THE MINERAL WEALTH OF CANADA.

contour to the surface. They consist of clay and sand and gravel, derived often from very different sources and intimately mixed. The product of abrasion and not of decay, they contain all the elements of fertility found in the original rocks. Since their deposition the surface has of course been subject to the ordinary meteoric influences, and some of the soluble salts have been carried away. The subsoils, which have been subjected in a less degree to atmospheric agencies, are naturally richer in a number of ingredients necessary for plant growth. Proper tillage tends to restore to the surface what is being continually lost through the growth of crops and the solvent action of rain. Man accomplishes this by deep ploughing, and he is helped not a little by the action of worms and other burrowing animals.

Besides the "drift," there is another division of transported soils known as alluvium. This is watercarried material which may have been deposited in the flood plain of a river, in the basin of a lake since drained, or in the marshy inlet of a sea at high tide. These alluvial soils are frequently very fertile, containing as they do much of the best material borne from the higher lands. The fine silt brought down by the Nile has transformed its desert flood plain into rich agricultural land. The marsh lands of Nova Scotia and New Brunswick, among the most fertile soils of the Dominion, are due to deposits of silt made at high tide. Fifty thousand acres have been reclaimed by dikes around Chignecto Bay alone.

Soils are also classified according to composition.

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