## A NEW CALIBRATED WEIGHING FLASK.

By GEORGE L. HEATH. Received January 8, 1897.

A FLASK has been designed by the writer which possesses some advantages over the ordinary graduated flasks in use. From the designs, Eimer and Amend, of New York, make

very neat flasks, which may be illustrated by the accompanying diagram.

The drawing shows the upper part of the neck, as if half cut away, giving a sectional view of the stem, and annular cup surrounding it.

The outside of the cup is ground to fit the light glass cap which slips over it. (See sectional view of cap.)

The flask is especially adapted to weighing liquids, as, for instance, portions of standard ferric chloride solutions for titrations as recommended in Blair's Iron Analysis.

The solution may be kept some time without any change in weight, since the joint of cup and cap is as tight as in other glass stoppered bottles.

A little vaseline may be used, for the cap never comes in contact with the solution like an ordinary stopper.

100 CC

This form of stopper cannot cement to the flask. After weighing and then mixing some solution, a portion may be poured off, and the little annular cup will retain any drop that might drip over the edge in pouring, and the cap, immediately replaced, prevents evaporation till the flask and remaining contents can be weighed.

In selecting ordinary graduated flasks to be fitted with such an annular cup and glass cap, those are preferably taken which have rather narrow necks, for the graduation of such is a little more accurate, and the cap, etc., may be smaller and neater in appearance, especially when applied to a large sized vessel.

The moderate expense necessary to fit flasks in this manner is the only disadvantage we have noted.