

# SCIENCE

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## THE TREND OF EARTH HISTORY<sup>1</sup>

SOME years ago a witty member of the mining engineering profession read a paper before the Canadian Institute of Mining Engineers, picturing geologists, and particularly historical geologists, as a group of romancers—the lineal descendants and heirs of the old professional story-tellers of the middle ages. He accounted for the general popularity of the subject of geology by the fact that every one loves a story-teller, while but few people are interested in questions of cold fact.

Nearly all opinions, correct or otherwise, are based upon a modicum of fact; and so, for this impression of historical geologists as dreamers and story-tellers, there is a certain foundation in reality. It will scarcely do, however, to accept so distorted a picture as even an approximation to the truth.

Are the data with which the student of Earth history works so obscure, so fragmentary and so equivocal that his conclusions are not entitled to confidence? In part, Yes; but in large measure, No. They are in fact much like the data of human history, and particularly of archeology. That they are not exact quantitative evidence is true, and this tends to make them seem untrustworthy in the eyes of the student of the more exact sciences. Nevertheless, the data are real, and safe conclusions may be drawn from them if care and due caution are applied to the operation. Furthermore, the solving of one problem often leads to the solution of another which had previously resisted all attempts at interpretation. In spite of the obvious incompleteness of the geologic record, we nevertheless have a large number of clearly ascertained facts about the physical and biologic history of the earth, and

<sup>1</sup> Address of the Vice-President and Chairman of Section E—Geology and Geography, American Association for the Advancement of Science, Toronto, December 28, 1921.