ments can be made. Continuous exposures across the entire formation are lacking; minor and major folds and faults are present and dips change so rapidly that one is not justified in assuming the continuance of any dip beneath concealed areas. Attempts to determine the thickness at several points, all of which necessitate several unproved assumptions, have given figures from 700 to 2,000 feet. It is probable that the thickness is approximately 1,000 to 1,200 feet, perhaps less in the vicinity of the Delaware River.

Name and correlation.—In the publication of the First Geological Survey of Pennsylvania, these limestones formed a part of the II Auroral Limestone. They constitute a part of the II Calciferous Limestone of the Second Geological Survey, a part of the Shenandoah Limestone of the U. S. Geological Survey from 1892 to 1908. This series was designated the Kittatinny by the New Jersey Geological Survey. Wherry and Miller in publications beginning in 1909 adopted the local name of Coplay from the town of Coplay, Lehigh County. Later, however, the local name was dropped as the fossils indicate proper correlation with the Beekmantown formation of the Mercerburg-Chambersburg area. This conclusion has been confirmed by E. O. Ulrich.

If and when further palcontologic studies are made of the fauna of the formation, it will be possible to discuss more exact correlations.

Stratigraphic relations.—In the region there are few exposures of contacts of formations. Close association of the Beekmantown and the underlying Allentown seems to indicate conformable strata. There may be a hiatus between the two formations since the New York section contains beds apparently not represented in this region.

The upper surface of the Beekmantown is definitely unconformable with the overlying Jacksonburg in New Jersey as described by R. L. Miller. He also presents evidence to support belief in a probable unconformability in Northampton County but with less positive information.

Local details.—A few localities where certain characteristics of the Beekmantown are particularly well shown are briefly described.

In the east part of Northampton Borough, very close to the contact of the Jacksonburg cement limestone, the interbedding of dense, hard, blue, massive dolomite with shaly, soft high-calcium limestone is shown perhaps as well as in any other place in the county. The limestone beds are prominently pitted on the weathered surface.

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