

**GEOLOGICAL
EXCURSIONS; OR, THE
RUDIMENTS OF GEOLOGY
FOR YOUNG LEARNERS**

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Geological excursions; or, The rudiments of geology for young learners by Alexander Winchell

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ALEXANDER WINCHELL

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GEOLOGICAL EXCURSIONS;
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ETC., ETC.

Science-teaching should begin early in the school-course.—
FRANCIS BACOT, Harvard University.

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PREFATORY NOTE.

ADDRESSED TO TEACHERS AND SCHOOL OFFICERS.

THAT the elements of geology are so seldom taught either in our primary or secondary schools is a circumstance to be regretted. No tendency seems manifest toward any improvement in this particular. In Michigan, which enjoys a justly high reputation for the excellence of its schools and teaching, even less geology is studied in school than was customary a dozen years ago. No knowledge whatever of this subject is required for entrance into the University of Michigan in the "Classical Course," nor in the "Scientific Course," nor in the so-called "English Course"—though in the last two courses the candidate is given his option between preparation in Chemistry, Geology, Zoölogy and Physiology. Of necessity, Physiology, which is generally taught in the schools, is almost always the chosen subject, though next to this stands Chemistry. Practically, therefore, the study of geology in the University begins with the elements in every course. A similar state of things exists in most of our colleges. There is no course where geology is a prerequisite, so that the student on entering may find himself in position to push on to some advanced knowledge of the subject. One would anticipate that a course specifically denominated "Scientific," would demand a more extended scientific preparation than the old "Classical" course, and that a science which has done as much for industry, civilization and culture as geology has, would not fail to be enumerated among the requirements.

Since geology is not so required for entrance into college, it has ceased to be taught in the schools—as if geology had no