THE PHYSIOGRAPHY OF NEW BRUNSWICK.

By W. J. Wilson, Ph.B., of the Geological Survey of Canada.

The rock formations of a country have a great influence in determining the character of its physical features. A brief description of the underlying rocks of New Brunswick will, therefore, be necessary before we can get a clear idea of its mountains, lakes and rivers.

Beginning at the south we find an irregular belt about thirty miles wide along the coast of the Bay of Fundy, composed of granite and crystalline rocks, which are much disturbed and thrown up into ridges. North of this belt lies a large triangular area of sandstone, comprising a large part of Sunbury, Queens, Westmorland, Albert, Northumberland and Gloucester counties, and all of Kent county. The western limit of this area is in York county, west of Oromocto lake, from which the southern boundary extends to near the mouth of the Petitcodiac river, and the northern boundary to Bathurst. These sandstones, for the most part, lie flat as at first deposited. Northwest of this sandstone area the rocks are principally slates and limestone with large masses of granite appearing in different places. These rocks are much changed and hardened, and instead of lying flat are thrown up at various angles, forming high ridges and lofty isolated peaks.

The sandstones, occupying the middle and eastern part of the province, were the last laid down, and with the exception of two or three small areas, as at St. Martins and on the Island of Grand Manan, are the newest rocks in New Brunswick. These sandstones, slates, etc., are sedimentary rocks, that is they were spread out layer upon layer on the shores and bottoms of ponds, lakes and oceans in the form of clay, sand and gravel, carried down by streams and rivers, and, after the lapse of long ages, they were hardened and became solid rock. Geologists divide the rocks thus formed into periods, giving each a name. The sandstone referred to above belongs to what is called the Carboniferous Period, because large deposits of coal are found in it. They have also estimated the relative time in which the rocks of each period were formed, and they give almost one-half of the whole time to the formations that are later than the carboniferous.

Now, as there is only a very small portion of New Brunswick occupied by rocks newer than the carboniferous, it is altogether