

Diagrams showing the composition of these several rocks are presented in Fig. 4.

THE TRANSITIONAL ROCK.—As has been mentioned, there intervenes in Mount Johnson between the pulaskite border and the central mass of essexite a transitional zone consisting of a rock which is dark in color and thus resembles the essexite, but which is characterized by the presence of large porphyritic feldspars sometimes as much as two inches in length, of peculiar form scattered through it and often arranged with their larger axes in the same direction, thus giving a fluidal appearance to the rock. This rock contains a large proportion of the same iron-magnesia minerals, more especially the hornblende, found in the essexite, and passes over gradually into this rock. Its passage into the pulaskite is rather more abrupt and is marked chiefly by the almost entire disappearance of the dark-colored constituents above mentioned. There is, however, a continuous transition or passage from the pulaskite through this intermediate rock into the inner essexite of the mountain.

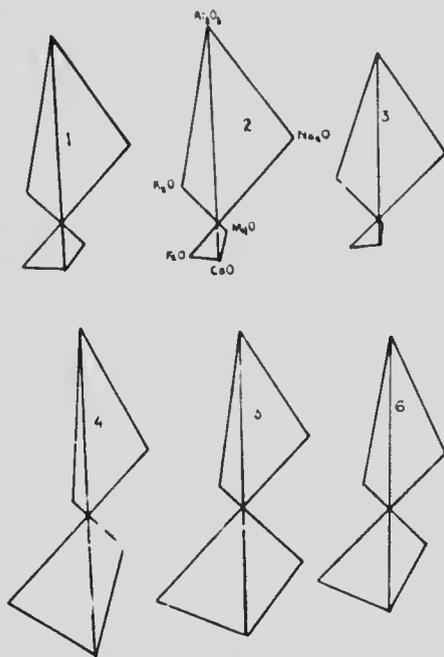


FIG. 4.—Diagrammatic representation of the chemical composition of the several rocks described.

- No. 1. Laurvikose — Mount Johnson.
- No. 2. Laurvikose — Shefford mountain.
- No. 3. Nordmarkose — Shefford mountain.
- No. 4. Andose — Mount Johnson.
- No. 5. Essexose — Mount Johnson.
- No. 6. Andose — Shefford mountain.

This transitional rock is composed of the same minerals as the essexite with the exception of the feldspar, which consists in part of the soda-orthoclase characteristic of the pulaskite, and in part of the plagioclase (in this case oligoclase) which forms the