

# THE CANADIAN JOURNAL.

NEW SERIES.

No. LXXVI.—JULY, 1872.

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## CONTEMPORANEITY OF STRATA AND THE DOCTRINE OF GEOLOGICAL CONTINUITY.

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When groups of beds in different parts of the earth's surface, however widely separated from one another, contain the same fossils, or rather an assemblage of fossils in which many identical forms occur, they are ordinarily said to be "contemporaneous." That is to say, they are ordinarily supposed to belong to the same geological period, and to have been formed at the same time in the history of the earth. They would, therefore, be unhesitatingly regarded as "geological equivalents," and would be classed as Silurian, Devonian, Carboniferous, and so on. It is to be remembered, however, that it is not necessary to establish such a degree of equivalency between widely separated groups of strata, that the fossils of each should be to any great extent *specifically* identical. It is sufficient that, whilst some few species are identical in both, the majority of the fossils should be "representative forms," or, in other words, nearly allied species. It is the object, however, of the present paper to show that groups of strata presenting the same fossils, if widely removed from one another in point of distance, can only exceptionally be "contem-