

contingent upon the lack of fair appropriation during the last three years have abandoned the hope of obtaining adequate facilities and the viewpoint of this article is concerned only with those things absolutely essential.

Consider crystallography for example. It must be obvious even to one unfamiliar with the subject that a study of crystal forms should be illustrated by a proper number of crystal models, if this essential of mineralogy is to be appreciated by the student. Except for a bare dozen or so of the commonest forms, we are utterly lacking in these. It is small comfort to know that enough of these could be purchased to supply the needs of the mineralogy class for years to come for the trifling sum of \$70.00, if you have n't got the \$70.00. Our collection of mineral specimens is fairly representative, but this is only half the story. Minerals present an almost endless variety in their form, texture, and mode of occurrence, and enough samples of each of the more common minerals should be available to enable the student to become familiar with them in their varying forms, and to recognize them wherever they occur.

In Petrology, or rock study, almost the entire collection consists of the Government samples and a small number from the Smithsonian Institute. These do not begin to supply the need, either in number or in representation.

Fortunately for the Geology class we have access to the Condon Museum which is invaluable so far as fossil specimens are concerned, but we lack relief maps, fault models, and a reflectroscope or stereoptican slides all of which are necessary to anything approaching thorough pursuit of the study.

We are able to take mine surveying only through the courtesy of the Department of Civil Engineering to whom we are supremely grateful. Unfortunately the instruments adapted to plane surveying are not always adapted to mine surveying. Any surveyor can easily imagine how useful the ordinary transit is for sighting along a line inclined about seventy-five degrees to the horizontal. The troubles of the assaying class have already been alluded to and it is but fair to add that the mining student who realizes that assaying is one of the essentials of his profession upon which later his bread and butter may depend has a right to expect the exclusive use of furnace or muffle for the brief time he may wish to use them. One of the most important elements in making fusions or cupellations is the temperature and each student should be in a position to control it without hindrance.