discontinued on account of the browning. Determination of strontium gave 37.16 and 37.16 per cent. Sr; calculated, 36.87 per cent.

Solubility Determinations.—In determining the solubility at 100° the method of Pawlewski[1] was employed. The same method of transferring was used in the determination at 13.5°.

For the determination in cold water the solution from which the rhombic plates were obtained was used before the crystals were removed. The determination was made at 13.5°.

	I.	II.
Weight of solution	9.2682	9.3738
Weight of $SrSO_4$	0.0277	0.0280
Strontium malate in solution	0.0331	0.0334
Parts per hundred	0.357	0.357

For the determination at 100° the mother-liquor from which the cubical crystals separated was used. As the temperature of this solution was above 100°, more crystals separated out in the determination. The following results were obtained:

	I.	II.
Weight of solution	7.1576	7.5326
Weight of $SrSO_4$	0.0717	0.0720
Strontium malate in solution	0.0857	0.0860
Parts per hundred	1.19	1.14

A. S. WHEELER AND W. McK. MARRIOTT.

CHAPEL HILL, N. C.

Magnesium Amalgam as a Reducing Agent.—In an article published in the September number of this Journal entitled "Magnesium Amalgam as a Reducing Agent," by Evans and Fetch, the statement was made: "While magnesium amalgam has been known for some time, having been prepared by Wanklyn and Chapman in 1866, its use as a reducing agent in organic chemistry has hitherto been neglected." This statement was true when the article in question was read before the Cincinnati Section of the American Chemical Society in October, 1901, but was not true when the article was published.

L. Meunier published an article on the use of magnesium amalgam as a reducing agent, entitled "Some Reactions Obtained by the Aid of Magnesium Amalgam," *Comptes Rendus* de l'Académie des Sciences de Paris, **134**, 24 (February, 1902), and another, "The Use of Magnesium Amalgam in Organic Chemistry," *Comptes Rendus* de l'Académie des Sciences de Paris, **137**, 714 (November,

[1] *Ber. d. chem. Ges.*, **32**, 1040.

1903). The writer desires to correct the statement referred to, but does not relinquish his claim to priority, since a notice of Evans and Fetch's paper appeared in the Proceedings of the American Chemical Society for 1901.   THOMAS EVANS.

UNIVERSITY OF CINCINNATI,
    December 21, 1904.

A New Wash Bottle.—The bottle described in this article was devised to replace the unsatisfactory rubber Bunsen valve by one of glass. The valve is made as follows: A piece of glass tubing 15 cm. long and from 4 to 5 mm. bore, is slightly contracted about 3 cm. from one end by heating in a small blast-lamp flame and drawing out a trifle. The valve is made of a piece of thin-walled tubing that fits loosely into the larger tube, leaving about 0.5 mm. free space all around. One end is closed and rounded as much as possible by rotating the end in a small flame. It should not taper too much, as there is then a tendency for it to wedge when in use.

Fig. 1.

The closed end is then made to fit the contracted part of the large tube by grinding with emery and water, taking care to rotate in one direction. From time to time the tubes are washed and the joint tested by sucking strongly into the longer end while it is still wet.

The closed end of the inner tube is then pushed into a cork just far enough to be held securely, and it is fused off as close to the cork as possible, using the smallest flame of the lamp. It is kept soft until the expanding air inside rounds it off. The finished valve should be about 1 cm. long. It is then slipped loosely into place in the outer tube and sealed in. This is the most difficult part of the whole operation, for the scratches make the ground tube very liable to crack. It is best to commence

Fig. 2.

heating at the end, and, when that is red-hot, to gradually heat along towards the valve. It is drawn out close to the valve by attaching a bit of glass rod as a handle, leaving about 3 mm. play.