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BULLETIN XCVIII.

IMPURITIES IN CLOVER SEED.

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AND GEOLOGY.

Notwithstanding the advancement that has been made in the thorough cultivation of land by the farmers of Ontario, we find the number of species among weeds is on the increase.

This likely arises from a tendency among farmers to introduce seed from other places and not confine themselves for seed to the product of their own farms. Among the seed frequently changed, we may place clover, which on account of its size and form is very difficult to rid of impurities; on this account we may consider it as being a chief source of the introduction of weeds into many farms. The writer obtained sixty samples of clover seed from various parts of Ontario for the purpose of examining them in reference to their purity, cleanliness and vitality. These samples were obtained from wholesale seedsmen, seedsmen selling on commission, and from farmers. The results from an examination of these are interesting, as they show a marked difference in the number of weeds found in each.

In testing the samples three things were kept under consideration:

1. The *purity* of the seed; that is, the extent to which it was true to its kind.
2. The *cleanliness* of the seed; referring to its freedom from the seeds of weeds and foreign substances such as bits of stone, glass, etc.
3. The *vitality* of the seed with reference to its germinating power, when placed under favorable conditions.

Testing seeds for these three characteristics is now becoming quite a common practice among seedsmen of reputation, both in the United States and Canada; and thus we find almost invariably in connec-