

to the minerals, rocks and fossils, and their distribution and relations deciphered. The collection and critical examination of these materials must, therefore, precede the areal work. After these investigations have been made it is possible to group together those materials of similar age and physical origin in what is known as a geological formation, which may be represented by a single color upon the map. This method of representation is of importance to the searcher after information regarding the mineral wealth of the state, while the descriptive text, explanatory of the geological map, will indicate the various mineral substances which characterize each formation, and will thus be a guide in the development of the various resources of each district. At the same time the futility of attempting to develop mineral products in a formation which has been shown by careful geological investigation to be devoid of them will be at once apparent. Innumerable instances might be cited where great sums have been wasted by a fruitless search after economic substances which might have been entirely obviated if geological maps had been available or had been employed when available.

The ultimate platting of the geological data upon the large scale topographic maps, described in a preceding paragraph, will disclose the relations of the several geological formations to the topography of the state and at the same time will make possible the exact location of the various mineral products. The resulting geological maps will also serve as agricultural maps, since, as will be shown later, each geological formation gives rise to its own particular type of soil.

THE INVESTIGATION OF THE MINERAL RESOURCES.

A satisfactory description of the various mineral products can be undertaken only after the detailed investigation of the mineralogical characters of the geological formations has been made and their distribution upon the geological map has been platted, at least in a preliminary way. It is the intention of the State Geological Survey, as its work proceeds far enough to give it an insight into the various mineral resources of the state, to treat each subject independently and exhaustively. Among the various materials which will be thus