

president, Major Campbell, M. P. P. J. O. A. Turgeon, Esq., P. E. Dostaler, Esq., James Logan, Esq.

A list of agricultural societies re-organized under the act 20 Vic. chap. 49. Was then put before the Board and decided upon.

Resolved.—That no agricultural society will be recognized by the Board unless they will send to this Board a list of subscriptions according to the schedule A of the above Act, and as required by said Act. On the application of several societies asking the permission to buy seeds with their grant, it was resolved:

That the Board will allow the agricultural societies to buy seeds with their grant, provided they sell them at auction to their members, and report the sale to this Board.

Major Campbell and Mr. Watts, the committee to whom the prize list for this year had been referred for revision, made their report recommending that of last year unaltered. On the application of Mr. Bruce, respecting his fish manure, the asst. secretary was instructed to answer that the Board could take no action respecting it, but that the members individually would be happy to make trial of it.

The Board adjourned
(By Order)

T. CHAGNON

Asst. Sec. Board of Agriculture
Lower Canada.
Montreal February 19th 1858.

Land Drainage—Its action and effects.

As a surcharge of water in any description of cultivable soil must at all times be injurious, it becomes absolutely necessary that it be discharged as quickly as possible; and

as the amount of rainfall is different in different portions of the kingdom, the means applied must have relation to the quantity to be discharged by the drains. Consequently, in districts where the rainfall exceeds 30 inches annually, the means resorted to for its removal must be in relation. The permeability of the soil also forms a strong consideration: the more retentive it is, the nearer together must the drains be placed; and *vice versa* the greater the porosity of the subsoil. The depth of the drains will depend upon the nature of the upper soil and substratum: if exceedingly retentive, and only slightly permeable, then the depth of the drains must be compensated by the distance betwixt them. On such soils drains of 30 to 36 inches in depth will be found sufficient, the distance between varying from 15 to 20 feet; but when the substrata become more permeable, the depth of the drain should be increased, and the space between them extended. It rarely happens, however, that any soil affected by surface water requires drains more than 48 inches in depth, or will allow a distance of more than 30 feet apart. This may be accepted as a principle necessary in application, upon soils affected only by what is termed *top water*, or such water only as is supplied from above. Upon the permeability or impermeability of the substratum the application must invariably depend; but as many drainers contend that all soils are more or less permeable, it may be well at once to advert to that point. To a certain depth it undoubtedly is the case; but frequently at a depth of 18 inches some of our strongest clays become impermeable, unless for short periods after excessive drought, when, by their having shrunk, fissures have been formed by which water becomes freely admitted, but which, when again saturated, become impervious to the further ad-