characteristic fossils obtained. The succession of strata in the Pottsville Gap gave the following series of formations in descending order:



The above constitutes an unbroken though somewhat tilted series which, if followed down, would be found to be continuous with the Silurian system without any apparent unconformity or break, and presenting a series of estuarine and terrigenous deposits of the Carboniferous system, from the Coal Measures proper down to the Pocono, (the probable equivalent of the Horton formation of Nova Scotia according to Sir William Dawson, Dr. White and other authorities), followed by the terrigenous and estuarine Catskill series, and in close contact with, but preceding in point of time the marine sediments of the Chemung and earlier Devonian strata, with their brachiopod and crinoidal faunas.

The Pottsville formation underlies the productive Coal Measures* of Pennsylvania just as the so-called "Millstone grit" of Nova Scotia underlies the productive Coal Measures of that province. Workable seams of coal occur in the Pottsville (Lykens series) as well, yet not so extensively, as in the Coal Measures of Pennsylvania. In Canada, the Millstone Grit (or Westville formation of the Pictou coal field) is held to be for the most part barren of productive coal seams. A detailed study of the fossil floras which accompany and characterize the productive Coal Measures of both the Upper and Lower Coal Measures of Pennsylvania and elsewhere, by Dr. White, has enabled him to locate definitely the horizon of the various seams met with, and I have no doubt that_ similar detailed palæobotanical studies in Canada would also yield important and definite results.

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^{*} The term Coal Measures is not by any means a good formational name, it is one conveying economic and petrographical relations, and should not be used in nomenclature,