Modern Evidences for Differential Movement of Certain Points on the Earth's Surface

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The subject of our discussion is one of those problems that not only straddles the border line between departments of knowledge, but transgresses far into the adjacent territories of several sciences. I am reminded of an apt warning for which Bulwer-Lytton is responsible, not to fall "into the error of the would-be scholar—namely, quoting second-hand." Making no pose as a geologist, however, I must confess that what I may have to say in regard to physiographic examples of differential displacements in the earth's crust will have to be from such little knowledge as I have been able to borrow from you geologists, and I venture to proffer such second-hand information only on the ground that we have a board of experts among us to whom questionable points may be referred subsequently. My excuse for venturing upon this subject comes from a very vital interest that must concern every student of the earth.

Certain investigations with which I have been more or less engaged for the last fifteen years seem to lend promise that the problem of lateral shifts in the earth's crust may be helped toward solution by the continued observation of the latitude and longitude of certain presumably fixed points on the earth's surface. In that unique organization of students of the earth sciences, the American Geophysical Union, experts from many different, but interrelated fields commingled freely. It would appear that it was through such commingling some astronomers became contaminated by some geologists perhaps with a fond hope that a little contamination of astronomy with geology might be of mutual benefit. In the time at our disposal I hope I

1 An address presented to the Geological Section of the New York Academy of Sciences on April 3, 1944.