

perfection, I will recommend it to all, as any boy or girl can run it, and I must state that nothing short of a first class machinist can manage the Burmeister and Wain.

I have seen the DeLaval running now the second year and it has not cost (\$2 00) TWO DOLLARS for repairs the whole time, and is doing as perfect work as ever.

I also find that the DeLaval will work at its best by setting it level on any ordinary floor and the Burmeister and Wain requires a solid stone foundation. The foundation for my Burmeister and Wain cost me over (50 00) fifty dollars.

I do the largest cream trade in Canada as well as manufacture Butter and Cheese, and I can with the DeLaval Separator make a better sample of cream for a city trade than can possibly be done with the Burmeister and Wain, and equally good for Butter.

All parties wishing to buy Separators are invited to come to my place in the centre of the City of Hamilton, and see the Burmeister and Wain and the DeLaval working side by side, and draw their own conclusions. Yours truly,

W. G. WALTON.

NOTE.

It is a well known fact that as an engineer and machinist Mr. W. G. Walton stands second to none. He is also manager of the Farmers Dairy Company of Hamilton and his opinion is well worth the careful consideration of all intending purchasers of Cream Separators. FRANK WILSON.

Experiments on Potatoes.

In a statement of some experiments with fertilizers on potatoes, a contemporary states that twelve rows running parallel were staked off of equal length, and eleven of them were treated with fertilizers and the twelfth unmanured. Experiments performed in this way are liable to considerable error, as the roots of adjoining rows three feet apart meet and cross each other early in the season and long before tubers are formed of any size. The plants in each row may therefore easily feed on the manure given to their neighbors, and a true result not be obtained. Taking the results, however, for what they are worth and with this liability to some error, we observe that the largest return above mentioned was obtained from dry ashes and plaster; next, from dry ashes and hen compost; third, from bran and plaster, and from stable droppings; fourth, from hen compost; fifth, from leached ashes; and from the unmanured row just half as much as from the ashes and plaster. The fertilizer was given at the same cash value to each row. There is no doubt that different returns would come from these fertilizers in other localities with soils of unlike character.

JUDGING HEAVY CART-HORSES.

It is a custom adopted by some societies, but a very bad custom, we consider, to submit all the animals to the veterinary inspector, who thus acts as a grand jury, and must necessarily make a cursory and hasty examination. The examinations should be limited to the prize and reserved horses alone, and should invariably take place before the awards are affixed, and the results relegated to the judges to determine thereon. From the non-observance of this rule—that is, the invariable examination by the veterinary inspector—serious errors have sometime been made, particularly with light horses, hunters, and hacks. I have known a first prize given to a brood mare with a cataract, and to a hunting stallion with a spavin, which should not be. In both cases the tendency is hereditary, and the common excuse of the former, a blow, is all moonshine.

How many judges should there be? I have acted alone, also with one and with two others, and I certainly prefer the latter; and I think one judge preferable to two, provided he

is duly informed of his duties beforehand. Of all animals to be judged, the most difficult are the foals, which are sometimes shown by themselves, and sometimes with their dams. "You stop to the dinner, I suppose?" was asked of a judge. "Well, no, I will get home. Those confounded foals have made me feel quite ill." I have given the preference to three judges acting together, which lessens responsibility, the judge who is in the minority yielding, of course, if he cannot persuade the others that they are wrong; whilst, with two only, the strongest minded or most obstinate man prevails, rather than the merits of the animals.

It is almost unnecessary to point out that at all shows the managers or stewards should secure a free and proper space for the judge or judges to perform their duties with comfort and satisfaction. This is such a truism that we should not mention it had it not occurred at more than one county show that the greatest physical exertion was required on the part of the judge to secure room to breathe and examine his horses properly—Norfolk and Dorsetshire to wit. And now, having relieved our mind of these necessary preliminaries, let us endeavour to classify some of the points we are called upon to judge. The horses brought before us, having been weeded out in the manner we have suggested, we direct our attention almost at a glance to the size, general shape, and aspect. Is he high and big enough for his class? has he barrel sufficient with a good broad back, for unless he has these he has no chance of a prize? He should be thick through the heart, with plenty of room for the digestive organs. He should be 16 hands and upwards in height, but not an unwieldy giant. The best position to see these points is behind the horse on the near side, which gives us a three-quarter likeness, as we should say of a picture. This is the best position in which we can see most of the horse and his best points at one and the same time. It is by no means essential to girth the horse, except for close comparison, but he should be as near eight feet as possible—if in a big class. The ribs of such a horse should spring out horizontally from the spine, as this will secure plenty of space for the muscles of the back, for it should be borne in mind that, though length gives speed, it is breadth that gives strength. It is needless to point out that all movements of the limbs are effected by a contraction of the muscular fibres acting on the bones which the joints permit to be brought nearer together. The tendons or snaws possess no power in themselves, but only serve the purpose of transmitting motion or power between the muscles and the bones like the ropes in pulling up a hod of mortar. Well, if we were in a ring, we should have judged these points, and others too, in less time than it has taken to discuss them, for we should have taken in the buttocks, so essential to strength, and the shoulders, so often discussed; whilst the carcass should be altogether neither too long nor too short, but just midway between the two extremes. It used to be considered that low upright shoulders, with a low setting-on of the head, enabled a horse to throw more weight into the collar. This may be true, and may be condoned, but such horses will seldom get a prize in a show-yard, because there are so many with good, deep, oblique shoulders, strong, rounded muscular necks, sufficient to support a muscular head, and strong enough for anything required, that can easily walk away from such lowly competitors.

After looking from the position referred to, it is well to view the horse in front, from which we judge if he has a wide, fleshy, and ample chest, with plenty of room for the collar, with withers not too high or lean; and, while in this position, it is convenient to examine the eyes, the ears, and the teeth, and the head generally, and to pass the fingers under the jaws. The eyes should, of course, be clear and free from disease, and sufficiently large and projecting, but not too