

## THE FARM.

### Influence of Food on Milk.

The effects foods have on the richness of the milk are not so easily detected but the effect upon the quality of the milk and butter is quite apparent and should be carefully considered and provided for by the best possible selections of dry provender for winter use and the grasses and lands for summer pasturage. A trial carried out last year on the Ontario College Experimental Farm, and recorded in the annual report, has an important bearing upon the vexed question of the effect of a cow's food upon the richness of her milk. There were two trials, but it is necessary to refer to one only, as the conditions under which it was carried on were far more distinctive than those of the other. Eight cows were fed for a month on pasture and one pound of bran each given simply to induce them to come into their stalls; for a second month on pasture and one pound each of bran, peas and wheat during the first week, double quantities in the second, and treble in the third and fourth weeks; and, lastly, for a fortnight on pasture and all the green peas and oats they liked to eat.

Now, in the conclusions derived from the results it is said that there was practically no difference in the proportions of butter fat in the milk given by the cows in the first and second periods, and, taking the periods in their entirety, that is true; but it would be quite a mistake to suppose that this proves that the food made no difference to the quality of the milk and it is strange that the writer of the report did not notice the striking difference which we will mention. In the first place, the cows had been in their winter quarters, in sheds till the end of May, when they were first turned out on to the pasture getting one pound of bran each a day. Before they were turned out the average percentage of butter fat in their milk was 3.51; whereas for the first week on the pasture, it was 4.22, with a considerable increase in the volume of milk.

Here we have a clear demonstration of food making a difference to the richness of milk. This surprised the manager of the experiments, who was prepared for the increased flow of milk, but not for the increase in butter fat. But this is not the first trial in which it has been shown that good pasture produces richer milk than corn. As to the lack of appreciable difference in the quality of the milk in the next two months, it is clearly explained by statements made, though the explanation is not recognized. It is stated that dry weather and consequent poor pasturage caused the quantity of milk to shrink during the second monthly period, when the cows had a gradually increasing supply of corn. No doubt the most nutritious grasses were eaten bare before the second month began, and the corn barely made up for the loss. Yet, in spite of the pasture getting worse and worse, the richness of the milk increased slightly with the increase of corn, the average percentage of fat being 3.82 for the last week of the second period, as compared with 3.62 for the first.

Again, in the last fortnight of the trial, when the cows had all the green peas and oats they liked to eat, still running on the pasture, the average percentage of butter fat increased from 3.82 to 4.01. Comparing the results in the last period with those of the first week of the second period (when the cows had poor pasturage and little corn), the increase is from 3.62 to 4.01. But the most striking difference is that first mentioned. The cows before being turned out had been getting one bushel of roots, twenty pounds of hay, four pounds of wheat and four pounds of bran each per day, and the average percentage of fat in their milk during the last week as stated above, was 3.51; but they did so much better on the fresh herbage of the pasture, probably not touched before since the winter, that, while getting only a pound of bran each in addition, their milk became richer as well as more abundant, the percentage of fat being 4.22. Seeing that the trials made in a previous year at the Ontario College were relied on to a great extent as having indicated that food made no difference to the richness of milk, it is important to notice the latest evidence from that source.

### Spraying Fruit Trees.

Decidedly beneficial results have been obtained from spraying apple trees for two purposes—to prevent the black rot or apple scab, and to destroy the codlin moth larva. For codlin worms, one pound of paris green to 320 gallons of water is sufficiently strong using a pure article of green. The benefits from a single spraying about June 25, reduced the wormy apples 50 per cent. The cost was merely nominal. It took about three gallons of liquid to a tree of size to bear 10 bushels of fruit. A spraying apparatus costs about \$10 and requires two men to drive the horse, ply the break and direct the spray. A stronger application would be necessary to kill the canker worms. Spraying for the apple scab was equally efficient but calls for different treatment. This is a fungus disease and disseminated by spores, which in countless numbers infect the trunk and branches of the trees when nude of foliage, and later the leaves and fruit. Spraying the trees before the leaves put out in spring, and once or twice afterwards, with carbonate of copper with or without the ammonia addition prepared according to a bulletin sent out by the Massachusetts experiment station, had a wonderful effect in preventing the effect of the disease upon the fruit.

### Clean Horse Collars.

One reason why horses gall their shoulders when at work is the neglect of the attendant in keeping the portion of the collar that presses against the skin free from dirt, or dandruff, which is constantly gathering upon the leather. This is rolled into lumps by the friction of the collar against

the shoulder in walking. At the beginning of the season's work the shoulder is tender, the hair long and full of dandruff, and when the work is heavy the collar should be cleaned every morning and noon, before commencing the work. For the first few days one or two cleanings during the half day will often prevent galling. This can be done by rubbing the hand briskly several times over the surface. It takes but a moment, and can be done while the team is resting. The shoulders should also be washed with warm water at night, rubbed dry, and if then washed in water in which white oak bark has been boiled for fifteen minutes, the skin is toughened and the galling prevented. Collars, particularly, should have their collars well fitted.

### The Farmer's Riches.

In silver and gold the farmer may be poor indeed, yet in the glories of day, in the mysteries of night, in sunrises, and sunsets, in sighing winds and rushing waters, in twilights and storms, in all the wonderful and grand operations of nature he may be rich indeed. Like music, true poetry exalts human nature. Its mission is to purify. It fills the sky of life with rainbows, and creates ideals towards which we strive. If the goal of the universal brotherhood of man is ever reached, the poets in every land and the poems in every language will be found to have contributed much toward the result.

### MR. TROTWOOD'S VACCINATION.

#### Be Carefully and Skillfully Vaccinated Himself With Petunia Seeds.

The humorous aspect of vaccination always impresses people who are not vaccinated much more keenly and agreeably than it does those who are vaccinated. But in a case which actually occurred last spring in the environs of a great city in which a "smallpox scare" was proceeding, the victim of the operation was able, before all was done, to see the humorous side of it. It was a very peculiar case—so peculiar that undoubtedly it never happened before and never will happen again.

Mr. Trotwood, who lives in a suburb a few miles out of the city, is a thrifty though not a penurious man, and likes to do with his own hands what he can do as well as not. He was sure that he could vaccinate himself. So he bought a small quantity of vaccine matter of the best guaranteed quality, took it home, and before he retired that night vaccinated himself on the left arm.

Next morning he remarked casually to his family at the breakfast-table, as he reached around uneasily toward his left arm, "I vaccinated myself last night, and by George, it's taking, too!"

"Vaccinated yourself!"

"Certainly I did. Simplest thing in the world. Did it just exactly as well as a doctor could do it."

Mr. Trotwood's family were all admiration. But before he went away for the day Mrs. Trotwood, happening to go to the bath-room, found upon the shelf there an apothecary's envelope, marked "vaccine matter," which was sealed, and had evidently never been opened. She went to her husband.

"Peter," she said, "what did you have your vaccine matter in?"

"Why, in an envelope. I got it at the drug store in town and brought it out, opened the envelope and used what I needed."

"But this envelope has not been opened at all!"

Mr. Trotwood was greatly perplexed.

"Why," said he, "I certainly—"

At this juncture Mrs. Trotwood burst into hearty laughter, and produced another little white envelope, which had been opened, from the near vicinity of the other on the shelf.

"Peter Trotwood," she exclaimed, "I'll tell you what you've done! You've been and vaccinated yourself with my petunia seeds!"

It was true. Mr. Trotwood had taken the wrong envelope, and had carefully and skillfully vaccinated himself with petunia seeds—and he was sure it was "working." He saw the humor of the situation, and laughed as heartily as any member of the family.

### HISTORICAL LIES.

There was probably no such man as Romulus. The first historian who mentions him lived at a distance of time so great as to throw extreme discredit on the story as told by him.

Alexander the great did not weep for other worlds to conquer. There is reason to suspect that his army met with a serious reverse in India, a fact that induced him to retrace his steps.

The crew of *Le Vengeur*, the famous French ship sunk by an English man-of-war, did not cry "Vive la Republique!" They bawled for help, and the English boats were sent to their assistance.

The immense burning glasses with which Archimedes burned the ships of the besiegers of Syracuse at ten miles distance were never manufactured and it is now known that they could not have existed.

Pitt did not use the expression, "The atrocious crime of being a young man." The words were used by Dr. Johnson, who was not present, but wrote a report of the speech from an abstract given him by a hearer.

Vinegar will not split rocks. So Hannibal could not thus have made his way through the Alps. Nor will it dissolve pearls. So that the story of Cleopatra drinking pearls melted in vinegar must have been a fiction.

Worshippers are not crushed by hundreds under the wheels of the car of Juggernaut. The car has not been taken out of the temple for many years, and such deaths as formerly occurred were exceptional or accidental.

## FUN FOR SOLDIERS.

Tommy Atkins Plays at Warfare at Islington—British Troops Show Visitors How Battles Are Won.

The royal military tournament, recently held for the fifteenth time at Islington, England, is more than a popular entertainment. It is a public institution, and one too, without which there would be a positive and painfully felt gap in the life of the nation. What people is there under the sun that does not like a show? And what can be a more fascinating show than one in which all the actors are not professional showmen, but the sternest of all living realities—soldiers and fighting men? With the mass of the nation leavened with the citizen-soldier spirit, this annual assault of arms at Islington, this Isthmia of Tommy Atkins, is naturally welcomed as one of the greatest popular pleasures of the year. Who cares for the tournament of tongues at Westminster in comparison with the tournament of arms at Islington? And what a poor show, thinks the sightseer in London, is made by the gladiators of St. Stephen's as compared with the gladiators of the Agricultural hall!

The beauty of these tournaments is that they are not restricted to the British army. France and Italy have in turn contributed to them some of their very best wielders of the white weapon; and now Denmark sends as messengers of peace and amity some choice descendants of the men who used to land upon British coasts, sword in hand, with different intent. It was hoped that a body of United States cavalry would have added to the attractions of this year's display, but their appearance has been deferred till next June; and then it will go far to realize the hopes of race universalists, who are always dreaming of an annual Isthmia for all the Anglo-Saxon race. Certainly the Isthmia at Islington is already acting as a good and promising nucleus of such a fine scheme; and, indeed, there were some who began to think that its realization was well past the initial stage when the home troops of the Queen were seen contending in the same arena of arms and honor with gunners from the snow-clad plains of Canada, and bronzed troopers, finest of their kind, from the sheep-producing prairies of the Southern Cross.

But, if last year's tournament was perhaps a little more vividly picturesque—with its lancers from New South Wales, its gunners from the batteries of Canada—the programme of the present assault of arms is as rich as ever in martial feats of strength and skill. The evolutions performed are all new and are most effective. The pace which is kept up is especially noticeable and to be commended highly. It is usually quick and lively, much in contrast to the somewhat slow, if stately, movement seen in previous years.

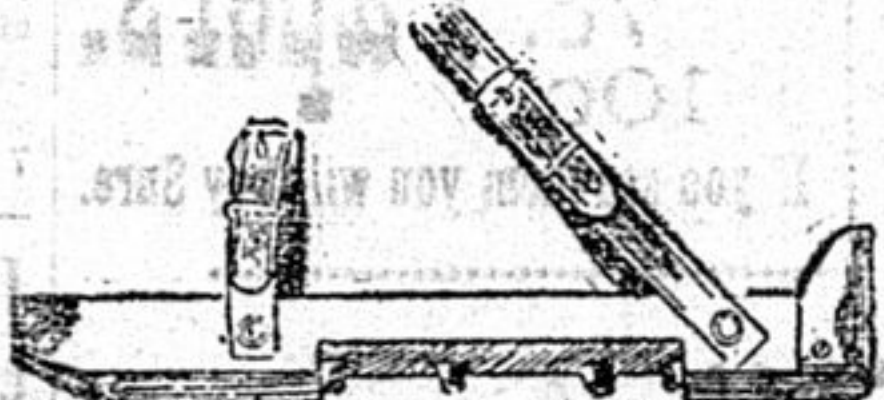
The series of performances of skill and strength by men of the army and auxiliary forces, horse and foot, was opened at the Royal Agricultural hall the other day. Among the visitors from day to day were Prince Edward of Saxe-Weimar, Lord William Seymour, and other military officers of rank. The First Life guards, the Scots guards, the Twentieth hussars, and two batteries of horse artillery, as well as many yeomanry cavalry troops and volunteer battalions, contributed to the varied programme of material displays and athletic exercises.

For the combined exhibition of all arms a model of a Soudanese native town on the banks of the Nile was erected, to be attacked by a British force. A light bridge having been thrown across an imaginary stream, the advanced guards of troops pushed forward and prepared to bivouac; they were soon engaged with the enemy, but were relieved by the arrival of successive reinforcements, with a mountain battery and machine guns. A party of the royal engineers constructed a pontoon bridge and a balloon was sent up to examine the interior of the fortress. These operations resulted in driving out the Soudanese garrison.

### SKATES FOR LADDER CLIMBERS.

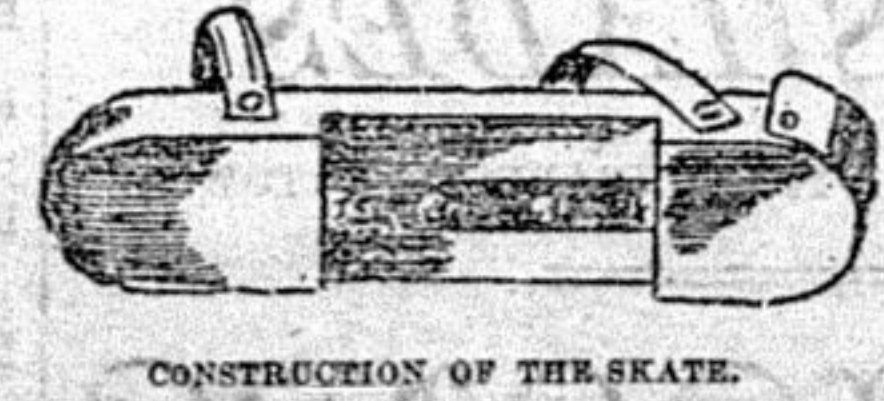
They Give a Surer Footing and Save the Shoes.

A ladder skate has recently been designed for roofers and other workmen whose employment calls for their frequent use of the ladder. The bottom of the skate is provided



THE LADDER SKATE.

with a three-loop casting to prevent slipping on the round of a ladder. The manufacturers state that the skates can be put on or taken off in an instant; that they do not have to be taken off when walking on the ground; that by their use standing on the round of a ladder is made as comfortable as standing on the ground, and that



CONSTRUCTION OF THE SKATE.

the skates are so made that the foot can be moved on a ladder to any desired position. The point is made that the skates are great savers of shoes.

To become like Christ is the only thing in the world worth caring for; the thing before which every ambition of man is folly, and all lower achievements vain.

When Christ said "Suffer little children to come unto me" he did not require their pedigree.

## THE ANGRY BOERS.

Intense Excitement Prevails at Pretoria—The Boers Prepared to do Battle With the British.

The South African Republic is surrounded by British possessions or territory under British protection. It has no outlet to the sea and is not likely to get one. The former President Kruger tried every means in his power to secure an outlet through Swaziland to the coast, but was unsuccessful. Rhodes' influence was too much for him. The Boers chafe under this restriction, which bears heavily upon them. The Republic raises its revenue by means of a tax upon imports. These having to pass through British custom houses at the coast, and to be hauled many hundreds of miles by railway or ox team far into the interior, where another tax is imposed at the frontier of the Republic, excessively high prices prevail for all commodities in the Transvaal, which would not be could the Boers secure an independent route to the coast for themselves. This is looked upon as part of the

### FORCING OUT POLICY

of the aggressive Premier at the Cape—"All South Africa British" is his motto. The existence of the Republic under such circumstances is doubtful, but when it is considered that the discovery of rich gold deposits in the Transvaal has caused a great influx of foreigners, so that the British subjects in the Republic equal, if they do not outnumber, the Boer population, it can be easily seen that it will be extremely difficult for the Republic to preserve its autonomy for many years longer. The conventions of 1880 and 1884 with Great Britain secured to the Boers republican rights, but the British retained control of native affairs and foreign relations so that the Boers are prevented from engaging in foreign intrigue. They had battled for their independence and won it by overthrowing, with great slaughter, the British forces of Gen. Colley at Majuba Hill in 1851, and they have jealously guarded the Republic ever since. The influx of British miners and others, attracted thither by the discoveries of gold, was not regarded with favor by the exclusive Boers, but the country has advanced so amazingly within the past few years that general prosperity reconciles them to the presence of the English incomer or "vitalander." Still they have steadfastly refused to extend the franchise to this large foreign element or to grant it representation in the Boer Parliament, which has

### EMBITTERED ENGLISH FEELINGS

against them. Under these circumstances the English residents are justified in refusing to do military service for the Republic, as a recent decree enjoins upon all maledenizens of the Republic. An attempt on the part of the Boers to enforce this decree must surely lead to resistance on the part of the English, who refuse under any consideration to bear arms for the Republic. Reports from South Africa, show that intense excitement prevails at Pretoria, the capital of the Transvaal, that the English have made a demonstration against the Boers, and that the latter, fully armed, were coming in from the surrounding country, prepared to do battle with their hereditary foes, so the situation may be said to be serious. War with the Boers will be no light matter. They are brave, intensely patriotic and skilled riflemen, which qualities have won them victory over the British before, and may again should occasion arise.

### WEALTH OF THE WORLD.

The Astonishing Rate at Which the Wealth of the World Increases.

Few people, even among professed politicians, have much idea of the wealth of the world or of the manner in which that wealth is growing. Still fewer have any notion of the potentiality of wealth to increase. M. Jannet quotes the elaborate calculation of an ingenious author to show that 100 francs, accumulating at five per cent. compound interest for seven centuries, would be sufficient to buy the whole surface of the globe, both land and water.

M. Jannet cites various authorities to show that the wealth of Great Britain exceeds £10,000,000,000; that of France, £8,000,000,000; that of all Europe, £40,000,000,000. If we place the wealth of the rest of the world at £26,000,000,000 we shall arrive at an aggregate of £80,000,000,000. We should have, we may add, to multiply this vast sum 30,000 times before we reached the total to which according to M. Jannet's ingenious authority, 100 francs accumulating at five per cent. compound interest for 700 years would grow. The figures we have given are so vast that they convey no appreciable idea to the ordinary reader. It may assist the apprehension if it be added that France on an average possesses more than £200, Great Britain more than £250 for each member of the population. Just 200 years ago Sir W. Petty estimated the entire wealth of England at only £250,000,000. Two centuries, therefore, have increased it forty-fold. But the chief additions to it have been made in the last fifty years and we believe that we are not far wrong in saying that the sum which is annually added to Great Britain amounts to £200,000,000, or in other words is nearly equal to its entire wealth at the time of the revolution of 1688.

### Result of a Policeman's Mistake.

A regrettable mistake, that has led to tragic consequences, has been made by a member of the "police des mœurs" at Mar-seilles, France. He arrested a respectable young dressmaker, aged 19 years, on suspicion of being an improper character. As it was not until she had been in the prison cells for a whole night among criminals that she succeeded in establishing the fact that she was of unblemished reputation, the occurrence preyed upon the young girl's mind. "I could not bear my parents to hear of my misfortune," she said more than once to a friend. In the end she committed suicide by suffocating herself with charcoal fumes. In a pathetic letter, written before the deed was committed, she said, "the police are the cause of my death."

## FAST ATLANTIC SERVICE.

SIR WILLIAM VAN HORNE HOLDS TO HIS OPINION.

Claims That the Country Needs it, and That It Will Pay It Properly Handled. It Must Be of the Very Best Class in Every Particular.

The following interesting statement was made recently by Sir William Van Horne with regard to the proposed fast line:

"I have publicly stated my views about a first-class Canadian Atlantic steamship line a good many times, and I hold to those views just as strongly as I ever did. I would be quite unfit for the office I occupy had I not, with the opportunities I have had, become familiar with the commercial interest of the country and with all parts of the country. It is possible that my deductions from the knowledge I have acquired are incorrect, but I believe I am right in holding that an Atlantic steamship service of the highest class is the very greatest need of the country. Indeed, I have no doubt whatever about it, nor have I any doubt as to its practicability, to which I have given much attention; or that it will be successful if properly established and handled. I can see where the business is to be had to support it, and I think I can see what effect it will have in promoting the material interests of the country; and I hold that it should be provided at almost any cost. I look upon it as a necessary and natural supplement to the enormous expenditures Canada has made for the development of railways and canals, and that it will have a most powerful effect in attracting people to the country. I hold that it would be folly to start at this late date with a second rate line; and in order that it may be effective and successful, it must be of the very highest class. It must be all that money will make it. The Canadian Pacific Railway Company has no financial interest, and is not likely to have, in any scheme now under consideration. We would prefer to see the service established by some one of the present Canadian Atlantic lines, or by a combination of them; but if they will not undertake it, anybody else who does will have our hearty cheers, provided, of course, that the service furnished is just what we think it should be. This company indicated to the Government at one time the conditions on which it would undertake to furnish the service, but these conditions were not deemed practicable, and the company has since dropped out of the question. It should not be forgotten that when this company moved towards the establishment of a first-class Pacific steamship line most of those who ought to know insisted that we could never induce passengers to go to Vancouver to take ship for China and Japan; but the results have strikingly disproved this, and they have proved that people who have travelled by sea will travel by the very best ships, from whatever port they sail."

### THE PULLMAN BOYCOTT.

The Movement Gathering Strength—Not a Car Leaving Chicago.

A Chicago despatch says:—The extent of the Pullman boycott strike was indicated Thursday by the flood of telegrams received by President Debes, of the American Union; the movement has gathered strength until now it paralyzes the traffic of the whole west. Perishable freight is being ruined on side tracks of overland routes in Texas, New Mexico, Arizona and Southern California as well as Nebraska, Utah, Montana, Oregon, Idaho, Minnesota and the Dakotas. Travel is stopped from the Pacific coast east, and not a car is leaving Chicago for the west. Messages received to-day from Minneapolis, Duluth, Los Angeles, Sprague, Wash., Emporia, Kan., Livingston, Butte and Missoula, Mon., and Little Falls, Minn., all agree that no trains are moving from Chicago to the Pacific coast.

No trains, through or suburban, were running on the Illinois Central into or out of Chicago to-day. By 10 o'clock this morning the Galen and Wisconsin division of the Chicago North-western was at a standstill. Announcement was made that every road entering the Union depot would be tied up at noon. The Chicago, Burlington and Quincy, the Pennsylvania, the Chicago and Alton and the Chicago, Milwaukee and St. Paul, would all be affected if traffic at the Union depot should be stopped.

### Seeing the Editor.

The office boy, who was also guardian of the gate of the Occidental, was sunning himself lazily in front of the office when a rough-looking citizen, with his pantaloons in his boots and a gun in his coat-tail pocket, approached the portullis.

"Can I see the editor?" he asked in a voice that sounded like a bass drum out of tune.

"Do you want him to see you?" asked the guardian significantly.

"I don't care if he does or not, so long's I can see him."

This did not strike the guardian propitiously.

"What do you want to see him about?" he asked on another tack.

"About four minutes and a half," was the rather equivocal reply.

"Is it personal?" inquired the boy, disregarding the ancient form of witticism in the answer.

"Yes."

"Want to lick him?"

"No; want to pay my subscription for last year and the year to come."

The boy jumped up; he hadn't moved previously.

"Walk right in," he said, shoving the door open; "walk right in; but say, mister, don't spring it on him sudden; he ain't used to it and something might happen."

Policemen in Austria must understand telegraphy.