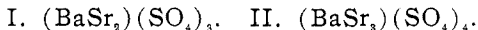


or an average of 1.176 and 1.201, which makes the percentage of sulphur trioxide in either as follows:

| | | |
|----------|-------|--------|
| I | 40.03 | 40.377 |
| II | 40.89 | 41.23 |

From these data, the constitution of these two minerals may be expressed as



The four minerals collected from the above-named districts, have the following specific gravities:

| | Sp. gr. |
|--------------------------|---------|
| Barite | 4.3989 |
| Celestite | 4.410 |
| Barytocelestite, I | 4.188 |
| " II | 4.123 |

The celestite and the two barytocelestites afford well-defined and distinct crystals. As they differ more or less from each other, although both of orthorhombic crystallization, the differences in crystallization may lead to some conclusion as to the influences, which different equivalent proportions of the strontium sulphate may have upon their isomorphous relation to each other. I hope to be enabled to lay these crystallographic relations before you at an early date, and thus conclude this investigation.

NEW YORK, December 17, 1898.

NOTES.

The Determination of Arsenic in Glycerine.—Mr. G. E. Barton has called my attention to the fact that in my outline of his paper on this subject, I quoted only one of the methods used by him, and neglected "to state that a direct addition of the glycerine (without charring) to the reduction flask was finally used as more accurate." Mr. Barton considers that this should be accepted as his method.

A. C. LANGMUIR.

Corrections in Baumé's Hydrometer Tables.—I am advised by Mr. G. E. Barton of three errors in the hydrometer tables printed in the March number. On page 127 at 28.6° read '0.8827' instead of '0.8821', and at 36.3° read '0.8419' instead of '0.8418'; on page 132 at 75.0° read '0.6829' instead of '0.6830'. Mr. Barton also states that he has checked all the figures except those for the eighths of degrees; this fact will doubtless add to the confidence in the accuracy of the tables.

SIDNEY S. EMERY.