

THE
CANADIAN NATURALIST

AND

Quarterly Journal of Science.

THE LIGNITE FORMATIONS OF THE WEST.

By GEORGE M. DAWSON,

Assoc. R. S. M., Geologist B. N. A. Boundary Commission.

The true Carboniferous formation and that with which the greater part of the valuable coals of the world are associated, and which is so largely developed in the eastern half of the American continent, from Nova Scotia southward, does not appear in the western prairie region. Its north-western border lies in the eastern part of the Territory of Nebraska and in Iowa, where the thickly wooded country of the east has already passed into the prairie land of the west. Here, however, this formation, depended on for fuel in so many parts of the world, to a great extent loses its coal-bearing character. In Nebraska it has now been pretty thoroughly explored, both by surface examination and by boring, and yet has only yielded coal in very sparing quantities. Coal seams of 18 inches and 2 feet are described, and one which has been pretty extensively worked in the vicinity of Nebraska city, is not more than 8 inches in thickness. Such coal beds as these would not be workable in England or on the continent of Europe, with all the cheap and skilled labour there at command, and in a new country like Nebraska are only rendered so by the extreme scarcity of wood for fuel, the coal, such as it is, being sold at prices ranging from about 40c. to 80c. per bushel.

Hayden and other United States geologists, who have examined this region, consider it to be upon the western lip or margin of the true coal formation. Even in the State of Iowa the coal beds are of comparatively small importance. The formation is