

have a considerable pitch, and the writer's impression is that in the northern part of the region at least, the pitch is to the north. The major folds would seem to be broad and not excessively steep, but their limbs are corrugated by minor folds also, and it is in these that the steepest dips are obtained.

The great igneous batholites of the Adirondacks are massed in the east center of the region. Going west and south, a zone is passed through marked by increase in Grenville sediments and diminution of igneous rocks. On the west and south the sediments largely predominate. It is in these areas that the folds must be worked out, provided they can be worked out at all. If so, the knowledge thus obtained may be, perhaps, successfully applied to the elucidation of the structure of the more difficult interior area, more difficult because of the much larger content of poorly foliated igneous rocks. The writer's work has been mainly in the latter district. It ought to be possible with good maps and careful areal work, to make out the axes of at least the larger folds. The folding was certainly done in Precambrian times and while the rocks were buried at some considerable depth; hence it long preceded the period of diabase eruption, and these dikes are wholly unaffected by it.

#### Folds

Aside from the folding of the Precambrian rocks, just noted, which was produced in Precambrian times, the rocks of the region are but slightly folded. Along Lake Champlain the Paleozoic rocks are thrown into a series of very gentle folds, which have subsequently been so much faulted that the folding is not always apparent. Across the lake in Vermont the folds become rapidly more pronounced, but on the New York side only a trifling amount of folding has taken place. The dips are in general very low, and in many cases so flat that they are made out only with great difficulty. They are almost always below  $10^{\circ}$  and usually below  $5^{\circ}$ . In the few instances where they are steeper, the cause is usually found to be the tilting of a small fault block, or drag in the vicinity of a fault. A steep dip may usually be taken as an indication of proximity to a fault. However, the rocks are unquestionably slightly folded, marking in all probability merely the waning effects of the force