

REVIEWS.

THE PHYSICAL FEATURES AND GEOLOGY OF THE PALÆOZOIC BASIN
BETWEEN THE LOWER OTTAWA AND ST. LAWRENCE RIVERS.
By R. W. Ells, LL.D. (Trans. R. S. C., Sec. IV, 1900,
pp. 99-120.)

This paper may be looked upon as a continuation of one read before the Royal Society in 1894, in which many additional facts relating to the structural features of the Palæozoic formations exposed in what may be called the Ottawa Basin. This information is believed to be especially important and opportune at the present time, in view of the boring operation which have lately been undertaken for the purpose of securing a supply of natural gas and oil which would be economically valuable. The formations exposed range in age from the Potsdam sandstone which rests upon the uneven surface of the Archæan to the Medina shales which here represent the lowest member of the Silurian proper. These constitute in general a broad synclinal basin whose boundaries are defined and note is made of their extension across the St. Lawrence into the state of New York. The various railways traversing and giving access to this area are mentioned as well as certain details in regard to the elevation above sea level at certain points. These have been secured through the kindness of Mr. Jas. White, Geographer to the Department of the Interior from advance proofs of "Altitudes in the Dominion of Canada," which it is expected, will be published shortly. These levels have evidently been quoted only approximately and many of them will be corrected in Mr. White's forthcoming volume. The determination of the various lines of demarcation between the several formations is very difficult owing to the thick and widespread covering of drift. A few general remarks are made in regard to ice movement, the striae representative of these showing no less than three such periods. The thickness of the several formations vary considerably at different points and the presence of numerous extensive faults prevents any very definite statement.

The following estimates are furnished and will doubtless be found valuable in any future boring operations which may be undertaken. The figures represent what is believed to be the greatest thickness.