

pulverisation of the soil largely increases the crops, and is one of the necessary parts of the preparation for meadows. A good heavy roller passed over the grass-land in spring would be a great benefit when the frost has raised the soil.

M. Paquin has drained his garden with wooden pipes: they act perfectly. We observed a patch of Orchard-grass four feet high, which promised a yield of 400 bdes of hay per arpent. A most useful grass this; very early and makes famous pastures. Excellent as hay, but it must be cut *very green*. The seed—14 lbs per bushel—sells for \$3.00. M. Paquin had better extend the cultivation of this grass, especially in his pastures.

Sixth prize.—M. Athanase Dufresne, Deschambault.

The two farms of M. Dufresne contain 180 arpents = 150 acres; of which 110 arpents = 93 acres, are in cultivation, the rest in bush and bog. As M. Dufresne can get lime very cheaply, we recommend him to make composts in his "savane" of earth and lime mixed at the rate of a quarter of a bushel of quick-lime to a tumbrel of earth. The heaps should be

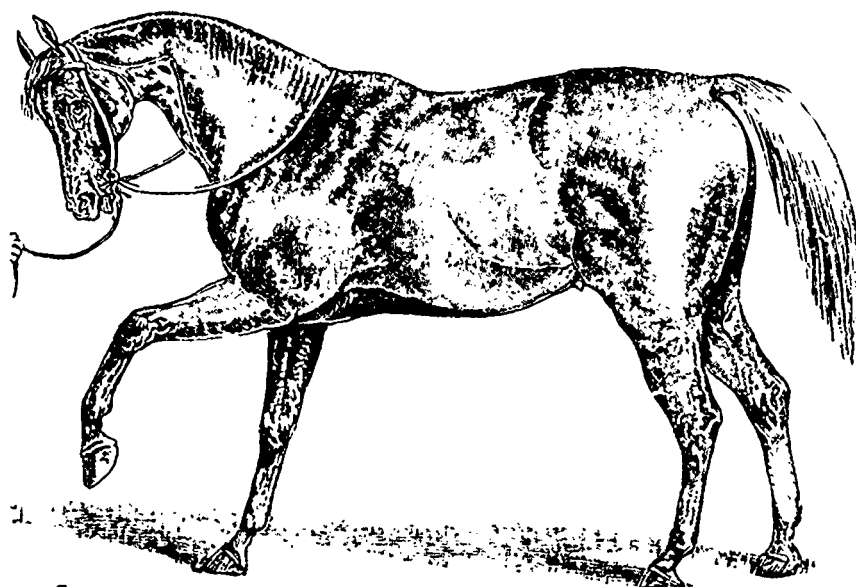
ter. The work done, and being done, by such men as Denison, Barnardo, Müller, and other devoted servants of our common humanity, is beyond all praise, as it is above all reward.

A. R. J. F.

Mr D. A. Jones' methods of Swarming, Extracting, Fall-Feeding.

TO THE EDITOR OF THE "JOURNAL OF AGRICULTURE."

Dear Sir,—Mr. Jones practises both natural and artificial increase—by the former, I mean allowing the bees to swarm naturally, and by the latter, using what is called the *nucleus* system. In Beeton the usual time for swarming, is between the 22nd June and the 1st July,—it depends a great deal upon the kind of season, and the way the bees have been treated during the spring. Swarming, of course means, that all the old bees leave the hive with the queen because the place has become overcrowded, and they know that they can work better in new



RAYON D'OR.

placed in a spot near a ditch that there may be no danger of their being damaged by water. These composts spread on the pastures, or on land in preparation for potatoes, at the rate of 50 loads an arpent would be of great benefit for seven or eight years at least.

—(From the French.)

ED. A. BARNARD.

NIGHT AND DAY.—A monthly record of Practical Philanthropy: Edited by Dr Barnardo: March, 1886.—J. F. Shaw & Co., 48 Paternoster Row, London, E. C.

The above publication has been forwarded to me for notice. Any one who knows the slums of London as well as the writer of these lines, who has seen the terrible faces of the street Arabs of both sexes as they prowl about the confines of the wealthier districts of that great city on the watch for booty, must welcome the work of any one, be he Christian or Jew, Turk or Infidel, who will boldly thrust himself into the dens of these worse than wild beasts, and strive boldly with the fiend for the salvation of his wretched slaves, if haply he may save some. There is no room for exaggeration in this mat-

quarters. But when a swarm thus leaves a hive, it of course provides for those bees which remain by building from ten to forty queen cells, each of which, if properly managed, will hatch out a queen.

Thus, swarming is of use in two ways to the bee-keeper, it increases his stock, and supplies him with queens.

The *nucleus* system consists in taking one comb containing brood and bees from a strong hive which is about to swarm, and placing it between two empty combs, in a new hive—this latter is the nucleus or beginning of a colony. Before it is complete, however, two or three frames full of bees are shaken off, in front of the nucleus, and allowed to run in—this latter contingent is merely to add to its strength.

These nuclei are of course strengthened by degrees, and in five or six weeks are in good working order.

I am not going to discuss the question of natural versus artificial increase, or in other words swarming versus the nucleus system, as the arguments *pro* and *con* are infinite in number, and to do it justice would mean an article large enough to fill up one number of the *Journal*.