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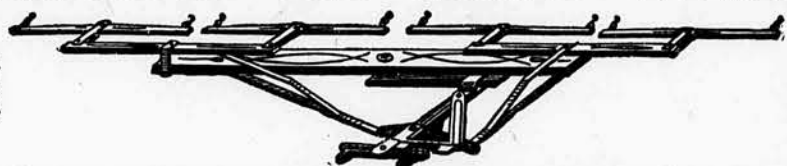
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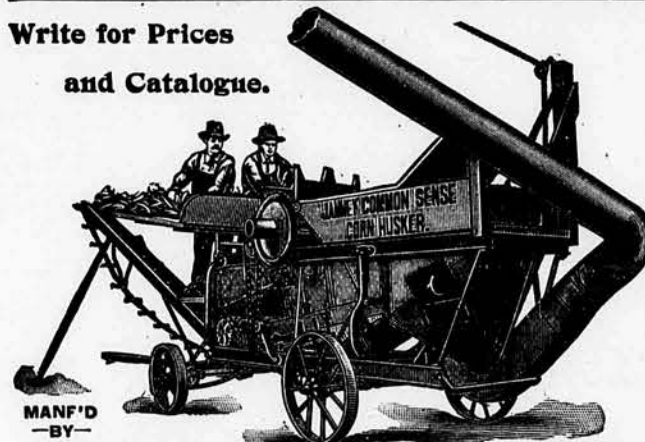
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Historical Matters.

OUTLINE HISTORY OF THE LOUISIANA PURCHASE.

Its Development into Territories and States, and Its Present and Relative Value as a Producing Section.

FROM "MONTHLY SUMMARY," ETC., BY DIVISION OF STATISTICS U. S. TREASURY DEPARTMENT.

SPANISH EXPLORATION.

The earliest record of the acquaintance of the white man with the mouth of the Mississippi is the visit of Alvarez de Pineda and his companions in 1519, who, it is said, entered the mouth of the Mississippi and spent six weeks on its banks. Ten years later, De Narvaez touched at the mouth of the Mississippi, and in 1541 De Soto crossed the Mississippi at a considerable distance above its mouth, and, after further wanderings, perished on its bank near the mouth of the Arkansas, his followers, after considerable delay, passing down the stream and arriving at its mouth July 18, 1543, turning westward along the shores of the Gulf of Mexico and ending the record of Spanish exploration of the Mississippi.

FRENCH EXPLORATION AND OCCUPATION.

The French exploration of the Mississippi Valley in the following century from the north, where explorers from their Canadian settlements moved down the Mississippi; but it was not until April 7, 1682, that the first party of explorers, headed by Robert Cavalier de la Salle, reached the mouth of the Mississippi, and on April 9 erected a column and took possession of the country, affixing to the column the arms of France with this inscription: "Louis le Grand, Roi de France et de Navarre, regne; le neuvieme Avril, 1662."

La Salle and his followers returned northward shortly, but three years later Henri de Tonty, who had accompanied him, again visited this spot and replanted further from the banks of the stream the column which had been thrown down by driftwood.

In 1698 Louis IV fitted out an expedition to colonize Louisiana, with Capt. Pierre le Moyne d'Iberville in command. It arrived at the mouth of the Mississippi early in 1699, and built a fort and established the first permanent colony on the eastern side of the mouth of the Biloxi Bay, communication being maintained at long intervals between this post and the French colonies in Canada.

In 1712 the first regular charter for the government of Louisiana was granted to Antoine Crozat, whose efforts to establish a settlement and develop the country soon proved unsatisfactory and

were abandoned in 1718. Another charter was immediately granted to John Law, whose operations seem to have been last disadvantageous to the Louisiana colony than to those of France who became interested in his operations, as William Preston Johnston says that the privilege granted him "finally inured to the benefit of the colony," while other writers indicate that the colony flourished during at least a part of the control of his Mississippi or West India Company.

FOUNDING OF NEW ORLEANS.

In 1717 Jean Baptiste de Bienville selected the tract whereon New Orleans now stands as a site for an agricultural and commercial settlement, and in the year following, being appointed governor, sent his chief engineers with a force of 80 convicts lately arrived from the prisons of France, to clear the land and trace out the plan of a town, which he named Nouveau Orleans in honor of Orleans, then duke of France. From that time until 1722 it was maintained only as a small military trading post, but in August, 1733, it was made the official quarters of the governor of the colony.

BOUNDARY BETWEEN THE ENGLISH AND FRENCH FIXED AT THE MISSISSIPPI.

The seven years' war in which France

SPANISH OCCUPATION.

The Spanish governor, Antonio de Ulloa, arrived at New Orleans March 5, 1766, but his restrictions upon commerce of French citizens with France created such dissatisfaction that a convention of planters on October 28, 1768, passed resolutions praying for a restoration of their former privileges and the expulsion of Spaniards, and on the passage by the council of a decree requiring the Spanish troops to leave the colony within three days, Ulloa and his troops immediately embarked for Spain. He was succeeded, however, by another Spanish governor, who brought the colony under complete Spanish control.

DIFFICULTIES REGARDING FREE NAVIGATION OF THE MISSISSIPPI.

During the occupancy of the territory by Spain, American colonists experienced much difficulty in maintaining the right of free navigation of the Mississippi, and the opposition of Spain was so great that in 1786 the Congress of the Confederation, by a vote of 7 to 5, agreed to suspend temporarily its demand for this right, and a treaty was framed by which the claim was to be suspended for twenty-five years, but not relinquished. This, however, proved very unsatisfactory to the population of the Mississippi Valley, and the entire

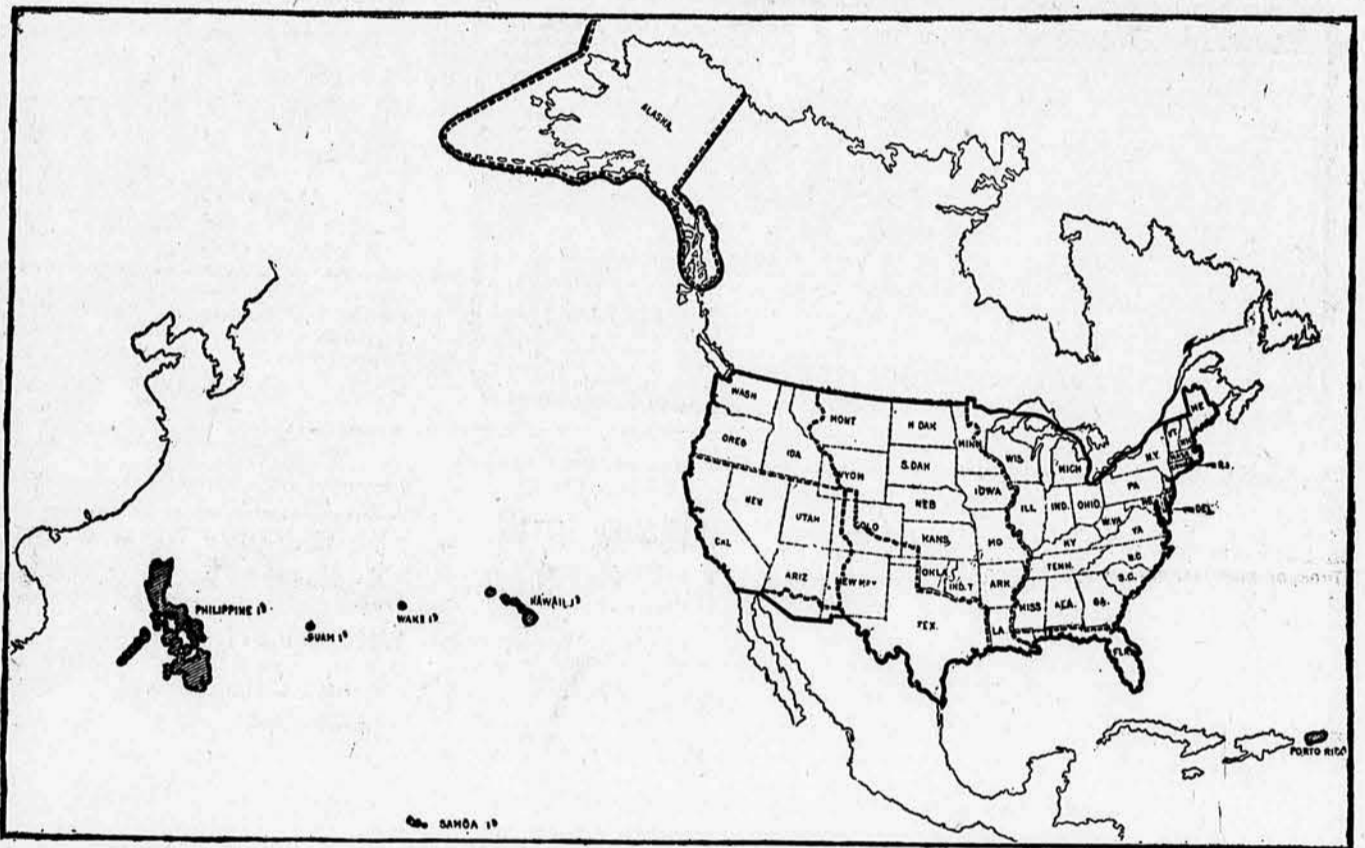
Orleans abrogated the right of deposit at that city and refused to name any other place as provided by the treaty.

ALARM IN THE UNITED STATES AS A RESULT OF RETROCESSION TO FRANCE.

The announcement made in 1802 that Louisiana had been retroceded to France caused great alarm in the United States, whose relations with France had been recently strained through the treatment accorded the embassy sent in 1797 to adjust the differences between the two nations, and the people of the Mississippi Valley especially felt that control of the Louisiana Territory and City of New Orleans by France threatened the permanent closing of the Mississippi River against American commerce.

MISSION SENT TO FRANCE TO PURCHASE NEW ORLEANS.

The result of this feeling was a resolution offered in Congress authorizing the President to call out 50,000 militia and take possession of New Orleans, but a substitute was adopted appropriating \$2,000,000 for the purchase of New Orleans, and on January 10, 1803, James Monroe was sent as minister extraordinary to cooperate with our then minister to France, Robert R. Livingston, for the purchase of New Orleans.



THE UNITED STATES AND ISLAND POSSESSIONS.

The territory of the original 13 colonies was entirely east of the Mississippi and north of Florida. The Louisiana Purchase of 1803 added the great central area whose eastern boundary was chiefly defined by the Mississippi River and whose western and southwestern boundary followed the irregular dotted line commencing at the Canadian border between Idaho and Montana, and ending at the Gulf of Mexico between Texas and Louisiana. Florida and parts of Alabama and Mississippi were added in 1819. Texas then larger than now was annexed in 1845. The country west of the Louisiana Purchase and Texas was added in 1848. The southern part of Arizona and New Mexico was added in 1853. The Hawaiian Islands were annexed in 1897. Porto Rico, the Philippines, Guam, Wake, and Samoa were added in 1898.

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Simply write me a postal card or letter. Let me send you an order for the medicine. Take it for a month, for it won't harm you anyway. If it cures, pay \$5.50. I leave that entirely to you. I will mail you a book that tells how I do it. Address Dr. Shoop, Box 529, Racine, Wis.

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and Great Britain contended for the final possession of this continent terminated with the definitive treaty of Paris signed in 1763, which fixed the western boundary of the British possessions along the middle of the Mississippi River from its source down to the Iberville, and thence down the center of that river or bayou and through lakes Maurepas and Pontchartrain to the Mexican Gulf.

FRANCE CEDES LOUISIANA TO SPAIN.

The Louisiana Territory was ceded by France to Spain by a secret treaty on November 3, 1762, which, however, was not made public until 1763, and in 1764 the director-general of Louisiana was directed to acquaint the inhabitants of that province with the act of cession and to turn over the government to the officers of Spain when they should arrive to receive it. The motive of this cession, according to Wallace, "appears to have been to indemnify Spain for her expenses in the war then just closed, and to prevent Louisiana from falling into the hands of Great Britain." He adds, however, that, "moreover, the province had become a burden to the French Government, of which it was anxious to be disencumbered. It has been computed that France, in her prolonged attempt to colonize Louisiana, expended directly or indirectly nearly \$20,000,000, without receiving any proportionate return."

question was referred to the new Government which assumed control in 1789. In 1795, Thomas Pinckney, as envoy extraordinary, negotiated a treaty with Spain by which it was agreed that the navigation of the Mississippi should be free to the citizens of the United States, and that they should for the space of three years have the privilege of depositing their merchandise in the port of New Orleans, and to export it from thence without paying any other duty than a fair price for hire of the buildings in which it might be stored. It was also agreed to renew this privilege at New Orleans at the end of three years or grant a similar privilege at some other point on the banks of the Mississippi.

LOUISIANA TERRITORY RETROCEDED TO FRANCE.

In the year 1800 the King of Spain, desiring the aid of Napoleon in the erection of the kingdom of Etruria for his son-in-law, the Duke of Parma, made an agreement for the retrocession of the Louisiana Territory to France as an equivalent for that aid, the French Government being quite willing to obtain new territory in America in lieu of that lost to England a few years earlier. This agreement, made October 1, 1800, remained a secret for more than a year, and even then France did not assume control of the territory. In 1802 the Spanish official still in charge at New

COMMISSION PURCHASES LOUISIANA TERRITORY.

Monroe, on his arrival in France, found that negotiations for the purchase of New Orleans had been begun by Minister Livingston, and the commissioners were surprised by a counter proposition from Napoleon's representative, Barbe-Marbois, in which he offered to sell all of the Louisiana Territory to the United States, suggesting 100,000,000 francs as the price; and the commissioners, although they had not been authorized to negotiate for more than the city of New Orleans, offered \$10,000,000 and on the following day, April 13, an agreement was reached for the sale to the United States of the entire Louisiana Territory for \$15,000,000, of which \$11,250,000 was to be in the form of 6 per cent United States bonds, and the United States to assume the payment of certain claims of American citizens against the French Government, amounting to \$3,750,000.

This treaty reached Washington for ratification July 14, Congress was called in special session October 17, and the treaty confirmed by the Senate after two days of discussion, and on October 28 a resolution to carry it into effect was

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passed after much opposition by many who expressed the belief that the territory was not worth the price proposed to be paid, and that its control would be difficult and unprofitable.

AMERICAN OCCUPATION.

The Spanish representatives were still in control at New Orleans and in possession of the entire territory when the treaty was ratified, and the Spanish representatives at Washington insisted that France had not carried out her agreement for the cession by Spain to France, and therefore the cession to the United States was void. Nevertheless the French charge at Washington directed the representatives at New Orleans to transfer that city and territory to the

an act was passed fixing the western boundary and excluding from the limits of Arkansas Territory practically all of that territory now known as Oklahoma and a part of that now known as the Indian Territory. In 1828 the western boundary line was again changed and made practically identical with the present western boundary of Arkansas, and the territory thus defined was admitted as the State of Arkansas June 15, 1836. 1821. State of Missouri formed, the boundaries nearly identical with those now existing (except as to the northwest corner) the remaining undivided area of the Louisiana purchase retaining the title of Missouri Territory until 1834, when it was given the title of The Indian Country.

other enabling act was passed by which the western boundary was extended to the Missouri River and the present northern boundary established.

1849. Territory of Minnesota organized, comprising the area of the present State of Minnesota and that part of North and South Dakota lying east of the Missouri River. In 1858 Minnesota was admitted as a State and the western portion of the territory not included in the State was in 1861 combined with a part of Nebraska and organized as the Territory of Dakota. The State of Minnesota also includes about 52,319 square miles of the area of the original thirteen States.

1854. Territory of Kansas organized, with practically its present boundaries,

western portion of the area then designated as Nebraska, while in the formation of the Territory of Idaho in 1863 the western boundary of Nebraska was fixed at about its present location. Admitted as a State March 1, 1867.

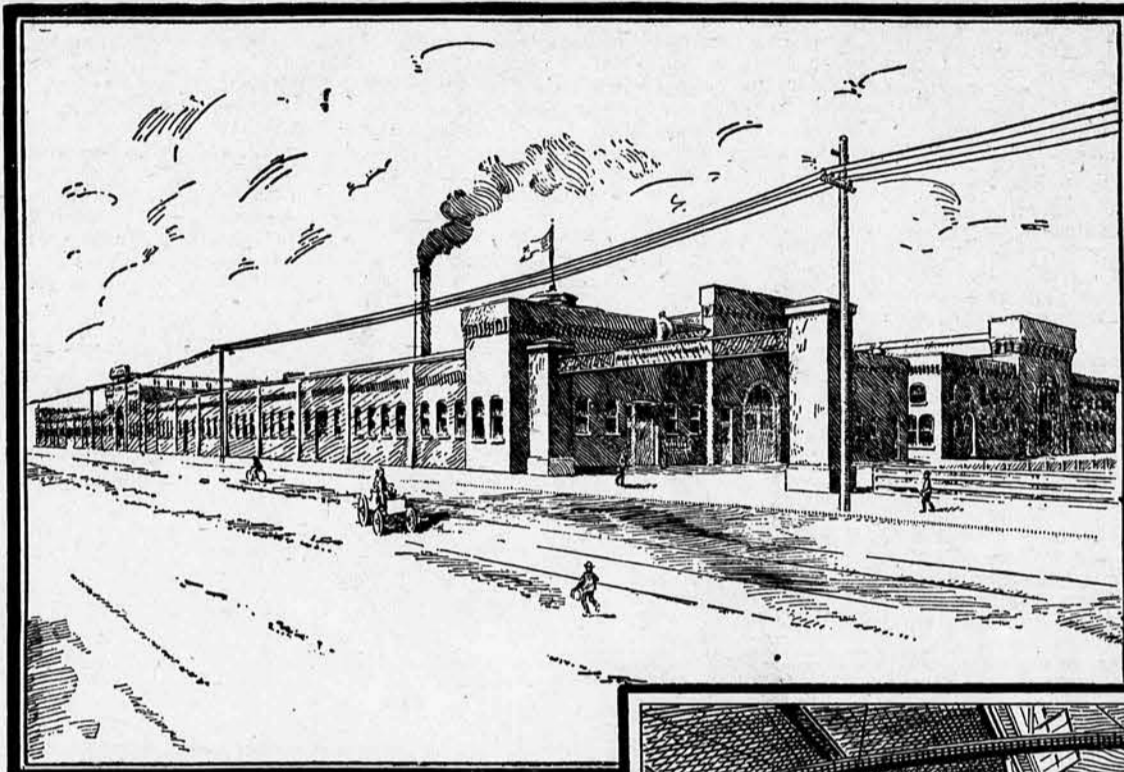
1861. Territory of Dakota organized from parts of Nebraska and Minnesota Territories. Its eastern boundary was practically identical with that now separating the State of Minnesota from North and South Dakota, and its southern boundary identical with that separating Nebraska from South Dakota, and extending westward to the summit of the Rocky Mountains, and thence northward to the Canadian line. In 1863 the western portion of Dakota was transferred to the Territory of Idaho, and in 1889 the boundary between North and South Dakota was named, and the two sections severally admitted as States.

1861. Territory of Colorado organized boundaries identical with those of the present State of Colorado, being made up from portions of Idaho, Utah, New Mexico, Kansas, and Nebraska, the northeastern section being taken from the Louisiana purchase, the central and southeastern portion from the Texas annexation, and all of the remainder from the Mexican cession.

1863. Territory of Idaho, formed from parts of Nebraska, Dakota, and Washington Territories, and included, besides the present State of Idaho, all of the territory now known as Montana and Wyoming. Its boundaries were, therefore, Dakota and Nebraska on the east, Colorado, Utah, and Nevada on the south, Oregon and Washington on the west, and Canada on the north, the portion east of the Rocky Mountains being taken from the Louisiana purchase, and that west of the Rocky Mountains from the Territory of Oregon.

1864. Montana Territory was formed from the northeastern portion of Idaho Territory.

1868. Wyoming Territory was formed from the southeastern part of the Idaho Territory; in 1890 Idaho and Wyoming admitted as States. Wyoming has the unique distinction of being the only State which contains within its boundaries territory originally included in four different additions to the territory of the United States, viz., parts of the Louisi-



Exposition Building—Exterior View.

representatives of the United States. The message reached New Orleans November 23, 1803, and after some consultation the Spanish governor handed the keys of the city to the French representative, who on December 20 surrendered them to the representatives of the United States Government, who assumed control of the city and territory.

POPULATION OF LOUISIANA TERRITORY AT DATE OF PURCHASE.

The population of the Louisiana Territory at the date of its cession to the United States was probably not far from 100,000. A volume written by M. Wante in Paris in 1803, states the population of the Territory at that date to be 50,100 whites, 39,820 blacks, and 10,340 mulattoes; total 100,260. The bishop of the province estimated the population of his jurisdiction at that date as 144,000, but his jurisdiction included Pensacola and Mobile. The census of 1810 shows the population of 97,401 for the entire area, of which 76,556 were accredited to Orleans Territory occupying the extreme southern portion of the purchase, and 20,845 to the remaining section of the Louisiana purchase.

TERRITORY EAST OF THE MOUTH OF THE MISSISSIPPI ADDED TO LOUISIANA.

After the cession of 1803 questions arose between Spain and the United States as to whether the cession included any territory east of the Mississippi other than New Orleans. The claim of the United States was that the original Louisiana Territory extended a considerable distance east of the Mississippi; and although this was not admitted by Spain Congress in 1804 passed an act for collecting duties in the disputed territory and placed it under the jurisdiction of Louisiana Territory. In September, 1810, the inhabitants of the section (i. e., of West Florida) declared themselves independent of Spain and notified the President of the United States of that fact, asking recognition as a part of the United States, and on October 27 of that year President Monroe by proclamation extended the claim of the United States over the territory in question and authorized the governor of New Orleans Territory to take possession. In 1812 an act was passed enlarging the limits of Louisiana and including the area in controversy.

TRANSFORMATION OF THE LOUISIANA PURCHASE INTO STATES AND TERRITORIES.

1803. French cession of Province of Louisiana, comprising entire Louisiana purchase.

1804. The Territory of Orleans established with boundaries practically identical with those of the present State of Louisiana. The remainder of the Louisiana purchase was designated as the District of Louisiana.

1812. The Territory of Orleans admitted to the Union as a State under the name of Louisiana and name of the territory known as Louisiana District changed to the Missouri Territory.

1819. Territory of Arkansas formed, including the present State of Arkansas and a large part of the present Indian Territory and Oklahoma. In 1824

1838. Territory of Iowa formed, including the present State of Iowa, and extending thence northward to the Canadian line and including all territory between the Mississippi and Missouri rivers, comprising most of the present State of Minnesota and the eastern portion of the present States of North and South Dakota. In 1845 an enabling act was passed for the admission of Iowa as a State, the northern boundary being somewhat farther north than at present and its western boundary an arbitrary line running due north and south, excluding all that portion fronting upon the Missouri River and including in the then limits of Iowa about two-thirds of the eastern portion of the State as at present defined. This, however, was not accepted, and in 1846 an-

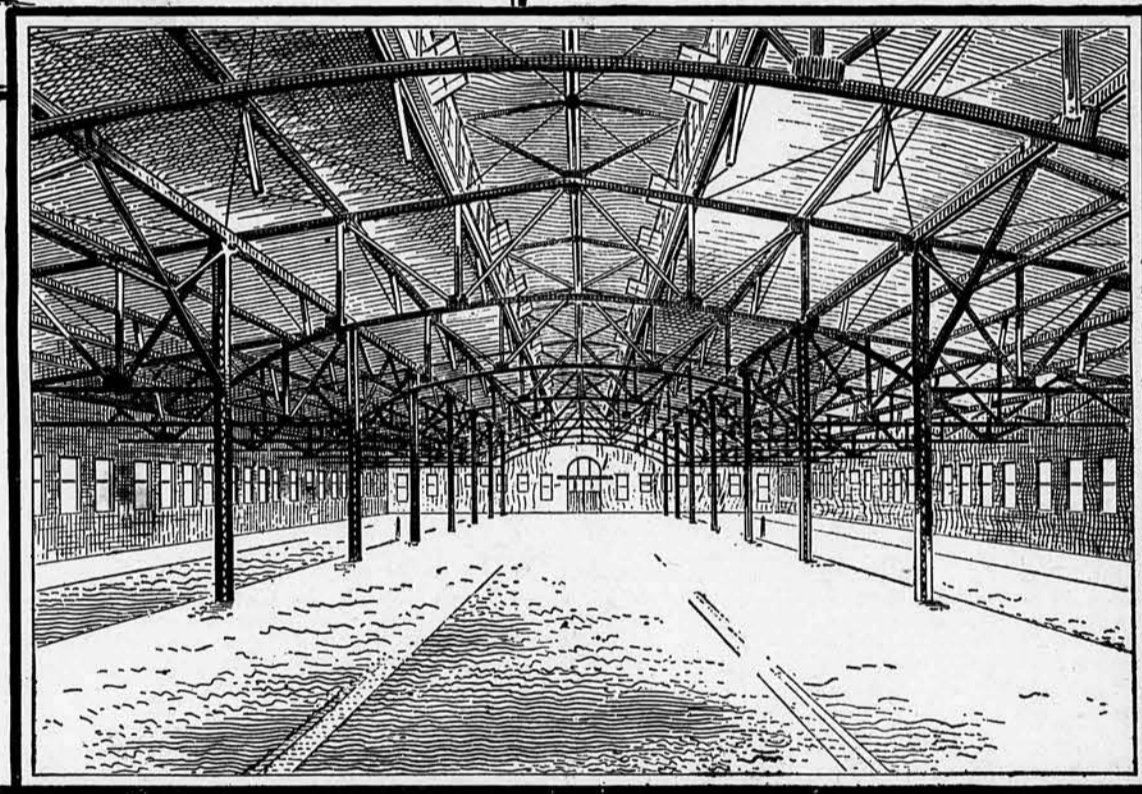
except that its western limit extended to the summit of the Rocky Mountains and included a part of the present State of Colorado. In 1861 Kansas was admitted as a State, and the western boundary line changed to its present location.

1854. Territory of Nebraska formed, with its southern line identical with the southern line of the present State of Nebraska, but extending westward to the Rocky Mountains the Territory including all that area between the southern line above described and Canada on the north, the Missouri River on the east, and the Rocky Mountains on the west. The northern portion of this area was designated in 1861 as the Territory of Dakota, and in the same year the formation of the Territory of Colorado removed a section from the south-

ana purchase, the Texas Territory ceded to the United States, the Mexican cession and the Oregon Territory.

AREA, POPULATION, AND PRODUCTION.

The land area of the Louisiana purchase exceeds that of the original thirteen States, being 864,944 square miles, against a total land area of 820,344 square miles in the original thirteen States. The States and Territories which have been created in whole or in part from its area number 14, and their population in 1900 was 14,708,616, against a population of less than 100,000 in the territory at the time of its



Exposition Building—Interior View.

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The buildings for this exposition, of which exterior and interior views are shown herewith, are the finest in the world for the purpose, being constructed of steel and brick, with splendid sky lights and electric facilities for lighting, a complete ventilating system, brick floor, beneath which is constructed a complete system of drainage, and in every way calculated to house to advantage the very choicest live stock exhibits. This building, which is 600 feet by 250 feet in dimensions, will be devoted solely to cattle entered at the coming show. The promenades will be 18 feet wide, thus giving a splendid opportunity for viewing the exhibits separately or collectively. At the central point in the building there is a division between the two walls extending from side to side wall, a space about 50 feet, for exhibition rings, around which will be constructed tiers of seats in amphitheater arrangement for the accommodation of the visitors who care to view the work of judging and to inspect the cattle as they are brought in the ring.

Stops the Cough and Works off the Cold.

Laxative Bromo-Quinine Tablets cure a cold in one day. No Cure, No Pay. Price 25 cents

purchase. Their total area is nearly one-third that of the entire Union, and their population about one-fifth that of the entire United States. They produced in 1890 164,000,000 bushels of wheat, and in 1900 264,000,000 bushels, at a value in 1900 of \$152,000,000, their total wheat production being over 50 per cent of that of the entire United States. They produced 603,000,000 bushels of corn in 1890 and 1,013,000,000 bushels in 1900, with a value in 1900 of \$314,000,000, their total corn crop forming in 1890 40 per cent and in 1900 48 per cent of the total corn crop of the United States. Of oats they produced in 1900 311,000,000 bushels, or 38 per cent of the total product of the country, with a valuation of \$71,000,000. Their production of barley in 1900 was valued at over \$10,000,000, and of rye at over \$2,000,000; while their production of potatoes in 1900 amounted to over \$25,000,000, of hay \$130,000,000, and of cotton \$50,000,000. The total value of the agricultural products of the States formed from the Louisiana purchase, including in that category simply wheat, corn, oats, barley, rye, hay, potatoes, and cotton, was in 1890 \$670,000,000, and in 1900 \$755,000,000. The wool product of these States amounted in 1894 to 61,871,357 pounds, and in 1900 to 100,396,982 pounds, or 35 per cent of the total wool product of the United States, with an estimated value of about \$15,000,000, or equal to the cost of the entire area. The value of the farm animals in these States in 1890 was \$772,000,000, and in 1900 \$825,000,000. Add to these easily measured farm products the estimated value of the wool, the sugar, the dairy and poultry products, and the proportion of the live stock annually turned into provisions, and it may be safely estimated that the agricultural products of a single year amount to one hundred times the original cost of the area; or, in other words, that its cost is repaid by 1 per cent of the agricultural productions of each recurring year.

MINERAL WEALTH.

The products of the mines is also of very great value. The coal produced in this area in 1899 amounted to 22,000,000 tons, against 14,000,000 tons in 1890; the iron ore to 8,491,000 tons in 1900, against 1,269,000 tons in 1890; the silver product of 1899, \$50,300,768 in coin value against \$44,799,998 in 1890, and gold, \$37,712,400 in 1899, against \$10,650,000 in 1890.

BANKING STATISTICS.

The prosperity shown by these figures is further evidenced by the banking institutions of the States formed from this territory. Their capital stock amounted in 1900 to over \$80,000,000; their circulation to \$36,600,000, against \$15,644,000 in 1890; their loans and discounts in 1900 to \$317,563,000, against \$269,016,000 in 1890, and their total resources in 1900 to \$1,099,111,000, against \$746,903,000 in 1890, while a still more gratifying evidence of the prosperity of this section is the fact that individual deposits in national banks in 1900 amounted to \$329,699,000, against \$216,609,000 in 1890, an increase of more than \$110,000,000 in individual deposits during the decade.

EDUCATIONAL CONDITIONS.

A study of educational conditions shows equally rapid and gratifying development. The pupils enrolled in the public schools in the States in question in 1890 numbered 2,580,495, and in 1899, 3,161,112; the teachers employed numbered, in 1890, 89,558, and in 1899, 102,202, and the expenditure for public schools in 1890 was \$30,284,752, and in 1899, \$37,185,881. The number of pupils in attendance at high schools in 1899 was 113,847, with 4,937 teachers; normal schools, 15,843 students, with 625 teachers, and at higher educational institutions, 40,249 students, and 3,925 teachers. The total figures for schools and educational institutions in the 14 States formed from the Louisiana purchase show: Teachers, in 1890, 95,365; in 1899, 111,689; attendance, in 1890, 2,670,541; in 1899, 3,331,051.

NEWSPAPERS, POST-OFFICES, AND RAILWAYS.

The number of newspapers and pe-

WANTED EVERY FARMER AND TEAMSTER WHO INTENDS TO BUY A WAGON

this year, to send us his address on a postal card. Don't put it off for we can do you much good. We will send you something that will interest you at least. One cent will bring you the information.

THE TIFFIN WAGON CO.,
1203 Union Ave., Kansas City, Mo.
or Tiffin, Ohio.

riodicals published in this area in 1890 was 4,759, and in 1900, 5,618; the number of post-offices in 1890, 12,919; in 1900, 16,228; the miles of railway in operation in 1890 numbered 51,823, and in 1899, 59,324, or 31 per cent of the total railway mileage of the country.

FUTURE POSSIBILITIES CONSIDERED.

The power of this vast area with its agricultural and mineral wealth to sustain a population much greater than that which it now supports is suggested by a comparison of its area with the area and population of the prosperous countries of Europe. The total area is 875,025 square miles and is slightly less than that of the United Kingdom, Netherlands, Belgium, Germany, France, Spain, Italy, and Switzerland, whose total area is 885,978; with a present population of 202,363,573, as against a present population of 14,708,616 in the territory under consideration, whose agricultural and mineral possibilities fully equal those of the European States named.

Improvement by Selection.

The possibility of improving plants by selection and breeding is well illustrated by work now under way by the U. S. Department of Agriculture. This has resulted in the discovery of a method of combating the movement through the soil of the tiny worms that attack the roots of plants, producing the so-called root knot disease. So far this method, which is one of selection of resistant strains, has been proved to be available only with the cow-pea, which furnishes the great forage and green fertilizer crop of the South especially, but there is good reason to suppose that it will also apply to such widely separated products as peaches and violets, as well as to an immense number of other plants which suffer more or less from the ravages of the worms. The investigation was begun by H. J. Webber, of the Division of Plant Industry, in regard to the cow-pea. Whole fields became incapable of producing a crop, leading to the belief that the soil must be exhausted, even though this seemed impossible with a plant which by its power of assimilating free nitrogen from the air, continually fertilized the land on which it grew. The roots would swell, develop knots and finally the plant would die. The department soon found that the trouble was due to minute—almost invisible—worms which moved through the soil much as trichinae move through pork, infesting the roots with which they come in contact. To arrest their progress seemed hopeless. The department, however, obtained specimens of every species of cow-pea—some 75 in number—on which it could lay its hands, and grew them all on the worst infested land it could find, this happening to be in South Carolina. Seventy-four of the species withered and died under the attacks of the worm; one, the Little Iron cow-pea, alone flourishing, immune to its attacks. This was last year; this year the test was repeated, the Little Iron cow-pea being grown under even more trying conditions, and again it withstood the test triumphantly. It is not yet certain that all local strains of the Little Iron pea will bear the test equally well, but it is certain that this particular strain will do so, and the department is now preparing to distribute the seed as widely as possible. Next year it hopes to have plenty of seed. The Little Iron pea is somewhat rare in this country, but farmers wishing to grow cow-peas are advised to try it whenever they can procure the seed, even though, as was said above, all local strains have not yet been proved immune.

Similar tests are now being made with a number of other plants which suffer from the root knot worms. A particular varieties or strains can be found that are immune they will be distributed as rapidly as possible; and if no variety can be found which fulfills the conditions, attempts will be made to develop one. Nearly always certain individuals in an infested crop will escape the ruin that overtakes the others; by saving the seed of these, planting them and again saving the seed of those that survive, a resistant variety can usually be developed in time. This will be done, if necessary.

Farmers' Institutes.

The following dates and assignments from the agricultural college have been arranged for farmers' institutes:
November 23, Meriden; Professor Otis and Miss Minis.
November 30, Rose Hill, Professors Otis and Walters.
December 2, Mulvane; Professors Otis and Walters.
December 3, Peck; Professors Otis and Walters.

AFTER BABY COMES.

The Disappointments of a Weak Mother.

After the baby's coming the weak mother often has her first great disappointment in not being able to nurse her child. Perhaps she is not strong enough to sustain more than her own life during the days of slow convalescence. Perhaps there is a lack of the secretions which make the baby's food. In any case she feels robbed of half the joy of her maternity because she can not nurse her child. And she envies the healthy woman who cares for it and who permits the mother to occasionally see and caress her own baby. If women would consider the matter they could hardly expect to be strong after the baby's coming if they were weak before. The woman who suffers during the prenatal period, who is nervous and sleepless and without appetite, is exhausting her



vitality before the hour of her trial, and when that time comes her very weakness increases her sufferings and prolongs them. It is no wonder, if, after the baby is born, the mother has no strength to nurse it. The one great necessity for happy motherhood is good health.

THE SECRET OF HEALTHY MOTHERHOOD lies largely in the proper preparation for the great physical strain and drain which women undergo at such a time. A proper preparation for maternity will keep the nerves tranquil and the temper even; it will encourage the appetite and give restful sleep. It will enable the mother to actively engage in her household duties until the time of the baby's advent, and give her strength to give her child.

Because it does all this and more women have named Dr. Pierce's Favorite Prescription "A God-send to mothers." "I take this opportunity of expressing my everlasting gratitude to you for the wonderful benefits I have received from the use of Dr. Pierce's Favorite Prescription and 'Golden Medical Discovery,'" writes Mrs. E. H. Newton, of Vanburen, Aroostook Co., Maine. "My baby was born in May, 1896, and for weeks after I was delirious. My friends did not know whether I would live or die. The doctor in attendance did not give much encouragement, and said that if I did get well I would never live through another such period. When I consulted you in April, 1899, I was in poor health; had been sick all winter, and to add to my trouble, was on the road to what the doctor said would end my days. I was almost discouraged; did not expect any help, but thought the end was only a matter of time, and—oh! my two poor, little, motherless children.

"It was in this condition that I began the use of your valuable medicine. On receipt of your letter of April 6th my husband purchased six bottles and I used it as you directed. When you wrote me words of encouragement on April 27th I had received no benefit from the medicine, but determined as a last resort to give it a fair trial. I am now taking the thirteenth and last bottle. I have a lovely baby girl three weeks old that weighed 11½ pounds at birth. My baby and I are enjoying perfect health, thanks to your wonderful medicines, to which I believe I owe my life. I can not find words to express my gratitude to you, and I hope you may long be spared to perform the good work in which you are now engaged."

MOTHERS PONDER THIS!

It is not you only who suffer when you are weak during the term of maternity, but your child must suffer also. It can have only what strength you can give. Your nervousness, fretfulness and fearfulness will leave a life-long impress upon your child, and while you in a few months will recover from the effects of the trial you have undergone, the baby's whole life will reflect the influence of those months of maternal misery.

If you can be a strong, healthy mother by any means, you owe it to your child to use those means at any cost. It is a matter of record that thousands of women to whom maternity was a menace and a misery have been made healthy, happy mothers by the use of Dr. Pierce's Favorite Prescription, which gives abundant strength and makes the baby's advent practically painless.

"I can not say too much for Dr. Pierce's Favorite Prescription," writes Mrs. S. E. Rose, of Big Otter, Clay Co., West Va. "I feel it my duty to say to all women who are suffering from female troubles that it is the best medicine on earth that they can use. I can not praise it too highly for the good it has done me.

I am the mother of five children, and have been as high as eight days in the doctor's hands, and never less than two days at any time until the last. Then I had used two bottles of Dr. Pierce's Favorite Prescription and was only two hours in the hands of the doctor."

REALLY WONDERFUL RESULTS.

Read the letter of Mrs. Rose carefully and you will realize why she can not praise "Favorite Prescription" too highly. The difference between one hundred and ninety-two hours suffering reduced to two hours by the use of "Favorite Prescription" explains her gratitude, but can not express it. It takes a woman and a mother to understand all that can be possible in one hundred and ninety-two hours of suffering maternity.

Dr. Pierce's Favorite Prescription not only gives the mother strength in the period of waiting, but it cures or prevents nausea, and makes the baby's advent practically painless. It is the best tonic and nerve for nursing mothers. It promotes the secretion of an abundance of nourishment for the child while giving strength to the mother. All alcoholic and stimulating medicines are particularly dangerous to nursing mothers, or in the period of convalescence which follows the baby's birth. "Favorite Prescription" contains no alcohol, and is entirely free from opium, cocaine and all other narcotics. It is a real nerve-feeding, body-building medicine.

FREE TO MOTHERS.

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

- December 4, Viola; Professors Otis and Walters.
 - December 5, Conway Springs; Professors Otis and Walters.
 - December 5 and 6, Hackney; Professors Cottrell and Mayo.
 - December 5 and 6, Burrton, Mrs. Calvin and Professor Dickens.
 - December 6, Belmont, Professors Otis and Walters.
 - December 7, Turon; Professors Otis and Walters.
 - December 9, Hazelton; Professors Otis and Willard.
 - December 10, Attica; Professors Otis and Willard.
 - December 11, Harper, Professors Otis and Willard.
 - December 12, Anthony; Professors Otis and Willard.
 - December 13, Argonia; Professors Otis and Willard.
 - December 14, Milan; Professors Otis and Willard.
- When writing advertisers please mention Kansas Farmer.

than the tables of composition and the German standards indicate.

SUMMARY.

The results obtained when wheat was fed at the various experiment stations show that, as a food for growing pigs, it is somewhat preferable to corn; but that for fattening pigs there is but little difference between wheat and corn.

The Flatt Sale a Great Success.

Owing to circumstances our own report of the great Flatt sale of imported Shorthorns, held at Chicago Union Stock Yards, was too late for use, and we herewith insert the very creditable report of the sale made by the Breeders Gazette.

Notwithstanding the hostility of those who view with a jealous eye the introduction of fresh blood into our Shorthorn herds, Mr. W. D. Flatt's auction sale of imported cattle, held at the Chicago Union Stock Yards sale pavilion last Thursday, was a huge success.

The great contest of the day was between Messrs. Baker and Geo. Ward for the possession of Lord Banff, the fight resulting in a sensational finish at \$5,100—the auction record price we believe for a Scotch-bred bull.

The crowning sensation of this red-letter day came, however, after the close of the sale in the shape of an announcement that the Messrs. Robbins had bought at private treaty, at a reputed price of \$7,500, the Highland prize bull Choice Goods, imported by Mr. Flatt and stabled with the sale cattle upon this occasion, but not catalogued.

Details of this extraordinary sale follow: COWS AND HEIFERS.

- Imp. Cicely, roan, calved Feb. 21, 1898; sire Prince Victor—J. G. Robbins & Sons, Horace, Ind. \$5,000
Imp. Empress 12th, red, calved May 19, 1897; sire Oxford Duke of Calthwaite 30th—W. J. & A. G. Baker, Oregon, Ill. 2,010

- May 26, 1893; sire British Flag; and c. c.—D. A. Teener..... 1,280
Lavender Rose 2d, roan, calved May 15, 1899; sire Prince of Sanquhar—George E. Ward, Hawarden, Iowa. 1,100
Imp. Lady Waterloo B. 2d, roan, calved Jan. 28, 1899; sire Merry Merlin—W. J. & A. G. Baker..... 1,100
Imp. Ascot Mayflower, roan, calved Jan. 1, 1899; sire Duke of Stratton—Coffman Bros., German Valley Ill. 1,080

BULLS.

- Lord Banff, roan, calved Jan. 10, 1899; sire Cap-a-Pie—George E. Ward..... 5,100
Vallant, roan, calved Nov. 10, 1896; sire Abbottsford—W. J. & A. G. Baker..... 1,675
Nestor of Dalmeny, roan, calved Feb. 24, 1900; sire Scottish Sailor—A. H. Krauskop, Richland Center, Wis. 805

International Cattle Sales.

During the International Live Stock Exposition next month at Chicago public sales of Herefords, Shorthorns, and Aberdeen-Angus will be held as announced in the following from an officer of each national association.

It is almost impossible to look over the list of cattle to be sold in the Hereford Association's combination sale at Chicago during the International Exposition without growing enthusiastic over the magnificent lot offered.

remaining as to this not being the greatest sale of Herefords ever conducted by the association, a catalogue will certainly settle them. Write C. R. Thomas, Secy., 225 West 12th Street, Kansas City, Mo., for one immediately.

Mr. B. O. Cowan, assistant secretary, writes: "Those who attend the International Show at Chicago, will have a rare opportunity to buy Shorthorns of elegant breeding and most excellent form. They have been carefully selected, and are much better than any previous offering made under the management of the association.

The sale of Aberdeen-Angus cattle during the International Exposition at Chicago must create widespread interest in Aberdeen-Angus breeding circles. No combination sale yet held of this great market-topping breed has presented such superior specimens as are promised for Dexter Park, Chicago, Tuesday and Wednesday afternoons, December 3 and 4.

The Armour-Funkhouser Sale.

The cattle contributed by Mr. Funkhouser are, in the main, from Hesiod 2d, or some of his descendants, and his offering may be regarded as distinctly a Funkhouser offering.

Recent Kansas City Shorthorn Sales.

Owing to a press of much special matter the reports of sales on hand for last week, now condensed, were crowded out, notably that of

B. O. COWAN'S DISPERSION SALE.

An event long to be remembered was the dispersion sale of B. O. Cowan, of View Point, Mo., who retires on account of his duties in connection with the American Shorthorn Breeders' Association.

Col. Geo. M. Casey did a very clever thing by Mr. Cowan in paying \$1,320 for May Violet 2d and calf at foot. Colonel Casey, it is known, has retired from the purchasing of any more cattle for the present, and this purchase was certainly a merited compliment to Mr. Cowan.

IN THE PARSONAGE

A Chapter from the Life of the Village Parson's Helpmate.

In every village the pastor's wife exerts an influence often as great as that of her husband. Needless to say, the responsibility of her position is great. Her approval or disapproval is not given without careful and conscientious consideration.

"In 1895," she says, "the birth of a child left me with complaints which caused me to suffer for several years. I was distressed after eating and was troubled with nausea and the formation of gas in my stomach.

"But you seem to have recovered marvelously," was suggested. "Yes, Mrs. Leech answered, "and I will tell you how it was brought about. I had read of cures effected by Dr. Williams' Pink Pills for Pale People and I decided to see what they would do for me.

Mrs. Leech suffered from the same troubles that are making thousands of women miserable. A few of the symptoms are severe headache, loss of appetite, exhaustion, pains in the groin or limbs, pale or sallow complexion, nervousness, offensive breath, etc.

fact, the imported division, as a whole, represents the best herds of England.

There are 4 imported bulls, 1 of which, Royal Hampton, is especially notable, on account of coming from an Albion sire, and from a Happy Hampton dam.

It has always been the custom of Mr. Armour to offer a Queen's heifer in his public sales. Queen Ideal, bred by her late Majesty, Queen Victoria, out of Firelight and by Arbitrator, will represent royalty in this event.

Mr. Armour's own breeding is represented by heifers and bulls from Kansas Lad, Beau Brummel, Jr., St. Louis, Aaron, Lord Prettyface, The Strand, Climax 4th, and the imported bull, Roderick, now in service with Scott & March.

As a summary, the Armour division represents Mr. Armour's history as a breeder and importer, and it was his own ambition to make this offering his greatest.

In opening the sale, Colonel Woods, the auctioneer, made a very important suggestion, one that should have favorable consideration at the annual meeting of the American Association.

Col. Geo. M. Casey did a very clever thing by Mr. Cowan in paying \$1,320 for May Violet 2d and calf at foot. Colonel Casey, it is known, has retired from the purchasing of any more cattle for the present, and this purchase was certainly a merited compliment to Mr. Cowan.

The celebrated John Tudge sire, Gold Box, is represented by 3 cows of unusual merit. The sires, Post Obit, Fairfax, Cecil, Happy Hampton, Truent, Keep-On, Gamecock, Tiptop, and other celebrated English sires are represented, and the bull Argon, sire of Majestic, the prize herd bull now in quarantine with the Armour importation, has several cows to his credit, in

The Home Circle.

MEN WHO WORK ON THE FARM.

Our hearts are filled with rapture, and we're likewise very brave, when marching with an army grand to liberate the slave; But when the military pageants have passed with pomp and charm, we remember all is furnished by men who work the farm.

When singing of the courage which our heroes never lack, we forget that every farmer bears a soldier on his back. Week in, week out the season through, he swings his good strong arm to furnish idle thousands with the products of the farm.

But for these toiling millions, who are nature's noblest sons, we'd have no fleet of battle-ships, no men behind the guns; we'd have no missionaries brave, the gospel to expound, no diplomats with wondrous tact, and wisdom most profound.

Our infant industries would close, prosperity take wings; we soon would miss the diner pail, of which the workman sings. The "boss," with plutocratic mien, would powerless be to harm, for his pockets would be empty, but for men who work the farm.

Our transportation companies, and the portly pictured trust, would cease their secret conclaves as the favored "upper crust;" there'd be no philanthropic gifts, suspicion to disarm, and every business door would close, but for men who work the farm.

The money for ship-subsidies, nobody could collect, and bills for pension increase would be objects of neglect. Our billion dollar congresses would cease to cause alarm, and the lobbyist would perish, but for men who work the farm.

Our kings and priests and presidents, with armies at their back, would very soon, like Uncle Paul, begin a weary "trek." The once inspiring spectacle would be devoid of charm, and they'd face the foe, starvation, but for men who work the farm.

—Harriet M. Cloz, Webster City, Iowa.

MEN WHO HAVE HELPED THE FARMER.

William Saunders.

(Born December 7, 1822; died September 11, 1900.)

"The art of agriculture is the parent and precursor of all arts, and its products the foundation of all wealth. The productions of the earth are subject to the influence of natural laws, invariable and indisputable; the amount produced will, consequently, be in proportion to the intelligence of the producer, and success will depend upon his knowledge of these laws and the proper application of their principles."

These words were put into the preamble of the constitution of the National Grange of the Patrons of Husbandry by William Saunders, the first master of that great farmers' organization. They expressed the philosophy of his life. In 1862, Mr. Saunders was appointed superintendent of the experimental gardens and grounds of the Department of Agriculture at Washington. In 1866 he prepared an article for Commissioner Newton's annual report, in which he declared that "there are certain fundamental principles, unchangeable in their nature, governing the growth of plants"; and in 1898 he began his last contribution to the Yearbook of the department with this brief statement of the same opinion: "Natural laws are constant and unvaried in their operation."

Mr. Saunders was born at St. Andrews, Scotland, and came of an old family of gardeners. He received a good general education, took a special course in horticulture at Edinburgh, and was engaged for several years in gardening before getting married and coming to the United States in 1848. His first work in the country of his adoption was done at New Haven, Connecticut. He immediately began writing for the agricultural and horticultural journals. In 1854 he established himself in the business of landscape gardening and horticulture at Germantown, Pennsylvania.

The fame of the young Scotchman grew apace. He was employed to lay out ornamental grounds in different cities and States. In 1859 he designed the Rose Hill Cemetery in Chicago, and Oak Ridge Cemetery at Springfield, Illinois, and was consulted in regard to the plans for the ornamentation of Central Park, New York. He had previously designed Fairmount Park, Philadelphia. In 1863 he planned the beautiful National Cemetery at Gettysburg; and on November 16th of that year had the satisfaction of explaining his drawings to President Lincoln and having

them approved by that great man. In his excellent sketch of Mr. Saunders, published in the Yearbook for 1900 of the Department of Agriculture, Mr. Geo. Wm. Hill says: "Mr. Saunders' connection with this splendid memorial was the result of a convention of governors of States at Altoona, Pa., where it was decided that this important work should be intrusted to him. It is a singular fact that, in spite of his being thus selected and of the immense amount of work which he performed in this connection, no provision was made at any time for any remuneration, even for his traveling expenses. From first to last the work was to him merely a labor of love."

Mr. Saunders served for many years as one of the park commissioners of the city of Washington. The terracing of the western front of the Capitol was mainly his work.

All this represents what may be called the beauty side of the work of Mr. Saunders. But he did vastly more than to design beautiful parks, cemeteries, and ornamental public and private grounds. He introduced many valuable plants into this country, the most valuable of them being the famous Washington Naval orange, which he imported from Brazil. Indeed, he may be said to have been the first systematic importer of foreign plants with a view to their general use. In outlining the objects and aims of the experimental gardens and grounds in 1862, he recommended as of first importance, "To procure and encourage the transmission of seeds, cuttings, bulbs, and plants from all sources, both foreign and domestic, for the purpose of testing their merits and adaptations in general, or for particular localities in this country." Next in order he proposed "To procure, by hybridizing and special culture, products of superior character to any now existing." No one needs to be an expert in agriculture or horticulture to see that this was the plan of a man of sound wisdom and unusual foresight. For thirty-eight years Mr. Saunders continued to develop the plans outlined in 1862.

When Mr. O. H. Kelley and his associates were planning the organization which became the grange, Mr. Saunders was consulted. They were enthusiasts, full of a great idea; and his practical wisdom and large experience were of great value in perfecting the organization. In the sketch already mentioned, Mr. Hill says: "Widely as Mr. Saunders is known among horticulturists, landscape gardeners, nurserymen, etc., it is probably as one of the founders of the grange that his name is most familiar to the farmers of the United States. As long ago as 1855, in a contribution to the American Farmer of Baltimore, Mr. Saunders outlined such an organization as the grange afterwards became. It was not, however, until 1867 that the first grange was finally organized at Washington."

For six years Mr. Saunders served as master of the National Grange, afterwards serving for a number of years on the executive committee. In the first difficult decade of the existence of the grange, no one of the Seven Founders was more faithful or more useful than William Saunders, and no one had greater influence in giving it stability and respectability. In later years he withdrew as much as possible from the responsibilities of the organization; but as long as he lived he was frequently consulted by those in positions of authority. He never lost interest in the grange, and its members never lost faith in him. All over the land are grange halls and farmhouses whose walls are adorned with his portrait. He was a man willing to spend himself for the good of agriculture, and his services will not be forgotten as long as the grange exists. D. W. WORKING, Denver, Colorado.

You should take advantage of our "Two for One" offer. It is the best offer we ever made.



Reading for the Farmer's Family.

MRS. MARY E. SHAW, BEFORE THE HOLTON FARMER'S INSTITUTE.

Probably no class, except some of the professionals, reads as much as do farmers. We people on the farm depend largely on reading for information, recreation, and amusement. Without reading the mind stagnates, the surrounding atmosphere becomes gloomy and dark. The American farmer must keep up with the times, and there are no means within our reach that will do so much toward making the rising generation ALERT, HONORABLE, EDUCATED AND REFINED as good well-chosen reading. The so-called farmer with nothing but brute force is a back number. The ideal farmer must be a brainy man and avail himself of all the new forces possible that tend toward elevating and bringing about a more

PROGRESSIVE AND ECONOMIC FARMING. His motto must be, "Good farming, clear thinking, right living." On entering a home we can have a very good idea of the intelligence of the inmates by the reading matter seen on tables and shelves. Persons of limited education may acquire a broad knowledge of the world, of people, and things, keep up with the times, and, in fact, be well educated, all from home reading, if rightly studies.

KNOWLEDGE IS THE PARENT OF WISDOM, and wisdom is the parent of all true and right living. When we look back over the past, we are compelled to admit that most of our mistakes and failures are due to ignorance. Had we known enough of the laws that govern life our course in many instances, would have been different. In the vicissitudes of life we do not hear people complain that they know too much. Rather is there a vain struggle after that which will illumine the path and show its sun and shadow. THE IMMENSE VALUE OF THE TIME EMPLOYED IN READING,

if used judiciously, would amaze one. We may boast of the number of papers we take, and try to crowd in a little more reading without missing any of the manual duties of life, we may flatter ourselves into the belief that we have a just and righteous appreciation of all the provinces of knowledge; that encompassed in our brain are all the things worth the knowing. Such reading may be done for recreation, possibly, but of what value is it to us? Are we better fitted to perform the duties of life devolving upon us for having read them? We have gathered a few facts, all interesting, no doubt, but so disjointed and disconnected are they that they are useless to us—only mental lumber.

READ TO A PURPOSE and do not be drawn from that purpose. Think well of what you have read, no so much to memorize what the writer has said as to assimilate what appeals to you. The main part of the reading should be solid. Choose writers with a chaste and pure style and you will derive a joy and satisfaction; you will acquire a feeling of strength and self-reliance beyond calculation. This, of course, necessitates the use of books—the best books—those on which time has set its seal and approval. We farmers' families have not the time for any other kind, life is too short for any but the best.

While many love books and enjoy reading, there are doubtless others who care nothing for them and thus have an idea that a library of any kind in a farm home is a useless extravagance. BOOKS ARE FOOD FOR THE MIND.

They are as necessary to the proper mental development of man as are bread and milk to meet his physical wants.

The reading habit is largely acquired and it is incumbent upon the farmer who has a young family growing up around him to furnish them with plenty of reading matter and that of the right kind. One of the most important steps in the education of our children is the cultivation of a taste for good reading, for if you allow a child to read nothing

but trashy reading, it will in after years be nothing but a shallow, trashy thinker; while, if interested in

GOOD BOOKS AND HAVE PLENTY OF THEM, the question of keeping the boy on the farm or from bad company is half solved. Who can expect a boy to love the farm when all the literature he reads makes sport of the "hayseed" and paints such rosy pictures of society life? One may easily notice the preponderance of fiction read over all other classes of literature. To many, a

GOOD BOOK means some story with entirely impossible characters. No wonder there are so many ruined homes, when such false and unnatural ideas of life are entertained; no wonder so many homes are blighted with drunkenness and dissipation, when the years that should have been given to the preparation for making life full of true happiness is consumed in an absorption of some false hero or heroine.

BY ALL MEANS READ SOME FICTION, but let it be worthy the name, that which is true to life, and which speaks sympathetically and truly of the joys and sorrows which we all know, and we are better for the reading. All of us should try to devote some part of the long winter evenings to reading. In the summer we can not have so much time. In every well regulated household the time for reading will be found pleasant and profitable. The home should be of the first importance in

CHARACTER BUILDING, and did every home give the instruction and influence it should, our progress would be much more marked. The books we read are potent factors in character building. Many of the books which fall into children's hands give such distorted views of life, or teach such a low type of morality, that we shudder when we read them. Aim always to supply the children with

READING THAT WILL CONTRIBUTE TO A HIGHER, NOBLER LIFE, and that will give them true ideas of life.

We see a thousand evil practices creeping into our public and private life. They are the outcome of years of neglect, indifference, and incapacity. We may not be able to readjust our own lives to meet the inevitable consequences. Too late the eternal justice of things, that certain causes are followed by certain results, just as surely as day succeeds night, but we may educate our children and give to them so true a gift that they may overcome the evils that have been foisted on them and escape sowing those seeds that will yield a harvest of tares.

With the exception of the READING WHICH RELATES DIRECTLY TO THE MANAGEMENT OF THE FARM, that for the farmer's families should be very much the same as for those of other callings, a diversified assortment of good books—books that are clean morally and at the same time instructive. There should be as wide a range as possible of the world's best productions in fiction, poetry, essays, history, and natural science, a good dictionary, a supply of good reference books, and, in fact, any books of interest to the whole family. The most necessary books should be purchased first and additions made from time to time as judgment dictates, and means permit. Only whatever you buy,

KEEP OUT THE TRASH. Let the reading be clean and wholesome, whether you buy one book or a thousand. The humblest home should contain a shelf of good books as an essential part of its furnishing, and no promising investment in land or stock, no fancied need in dress or house gear should stand in the way of adding to it every year.

Tenderness or aching in the small of the back is a serious symptom. The kidneys are suffering. Take Prickly Ash Bitters at once. It is a reliable kidney remedy and system regulator and will cure the trouble before it develops its dangerous stage.

The Young Folks.

SIGNS OF AUTUMN.

Do you seek for signs of autumn? They are plainly to be seen:
First there comes a sense of dimness to the summer's brilliant green,
With a shade of brown and crimson where the woodland shadows play,
And a tinge of gold and purple, growing brighter day by day.

In the woods the nuts are falling, lying thick beneath the trees,
And the cornfields' waving banners rustle in the passing breeze;
On the meadows in the morning the mist lies cold and white,
And the twilight shadows hasten when the sun drops out of sight.

Across the russet uplands the quails go whizzing by,
From the thicket in the evening comes the coon's sad quavering cry;
Round the lakes the sportsmen gather, till the air with smoke is blue,
And the shots they fire are many, but the ducks they kill are few.

Still that don't make any difference if you go by what they say,
For they reckon in the wounded and the ones that fly away;
And the loafers all acknowledge when they gather at the store
That the fisher isn't in it when the hunter has the floor.

There is silence in the household where commotion used to rule,
And the place seems strange and lonesome, for the children are in school.
While the small boy's furtive glances, if his eye you chance to catch,
Are quite apt to be directed to the neighbor's melon patch.

There's another sign of autumn, you can bet your boots on that,
'Tis the total disappearance of the gorgeous paper hat;
And the passing of the shirt-waist is a sure and certain sign
That in nature's operations the sun has crossed the line.

Here's another indication, let him who dares deny,
Just as sure as you are living we have had a pumpkin pie!
Is the list of signs imperfect? Is there anything it lacks?
On the table there is chicken, there are feathers on the ax!

—John Hellier.

Our Nation's Future.

EDWARD EVERETT HALE.

A century and more ago, the Academy of Lyons offered a prize for the best essay to be submitted to them on the advantages or disadvantages which had come to the world from Columbus' discovery of America. The essay was to be published in honor of the third Centennial of the Discovery, October 11, 1792.

A good many people wrote. A New Englander wrote in Latin, and he went so far as to explain what he would do with the money awarded him. Alas! he did not win the prize. It was awarded to an Abbe Genty, rather a celebrated literary man of that day, whom no one now seems to remember.

The Abbe had a sad set of grievances to charge against America—he thought of diseases which America had introduced, of cruelties with which Spanish invasions and their history were crowded—and, in particular, he observed that the whole system of government and commerce in the Old World had been tumbled bottom upward—and had gone to pieces. But the French revolution was just before them. They were all hopeful. The Abbe wanted to say the best he could, and he wound up his essay by saying that there were 13 States, which had just at that time challenged the attention of the world. The most northerly was New Hampshire, the most southerly was Georgia, and they extended 1,000 or 2,000 miles along the coast of the Atlantic. One or two of them ran back inland 100 or 200 miles. And the Abbe expressed the hope, as he wound up his book, that before another century passed, these 13 States might give such lessons to the world, that the world, even with its largest W, would not be sorry for the discovery of America.

He had already said that the world owed "Jesuit's Bark" or Cinchona to America. He hoped that in the next century she might have something more to give. And he thought that this something might come, would come from the new nation called the United States of America.

I am fond of calling this nation "The United-States with a hyphen."

Thirteen years after, Alexis de Tocqueville was born in Paris. In 1831, Louis Philippe's government sent him to this very United-States. He went back and published "Democracy in America" in 1835. Among a thousand other excellent observations he stated in detail the rate at which emigration had moved westward from the Atlantic to the valley of the Great River, Mississippi. He observed that the average was 17 miles a year.

That emigration went on at almost

exactly that rate for a hundred years from the time of the Abbe's writing, which was fifty years after De Tocqueville wrote. Seventeen hundred miles, the rate for a century, is, as the bird flies, somewhere in the State of Colorado—so far west from Philadelphia, which was about the middle meridian of the United States in 1792. Meanwhile, in 1849, America began to plant herself on the western shores of the continent and another wave of emigration worked eastward from that side. Its rate was not very far from that of De Tocqueville, and so it would be fair to say that in the nineties of this century this curious process of emigration, which De Tocqueville studied with so much interest and precision, had achieved its work. The two waves, the western wave and the eastern wave, had met, and the United States had felt its own pulse in every meridian of its sway.

There is a certain interest in recalling these historical recollections now that we begin on another century, and ask what is to be the future of the United States as other Abbes and other De Tocquevilles shall study it. It is somewhat interesting to observe, as we write, that we are just now, (1899) in the thousandth year of modern civilization. Mr. James Boyce says that the birthday of modern civilization was the 25th of December, 899, when Otto was crowned in Rome. We people of English blood are quite as apt to remember that the year 899 marked the noblest period of Alfred's reign, for we are right in connecting Alfred with the noblest traditions of our civil liberties.

Observing then that the Abbe was quite right in his forecast for his century, it is safe to follow his rule. He saw that the great victory of the century was to be achieved by the manhood of the people who lived in it. He saw that the government of the future was to be a government of the people, for the people, by the people. He saw that open promotion, such as makes an Abraham Lincoln of a rail-splitter, such as makes Edison out of a messenger-boy, gives to a nation success as no more complicated system of society has ever given it.

The victories of the next century will be moral victories. In the schools we shall have more and more education, where we now are only half satisfied when the time is given to instruction. The schools will try to make new men and women out of boys and girls, and will not be satisfied in teaching the fact that there are 8 quarts in a peck and 4 quarts in a gallon.

Again, the country will place a round peg in a round hole, and a square peg in a square hole. It will not permit the packing together of people in cellars that they may make lace for grand ladies, while the most beautiful regions of the world are spread out to the sky of God, with no inhabitants but gophers and wildcats. It will have easy methods of transfer, so that when work is wanted work can be done, though it should require the movement of the workmen backward and forward for thousands of miles. When the conquerors in war march soldiers that they may win a battle, the conquerors of peace will move their forces to and fro for the easy victories of the harvest.

The century will abolish labor and substitute work. Work is the power of spirit over matter; labor is the drudgery or toil by which a man gives his muscular strength only to his task, as an ox or a mule gives his when he is harnessed. George Morrison is the authority for saying that by the end of another century the unconscious forces

will be so subdivided that no man or woman in a civilized country will undertake any toil excepting for the pleasure of that toil; as a man swims in the water because he wants to, as a man beats the record in running because he wants to, a man in 1899 shall hoe potatoes if he wants to, but if not, no.

This means that the twentieth century is to be a century of peace. It means that the modern forms of war will go out of fashion, slowly but surely. As the fashions of the tilting field have disappeared, so that we can hardly reproduce them on a holiday; as the fashions of the phalanx of Alexander and the legion of Cæsar have disappeared, so the modern forms of war will disappear, as Galen's prescriptions or the surgery of his time has disappeared. This will come, as He shall reign whose right it is to reign.

Electricity in Mountain Railroad.

It is wholly within the range of possibility that electricity generated by water-power now running to waste, may be used to operate the mountain division of some of our great western railroads. The availability of cheap water-power, the relatively high cost of coal, and other reasons have led to a serious consideration of a change of motive power. Some of the roads are already reported to be planning for the use of electricity as a partial substitute for coal. On certain portions of the lines where the roads cross the mountains with heavy grades, each train requires the assistance of a "helper" engine in addition to the regular engines, and as all the mountain trains on these divisions are hauled by the big mountain climbing engines the coal consumption is enormous, amounting sometimes to as much as 250 tons a day, or nearly 1,000,000 tons a year. In addition to the saving of coal the discomforts of transit through the long tunnels and snow sheds on the route would be greatly lessened by the avoidance of smoke and coal gas. The proposed use of electric power under these conditions is an interesting comment on the growing value of the country's smaller streams. This is especially true in the West, where first as supply and in mining operations, then for irrigation, and finally for cheap water-power, the rivers are proving themselves a most valuable natural resource. So fully is this understood that for several years the government has been engaged in a systematic study of the inland waters through the United States Geological Survey, which is making measurements and collecting data for future use in their development.

A River that Disappears.

In the work of stream measurement which is being carried on by the Division of the United States Geological Survey as a part of the investigation of the country's water resources, interesting conditions are often met with, especially in the West, where the peculiarities of climate produce many surprising phenomena. Mr. C. T. Prall, one of the hydrographers of the survey, has recently reported the existence of a stream whose water, in the summer season, entirely vanishes midway in its course. The river is known as the Dry Fork, a small stream in northwestern Utah, tributary to Ashley Creek. About

14 miles from its source in the Uinta Mountains this stream reaches a large basin or sink, whose walls are from 75 to 100 feet high, except on the up stream side. The pool is apparently bottomless, and the water in it revolves with a slow circular motion, caused either by the incoming waters, or by suction from below, or both. The only visible outlet to this pool is a narrow rock channel from which a little water flows, but is soon lost to sight a few hundred yards below. A measurement of the main stream just above the pool showed a volume of 96 cubic feet of water passing each second, but this entire flow disappears in the basin, and the stream bed for miles below is perfectly dry. About 7 miles below this interesting pool were found several springs, one of them in a large hole 25 feet in diameter and 20 feet deep, which at times are empty and again filled with water. It is thought that the water which disappears in the upper pool flows underground deep below in the gravels, which form the bed of the stream, and in times of rainfall heavier than usual, appears again in part in the large springs below.

Lady Florence Dixie, the most celebrated shot among Englishwomen, is no longer a Nimrod, and she has published a pamphlet called "The Horror of Sports," in which she says: "Many a keen sportsman will acknowledge that a feeling of self-reproach has at times come over him as he has stood by the dying victim of his skill. I know that it has confronted me many and many a time. I have bent over my fallen game and seen the beautiful eye of the deer grow dim. I have ended with a sharp yet merciful knife the dying sufferings of creatures that have never harmed me. I, too, have witnessed the angry, defiant glare of the wild beast's fading sight as death deprived him of the power to wreck his vengeance on the human being that has taken his free life. The memory of those scenes brings no pleasure to my mind; on the contrary, it haunts me with a cruel reproach, and I wish that I had never done those deeds of skill and cruelty." Lady Florence Dixie has killed lions in Africa, gazelles in Arabia; bears in the Rockies, and the wild beasts of Patagonia.

The larvæ of flies, bees, beetles, and other insects have been placed in the wooden half of a box having one section of lead and another of wood, and on exposure to Roentgen rays they have been greatly excited, invariably retreating to the leaden part of the box. With blind larvæ the results were the same, showing that the exciting rays were perceived through the nerves of the skin.

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SUBSCRIPTION PRICE: \$1.00 A YEAR.

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



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BLOCKS OF TWO.

The regular subscription price for the KANSAS FARMER is one dollar a year. That it is worth the money is attested by the fact that thousands have for many years been paying the price and found it profitable.

According to the Havana correspondent of the Louisiana Planter and Sugar Manufacturer Cuban sugar of 86° test of the last season's crop was sold at 1.48 cents per pound.

The largest wheat ranch in the world has been purchased by William Ogden, of McLean County, Illinois. The property consists of 180,000 acres of land in western Kansas, and was owned by 15 different men.

The thirtieth annual meeting of the Kansas State Grange, Order of Patrons of Husbandry, will be held in Representative Hall, Topeka, December 10, 11, and 12, 1901.

E. M. WILLIAMS DEAD.

E. M. Williams, who was manager of G. M. Casey's big Shorthorn breeding farm in Henry County, died at the Sisters' Hospital on November 13. He was 53 years old and a native of Maryland.

His death was due to pneumonia which followed a cold. Mr. Williams lived for many years at Eureka, Kans., where he and his brother were successful breeders of Shorthorn cattle, which they frequently entered in the show ring as invariable winners.

Mr. Williams was considered the best posted man of the entire fraternity on Shorthorn lore and his untimely death is a positive loss to the American Shorthorn industry.

A NOTED WRITER ON LIVE STOCK DEAD.

John McDiarmid died at Des Moines, Iowa, of heart failure on the night of November 6. Mr. McDiarmid came to this country about 17 years ago from the Highlands of Scotland, where he was born.

He was a writer on the editorial staff of the Iowa Homestead. His place will be hard to fill.

WILL BUY IMPROVED STOCK.

A peculiar condition of things exist in what is known among live stock men as the "Kansas City territory." This territory embraces Kansas, Oklahoma, Indian Territory, western Missouri and southern Nebraska especially, and is the territory from which a considerable amount of the total live stock business of the country is supplied.

The later rains of the season made forage and roughness plentiful and with Kaffir-corn, wheat and alfalfa the food for stock is more than abundant for the number of cattle in the country.

The same facts are true in regard to hogs, and the result of this general condition is that both classes of stock are in demand for restocking purposes. As a rule the farmers are providing for the future by securing a much better class of stock for the foundation of their herds, and breeders are busy in supplying the demands of farmers whom necessity or an error in judgment has compelled to sell even of their young and breeding animals.

This so-called Kansas City territory is a magnificent country, the prosperity of which is unequalled, probably, by any like scope of farming land in the world, and the basis of this prosperity has always been and must continue to be the live stock. With this scarcity of available young stock time must elapse before the best results can be in the hands of the farmer, and delay in restocking and in securing good foundation blood will only serve to delay the results which all seek to attain.

be "roughed" through, and by securing good blood which is always the cheapest because it is the best. While it is a fact, as shown by the records of the past two years, that breeders and farmers in this territory, which, by the way, is the special field of the KANSAS FARMER, are the best and most numerous buyers of all classes of improved stock to be found in any portion of agricultural America, it is also true that under the present somewhat abnormal conditions the activity in live stock circles will probably be abnormal also and the farmer who "arrives" will be the man who begins at once.

THE GREATER INTERNATIONAL SHOW.

We present an illustration showing something of the new buildings for the Greater International Live Stock Exposition for 1901, to be held at Chicago during the first week in December.

The entries are now all in for the different classes of stock and number 2,900, against 1,145 last year. It was thought last year that it was the top-notch live stock show of the world, but it is very evident that it will be eclipsed by the show this year.

There will be 280 Shorthorns, 182 Herefords, 127 Aberdeen-Angus, 105 Galloways, 83 Red Polls, 48 Polled Durhams, and 33 Devon cattle in the breeding division. In the fat cattle division, 13 Herefords, 33 Shorthorns, 19 Aberdeen-Angus, 8 Galloways, 7 Red Polls, 5 Devons, and 122 grades and crosses.

In the horse department there will be 109 Percherons, 81 Clydesdales, 45 Belgians, 53 Shires, and 2 Suffolks.

The swine section will contain 188 Poland-Chinas, 165 Berkshires, 49 Duroc-Jerseys, 92 Chester Whites, 23 Tamworths, 26 Large Yorkshires, 45 of other breeds, and 29 fat swine.

In the sheep department there will be 114 Shropshires, 35 Southdowns, 33 Oxford, 86 Hampshire Downs, 29 Dorsets, 23 Cheviots, 19 Cotswolds, 87 Lincoln, 41 Leicesters, and 69 Ramboulllets. The fat sheep, of pure breeds 135, grades and crosses 94.

Big with promise looms the International Live Stock Exposition of 1901, says the Breeder's Gazette. The all-conquering power of unity of effort has never been so thoroughly illustrated in this field as in the course of this exposition. Allied forces, never before harnessed together, have filled into the collar with a strength and willingness that move mountains.

The stockman who misses it will be unfortunate. In the figuring of the year's expenses the trip to Chicago should be included, not as a mere pastime, not as a recreation or a pleasure visit, but as a part of a stockman's investment in equipment. He can purchase "equipment" at this show much more valuable than his tangible collection of implements.

It will be an international event in fact as well as in name. The foreign delegations at Washington are to be represented and every mail brings announcements of distinguished old country breeders arranging to be present.

GASOLINE FARMING.

Time was when what is now known as the great wheat belt of Kansas was but a treeless waste of short-grass country. Now it is one of the fairest sights man ever looked upon and is even better timbered by art than some portions of the State within the "timber belt" have been by nature.

who keep on doing them. For instance, a certain young man—a graduate of the State agricultural college, of some years' standing—became possessed of a farm in Reno County. This farm was apparently composed of pure sand but it had the advantage of being on the Arkansas River bottom, within easy reach of water and close to Hutchinson, a good market.

Here is how the young man did it. He bought a Fairbanks-Morse gasoline engine and a Fairbanks No. 2 1/2 centrifugal pump with a capacity of 450 to 500 gallons per minute. He drove three 2-inch well points into the water-bearing sand and coupled the pump on.

One season's experience, however, convinced him that he was still unable to cover as large a territory with the water as he desired for the reason that his pump did not give sufficient "head." He then mounted his engine and pump so as to make them portable and made some other wells at different points by simply digging to quick sand and then setting a sand pump at work in a suitable pipe and pumping out a well in about twenty minutes.

The Fairbanks-Morse engine is well nigh perfect for any purpose for which it can be used. His habit, when pumping for irrigation purposes, is to start the engine at work in the morning and then go about his business for the day. The writer has been present on the farm when the owner started the engine at 7 a. m. and did not go near it until he shut it off at dark.

The owner of this farm is Mr. Frank L. Parker, who lives 1 1/2 miles south of the State Reformatory at Hutchinson, Kansas, and, as he can dig a new well, move and set up his engine and have the water running all inside of two hours time, and as he does not need to water any given tract more than twice each year, he proposes to be entirely independent of the weather man next year and has prepared to water 10 acres of peach orchard, 4 acres of strawberries, 3 acres of celery, 12 acres of sweet potatoes, 3 acres of early cabbage, and 4 acres of late cabbage, besides other crops.

This experiment is an interesting one both for its crop results and for the test of the famous Fairbanks-Morse gasoline engine, and the KANSAS FARMER proposes to keep its readers posted to results and details.

PERCHERONS AT THE AGRICULTURAL COLLEGE.

Regents McDowell and Satterthwaite have purchased for the Kansas State Agricultural College of Singmaster & Sons, Keota, Iowa, 2 pure-bred Percheron mares—Keota Brillante 17155 and Keota Flora 18884. These mares weigh 2,000 pounds each, are valued at \$2,000, and make what is probably the best draft team west of the Missouri River.

These are the first good horses owned by the college and make the beginning of what it is hoped will soon become a herd containing good representatives of all the leading breeds of draft and driving horses.

Horsemen will be greatly interested in the pedigrees of these superb mares, which are as follows:

Keota Brillante 17155. Black; star, foaled June 1892; bred by Singmaster & Sons, Keota, Iowa; got by Francillon 9842 (10428) by Chevi 5079 (2423), by Bayard, by Duke de Chartres 162 (721), by Coco 2d (714), by Vieux-Chaslin (713), by Coco (712), by Mignon (715), by Jeon-le-Blanc (739). Dam, Daisy 9817 (13989) by Mont-

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The soil in his locality is a sandy loam, much nearer the ideal peanut soil than either of the soils planted by the experiment station. The principal facts of his report are: Ground plowed and peanuts planted May 17, rows 3 feet and 4 inches apart, hills 3 feet apart. First appearance of plants, May 20. Cultivated four times, hoed three times. Crop of 400 hills dug October 10, yielding 8 bushels of marketable nuts. This was a yield of about 87 bushels per acre, considerably above the average yield. Mr. Webb had 15 acres of peanuts which yielded slightly less than 30 bushels per acre. He accounted for the less yield by the fact that as grasshoppers were numerous he let many weeds grow among the peanuts. In good soil and with favorable seasons, from 50 to 100 bushels is considered a satisfactory crop.

The cuts of the individual plants do not show the difference in the growth of the varieties, as the Virginia vine had to be bunched closely for photographing, but it will be noticed that the nuts are borne along the stems for a much greater distance than are the Spanish, which cluster thickly about the tap-root. The yields of the plants photographed were: Virginia, 177 nuts, measuring 3 pints; Spanish, 272 nuts, measuring 2 pints. As the kernels of the Spanish more nearly filled the pods, the weight is slightly greater for the same measure of nuts.

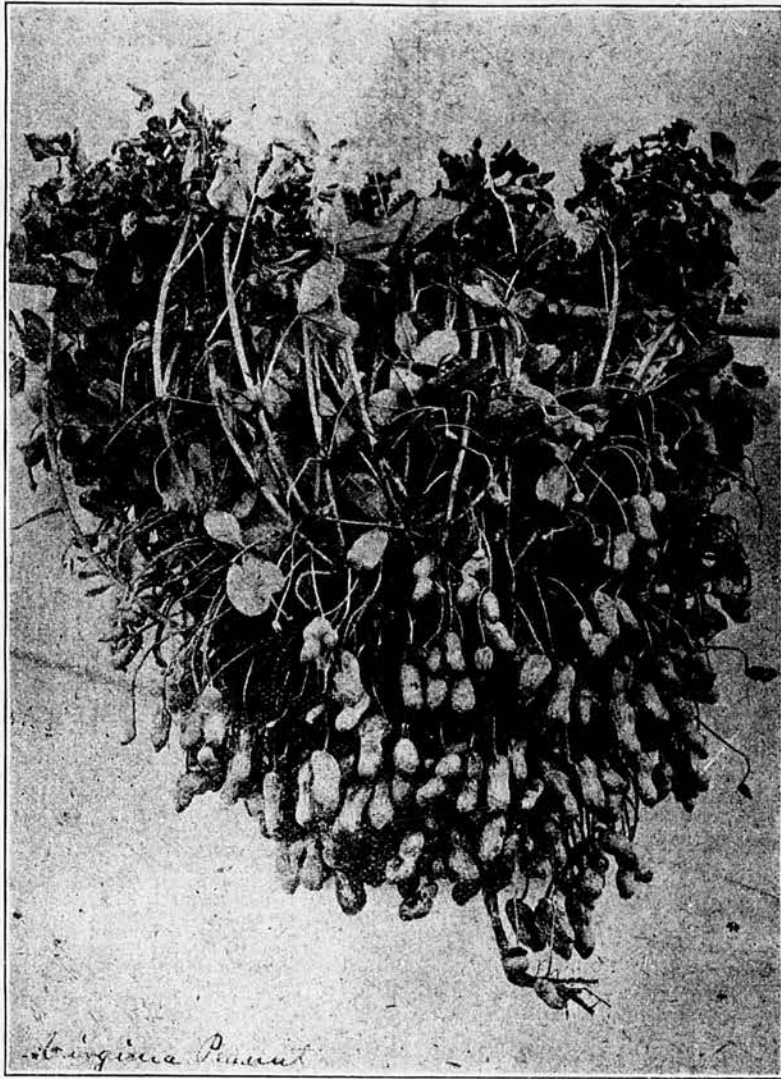
The requisites for successful growing are: A soil that may be kept in a good state of cultivation; planting after the soil is warm, covering about 2 inches; good culture until the vines cover the greater part of the ground, taking care not to disturb the newly set pod.

The Egg-Plant Crop.

The popularity of the egg-plant as a culinary article has been growing quite rapidly during the past ten years, and yet a great many people in the United States have never yet as much as tasted it. Few of those whom I have induced to give it a trial on their tables have failed to like it or to wish for more. Most of them claim that they find the egg-plant one of the finest dishes ever put before them (provided that it was properly prepared). I can not but believe that there is a field for further expansion and that before long there will be sale for 10 of these eggs where 1 is sold now. The trade is mostly in the green-grocery lands and we must look mostly to them for buying our crops at comparatively small figures. The Italian fruit-venders around here usually pick up any surplus which the grower may be willing to part with at a low figure. Grocers, however, usually hold their retail prices up to a high figure, 15 cents being frequently asked for an egg of medium size. The plants must

Purple (Improved New York Purple, Thornless New York Purple). When full-grown it reaches a very large size. I have one specimen, saved for seed purposes, which measures 27 inches around each of the two largest dimensions, and weighs over 10 pounds. But aside from the question of profit I can never say enough about the egg-plant as a thing of joy and beauty. The plant is highly ornamental and an object of

and for soils that are fairly rich enough to be classed as good garden soil I would consider 3 feet square for each plant just about right. It may be a little trouble for the inexperienced to get and clean the seed of the egg-plant. I cut the egg selected for seed through the middle, dig out the flesh which holds the seeds, put this into a bucket or other dish, mash it with a stick of wood the best I can, and finally turn



particular interest to garden and flower lovers, especially when in full fruit, with 4 or 5, or even more half-grown eggs hanging to them, and the whole plant so evidently tropical in its whole appearance and character. The one thing that bothers me, however, is to give an answer to the question, "How far apart shall the plants be set?" I invariably select the warmest and richest spot for

water into the dish. The heavy seeds sink to the bottom, the lighter pulp stays on top and can be removed or floated off, until only the seeds remain. These are then strained out and dried. —T. Greiner, in Farm and Fireside.

The Storing of Apples in Barrels.

As far as the storing of fall fruit goes it is mostly a case of keeping windows



Virginia Peanut Vines.

be started early under glass in a warm spot, be set in rich soil and given high culture, when the yield will be very large. I believe I get as much as half a bushel of eggs from a single plant. On a recent trip through the county I found a good-sized patch, and the grower who sold them at wholesale for 50 cents a bushel thought the crop paid fairly well. Practically there is but one variety used in these sections for market purposes, namely, the New York

my egg-plants, and usually crowd my plants to such an extent that the whole ground is covered with foliage. I make the rows 2 feet apart (rather less than more) and set the plants 2 feet and perhaps a half more apart in the rows. This gives an enormous crop of eggs for the space occupied; but people who look for convenience and speed in gathering the crop will do well to set plants in soil of this fertility at least 6 inches further apart each way. On an average

and ventilators open at night or whenever it is cool, and to keep them closed and darkened during the day, but when it comes to the storing of our best winter fruit it is a question of far more importance and one not so easily solved.

The greatest difficulty we have is to keep our winter apples from shrinking and especially since we had our cellar floor cemented, although no water ever stood in the cellar before, it seems to

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After years of patient study, and delving into the dusty record of the past, as well as following modern experiments in the realms of medical science, Dr. James W. Kidd, 87 Baites Building, Fort Wayne, Ind., makes the startling announcement



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that he has surely discovered the elixir of life. That he is able with the aid of a mysterious compound, known only to himself, produced as a result of the years he has spent in searching for this precious life-giving boon, to cure any and every disease that is known to the human body. There is no doubt of the doctor's earnestness in making his claim and the remarkable cures that he is daily effecting seems to bear him out very strongly. His theory which he advances is one of reason and based on sound experience in a medical practice of many years. It costs nothing to try his remarkable "Elixir of Life," as he calls it, for he sends it free, to any one who is a sufferer, in sufficient quantities to convince of its ability to cure, so there is absolutely no risk to run. Some of the cures cited are very remarkable, and but for reliable witnesses would hardly be credited. The lame have thrown away crutches and walked about after two or three trials of the remedy. The sick, given up by home doctors, have been restored to their families and friends in perfect health. Rheumatism, neuralgia, stomach, heart, liver, kidney, blood, and skin diseases and bladder troubles disappear as by magic. Headaches, backaches, nervousness, fevers, consumption, coughs, colds, asthma, catarrh, bronchitis, and all affections of the throat, lungs, or any vital organs are easily overcome in a space of time that is simply marvelous.

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majority of the farmers in Kansas on account of the smaller amount of labor required than for butter-making. In handling milk for the creamery a small amount of money and a great deal of care is required. The cow's udder should be brushed and dampened with a cloth or sponge before milking to prevent the dirt and hair from falling into the bucket. After being drawn the milk should be taken from the stable and strained and cooled, as warm milk is always an absorber of gasses.

Night's and morning's milk should not be mixed until cool or just before starting for the creamery; the cans should be well filled to prevent churning and should be covered with wet sacks or a canvas to prevent heating and souring on the road.

To Mark the International Boundary.

The boundary between the United States and Canada, from the crest of the Rocky Mountains to the Pacific Ocean, has never been distinctly marked. The original treaty, signed in 1846, which established the boundary at the 49th parallel, did not provide for its immediate survey over this section. This was due partly to the extreme difficulty and even danger of conducting surveys in this region at the time, and partly to the prevailing opinion that so rough and distant a region would be settled only in a very remote future. This view still prevailed to a certain extent when in 1857 to 1861 surveys were actually carried out, for it was then agreed by the commissions representing both governments that it was inexpedient to incur the expense of locating and marking the boundary continuously because, as they say in their official report, the country would not be occupied for generations to come. These commissions did, however, determine the 49th parallel by astronomical observations, and established monuments accordingly on each large stream and every important trail that crossed the boundary.

Exploration and settlement have far outstripped the expectations entertained forty odd years ago; in those sections where valuable mineral deposits are supposed to exist the location of the boundary has for several years past been a question of more or less interesting dispute. The old cuttings and monuments have become obscured, and in some instances rumor has with purpose circulated false reports that the monuments placed by the old commission were incorrect. Canada and the United States are both interested in having the line precisely fixed, and steps are being taken toward the establishment of a commission whose determination shall be final. In the meantime provisional but accurate work has been done by the joint party of the Geological and Coast and Geodetic Surveys to re-determine the 49th parallel in the sharply disputed sections, while 3 other parties of the Geological Survey have reconnoitered the entire stretch of 410 miles from the crest of the Rockies to the Pacific Coast.

The line traversed 2 mountain districts, the Rocky Mountains and the Cascades and an intermediate country which though hilly is not so high. The mountains carry heavy forests, and along the line are difficult of access because the trails, once kept open by the Indians, are now greatly obstructed by fallen timber. The surveys frequently find the game trails worn by bear and deer the easiest routes to follow. The extreme eastern range of the Rockies is of alpine character, and glaciers and precipices lie across the boundary line. The work of the parties has been arduous, but has been successfully carried out, and a report will shortly be made through the Interior Department for the information of our State Department.

A Remarkable Prediction.

The dastardly assassination of President McKinley calls attention to the remarkable prophecies of Mlle. Couesdon, of Paris, who claims to be the mouthpiece of the Arch-Angel Gabriel, and who became famous by foretelling the dreadful Bazaar fire; the sudden death of President Felix Faure, and the disturbances caused by the Dreyfus case. The correspondent who reported the prophecy to the Chicago Tribune in April, 1899, said:

"The fire of the Bazaar de la Charite, which was on the Champs Elysees, occurred in May, 1897, exactly a year after the prophecy.

"Mlle. Couesdon has within the past month enjoyed a tremendous renewal of popularity owing to the fulfillment of her prediction that President Faure would die suddenly.

"In the course of a conversation with a correspondent she declared that she had no intention of marrying, as had

been reported, because in that case she would lose her gift of prophecy.

"When I visited Mlle. Couesdon I found her in a highly prophetic mood. I asked her what she foresaw for the future of the United States. After a time she closed her eyes and said:

"It will not be easy.
 "War will come.
 "Again it will come.
 "It will not be easy.
 "I see a great day coming—a great day for America.

"All America, North and South, under one government will be united.

"The great American republic will stretch from pole to pole.

"The day is not far distant in the line of a nation.

"Great statesmen will strive to bring the whole continent under the American flag.

"War will not be waged to bring this about.

"Mexico will ask for admission into the United States after the death of President Diaz and it will be granted.

"The South American countries will see the prosperity and happiness of Mexico under the American flag.

"They, too, will ask to be admitted, and their wish will be granted.

"Canada will remain longest out of the Union.

"America will have another great war.

"It will be a greater war by far than that with Spain.

"It will not be with Germany, neither will it be with France.

"It will be with a country that is now making loud professions of friendship for America.

"I can not give you reasons, I can only tell you the things I see.

"Statesmen will see clearly the wisdom of my predictions.

"Germans in America will never permit their fatherland to wage war against the United States.

"Englishmen have no such power.

"But America will be finally triumphant.

"Then the American navy will be the greatest in the world.

"A great change will come over the United States.

"This will be due to her rich men.

"The common people will remain sound and virtuous.

"The rich men will become corrupt, avaricious, and degraded.

"They will ruin themselves with their incalculable riches.

"President McKinley is not going to die suddenly as did President Faure.

"He will be elected president a second time.

"His health will fail him during his second term.

"Then a great sorrow will befall him.

"A sorrow in which he will have the sympathy of friends as well as enemies.

"America will have to pay the penalty of her coming glory.

"She will pay with the blood of her best sons.

"Her negroes will become good citizens.

"They will make splendid soldiers for her colonies.

"In the middle of the next century there will be a great literary revival in America.

"The language of the United States will spread from Greenland to Cape Horn.

"The English language will be governed by America and not by England.

"An American will reach the north pole and another the south pole.

"Then the dominion of the United States will reach from pole to pole.

"The evil of divorce will at last become unbearable.

"The rich will change their wives so often that they will become worse than the Turks.

"At last women will revolt for their own protection.

"They will put an end to divorce altogether.

"An American woman will lead this crusade.

"She will go down to posterity as the Joanne d'Arc of the western world."

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Mr. Edward Van Alstyne, Supt. of Model Dairy at the Pan-American, states, under date of Nov. 1st, "I find since the receipt of your letter, after carefully going over the figures of the seventy-one runs of their (the DeLaval) machine that I mis-called the figures, and the reading should be .0172 instead of .0161."

NOW READ WHAT THE UNITED STATES SEPARATOR DID IN THE MODEL DAIRY

Mr. Van Alstyne states in reference to the work done by the United States Separator in the Model Dairy at the Pan-American Exposition, from Sept. 29th to Oct. 30th, inclusive, that in the fifty separate runs made by that separator during these days, with the milk of the ten different herds in the dairy test, the average per cent. of fat left in the skimmilk was .0138.

DeLaval average test of skimmilk	.0172
United States average test of skimmilk	.0138
Difference in favor of the United States	.0034

This shows that the DeLaval separator left 25 per cent. more butter fat in the skimmilk than the United States—an immense waste that amounts to a very large sum of money upon the dairy products of the world. Enough to pay for a United States Separator to replace every DeLaval Separator now in use.

Perhaps our chagrined and "disgruntled would-be competitors" with characteristic advertising honesty will undertake to bluff this statement off, but it remains true and is a matter of record that cannot be successfully denied.

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The Apiary.

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

Save the Empty Honey Combs.

There are usually a lot of empty frames of comb left after our fall work of putting hives in shape for winter, is finished. These frames of comb are very valuable to have on hand during spring, and the honey harvest. We can put swarms in shape at once after being hived, to store honey rapidly and also to breed young bees. The queen being thus accommodated with capacity for depositing eggs will soon fill several of these frames, and hundreds of young bees will be hatching out in a short time, where but few would be hatching otherwise. Drawn out combs are much ahead of the raw foundation itself to thus give them a quick start.

These surplus combs, if taken care of, will last a long time, and if by some mishap they should get slightly damaged, the bees will soon fix them up and repair them so completely that no trace of the damaged parts can be seen. There is no better way to keep these combs safely than to place them in an empty hive in the same position as when the bees occupied them. They should not be left sitting out in hives thus exposed, but placed carefully away in a building. The hives must be close fitting so that they will exclude mice, for if there is the least trace of honey or pollen left in them the mice will soon cut them to pieces.

Moth worms will frequently destroy combs unoccupied by bees, especially so in summer, or after the weather gets warm in spring. Moths are worse on combs that contain pollen than new combs containing only pure wax. The worms may easily be destroyed by fumigating the combs with burning sulphur. The combs may be arranged in empty hives, with both lid and bottom left off, and the hives set over others in considerable numbers, and the sulphur applied in an empty box underneath, when the entire lot may be fumigated at one time.

We not only have empty frames of comb to carry over, but have other frames containing more or less honey and pollen. These are more valuable for use than others, and should receive special care. We frequently find colonies in spring that stand in need of these frames containing honey and pollen, which will be greatly benefited by them. Empty frames may be taken out of such colonies, and those containing food substituted. No other arrangement will bring colonies out more rapidly in spring than such treatment as this, and it is much more convenient than feeding.

Empty frames also include partly filled section boxes. If we have a supply of sections thus partly filled with honey, or the empty combs without the honey, we can, by their use, get the bees to working in the surplus boxes much earlier in the season. If the season is a good one for honey gathering we will be ready with crates filled with surplus honey long before we otherwise would

without these partly filled sections which were carried over.

The best way to keep these sections in good condition is to place them carefully in the ordinary section crates, or supers, in same position as when on the hives, but, as they are used for surplus, they must have the best of care. Combs of any kind, even pieces of nice, straight comb, may be put together and fitted up into a frame, and if put in the hive with the bees for a few days, they will be thoroughly patched up and cemented together into a good frame of comb. It does not pay to melt into wax good combs that can be thus patched up.

Frames of comb should be kept in good shape, that is when we find a crooked comb we can press it into shape and we also frequently have combs that from neglect on our part are not properly spaced in the hives, so the bees build them out until they are too thick. These can be shaven down with a sharp knife to the right thickness.

Wintering Bees in the Cellar.

Putting bees in the cellar to winter, is the last work we have to do in all their management, so if you have made no provisions to winter them out of doors until it is too late, you can still go to the cellar with them. This work is done just at the beginning of steady winter, but if winter has progressed a little, you can yet put the bees in the cellar. Do not undertake to do so, however, unless you have some idea of managing bees in the cellar. If one was not aware of the fact that it is a difficult matter to winter bees in a cellar, he might think that just putting them down in the cellar was very easy, and the best way to get rid of the winter problem.

Remember that setting hives of bees in an ordinary cellar will not work, and they would be much better on their summer stand in their summer hives. The cellar in which to keep bees must be of an even temperature, varying but a very few degrees, 45° being about right. If the cellar is not to be used exclusively for the bees, as much of it as is to be used must be set off entirely to itself with a good partition. The apartment the bees are to occupy must be in utter darkness day and night. This part must be free from any disturbance of any kind, and must have a ground floor, or if not a ground floor, the floor should not connect with any other. To prepare a place for the hives, get 2x4 scantling, place them about 16 inches apart on a good solid foundation, tack a piece across each end to hold them in place. Now set a row of hives crosswise on this frame; about 8 inches of space should be left between each two hives. Remove the bottom boards from the hives, but leave on the lids. Set the second row of hives on top of the first, and directly over the 8 inch space between the same. The third row may be set on the second in the same manner, and may be carried up as high as the ceiling. It takes but a small place to thus winter a large number of colonies.

Odd Wedding Mishaps.

A group of young men, all of whom had taken part in weddings, were telling their reminiscences. The stories began when the tall, thin one said:

"At every wedding there is something unexpected. I do not mean particularly such as that fine affair we saw to-day, for it was a performance where everything was done by contract, and where that instant enjoyment was lost in the common-place ease of the professionals, who arrange things as smoothly and as solemnly as if they were undertakers preparing for a funeral. A real wedding is where no irreverent or mechanical outsider lays his hand on the program."

"An old bachelor was to be married," said another usher. "This is the story as he told it: 'I rigged out in my best, but I think that of all the outfit I was proudest of my boots. I had them shined until I did not need a mirror. They were perfect, but on the day of the tragedy rain was falling in torrents. So I bought a pair of galoches that came well up so as to protect those precious boots. The fateful hour arrived. I emerged with the best man from the vestry room, and just as we reached the head aisle I looked down and saw the galoches. I had forgotten to take them off!'"

"A few years afterward the niece was married. It was a beautiful wedding. She sent to New York for a pair of satin slippers, which were the pride of her outfit. But on the day it snowed, and in the country town, far removed from cities, there was no canvas awning. So the good, kind relatives who swarm on such occasions put bigger slippers over



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the satin treasures, and over them drew large woolen stockings, so that she would not slip on the icy pavement that led from the road to the church steps, intending of course, to remove them in the little anteroom.

"The ceremony was without flaw, and the happy bride and bridegroom made a lovely picture as they marched down the aisle, but just as they reached the outer door the bride clutched her husband's arm and turned deathly pale. "Oh, Edgar," she gasped, "they forgot to take the stockings off!"

"Edgar was dumfounded for a moment, but the story was all told afterward with many a laugh.

"I heard it from both bride and groom, and it never grew stale. The next year I was best man at a wedding in Pennsylvania. It was a special affair—all weddings are, of course, but this was very special. I purchased a special pair of patent leathers for the occasion. It was in a small city and the December snow had turned into slush. The pair of overshoes I wore were generous in scope and outline. As we entered the vestry room an old friend came forward, and we were busy renewing our acquaintance when a voice shouted, 'Hurry up, they've come!' and we got out of our overcoats instanter. "Everything went along beautifully. The bridegroom met the bride at exactly the right instant and caught step perfectly. It was not until I turned that the awful truth flashed upon me. There, incasing my lovely patent leathers, were the rubbers, looking as big and spotted as two ferryboats that had just arrived through the mud. It was one of those times that a man thinks that there was some mistake that he was ever born.

"This couple," he continued, "went to one of the big Southern resorts on their bridal tour. The bridegroom was a notably handsome man, over 6 feet and with the build of a Grecian athlete. He marched to the office and with the self-possession of a man who had been married many years, registered. This is the way the register read: "Mr. and Mrs. Edgar Z. Blank and wife."

"He never went into that office again, and when he departed he settled his bill through a bell boy. Moreover, he quit teasing his wife about satin slippers and stockings."

The Southern man spoke: At a wedding in Virginia the chancel rail of the church was a semi-circle. Both the bride and the bridegroom had a number of unusually handsome little nephews and nieces. These afforded an opportunity which could not be missed.

"So the best girl and I spent a day in training them for the ceremony. In order that there might be symmetry and a picture of orderly arrangement, as viewed from the audience, we pinned just inside the chancel rail—out of sight of the people, of course—pieces of ribbon corresponding to the dress each was to wear or in the case of the boys to the color of their neckties. The rehearsals were brilliantly successful. "And so was the wedding, but several of us nearly went under at the slightest of incidents. The little beauty in pink had marched up the aisle like a soldier, her head high in the air, her expression one of absolute placidity.

"But just as the service began she happened to glance down and she saw that she was about 6 inches from her ribbon mark. With her to see was to do, and she literally jumped the 6



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inches to her proper place. Her countenance did not change a shade, but to those of us who were standing near it was excruciating."—Kansas City Journal.

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**ARMOUR-
FUNKHOUSER
PUBLIC SALE**

OF

**..Hereford..
Cattle.**

TUESDAY, DECEMBER 10, AND....
WEDNESDAY, DECEMBER 11, 1901,
KANSAS CITY STOCK YARDS SALE PAVILION

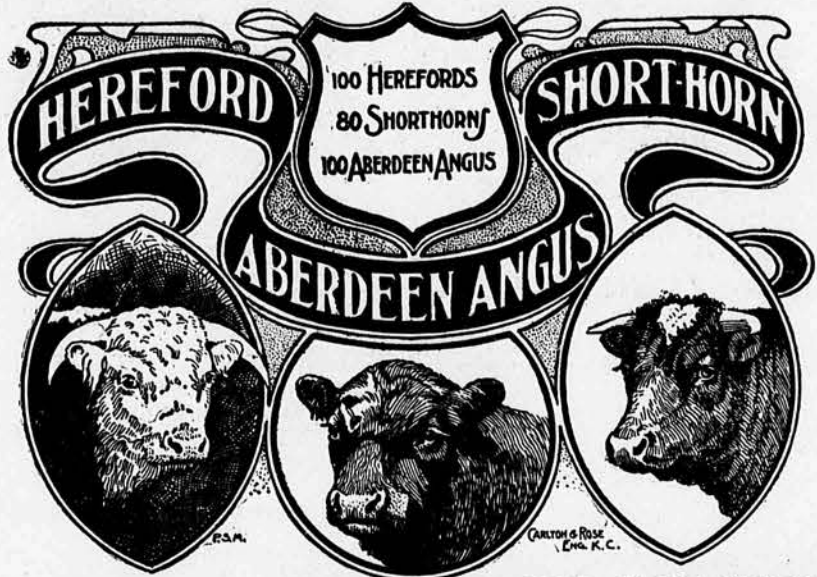
We shall offer 90 head of American and Imported Hereford females, well advanced in calf, or with calf at foot, and 25 head of American and Imported bulls.
The entire lot was selected under an arrangement between the late Kirk. B. Armour and James A. Funkhouser to make it form their greatest public offering.
We shall leave nothing undone to that end and pledge ourselves to present a grand lot of cattle.
Write for Catalogue.

CHARLES W. ARMOUR, JAMES A. FUNKHOUSER,
For Estate of Plattsburg, Mo.
KIRK B. ARMOUR, Kansas City, Mo.

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

MILLET CANE
CLOVERS
TIMOTHY
GRASS SEEDS.

SEEDS



Sales during the week of the **INTERNATIONAL LIVE STOCK EXPOSITION, Chicago, Illinois.**

The "tops" of these three great beef breeds to be sold at Auction. The Premier Beef Cattle sales of the year. Contributed to by the leading breeders, and under the management of the National Associations.
Address
For Hereford Catalogues, C. R. THOMAS, Sec'y, 225 West 12th Street, Kansas City, Mo.
For Short-Horn Catalogues, B. O. COWAN, Ass't Sec'y, Springfield, Illinois.
For Aberdeen Angus Catalogues, W. C. MCGAYOCK, Mt. Pulaski, Illinois.

Mains' Herd of Poland-Chinas.

Pigs by Anderson's Perfect, Harris' Black U. S. (the champion sweepstakes boar at the Iowa State Fair of 1900), Kemp's Perfection (the highest priced pig by Chief Perfection 2d sold last year), for sale from the very best of sows. Stock of all ages for sale.

James Mains, Oskaloosa, Kas.

GREAT BERKSHIRE SALE

At the Great Live Stock Headquarters, Dexter Park, Union Stock Yards, Chicago, Ill.,
WEDNESDAY, DECEMBER 4, 1901.
During the International Live Stock Show **50-Head of High-Class Berkshires-50** Will be sold at the time and place named above.
The consignments to this sale will be made by well known breeders and the contributions will be creditable specimens of the best American herds. For Catalogues and particulars, address
CHAS. F. MILLS, Springfield, Ill., Secretary American Berkshire Association.



STEELE BROS., Belvoir, Douglas Co., Kans.,
Breeders of **SELECT**

HEREFORD CATTLE.

YOUNG STOCK FOR SALE. INSPECTION OR CORRESPONDENCE INVITED.

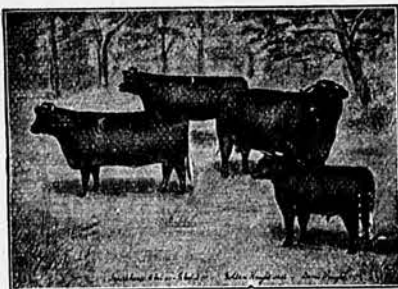
T. K. Tomson & Sons,

Proprietors of

Elderlawn Herd of Shorthorns.

DOVER, SHAWNEE COUNTY, KANSAS.

GALLANT KNIGHT 124468 in service. How would you like a cow in calf to, or a bull sired by, Gallant Knight 124468? His get won 14 prizes at the National Cattle Show held at Kansas City last October. 100 head in herd. Correspondence and inspection invited.



Pearl Shorthorns.

Herd Bulls:
BARON URY 2d 124970. LAFITTE 119915.

Inspection invited

C. W. TAYLOR, Pearl, Kans

FOR SALE.

1,000 HEAD OF GRADE HEREFORDS

600 Cows and Heifers, 300 Calves,
100 Yearling Steers, 25 Registered Hereford Bulls
At Garden City, Kansas,

For particulars, address **SCOTT & MAROH, Belton, Missouri.**

Gudgell & Simpson,

Independence, Mo.,

..BREEDERS AND IMPORTERS OF..

Herefords

One of the Oldest and Largest Herds
in America.

ANXIETY 4TH Blood and Type Prevail

Both Sexes, in Large or Small Lots, Always For Sale



LAMPLIGHTER 51834.

Sunny Slope Herefords

...200 HEAD FOR SALE...

Consisting of 40 good Cows 3 years old or over, 10 2-year-old Heifers bred, 50 yearling Heifers, and 100 Bulls from 8 months to 2 years old. I will make VERY Low Prices on any of the above cattle. Write me or come and see me before buying.

C. A. STANNARD, Emporia, Kans



Valley Grove Shorthorns

THE SCOTCH BRED BULLS

LORD MAYOR 112727, and LAIRD OF LINWOOD 127149
HEAD OF THE HERD.

LORD MAYOR was by the Baron Victor bull, Baron Lavender 2d, out of Imp. Lady of the Meadow, and is one of the greatest breeding bulls of the age. Laird of Linwood was by Gallahad out of 11th Linwood Golden Drop. Lord Mayor heifers bred to Laird of Linwood for sale. Also breed Shetland ponies. Inspection invited. Correspondence solicited. A few young bulls sired by Lord Mayor for sale.

Address **T. P. BABST, Prop., Dover, Shawnee Co., Kans**

TEBO LAWN HERD SHORTHORNS.



HERD BULLS ARE: ALICE'S PRINCE 122583 bred by W. A. Harris; VICTOR BASHFUL 152797 bred by J. R. Crawford & Sons; VALIANT 151304 bred by C. C. Norton; ADMIRAL GODDY 133872 bred by Chas. E. Leonard.

FEMALES are the best Crulekshank families TOPPED from the leading importations and American herds. These added to the long established herd of the "Casey Mixture," of my own breeding, and distinguished for INDIVIDUAL MERIT, constitute a breeding herd to which we are pleased to invite the attention of the public. Inspection and correspondence solicited.

G. M. CASEY,

Rural Route No. 1, CLINTON, MO.