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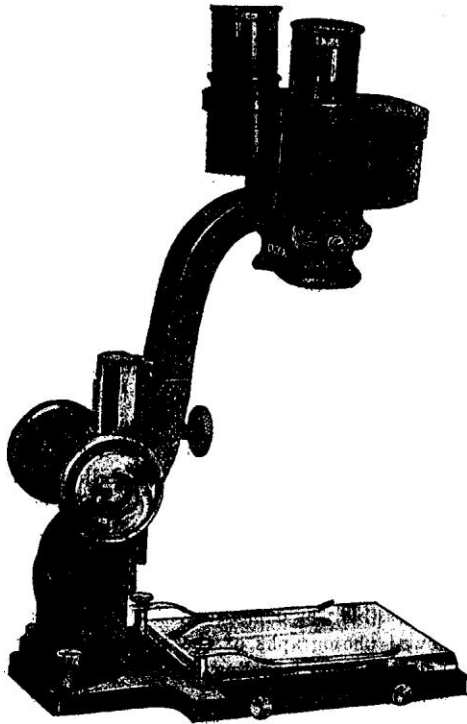
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THE VALUE OF OUTRAGEOUS GEO- LOGICAL HYPOTHESES¹

MEETINGS of geological societies in these modern days are often somewhat prosaic as compared to those of an earlier time when the limits as well as the methods of geological speculation were less defined than now, and when contradictory differences of opinion were commonly expressed even with regard to fundamental ideas concerning the conditions and processes of earth history. That was a time when the scientific imagination, not so much hampered as it is now by standardized principles, was accustomed to roam with little restraint over the unexplored fields of geological investigation; a time when the facts regarding the earth's crust had been gathered from a relatively small part of its surface, when a theory was thought to be established if it explained nothing more than the facts which it had been invented to explain, and when lively discussion as to the merits of rival theories too often degenerated into polemical diatribes between rival theorists.

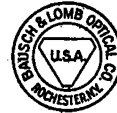
In those earlier days, attendance at the meetings of Section E of the American Association for the Advancement of Science—the only meetings in which geologists from different parts of the country were then brought together—was likely to be rewarded by a vigorous, not to say vituperative dispute between Marsh and Cope, not merely as to the completed structures and systematic relationships of the fossil vertebrates that they were finding in the fresh-water Tertiary deposits of the west, but also as to mere priority in finding and naming the fossils; and so eager was each of those eminent worthies to secure his prior claim for a new find before the other came upon it that, according to stories then current, one or both of them sometimes, while still in the western field, resorted to the telegraphic announcement of a name for a newly discovered fossil to be published in the eastern newspapers. In the years, half a century ago, when I first attended the meetings of the Boston Society of Natural History, they were occasionally the scene of emphatic contradictions between T. Sterry Hunt and M. E. Wadsworth on matters petrographic, for that recondite branch of geological science was then just taking form among us. Hunt knew exactly how rocks ought, in accordance with his theoretical views of terrestrial chemistry, to be constituted; while

¹ An address delivered before the Leconte Club of the University of California at its annual meeting at Berkeley, February 21, 1925.



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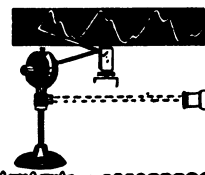
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