

To prepare the student for these labors an intimate acquaintance with the greater number of minerals contained in the rocks, or composing them, is absolutely requisite; with the whole in fact, if possible, and they amount to seventeen hundred. He will make discoveries in the field in proportion to his familiarity with these substances in all their disguises: minerals do not occur in the woods, unsoiled, fresh and bright like flowers, but disintegrated by the weather, covered with earth and moss, rolled and frequently in a stony mass, a small fragment only being visible. For a thorough knowledge of mineralogy the learner must repair to Europe, or to one of the cities of the United States, as Newhaven, Boston, New-York, or Philadelphia; where he will have liberal access to excellently arranged and very complete cabinets—more useful to him than any in the first mentioned quarter of the globe, for the latter contain few specimens of American minerals; and it is with them that he should principally interest himself. The chief part of the most splendid collection in the United States, that of Col. Gibbs, and now placed for public use in Yale College, was purchased at Paris during the tumults of the French Revolution. The British Museum at London is utterly useless. A few gems, ores and brilliant spars only are exhibited and without any designations. But an admirable method of instruction is afforded by the private lessons, of the very highly respectable and learned Mrs. Lowry of Great Titchfield street, London. These which need not be described, and an occasional visit to other cabinets, as those of the geological society, Messrs. Heuland, Bakewell and Mawe, will be all that is necessary. Mrs. Lowry's cabinet also includes a fine suite of rock specimens in the greater variety of their forms, from granite to the alternating fresh water and marine depositions above chalk. We were astonished at the superb collection of geological specimens amounting to 60,000, in the possession of Mr. Greenhough, and arranged after a new and useful method.

The United States are very deficient in opportunities of studying organic remains. There are now however some tolerable collections in New-York. Peale's Museum at Philadelphia, possesses some fine specimens accurately labelled, and what is much valued in Europe, a pretty complete set of the fresh water shells of North America. Mr. Deluc at Geneva gives lessons on fossil remains aided by a good cabinet. Mr. G. B. Sowerby of King Street, Covent Garden, London, does the same, and disposes of well arranged collections. He is perhaps the most scientific conchologist in Britain.

Persevering application to books is now to be continued for two or three years; and after this period too, the progress of the science must be kept pace with. Excursions should be made:—if with a teacher, the advancement is very rapid. A few walks in each of the great-geological subdivisions will accustom the student to careful observation. They will shew him the deceptions arising from the laws of perspective, in estimating the direction of mountain