALITY, FINISH, STYLE and FASHION UNSURPASSED. Seventy head, principally the get of Hadley Jr. (deceased), out of sows by Chief Tecumseh 2d, Hide-stretcher, Chief I Know, Klever's Model, Look Me Over, Chief I Am and Graceful Index. CATALOGUES ON APPLICATION ONLY. Terms liberal, guarantees ample. Sale under cover. All trains stop. Free entertainment. No boom business, but square business.

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