

can be derived by symmetrical flattening of these solids. The optical features of biaxiality, uniaxiality and isotropism also successively characterize these divisions.

The Tetragonal system is divided into two sub-systems, the Hexagonal into *four*, distinguished by the rotation symmetry of their singular directions or axes. Anyone who prefers to set up a Trigonal system as distinct from the Hexagonal can combine these sub-systems as desired. If they are to be consistent, however, they should then recognize also a Digonal system made up of the classes of the Tetragonal with 2 fold symmetry of the singular axis.

The classes of minimum symmetry within each system or sub-system appear in an early class-column, those of maximum symmetry (holosymmetry) in a late one. The second class-column contains those classes characterized by third-order forms in each of the dimetric subsystems; the third, those classes similarly characterized by trapezohedrons; and the fourth, those characterized by hemimorphism with otherwise complete symmetry. In general, it is believed that this arrangement has advantages over previous ones in bringing out similarities between analogous classes in different systems which may be of pedagogical value; and it is hoped that it is correct from the mathematical standpoint. Suggestions for its improvement will, however, be welcome.

THE PRONUNCIATION OF PYROXENE.

FREDERICK A. BURT, *Agricultural and Mechanical College of Texas.*

During several years of teaching experience the writer has been located in a portion of Texas where he comes in contact with many oil geologists whose combined geologic training represents most of our universities and colleges which have well-established departments of the geologic sciences. Among these men *pyroxene* seems to be the most variously pronounced word in their scientific vocabularies, and this fact must reflect upon the pronunciation used by our corps of mineralogy, petrology, and geology instructors.

Five ways of pronouncing the word seem common: (1) pī'-rōk-sēn, (2) pī'-rōks-ēn, (3) pīr'-ōk-sēn, (4) pī-rōks'-ēn, and (5) pīr'-ōks'-ēn. A note on the origin and pronunciation of this word, therefore, seems in order.

The term *pyroxene* was established by Haüy (in 1796), being coined by him from two Greek words: pyr (fire), and xenos (a stranger), since he erroneously thought the mineral alien to igneous rocks.

The new Webster Unabridged Dictionary¹ gives "(1)" above preference and "(3)" as an alternative pronunciation. Funk and Wagnalls New Standard gives "(2)" as preference and "(3)" as an alternative. Here is practical agreement between the two works with the preference on a long *i*-sound in the first syllable, and an alternative of the short *i*-sound. The question of whether the *s*-sound should terminate the second or originate the third syllable seems of slight importance. No authority can be found for placing the accent on the second syllable.

¹ The mineralogical terms in Webster were edited by E. S. Dana, in the new Standard by Frank W. Clarke.