

their fathers grew rich. It is to be hoped that Ontario farmers will profit by the suggestions thrown out by Mr. Swan.

THE JERSEY RECORD BEATEN AGAIN.

Those interested in the development of the Jerseys will be pleased to learn that the butter record has been broken once more, and broken with a vengeance at that. This time Canada has not the honor of being either the home or the birthplace of the Queen of the Jerseys. The new record-breaker is Princess 2nd, 8046. She was bred by A. Le Gallais, St. Brelade's, Island of Jersey, dropped Feb. 22, 1877. She was imported in 1879, and bought at auction in New York for \$4,800 for the herd of Mrs. S. M. Shoemaker, of Burnside Park Farm, near Baltimore, Maryland. Her test was an absolutely astounding one, and there will no doubt be many to raise a howl of incredulity about it, just as there were in the case of Mary Anne of St. Lambert. As it was an officially conducted test, however, there is certainly no occasion for anyone to throw discredit upon it. The American Jersey Cattle Club is not an institution that could afford to take any chances as to the falsification of records, and there is really not the shadow of an excuse for doubting the absolute accuracy of the report of the agent of the American Jersey Cattle Club under whose supervision the test was made. The report of the Commissioner says:—

"In the following table are given the details of the test, which resulted in a total yield in seven days of 299½ lbs. of milk, from which were churned 44 lbs. 1½ oz. of unsalted butter, which, when salted at the rate of one ounce to the pound, gave 46 lbs. 12½ oz. of salted butter ready for market. The great gain by salting is due to the fact that the unsalted butter was worked so very dry that when the salt was afterwards worked in no water or buttermilk appeared in the bowl. It should have been said above that the butter was twice washed in the churn when in granular form, removing every trace of buttermilk:—

Feb. 22...6.05 p.m.	Milked dry.	
Feb. 23 3.00 a.m.	18½ lbs.	
Feb. 23 11.00 a.m.	11 lbs.	44½ lbs.
Feb. 23 7.00 p.m.	15½ lbs.	
Feb. 24 3.00 a.m.	17½ lbs.	
Feb. 24 11.00 a.m.	11½ lbs.	41½ lbs.
Feb. 24 7.00 p.m.	12½ lbs.	
Feb. 25 3.00 a.m.	13½ lbs.	
Feb. 25 11.00 a.m.	12½ lbs.	40 lbs.
Feb. 25 7.00 p.m.	14 lbs.	
Feb. 26 3.00 a.m.	16½ lbs.	
Feb. 26 11.00 a.m.	12½ lbs.	43½ lbs.
Feb. 26 7.00 p.m.	14½ lbs.	
Feb. 27 3.00 a.m.	16½ lbs.	
Feb. 27 11.00 a.m.	12 lbs.	44½ lbs.
Feb. 27 7.00 p.m.	16 lbs.	
Feb. 28 3.00 a.m.	15 lbs.	
Feb. 28 11.00 a.m.	13½ lbs.	42 lbs.
Feb. 28 7.00 p.m.	13½ lbs.	
Mch. 1 3.20 a.m.	11½ lbs.	
Mch. 1 11.00 a.m.	15½ lbs.	43½ lbs.
Mch. 1 6.05 p.m.	16½ lbs.	

7 day's milk299½ lbs.

Butter,
unsalted,
44 lbs.
1½ oz.;
salted, 46
lbs. 12½
oz.

Mr. J. Henry Gest, under whose supervision the test was made, circumstantially describes the thorough precautions he took to secure a thoroughly fair and accurate test, and from what he says there is no room left for doubt as to the absolute correctness of the test. Princess 2nd is described as a large cow of light fawn color with white on the belly; white switch and very yellow skin. She has a large selvedge escutcheon, a large, perfectly-formed, and very symmetrical udder, with large teats; large and very prominent tortuous milk veins. She weighs 1,125 lbs. and carries no superfluous flesh, being fine in bone and muscle. Her last calf was dropped Dec. 31, 1884, seven and a half weeks before the beginning of this test. Her preparation for the test consisted of six weeks of high feeding, which so enriched her milk that during the test only 6½ lbs. of milk were required to produce a pound of butter.

With regard to her feeding Mr. Gest's report says:—

"The cow was fed at the discretion of Mr. O. Ricklefsen, manager of the Burnside Park Herd, the daily ration being: twenty-two quarts ground oats, fifteen quarts pea meal, two quarts linseed oil cake, one quart wheat bran; total, forty quarts, besides carrots, beets, and good clover hay. Her appetite was constantly good; in fact she seemed always ready to eat more. The weather during the test was disagreeable, cold, and snowy, and interfered somewhat with her daily exercise."

Princess 2nd is by Khedive, P.S. 103, out of Princess, F.S. 452, being a Coomassie-Welcome cow. In a letter to the *Chicago Breeders' Gazette* Mr. Gest says:—

"The first lesson to be learned from this test and those made by Mr. Fuller is one of feeding, in which great improvements have been made. The next is that the capacity of the Jersey cow of to-day can be raised far beyond what it now averages, for these tests show what possibilities are ahead of us. They demonstrate that we can enrich the milk until only six pounds are required to carry a pound of butter. Of course this is to-day done by forcing; but it is not too much to say that by judicious breeding and proper feeding and training we may gradually develop a Jersey cow that will have a natural capacity far beyond the natural capacity of to-day. They open a future for Jerseys wider than ever. And they are the greatest possible proof that the Jersey cow is the butter cow of the world."

DRIVING UNSHOD HORSES.

Mr. Ernest Dundas, late of Toronto, now live stock editor of the *Kansas City Journal*, writes the following:—

It seems somewhat strange that because a few men try to save the expense of shoeing that so many others should think, against their own common sense, whether it is possible to use horses without shoes or not, and many have made their horses suffer pain trying the experiment. In nearly every part of the world where horses are used the attempt has been made without success, except in countries like Algeria, where the ground is sandy and soft.

Notwithstanding the fact that it has been proved to all intents and purposes that horses must be shod, people still try to work them

without shoes, and make the unfortunate animal that happens to be their property suffer needless pain. While horses suffer without shoes, it is to be feared that with them they often have to bear much pain through the carelessness of the blacksmiths. As a general rule there is too much iron put in the shoes, and what is worse, the foot is often made to fit the shoe, instead of the shoe fitting the foot. While the foot is protected by the shoes the joints have to bear the concussion caused by the hard metal and the ground meeting at the force they do, and promising young horses often turn lame from navicular and other diseases, from this fact. A new style of shoeing has been tried and found to be a great improvement, but the public, notwithstanding they know the present style of shoeing is to some extent wrong, are loth to try anything new.

The wall of the foot is really the only part that requires protection, and why is it necessary to cover half the foot with iron? When a horse is turned out into a pasture for any length of time, a careful owner will generally have tips put on, or a narrow piece of iron put half way round the front of the hoof. This prevents the wall from being broken away, as it often is when the ground is hard, and when the animal is brought in again the foot is found to be sound, the frog has become pliant and considerable expansion is to be noticed at the heels. The frog, there is no doubt, was meant by nature to save concussion and prevent slipping. Why cannot it be used on the hard and slippery roads? This has been tried and with great success, and the shoes that are used last much longer than the ones used at present, and save the horse's legs to a great extent. The shoe is let into the wall and round the sole of the hoof to within three inches of the heel, and the frog is allowed to come in contact with the ground. It has been used on both carriage and draught horses in some of the largest cities in the world, but has not become generally known, owing to the fact that blacksmiths as a rule object to give up their old style for a new one that they fancy not so profitable and difficult to learn.

The frog in its natural state is soft and like rubber, and if the knife is kept away from it will become of great benefit on slippery roads, and do away with the most injurious things of all "corking" or "heels. Lameness is often caused by contracted heels produced by careless shoeing, and if more owners would only go to the shoeing shop and see that shoes are made to fit, the noble animal that not only gives them pleasure but also puts money into their pockets would be saved many weeks of unnecessary torture.

ANNUAL SPRING SALE.—The entry books are now open for the spring sale of horses. Messrs. Grand & Walsh appeal to the farmers and breeders to forward their entries at once. By doing so much trouble and inconvenience can be averted. As the firm handle no horses on their own account now, shippers are placed on a better footing. The sale will be conducted on a strictly commission basis, and carried through in the same honorable manner that characterizes the firm's dealings.