AGRICULTURAL.

A Farmer's Education.

We know a farmer may live on, and even make a moderately fair living, we have known a few to become wealthy, without an education, yet such instances are rare, and as a rule the farmer who is the best educated makes the best living, all other things being equal. The history of the past proves beyond a doubt that the most thoroughly educated men of all ranks will do more and better work than uneducated ones and farmers are no exception to the rule. We do not believe there is any other profession that requires a more extended and general education than farming—there is very little knowledge that cannot in some way be made useful on the farm. Uneducated men do not often read agricultural journals and papers, hence we do not find them using improved methods of farming, or see on their farm the best stock or the best farming implements. They still use scrub hogs, they still run six times in a row with an old fashioned bull-tongue plow; they know absolutely nothing of the market reports; they never know what the probable home and foreign demand will be; they never know when it is best to sell or when it is best to hold their produce for better prices. It is only the educated farmer that understands how to make the head do good work, as well as the heels. The educated farmer is known by his fences, his orchard, his houses, his stock and his farm implements: so is the uneducated one known; the former has, as a rule, arrived at the highest point of excellence in these things, the latter just the opposite. One educated farmer is worth more to his neighborhood than a barnyard full of ignorant ones. Have you not noticed how a whole neighborhood has been influenced by the energy, taste and education of one of their number, to change the whole aspect of their farms, bringing them into a higher state of cultivation and making them blossom as the rose?

But an education is not valuable alone for its advantage in acquiring wealth. Its acquirement is a sacred duty that every one owes to the Creator, his country and his fellow man. Remember it is a law of our nature, the better trained mind we have the higher we rise in the scale of creation, and the better prepared are we for the great hereafter.

About the Pigs.

Early sown rye will help the pigs through the fall and winter and give them a good, green bite in early spring. It will more than repay the cost of seeding.

The sucking pigs may be growing nicely, but you will cheat yourself with a false idea of the profits unless you keep your eye on the sow. She may be falling off as fast as they are gaining. Give her the best food that you can to maintain both flesh and a flow of milk.

Prof. Henry, of the Wisconsin Experiment Station, says there is an absolute loss in cooking food for hogs. He claims that the only way in which cooked food is of any value is in furnishing a variety. There is so much difference of opinion upon this subject, and upon the use of ground as against unground grain, that we should advise all farmers to accept no statement as authoritative, but to test the matter fully for themselves.

Profits in Horses.

Coach horses bring good prices if they are handsome and stylish, have good action, and weigh twelve hundred pounds or over. If you contemplate trying to raise such, select a stallion that embraces these points.

For general-purpose horses for farm work and to sell quickly for a good price at almost any age, the roadster is one of the best animals for the farmer to raise. The larger ones are strong enough for any use; they walk fast, are quick in all their movements, and will get to town and to the field right speedily. They are suited to the needs of almost any man who needs a horse.

Horses, as well as other stock, will relish an occasional meal of roots with their dry winter rations. Carrots are especially beneficial, and a supply should be stored where they may be easily drawn upon.

The prices for common and inferior horses are continually going lower. A few years more and their value will be pretty near nothing. Farmers who are wise will avoid breeding any but good stock.

Exports in Cattle.

Those who fear over-production of cattle should study the possibilities of the export trade of the United States. Fifteen years ago we did almost nothing in this line, and the only outlet for our increasing production to which we could look was our own increasing capacity for consumption. The ratio of our increasing population showed pretty clearly what we could depend upon from this source, and the production was increasing much too rapidly to be taken care of by this means alone. The ranch business was developing and threatening to overwhelm our markets, but when the need was greatest our export trade began to develop, and has grown to such dimensions that it easily consumes all our real surplus, leaving our markets comparatively free from congestion. The exports now amount to about sixty-five million dollars a year in live cattle and dressed meats, and there is so wide a margin between the value of meat in Europe and the cost of producing it here upon our cheap lands that there would seem to be no near limit to the possibilities of the extension of that trade; but it must be borne in mind that only the very best classes of cattle are wanted for export. "Canners, stock" and culls of every description will remain at home to glut our market and depress prices. Really good cattle are not and have not been at any time greatly in excess of our own needs, but now, when they are offered, export buyers are always ready to take them, and so if sold for home use they bring better prices than if such a market was not ready. The lesson of this export trade is that more good cattle should be raised, then more would be exported, and the entire market for all grades would respond to such relief with a higher average of prices.

With Balky Horses.

A reader who has had experience in the management of balky horses says of an instance wherein he was called upon to drive a team that was notorious for its balking propensities:

"The road being ready, I took my whip and gave the word to start, but instead of starting with the load, oh, what a sight met my gaze. The leading pair began to plunge and bound. The near horse trying to get over the off one, got his feet entangled in the harness, and all sorts of gymnastics. The wheel pair trying to act as bad as the leaders, but could not, because they were encased, each one, in a pair of heavy shafts instead of a pole, as in this country. I stood a few seconds and watched their performance, and finding they did not get their accustomed whipping, but instead a few mild words, they began to be a little more quiet. Then again I requested them to start, when they again became frightened and rushed anyway but the right. I told them to stand still and not be worried, patted them on the neck, rubbed their noses and told them I knew they had been sadly abused, but that kind of abuse was done with; talked to them as I would have done to a little child. I think perhaps we stood there fifteen minutes. I took the nigh leader by the head, after throwing my whip on the load. Letting them see I had no whip to use on them, I said to him, 'Come along, sir,' at the same time walking off myself. Then not looking at him in the face, but looking the way I was going, and being assured they were not going to get whipped, they all four put shoulder to collar and took the load half way up the hill, when I stopped, blocked the wheels and gave them a few seconds to breathe.

Again I asked them to start, when they began to rush here and there, trying to turn round and many other antics. I also began my part of the amusing performance by getting them into shape, all the while talking mildly to them and acting in a careless way as if I was in no hurry. I asked them to start, and after one or two trials at that place, they started and took the load up the rest of the hill. After this they seemed to place confidence in me, and I had no more difficulty during that day, although we returned and drew two more loads. Three days after the above I was sent to draw a heavy load out of a very bad place, where the wagon cut in to the hubs, and when I was ready I spoke very carefully to them so as not to excite their fears; they bothered for a few minutes but the whip was not used once, and when they found they were not misused, they took hold and drew it out, and here ended once and for all the idea of balking. I never had one moment of difficulty in regard to a refusal to do what I asked of them after this. Permit me to ask if you have a balky team? Be ever on the watch, and the moment you see signs of balking, speak in your ordinary tone of voice and say "Whoa." Now sit or stand still, as the case may be; wait a few seconds and then give the word to go. If they refuse, keep cool, jump down quietly, pat them on the neck and face, and make as if you wanted to fix something on the harness or load; in a word, do anything to take their attention, and they will forget they had balked. Always remember not to get balky yourself. But if at any time you should find it absolutely necessary to use the whip, do not use it while they are hitched to the load, but drop them out, gather up the lines firmly in one hand, take the whip, bid them go, but in a mild tone, and give each a sharp cut around the legs, letting them go a rod or two; then stop them a few seconds; then repeat, driving them in a circle around to the pole, hitch on, and in nine cases out of ten they will go when bid.

The Bull.

It must be admitted that the bull is a neglected animal—an animal subjected to great ill-usage, if not cruelty. Twenty or thirty years ago, comparatively few farmers kept bulls, but to-day a great many have bulls of their own. The farmer may provide himself with a bull without much expense: he has opportunity to buy a high-grade bull calf or thoroughbred, or raise one of his own from a registered animal.

This is commendable if the farmers will take care of their bulls—give them a chance to live a fairly comfortable life, and not make them eyesores to every one who visits the place. As soon as the bull begins to show his temper (and he begins to show it very early if treated in the ordinary way), he is discovered to be "cross," a ring thrust through his nose, and he is kept in the stall month after month, year after year, only going out as service requires.

In a great many cases the bull never leaves the stall except when led by the pole attached to the ring in his nose. He is not even allowed the freedom of the yard, because he has shown an ugly disposition. Why should he not show an ugly disposition? He cannot be otherwise than ugly under such treatment as is meted out to him; it would not be natural for him to have a gentle disposition.

Within a week I have seen two bulls, one not yet two years old, that have not been out of the stall, except when led by the pole and ring, for seven months. The bulls are held by the old-style stanchions, so that they cannot reach with their head any part of the body. They cannot rub or lick themselves. Any one with any knowledge of cattle knows that such treatment of stock is contrary to nature, the nature of the animal, and that is little less than torture. Throughout the country are a great many bulls treated in the same way, and their owners wonder why they are cross. Who or what would not become cross, even mad, frantic, under such circumstances? Some farmers appear to think that because a bull is a bull, he is not entitled to any consideration.

The question has been asked often, "What shall we do with the bull?" and it has as often been answered; namely, "Work him." There is no reason why the bull should not be yoked and worked like the ox. He makes a good draft animal, and his working does not impare his vitality or usefulness in other respects.

Hog-Catcher.

To catch a hog and hold him without striking or laying hands on him, prepare a strong, small cord with a slip-noose at one end; lay the noose on the ground, a little extended, and place within the circle some corn. When the hog comes to eat the corn the noose can be drawn snug back of the tusk by the first intention.

I caught a pig in that way once, which weighed one hundred and thirty pounds, dressed, which I wished to butcher alone. I tied the cord to the top of a post at the side of the pen, and as he settled back on his haunches, cut his throat, and did not touch him with a finger till after he was dead.

I think this method would be preferable for a large hog, rather than chase him around to throw him and listen to his outcry.

BACK FROM SIBERIA.

Story of the Capture of the Canadian Seal Hunters—Their Adventures and Experiences While in the Czar's Domains.

The Vancouver News-Advertiser says:—Early the other morning a sealing schooner dropped anchor in English Bay, and passengers on the steamers Yosemite and other vessels entering the harbor were at a loss to know what schooner it was. A short time later, however, it was learned that it was the schooner Rosie Olsen of Victoria, and that Capt. Copp and the crew of the schooner Vancouver Belle of this port, which had been seized by the Russians were on board, in addition to nine men off the Schooner W.P. Sayward, three off the E. B. Marvin, and three off the Annie C. Moore. The Rosie Olsen was towed into the harbor by the steamer Leonora, and came alongside the wharf at about 10 o'clock, and then the whole story was learned from the crew.

The seizure was made on August 12th, when she was about 22 miles from Copper Island. She had at the time about 700 skins on board, and had already turned towards home, the boats being out sealing for the last day in this locality. There were at the time of the seizure several schooners in the neighborhood, among them the Agnes Macdonald which brought down the news of the seizure. A slight fog came on, and thus the schooners did not see the Russian cruiser Zabiaka, which was bearing down on them, until she was quite close. All the boats were called in at once, and the Vancouver Belle had all her boats on board, but the cruiser caught her after a short chase, although all the other schooners got off. Capt. Copp ran up

THE BRITISH FLAG

to the mast, but this did not have any effect, and when asked why his vessel was seized was told by the captain that he had orders to seize any vessel found sealing within a limit of 100 miles round Copper Island, the Russian Government claiming jurisdiction over this tract of water. Capt. Copp and all the men except Harvey Copp and two hunters were transferred to the Zabiaka and a prize crew consisting of two officers, a boatswain, and twelve men were placed on the Vancouver Belle, which was headed for Petropaulofsky, where she arrived one day before the Zabiaka. Harvey Copp and the hunters do not speak very highly of the seamanship of these men, and had it not been for them they would probably not have reached port in safety. Capt. Copp says that he received very fair treatment at the hands of the Captain of the Zabiaka, although the men did not much appreciate the food they received, as it consisted of soup with meat in it and rye bread, all sitting round the pot and scooping into it with their spoons, the food being the same as the other sailors had. On arriving at Petropaulofsky they were detained there a week, and during that time they were allowed 15 kopecks per day for each man, which Capt. Copp received from the Governor, who did not treat him with much courtesy, and even the Russian interpreter did not like to translate all the expressions he used. The fifteen kopecks were equal to about seven cents, and thus an idea can be formed of the amount each could purchase.

While at Petropaulofsky two other Russian cruisers arrived in port, on one of which was the Admiral of the squadron. Capt. Copp had asked the captain of the Zabiaka, to be allowed to return to Vancouver in the Vancouver Belle, even if he had to give up the skins, but this he said was out of his power. The matter was finally referred to the Admiral, and he agreed to allow them to have the Rosie Olsen, which had been condemned by the Russians, and who had intended to sink it by

FIRING INTO IT.

This schooner belongs to Victoria, Capt. Keefe being the principal owner, and had a crew of Siwashes, who had been sent back to Victoria on the barque Majestic some time since. The vessel was decidedly unseaworthy, and no care had been taken of it, while lying in the harbor, but Capt. Copp decided to take the opportunity of escape offered him, and agreed to take the other men with him. The schooner has only accommodation for twelve men, and there were 38 men in all, so that it can be seen that they had pretty close quarters, and some of the men had to sleep in the hold where the sealskins were kept. The vessel was in a very dirty condition, but the men seemed to favor risking anything to remaining in that inhospitable place. They were given some provisions out of the schooner C. H. White, which had been seized, and which were sufficient to last 20 days. They had some rye bread, biscuits, flour, beef, pork lard, tea and half a barrel of sugar given them and on asking for some butter were told that they could not have such a luxury given them. The beef and pork were bad and had to be thrown overboard, and the rye bread, which was about as hard as a stone, and black tea, samples of which were shown a representative of the News-Advertiser, constituted the principal items on their *menu*. The stores of the Vancouver Belle had been nearly exhausted, as they had just about enough to take them home when they were captured. By strict economy they managed to make this scanty allowance of provisions eke out till they arrived in port, although they had short rations for the last few days, and were all ravenously hungry when they got here. They started for home on August 22nd, having been in Petropaulofsky for a week. Fortunately they were favored with fair weather the whole way across, and made the trip in 30 days, as if they had encountered a gale they would probably never have survived

TO TELL THE TALE.

In addition to the schooner, and the skins, all their guns and ammunition were taken away from them, and they were only allowed to take their clothes, and three boats, the Russians taking care to see that they took the three worst of the lot. Capt. Copp was also allowed to take his chronometer and sextant, and charts, which was more than the other captains had been allowed to do. On the way across they did not speak a single vessel, although they saw two sailing ships, and two large steamers, one of which was probably the Empress of China, at a distance. They had not seen a British or American man-of-war since they left port.

When they left on the "Prize," which was the name the Russians had given to the Rosie Olsen, and which had been painted on the bows, the Russians had seized the following schooners: Rosie Olsen, Victoria; Ariel, Victoria; Willie Macgowan, Victoria; Enterprise, Victoria; Charlotte G. Cox, Victoria; Vancouver Belle, Vancouver; C. H. White, San Francisco; and Kate and Annie, San Francisco. They had allowed the schooner Kate and Annie to go after taking away the skins, as they did not apparently think her sufficiently good to keep. All the others except the Enterprise and Cox were at Petropaulofsky when they left, and it was thought these two were at Vladivostock. These are about the best vessels in the whole British and American fleets, and the Russians have secured a fine haul. The Russians picked up the boats that were supposed to be lost by the Victoria schooner, and these men were brought down by Capt. Copp. They report that one boat's crew of the Annie C. Moore are still on Copper Island, and if they are not taken off will doubtless perish in the Winter, owing to the intense cold.

The Vancouver Belle had already started on her homeward trip when seized, and had only fished for one day near Copper Island. Seals were very plentiful there and in that day she caught 104, which was the highest catch made, the best catch beside that being 54. She did not enter the Behring Sea at all. Capt. Copp has grown a full beard and has changed in appearance considerably since he left here, so much so that Mrs. Copp did not recognize him at first. The company that own the Vancouver Belle have not met yet, but will do so to-day, and all the information on the matter will be forwarded to the authorities at Ottawa. A question has arisen as to who is now the legal owner of the schooner Rosie Olsen, as she was given by the Russians to Capt. Copp. Anyhow she is not worth much, although the captain of the Zabiaka thought her a beautiful model, and large numbers of people visited her yesterday, and listened eagerly to the adventures of the crew.

GREAT MAP OF THE WORLD.

A Production in Which All the Leading Nations Are to Take Part.

At the Geographical Congress in Berne a year ago Prof. Penck proposed the publication of a map of the entire world on a uniform scale of 1 in 1,000,000, or about 16 statute miles to the inch, the various nations to take part in the production of the map. The proposition was favorably entertained, and a committee was appointed to take steps for its realization. The geographers of various nations, on the whole, have received the idea with favor, and there seems to be no doubt that the map will be produced.

Each sheet of the map up to 60° N. lat. will embrace 5° in each directions. The more northern sheets will embrace 10° of longitude. The representation of the whole earth, including the sea, will require 936 of of these sheets, while the land alone may be shown on 769 sheets. It is proposed to give great attention to physical and political features. Dr. Ravenstein, the English map maker, says the rivers will be in blue and the hills in brown. Contour lines will be drawn at elevation of 100, 300, 500, and 1,200 metres, and the areas enclosed by them are to be tinted. It is expected that sheets which deal with countries already topographically surveyed will be engraved on copper. The remaining sheets will probably be lithographed. The Greenwich meridian will be accepted for the entire map, and all altitudes are to be marked in metres. The official spelling of all countries using the Latin alphabet is to be retained. Other alphabets are to be transliterated in accordance with a system to be agreed upon, while names in unwritten languages will be spelled phonetically. It is estimated that the cost of an edition of 1,000 copies of this map, showing only the land surface will be $957,190 and as the sale of the first edition at two shillings a sheet would produce only $478,595, the deficit would have to be made up by the Governments concerned or by liberal private patrons.

Prof. Ravenstein says he sees nothing Utopian in the scheme. Difficulties may arise as to the spelling of the names and the introduction of the metre, but the essential thing, to his mind, is the production of a map on a uniform scale.

TWINS IN EVERYTHING.

The Remarkable Case of a Pair of Englishmen.

Risden, in his "Survey of Devon," relates the following regarding Nicholas and Andrew Tremayne, the twin sons of John Tremayne, of Collacombe, High Sheriff of Cornwall in 1485:

"They were," observes that learned writer, "so like in all their lineaments, so equal in stature, so colored in hair, and of such resemblance in face and gesture, that they could not be known the one from the other—no, not by their parents, brethren or sisters, but privately by some secret mark, or openly by wearing some several colored ribbon or the like, which, in sport, they would sometimes change to make trial of their friends' judgments, which would occasion many mirthful mistakes. Yet somewhat more strange it was that they agreed in mind and affection as much as in body, for what one loved the other desired; so, on the contrary, what one loathed was disliked by the other. Yea, such a consideration of inbred power and sympathy was in their natures, that if Nicholas was sick and grieved Andrew felt the like pain, though they were far distant and remote from each other; this, too, without any intelligence given unto either party. And, what is further observable, if Andrew was merry Nicholas was so affected, although in different places—which they could not long endure to be, for they ever desired to eat, drink, sleep and wake together. So they lived and so they died.

"In the year 1564 they both served in the wars at Newhaven, in France, where in this they something differed, the one being captain of a troop of horses and the other a private soldier, but still with the same sympathy of affection. Being both to the last degree brave, they put themselves in posts of the greatest hazard. At length one of the brothers was slain, and the other instantly stepped into his place, and there in the midst of danger, no persuasion being able to remove him, he was also slain."

Upon their monument was placed the following:

These likened twins, in form and fancy one,
Were like affected, and like habit chose;
Their valor at Newhaven siege was known,
Were both encountered fiercely with their foes.
There one of both, sore wounded, lost his breath,
And t'other slain, revenging brother's death.

BACK FROM THE ARCTIC ISLANDS.

A Naturalist's Quest for Plants in Far Northern Regions.

In June last the French Ministry of Public Instruction confided to Charles Rabot, a young explorer, who had already visited Greenland, Lapland, and Siberia, a mission to collect specimens of natural history in the Arctic islands of Jan Mayen and Spitzbergen. This department of the French Government has repeatedly sent out expeditions of late years to make scientific researches. The Government placed the little vessel La Manche at the disposal of the explorer, and he sailed from Leith, England, on July 20 for Jan Mayen, which is about 275 miles north of Iceland. Just a month later he returned to Tromsoe, in northern Norway, after a successful voyage, bringing home specimens of all the plants that grew in the regions he visited.

In a letter he wrote from Tromsoe he said that his party did not see a particle of ice between Scotland and Jan Mayen. This is rather remarkable, as the island is very often difficult of approach on account of the ice. Mr. Rabot found the buildings occupied by the Austrian meteorologists in the winter of 1882-83 in excellent condition, and the provisions they left behind were good enough to eat. The explorer crossed the island, which is of volcanic origin, cut up by deep ravines and lofty mountains. The old volcanoes are covered with glaciers. In the ravines were a few plants which grow only two or three inches above the soil. They are the Alpine plants found in Europe at an elevation of about 10,000 feet. Some of them were in bloom and their colors were beautiful and vivid. Along the coast was a good deal of driftwood which had been brought, by ocean currents, from Norway, as amid the wood Rabot found implements used by fishermen on the Norway coast.

Then the party went northeast to Spitzbergen, where they arrived on Aug. 1, meeting with no ice. That part of the Arctic waters seems to have been uncommonly free from ice during the past season, though a great deal of heavy ice was reported in Greenland waters. In the fiords of Spitzbergen Rabot did not see a single iceberg as big as a ship. After coasting along the west side of Spitzbergen the vessel entered the deep Ice Fiord, midway on the west coast. This year it does not deserve its name, for there was scarcely any ice in sight, though the fiord is usually packed with it.

The party ascended to the northern end of the fiord and that made a considerable journey inland by which they reached nearly the centre of Spitzbergen. From a lofty mountain they could see a great distance around. They saw very few glaciers, but the plateaus were crossed by many ravines, and the general aspect of the country, Rabot says, is similar to that of the most desolate part of Colorado. The parties succeeded in making a very interesting collection of fossil plants for the Museum of Natural History in Paris. Only a few plants were found and one specimen of a dwarf tree. In the past geological age, however, the island had a luxuriant flora of palms and other plants that flourish in very warm climates. The traces of this vegetation have been marvellously well preserved and the discovery of these fossils, which have now been taken back to France, is the most gratifying feature of the expedition. The coldest temperature the party experienced was 7 above zero. This Arctic expedition had nothing to complain of with regard to weather, and it fully accomplished the purpose for which it was sent out.

WOLF VENGEANCE.

Even a Wolf Hates a Liar.

During one of my hunting and fishing excursions in Louisiana I was fishing on a lake two or three miles long and from one-quarter to one-half mile wide. On one side the hill came down near the lake, leaving about one-quarter mile of sand beach, and while there I saw a deer running at the top of his speed toward the lake, and a moment later a wolf appeared in hot pursuit. Expecting them to plunge into the lake, when I would overtake and kill them both in the water, I kept my place. Just before the deer reached the water it was caught by the wolf, which pulled it down and killed it. Then the wolf stalked around, looked about, trotted off some distance and set up a howl, went further and again howled, and then into the woods, when I heard more howling.

The wolf being out of sight, I rowed my boat to the place and got the deer and then went back to my fishhooks. Shortly there appeared on the scene a pack of ten or twelve wolves. They sniffed and moved all around where the deer had been killed. These movements occupied considerable time. They would huddle together, change about and trot in all directions, keeping close together. Finally they got in a fight; the whole pack attacked one wolf and killed it. It was literally bitten and chewed to pieces. Now, what was the wolf killed for? The probability is, and I am almost positive, that the dead wolf was the one that had killed the deer. I have talked to many hunters upon this subject, and have come across but two who had seen anything similar, and they thought the wolf had been killed for lying. If it was done in the case I saw for lying, it was the only time I ever knew a wolf to be killed wrongfully.—[Forest and Stream.

A well-dressed stranger, accompanied by a boy, entered a hat store in Frankfort, Germany, and after a time the man was fitted to a hat. Looking in the glass he said to the youngster. "How do I look in this hat?" "Like a thief!" promptly responded the lad. The man angrily darted toward him, but the lad fled from the store, pursued by the man. The shopkeeper thought it all very funny until their long absence made him realize that he had been robbed.

A correspondent of The Montreal Star calls attention to the necessity of proper instructions in the public schools in the art of composition and the use of the English language. Owing to neglect in this respect he declares that the Canadian English is very rapidly becoming slovenly, incorrect, vulgar, and ungrammatical. This is a sweeping indictment, but it cannot be denied that there is much in it that is true. Among the uneducated such a state of affairs is not unnatural, for even in the Old Country the ignorant constantly murder the Queen's English, but it is remarkable that those who have every advantage educationally do not speak and write their own language correctly. Too frequently accuracy in English is sacrificed for a smattering of half a dozen other languages to be used for purely ornamental purposes.