When driving there must be no pulling and hauling first one side and then the other. A well broken, well-bitted horse needs as much pressure as is needful to keep his head straight and no more.

When you wish to stop your horse, do it in the manner

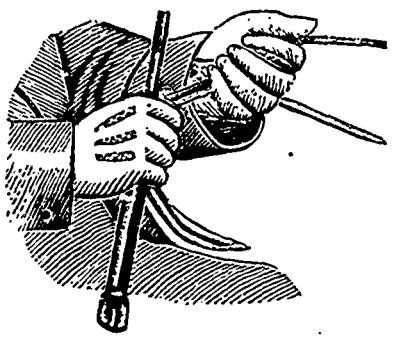

FIG. 4—STOPPING.

indicated in figure 4. There is no necessity of falling back with your feet in the air, or pulling your hands up to your eyes in the fashion of some drivers. Simply shorten up the reins with a turn of the wrist. (1)

ENSILAGE AND SWEDE TURNIPS.

I am anxious to increase my cows, am undecided as to building a silo, and would like advice. The earliest ensilage corn at present grown here will not "ear," and if some should form will not glaze, the yield being in the vicinity of 18 tons per acre. I can and do grow 18 to 19 tons per acre of Swede turnips at a cost of about 85c. per ton. Is a ton of ensilage made from corn as above described equal to a ton of Swede turnips for feeding milch cows kept for butter purposes? It appears to me that ensilage is popular only where turnips cannot be grown as successfully as here—600 to 800 bushels per acre, E. B. B. *Charlottetown, P. E. I.*. [Indian corn when in full tassel, even before the kernel begins to form, has a greater nutritive value per ton than Swede turnips, and the question is not settled whether there is any increase in the aggregate amount of nutriment per ton of green corn, after it reaches the full tassel stage. We think that the maturing of the ear simply changes the form of nutriment, and what it gains in the ear it loses in the stalk, or that the aggregate amount of nutriment, per ton, is not increased. But B.'s question as to the comparative food value of Swede turnips and corn ensilage, at the stage of maturity he mentions, has been decided by numerous analyses in favor of the corn. Besides, one point does not seem to be considered by B., and that is the liability of Swede turnips to unfavorably affect the flavor of the milk, and butter. Yet it may be said that sour ensilage also affects the flavor of milk and butter. But when the ensilage is properly preserved it is sweet and not liable to this objection. Perhaps we may as well say here that a perfect remedy for the taint of milk, from feeding sour ensilage, and also Swede turnips, is found in heating the milk in a water bath, after being drawn to 135° F. The temperature fully dissipates any such taint, and may be applied to either case. We note the interesting statement of B. that Swede turnips can be raised on his island at 85c. per ton, which is an astonishingly low price, and must result from the lower price of labor with him. This is as low a cost as ensilage can be raised and stored for in the United States, and it is no doubt considerably below the average cost of ensilage. We think that B. can rely upon the value and success of ensilage, siloed at the stage of maturity he mentions, and that it will be an important factor in increasing his milk and butter production. E. W. S.]

(1) Two fingers always between the reins. Hardly one of the Montreal Tandem Club knows how to catch up his whip properly.
A. R. J. F.

WEIGHT OF DUNG.

One cubic yard of well made and firm dung cut out of the middle of a dung heap would not weigh more than 15 cwts. We should be disposed to think that approximately 1½ yards would run to the ton. The firmest silage will only run about 56 lb. to the cubic foot, or 13½ cwt. to the yard; and we think that 15 cwt. to the cubic yard of dung is ample. Reliable and modern *data* are wanted, but the weight of a certain volume of dung must always be a very variable quantity.

THE FEDERAL EXPERIMENTAL FARMS,

By M. J. A. CHICOINE.

Mr. President,

From the very first organisation of the Dairymen's Association of the Province of Quebec, I have followed its labours with the greatest interest and the greatest benefit. The lectures and discussions which have distinguished its meetings, and which have been so opportunely published, constitute a new epoch in the diffusion of agricultural information in this country.

At this, the first time of my being present at any of its deliberations, I feel it my duty to congratulate the founders of the association on the patriotic enterprise they have undertaken; an enterprise which has been carried out with a devotion and success worthy of all praise.

In spite of my admission to your ranks only dating from yesterday, you have condescended to ask me to address you. Flattered as I, of course, am at this mark of your good will, I still am obliged to solicit your indulgence.

The subject I am about to treat is so vast, and embraces such a number of details, that it is difficult, not to say impossible, to find room in an ordinary lecture for a description in full of the *Experimental Farms of the Dominion* in all their importance and under all their different aspects.

These establishments, of quite recent creation, have already been so largely developed that it would take hours of talk were I only to sketch before you the operations of the Central Farm at Ottawa, the one that more specially concerns us.

My essay, then, will be limited to the pointing out of certain striking features, to tracing the chief points of interest to be met with, and to attracting your attention to a subject which I shall only skim over.

I am happy to think that in striving to extend the reputation of the Experimental Farm established in the suburbs of he Federal capital, for the common benefit of the two provinces of Ontario and Quebec, I shall meet with the approval of all the friends of progress, and more especially shall I second the intentions of the Hon. John Carling, Minister of Agriculture, who is particularly desirous of seeing our compatriots more interested in the object and organisation of this institution. Mr. Carling, during his long career as a public man, has always loved and favoured agriculture, and the Experimental Farm his now is most dearly loved work: to it he devotes not only his official attention, but also a great portion of his leisure.

Agriculture is essentially a *matter of fact* business, and