

to the ground. Every tree in the forest now and then dropped twigs and broken branches. When a big tree died and decayed, it also fell to the ground, and lay stretched with its arms spreading wide. Slowly but surely all these things—leaves, twigs and trees,—rotted and passed into the form of mother Earth. And thus the mold, which you find so common in forests, was made.

It is this *vegetable matter*, or humus, that makes soils dark. It is the most valuable and enriching part of the soil, and so nearly all the best soils are dark. The virgin soil of Canada, that is, the soil before it was cultivated or cropped, wore a thick coat of rich brown mold over the sand-grains below. Through many years of plowing and cultivating, these two parts—the humus and the rock—have become mixed together, just as you found in the earth you examined. Wood and leaves are not the only sources of humus. Straw, roots, grass, and clover, if left on the land, will finally become humus.

THE SOIL AND THE RAIN. It was a dry hot summer day. In the fields, the corn

and clover leaves hung limp and lifeless. In the gardens, the flowers bent their heads, and had hardly strength enough to put forth their buds. There had been no rain for many days, and the plants had had very little to drink but the dew that gathered on their leaves at night. So they were all very thirsty.

That night the rain fell in a long, heavy shower, upon the fields and gardens. On the steep hillsides it fell, and ran down in torrents to the

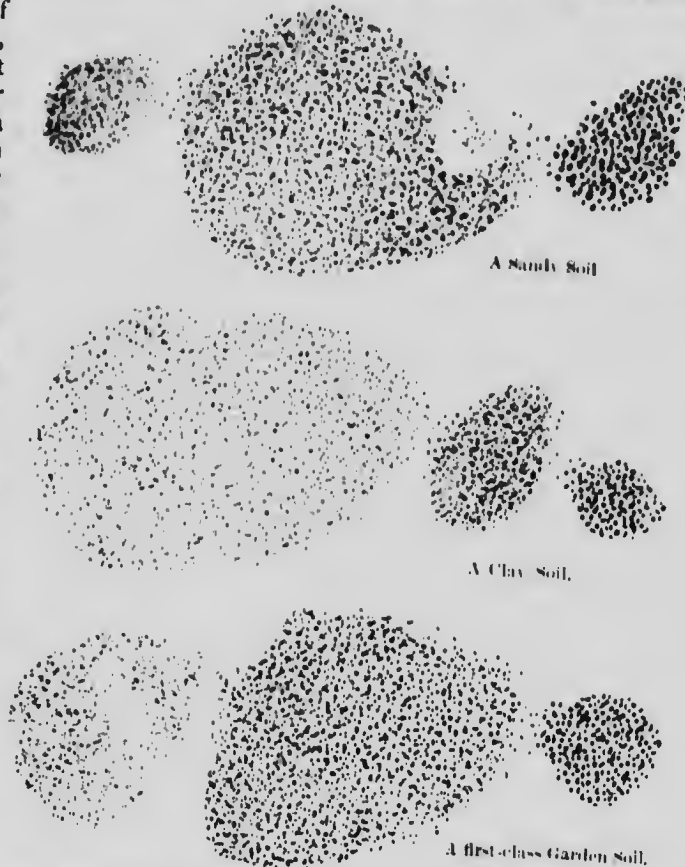


Fig. 5. Showing soils, each separated into fine, medium, and coarse grains.