

and some ferruginous matter that is present is in string-like forms following the cleavage of the rock.

Quartzite.

Quartzite comes in contact with the mountain for a short distance on the east side, and also on the west. It is best seen on the north side of the road leading from McCutcheon's corner to the mountain, where it contains a considerable amount of feldspar, and has rather the composition of quartzose sandstone. It is but slightly altered at a distance of fifteen yards from the contact.

Conglomerate

The principal sedimentary rock, besides those already mentioned, is a conglomerate, which may be seen at West Sheffield, on the Central Vermont Railway. It consists of feldspar, biotite, quartz, augite, hornblende and magnetite in order of importance. The larger grains are comparatively few, and are either feldspar, which may be either plagioclase or orthoclase, or more commonly, quartz. No composite grains of larger size were distinguished. Much quartz appeared also in veins or irregular masses of secondary origin. But even these are often broken and faulted, sometimes showing very distinct strain shadows, the results of pressure subsequent to their deposition.

The dark minerals, of which biotite is the chief, in places, make up nearly half the rock. The structure is highly schistose, the larger nodules giving the appearance of a rather fine augen gneiss.

Few dykes

The sedimentary rocks are invaded by dykes from the main mass of the mountain in several instances, but on the whole somewhat rarely, while dykes, more recent than the mountain, cut both it and the sedimentary strata much more frequently. Fragments of the surrounding sediments are occasionally included in the margin of the igneous mass and the stratified rocks are much contorted in many places at the contact, yet on the whole the intrusion of the body of the mountain does not seem to have been accompanied by any very violent catastrophic action.

#### IGNEOUS ROCKS.

Kinds of  
igneous rock.

Three main classes of igneous rocks are easily distinguished in the field. The first is a rock of dioritic aspect, which weathers to a dark brown and shows a predominance of dark minerals. Detailed examination shows it to belong to the *Essexite* group. The second is almost wholly composed of rather coarsely crystalline feldspar. This is classed as *Nordmarkite*.