The Protopersilicates are grouped under the heads of Zeolitoid, Spathoid, Adamantoid, Phylloid and Pinitoid; while in a column to the left are given the atomic ratios of fixed protoxyds and sesquioxyds, the silica being variable. The zeolitoids include, besides the zeolites proper, forestite, prehnite, cataplciite, xanthorthite, etc. Under the spathoids of this class are placed petalite, all feldspars and feldspathides, including sodalite, iolite and leucite; the scapolites, including meionite; barylite, milarite, gehlenite, sarcolite, melilite, wöhlerite and eudialyte. The adamantoids comprise pargasite, keilhauite, schorlomite, ilvaite, idocrase, garnet, allanite, beryl, euclase, ardennite, axinite, epidote, zoisite, jadeite, spodumene, staurolite, sapphirine, and the various tourmalines. In the phylloids are included the micas proper, from phlogopite and biotite, through seybertite and chloritoid, lepidolite, margarite and euphyllite to the muscovites and damourite. With the magnesian micas are placed, under the head of phylloids, the whole family of chloritic species, while parallel with the non-magnesian or muscovitic micas, are ranged the pinitoids, including besides pinite or gieseckite, jollyte, fahlunite, bravaisite, cossaite and gümbellite.

Order SILICATE.

SUB-ORDER C.—PERSILICATE.

r : Si.	KAOLINOID. V = 6·8 — 5·3	ADAMANTOID. V = 5·3 — 4·4
1 : ¼	Schrötterite.	
1 : ⅓	Collyrite. - - - - - -	Dumortierite.
1 : ⅖	Allophane. - - - - -	Topaz. Andalusite. Fibrolite. Cyanite.
1 : 1	Pholerite. Samoite. - -	Bucholzite. Zircon. Malacone.
1 : 1½	Kaolinite. Halloysite.	
1 : 1½	- - - - - - - - - -	Auerbachite.
1 : 2	Pyrophyllite. Steargillite. Chloropal.	
1 : 2½	Pyrophyllite.	
1 : 3	Cimolite. - - - - -	Anthosiderite.
1 : 4	Smectite.	