Along the Delaware River road about three and a half miles south of Easton there is an excellent exposure of Tomstown massive dolomite with some interbedded shaly layers. On the top of the hill about two-thirds of a mile to the west similar rock appears. In one place on the farm of the late Prof. Edward Hart there is a small cave.

**Allentown Formation**

*Distribution.*—The strata constituting the Allentown formation are represented in Northampton County by a broad band of magnesian limestones that extends from New Jersey west-southwestward to Lehigh County and underlies the major portions of Easton and Bethlehem. Also they form the floor of the larger part of the Saucon Valley and occur in the extreme southeastern corner of the county in the vicinity of Coffeetown and Frya Run. Another small area is located along Cataqua Creek a short distance north of the town of Cataqua.

Where the formation crops out along the Lehigh River and smaller streams, fine opportunities are offered for detailed study. It has been quarried in scores of localities and these quarries, now in large part abandoned, are also useful in geologic investigations. Residual soil and glacial deposits conceal the limestones on the uplands.

*Lithologic characteristics.*—The Allentown formation consists of dense bluish-gray to gray magnesian limestones in beds mainly from six to eighteen inches thick. Some shaly phases contain thinner beds whereas occasional layers are several feet thick. The thicker beds, however, break into thinner laminae on weathering.

One of the most characteristic features of the strata of this formation, and one which is fairly diagnostic, is the alternation of dark and light beds. In an operating quarry these distinctions of color are not readily observable whereas they are prominent in old quarries and in natural outcrops. They are mainly due to different amounts of carbonaceous matter but in part to varying amounts of magnesian carbonate. Those strata with high magnesian content which in fresh fractures may be grayish-blue, assume a lighter color on long exposure to the weathering agents and may even become chalky white and thus present a striking contrast to those beds with less magnesia which undergo less change in color. This criterion of alternating beds of different color for the separation of the Allentown from the Tomstown and Beekmantown unfortunately can not be used everywhere because it is not developed in every exposure. Also, some slight development of this same feature has occasionally been noted in the Tomstown formation.

Shaly bands occur in the Allentown formation but are much less