

AGRICULTURAL.

Largest Farm in the World.

In the extreme southwest corner of Louisiana lies the largest producing farm in the world, measuring 100 miles north and south and 25 miles east and west. It is owned and operated by a syndicate of northern capitalists. The 1,500,000 acres of the tract were purchased in 1883, from the State of Louisiana and from the United States Government. At that time it was a vast grazing land for the cattle of the few dealers of the neighborhood, over 30,000 head of half-wild horses and cattle being thereon. Now this immense tract is divided into convenient pasture stations or ranches existing every six miles. The fencing alone cost \$50,000. The land is best adapted for rice, sugar, corn and cotton. All cultivating, ditching, etc., is done by steam power. A tract, say half a mile wide, is taken and an engine is placed on each side. The engines are portable, and operate a cable attached to four plows, and under this arrangement thirty acres a day are gone over with only the labor of three men. Harrowing, planting and other cultivation is done in a like manner. There is not a single draft horse on the entire place. Of course horses are used for the herders of cattle, of which there are 16,000 head. The Southern Pacific Railway runs for thirty-six miles through the farm. The company has three steamboats operating on the waters of their estates, of which there are 300 miles navigable. They have also an ice house, a bank, a ship yard and a rice mill.—(Spare Moments.)

English Methods of Butter Making.

Canadian dairymen, while holding views based on their own experience, yet should be interested in successful methods of butter-making in England. The following instructions for making good butter have been prepared by Mr. W. Smith of the Carse of Govrie Creamery Company, Dundee, especially for farmers who are not possessed of separators or other machinery necessary for the more advanced method of dairy practice, and are published in the London Agricultural Gazette:

To make good butter from cows fed on grass: 1. Milk the cows cleanly and clean. 2. Strain the milk through a fine sieve or clean cloth, and set in clean dishes as soon as it is milked. When early cream is required for table use or sweet cream butter, seal the dishes, set the hot milk in the hot dishes and ten minutes after set the dishes in cold water (running if possible), skim in six hours, and churn at once. 3. For sour cream butter, skim at twenty-four hours, collecting two days cream in one jar, and churn the third day. Be sure all the cream you churn at one time has been mixed for twelve hours before churning. 4. Have the cream at a temperature of 58 degrees before it is put into the churn, raise or lower the temperature by plunging the cream jar into hot or cold water, stirring the cream. 5. Drive the cream about sixty revolutions per minute, ventilating several times during the first five minutes. 6. Watch carefully when you see butter like peas or wheat; strain off the buttermilk with a sieve, and for fresh butter wash with cold water in the churn until the water comes off as clear as it goes in, and make up in any shape with butter beaters. 7. When salting, use no water, ream the butter to a butter worker or tub right out of the buttermilk, and while it is at churning temperature. Ascertain the weight of butter and weigh your salt (say half an ounce to the pound), work in the salt with a roller or butter-beater, and cover it up with a cloth for twenty-four hours, re-work the whole lump together and pack into jars firmly, and never expose it again until it is to be consumed. The quantity of salt may vary from a quarter to three-quarters of an ounce to the pound. 8. The hands should never touch the butter.

To make good butter from cows fed on turnips and straw: 1. Set the milk the same as for early cream, in hot dishes and cold water. 2. Skim at twelve hours, and scald the cream by plunging the jar in boiling water, and keep stirring until it reaches 150 deg. Then put the jar in cold water and reduce the temperature to 60 deg. Col set and churn two days cream together, never put fresh and gathered cream together at churning time, and churn at 60 deg. Butter made in this way should be entirely free from the taste of turnips. 3. In washing for fresh butter sales, in the winter time when the water is nearly at freezing point, heat the water to 50 deg. and wash and make up the butter at that temperature. For salting use no water, and mix the salt with the butter at the churning temperature. 4. For packing butter; pack close with a hard-wood beater, so as no air can get in, putting one tub in filled, and after the butter has clung to it leave an open space all around the crock, or fill the space with salted brine, and fix it up tight. 5. The hands should never touch the butter.

Phenomenal Potato Growing.

The contrast between the highest capabilities of the soil and the average yield of a crop is about as great as that which the highest mental attainments of mankind make with the average intellectual development of humanity. The *American Agriculturist* last year offered prizes for the two largest yields of potatoes on one acre of land. The first prize was won by William J. Sturgis, of Buffalo, Johnson county, Wyoming, with a yield of 974 bushels, and the second prize went to R. A. Chisholm, of Del Norte, Col., with a yield of 847 bushels. What this really means can be best understood when it is known that the average yield of the United States is placed at fifty-seven and one-half bushels per acre. The acre that took second prize was irrigated while that which took first was not. When a man can raise such crops it is foolish to ask whether farming pays.

Pitting Potatoes.

We are asked by a correspondent to give directions for pitting potatoes. In the first place we advise carefulness not to put too many together. Build them up in a ridge, a sharp ridge, so as to have say about a hundred bushels in twenty feet of length. The base of the ridge will be about four feet, and the sides will slope so that the pile will reach three or four feet in height. Usually a coat

of straw is placed next to the potatoes, but some of our most experienced agriculturists prefer to put six or eight inches of mellow dirt on instead of straw, and then the straw on the dirt. The reason given for this is that the straw becomes damp and if the frosts reach it they will penetrate it, while if a layer of mellow dirt is put next to the potatoes there will be little danger of this. If pitting is resorted to it should be done with the full expectation of having a severe winter. Never count on a mild winter. If you do, you will be very likely, in vulgar parlance, to get left. Cover thick enough to prevent the frost from reaching them. This need not be done at first. On the contrary the straw and dirt as above mentioned may be applied at first and then when freezing weather comes, apply a good coat of coarse manure or straw.

The Poultry Yard.

As winter approaches, when the keeping of fowls is attended with more expense, we should inspect our flocks and reject all except those which we are sure will prove profitable or will be needed for breeding purposes in the spring. Get rid of the superannuated cocks and hens, and very late pullets that will not begin laying before next spring.

It is a good plan also to dispose of all the cockerels raised on the place, and replace them with an entirely new lot of thoroughbreds, procured from some reliable poultry dealer. These young cockerels should be of the early spring hatch, so as to be near maturity; and if possible I prefer buying them early in the fall, for they are near so pugnacious among themselves as when almost grown, and if the roosters, who, for so long have lorded it over the yard, show a desire to drive them off, why it is better to dispose of them, too.

Keep, by all means, your early spring pullets; they appear larger now if anything than the old hens, but can easily be distinguished by their smooth, clean legs, trim shape, and bright, handsome plumage.

The poultry-house should be thoroughly cleansed and made ready for the accommodation of the new-comers, giving the perches special attention. The frequency with which the floor needs sweeping of course depends on the size of the house, the warmth of the weather and the number of fowls kept. I never like a longer interval than two weeks to elapse at any time; in summer one week is preferred, though my poultry-house is large, well ventilated and not at all crowded with inmates. After each sweeping the smooth plank floor is covered with dry earth, and lime sprinkled over that. The nests, which were all removed for the summer, will soon be replaced, and then the old biddies will be happy, for nothing pleases them so well as keeping house in a house. In fact, so long were some of them to give it up, that they persisted during summer in depositing their eggs on the upper sill or plate of the house on which the rafters nest, from which insecure place the egg of course rolled down, and made a feast for the fortunate fowl that found them.

As nest eggs, they much prefer the white glass or china eggs, which stay cleaner and fresher, and look more like real eggs than the unpainted wooden ones, which, though cheaper at first, are dearer in the end for they soon get lost. It is very unfortunate that the brooding instinct of many improved breeds of fowls is still inseparable from their increased prolificness. Even some of the non-sitters, when kept on the farm for a few years where they have a wide range and a variety of food, return by degrees to their original brooding habit.

And the trouble of it is, they are just as determined to sit out of season as in; they have no method whatever in their madnes, looking little brownies! I always wrap my hand in my apron when I find one of them on the nest. She doesn't say a word, but if her sharp eyes catch a glimpse of my wrist she fires away, and the milk stays there for a week. But if it is a Plymouth Rock on the nest, then my hand goes boldly under her soft feathers; she may quarrel a little, but she wouldn't hurt me for the world; in fact, she is too dignified to be aggressive.

The hens kept for brooders next spring should be from 2 to 3 years old; their eggs are larger and more perfect, and the hens themselves make more sensible, patient, and more thrifty mothers.

Pure-bred Plymouths that have been fed pretty liberally are not generally profitable after the third year; they are apt to become fat and sluggish—too lazy to do anything but eat, and too heavy to make good brooders. They are excellent for the table, however, all during fall, winter and early spring; and when dressed whole and stuffed like a turkey they make quite a handsome appearance, being nearly as large as a turkey hen, the skin clean and transparent, with the yellow fat shining through, and the flesh tender and savory, juicy and sweet.

I have never had a Leghorn get too old to lay; they are too active and inquisitive to "carry flesh," and too full of mischief to grow sluggish. When cared for judiciously, they may doubtless be kept with profit until 5 years of age.

The Right Way To Do It.

Brookline, Mass., was recently the scene of a rare spectacle, being nothing less than an amicable meeting between the heirs and next of kin of a rich man, who agreed to follow out the wishes of the deceased in dividing up his estate, though under no legal obligation to do so. The circumstances as reported are as follows: A Mr. Shapleigh, of that city, died lately, leaving an estate which was valued at \$700,000. No will was found, but in lieu thereof there was discovered in Mr. Shapleigh's pocketbook an unsigned paper, wholly in his own handwriting, in the form of a promissory note. By the terms of this instrument, if it had borne his signature, he would have promised to pay to relatives named therein \$8,000 or \$10,000 apiece, the aggregate sum thus promised being \$306,000. Among the persons mentioned in this paper were several relatives who were not entitled to any portion of Mr. Shapleigh's estate under the statute of descent or the statute relating to the distribution of personal property in cases of intestacy. A meeting of all the heirs and next of kin has, as before mentioned, just been held and all the parties entitled to inherit have united in an agreement to carry into effect Mr. Shapleigh's wishes as expressed in the unsigned document. How many family quarrels might have been averted, and expensive litigations avoided had this sensible and just method of settling such disputes hitherto prevailed! The relatives of Mr. Shapleigh have set an excellent example which the heirs and next of kin of rich men would do well to imitate.

SITTING BULL DEAD.

The Wily Old Chief Killed in a Fight With S. U. Police.

WASHINGTON, Dec. 22.—Indian Commissioner Morgan this evening received a despatch from Indian Agent McLaughlin. The despatch is dated Fort Yates, N. D., and reads:

"Indian police arrested Sitting Bull at his camp, 40 miles north west of the agency, this morning at daylight. His followers attempted to rescue him and the manner commenced. Four policemen were killed and three wounded. Eight Indians were killed including Sitting Bull and his son Crowfoot, and several others wounded. The police were surrounded for some time, but maintained their ground until relieved by United States troops, who now have possession of Sitting Bull's camp with all the women, children and property. Sitting Bull's followers, probably 100 men, deserted their families and fled west up the Grand River. The police behaved nobly and great credit is due them."

SITTING BULL'S CAREER.

The romance of the American frontier has never had in it anything stranger than the widely-spread craze among the redmen of the Dakotas, of Nebraska, Wyoming and other sections of the North West over the immediate coming of an Indian Messiah. The craze was started by a Ute named Johnson, who claimed to be the Great Spirit come to put them again in possession of the country, restore the buffalo, elk and antelope. In 1878 the Ute tribe, in which Johnson was a petty chief, was located at White River Agency, in Grand County, Colorado, and Johnson was the ringleader of the famous White River massacre, the bloodiest ever perpetrated west of the Missouri. In promising a millennium he induced the old out-throat, Sitting Bull, to join with him, and the ghost dances of the past six months have been the result. The mention of Sitting Bull's name as an acquiescent spectator of the agitation was really one of the principal causes for alarm, and not altogether without reason. There have been few American Indians in all the history of Indian warfare who have excelled him in craftiness, in generalship and in that rude diplomacy which has characterized the race since the days of Powhatan.

Sitting Bull was between 54 and 58 years of age. He was born below the mouth of the Cheyenne River, near old Fort George. His father was Jumping Bull, a warrior of no particular prominence, except for his position at the head of one of the innumerable factions of the Sioux Nation. In his boyhood and up to his 14th year Sitting Bull had been called the Sacred Stand, but when he had killed and scalped a young buck about his own age, his name was changed to Tatanka-yankanka, or in English the name which he now bears. Before he reached his 15th year he began to develop those traits which afterwards made him a terror to the white settlers of the frontier. He is described by an old western scout as a boy of rather stocky appearance, not "straight as an arrow," like the traditional Indian. He was lazy and vicious and never told the truth where a lie would serve better. But with all these bad traits, he was fearless under all circumstances, a magnificent rider, an accurate shot, and capable of enduring an extraordinary amount of fatigue. It was not until after the close of the war of the rebellion that Sitting Bull began to attract any attention. In 1868 he was known as a "blanket warrior" by the soldiers in Fort Buford, on the Missouri River, and one who despised the whites. He was bold and impudent, and to show his utter contempt for the white man and his ways he refused to learn a word of English, or even to be in command of the fort, and in 1868 and 1869, when numerous depredations were committed and stock stolen, Sitting Bull was accused because of his general character, although he was then a chief. He denied the charge with great vigor. His success in obtaining a concession and a wagon load of blankets in settlement drew around him some of the bolder members of the tribe. From that day forward Sitting Bull became a great chief among his people.

The chief began at once to display a deliberative turn of mind, altogether at variance with his previous character. In a very few months his perspicacious view of events became so well known that he had every buck in the tribe under his thumb, and those who had been bold enough to consider themselves possible rivals were heard of no more. He was of more than an ordinary restless nature, and as he felt that his power was absolute he gave orders to strike camp and go to the Yellowstone River. There the tepees were put up, the stock tethered, and orders issued that no white man should be permitted to enter the camp.

In the latter part of 1875 a party of 50 white men from Montana invaded Sitting Bull's territory and built a fort. The chief ordered them to leave, and enforced the demand by killing one of the party. Sitting Bull immediately put the fort under fire and there were desultory attacks daily, lasting through the months of December and January. Six white men were killed and eight wounded. Five hundred warriors surrounded the fort, and their persistent patience soon convinced the besieged that the intention was to starve them to death. Two of the imprisoned men volunteered to attempt to reach the nearest point where help could be obtained. They hardily and suffering reached Fort Ellis in the latter part of February. Four companies of United States cavalry and three companies of Montana militia were put under marching orders at once. The chief heard of their coming through his outposts and withdrew his force to a safe distance. The wretched survivors were rescued, and after the evacuation Sitting Bull fired the fort and had the bodies of the six dead men dug from their shallow graves and scalped.

The story of the Custer massacre, in June, 1876, has been told again and again, but to this day no person can tell just what part Sitting Bull took in that awful scene of carnage. Some say he sat in a tepee while the slaughter was going on; others assert that he led the savage host and with his own hand scalped and mutilated. No one lives to tell the story on the white side, and Sitting Bull himself was evasive and ambiguous after he became a "Show Indian," and Sunday schools and on lecture platforms, the old racial simply went back to his boyhood habit of lying, and blandly exclaimed that he wasn't responsible for the killing and really knew nothing of it.

Sitting Bull did not go to the exhibition business with Buffalo Bill until after he had escaped to Canada and had returned and surrendered. Then his power began to wane, and when younger warriors were selected to go to Washington and confer with the Great Father and he was ignored he became disgusted with life, and it did not take much persuasion to induce him to become a "freak." In 1884 he was placed on exhibition in Philadelphia as "a freak," but subsequently returned to his agency, and had been instrumental in fomenting recent troubles.

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The German Emperor on Education.

Educational circles in Germany are said to be greatly excited over Emperor William's recent speech on education, in which he severely criticized the present system, both as to the matter taught and the manner of teaching. His Majesty held that as regards the basis of instruction in all gymnasial schools it ought to be German, and the principal aim should be to turn out young Germans, instead of youthful Greeks and Romans. Said he, "We must courageously break with the medieval and monkish habit of mumbering away at much Latin and a little Greek, and take to the German language as the basis of all our scholastic studies. We must reduce the time burden under which the pupils are now crushed. It is this cruel, one-sided, and eternal cramming, which has already made the nation suffer from an over-production of learned and so-called educated people, the number of whom is now more than the nation can bear, and who constitute a distinct danger to society." His Majesty also dwelt on certain evils which prevailed to an intolerable extent in high schools, and quoted figures to prove that certain physical ailments, especially short-sightedness, was increasing to an alarming extent, were directly due to too long hours and bad ventilation in school rooms. He asked his hearers to reflect on the meaning of these figures in relation to the question of national defence. What they wanted was soldiers. The country also stood in need of intellectual leaders and efficient servants. But how was the stock of these to be replenished when the number of shortsighted youth in the upper forms of the high schools rose in some cases to as much as 74 per cent. When he studied at Cassell not fewer than eighteen of his fellow pupils out of a class of twenty-one wore spectacles, while some of these with their glasses on could not even see the length of the table. As Landseverster or Father of his country, he felt bound to declare that such a state of things must cease. Naturally such unparading condemnation of the traditional system has created a feeling of consternation in the ranks of the old-fashioned schoolmen. The conservative newspapers, too, are dumfounded and admit that the last vestiges of the ancient regime have been thrown overboard, while the organs of the Liberal Progressist and Freisinnige parties laud the Kaiser as the most far-seeing of contemporary sovereigns.

The Blessedness of Giving.

"Let one consider seriously whether he ever gets as much satisfaction out of a gift for the moment as out of one given. It pleases him for the moment, and if it is useful, for a long time; he turns it over, and admires it; he flatters his self-esteem that he is the object of it. But it is a transient feeling compared with that he has when he has made a gift. That substantially ministers to his self-esteem. He follows the gift; he dwells upon the delight of the receiver; his imagination plays about it; it will never wear out or become stale; having parted with it, it is for him a lasting possession. It is an investment as lasting as that in the debt of England. Like a good deed, it grows, and is continually satisfactory. It is something to think of when he first wakes in the morning—a time when most people are badly put for want of something pleasant to think of. This fact about giving is so incontestably true that it is a wonder that enlightened people do not more freely indulge in giving for their own comfort. It is, above all else, amazing that so many imagine they are going to get any satisfaction out of what they leave by will. They may be in a state where they will enjoy it, if the will is not fought over; but it is shocking how little gratitude there is accorded to a departed giver compared to a living gift. He couldn't take the property with him, it is said; he was obliged to leave it to some body. By this thought his generosity is always reduced to a minimum. He may build a monument to himself in some institution, but we do not know enough of the world to which he has gone to know whether a tiny monument on this earth is any satisfaction to a person who is free of the universe. Whereas every giving or deed of real humanity done while he was living would have entered into his character, and would be of lasting service to him—that is, in any future which we can conceive."

Level Crossings and the Railways.

A decision of great importance to all municipalities in which the lives of the people have been threatened by the level crossing has just been rendered by the railway committee of the Privy Council. The general principle is laid down that when two railways use the same crossings the companies and the municipality shall each contribute one-third towards the cost of protection. When the dispute is between the municipality and railway company each shall pay half the cost. This decision will commend itself to the fair-minded, though to that section of each party which sought to throw all the responsibility on the other it will perhaps appear more like a compromise than an expression of strict justice. But as neither party derives the sole advantage from the road each should share in bearing an expense of this kind. Now that the dispute as to responsibility is settled, it is to be hoped that the municipalities particularly concerned will see to it that watchmen are appointed to guard the dangerous ways so that "killed at the crossing" will henceforth be as rare as of late it has been frequent.

A Mohammedan Society in England.

A Mohammedan society, composed of twenty-five English men and women and presided over by a well-known provincial barrister, has lately been organized in Liverpool, England, and has applied to Hyderabad for funds to carry on mission work in England, for the success of which the secretary declares there is every prospect. This movement, which will doubtless come as a surprise to those that have been regarding that religion as moribund, is only one of a number of signs that the followers of the false prophet are at present bestriding themselves to an unusual degree. Of late, as is well known the authorities at Constantinople, which is the chief seat of Islamism for Europe and Western Asia, have shown unwonted zeal in their efforts to suppress Protestant mission work. A strict censorship of the press has been established, and no book not approved by the government is permitted to be printed. Recently the weekly organ of the missionaries was suppressed, but the publication of it was allowed again, on the insulting conditions that it should contain no news whatever of current events within the empire or outside its borders, but should be confined to the discussion of scientific, moral, and religious questions, and further, that it make no adverse criticism upon any of the religious beliefs of any of the sects of the empire." Men upon the ground state that English books coming to the missionaries are inspected and returned, often with leaves torn out, or the whole volume is confiscated. Of thirty-eight condemned books the American consul succeeded in rescuing thirty-two and the others being burned. Livingstone's "Africa" and Thomson's "The Land and the Book" are considered especially obnoxious. Missionary magazines sent to the missionaries are supposed to find a watery grave in the Bosphorus. Nor has the Bible, the Christian missionary's text book, altogether escaped. Not condoned its publication in the Turkish language on the ground that it was hostile to the Mohammedan religion. Only the timely and vigorous protest of the ambassador, made at the solicitation of the missionaries, saves it from being treated as a prescribed book. Even now it is not allowed to be sold in khans of the city.

These facts are sufficient to show that this false religion, whose history has been so remarkable, is not yet ready for its winding sheet. Of course, few persons entertain any fear that those who range themselves under the Crescent will, as in the days of Islam's greatest power, multiply their converts at the point of the sword. Their victories, if gained at all, must now be made by an appeal to other motives than that of fear of personal injury or material disadvantage. The fighting forces of the nations have greatly changed since the days of Charles Martel. Not in this respect, therefore, does the present Mohammedan revival furnish any reason for disquietude. But the circumstance that a society has been formed in England, if known, as doubtless it will be made known, among the Moslems of India, will naturally tend to confirm them in their faith and to render their conversion to Christianity the more difficult. And this is serious enough whether viewed from the standpoint of the prosperity and harmony of the empire, or of missionary enterprise and success. To counteract this outburst of fanaticism more earnest endeavor and greater sacrifice are demanded on the part of Christians. The soldiers of the Cross must show themselves not less zealous and determined than the soldiers of the Crescent.

Chicago and the World's Fair.

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Chicago has at last got its World's Fair project in financial shape for the President's approval. It has made provisions for grounds and buildings, and has raised \$10,000,000 "by subscription or other legally binding means." If the President approves, and there is no reason to doubt his approval, he will issue a proclamation inviting the nations of the world to come on with their exhibits and see Chicago. Chicago is of itself a sight well worth a visit to the nations of the Old World. Chicago is a great fact illustrative of the energy and progress of which a tree people is capable in a new country. Probably alone among the cities of the world having one million inhabitants can it say that it is little more than half a century old. In 1840 Chicago had less than five thousand inhabitants, and twenty years before that its site was a wilderness, that we have no question, howled louder than any other wilderness of the country. To-day Chicago is big, bustling, boastful and booming and in parts beautiful. If the people of the Old World want to see an exemplification of the modern American spirit by all means let them visit Chicago when the World's Fair is in progress.

The Jewish preference for the quiet pursuits, such as mercantile and literary, and also his repugnance for war are strikingly illustrated by the German official figures. According to these there are 600,000 Hebrews in that Empire. Though numbering not quite two-thirds of a million the proportion of Hebrew bankers is as great as if their coreligionists numbered twelve millions. Moreover, the percentage of Hebrew lawyers is equal to a proportion of ten millions of the Christian population, while the number of Jewish soldiers turns out to be as small as it would be if there were only ninety children of Israel in the Fatherland.

The treasury department at Washington has decided that maple molasses or maple syrup must pay duty as a manufactured article at 20 per cent. ad valorem.