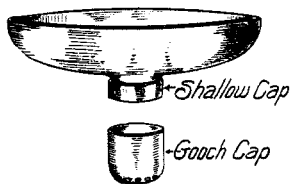


## NOTES.

*A Simple Fat Extractor.*—To those making fat determinations in milk by means of solvents, the form of extractor represented in the accompanying cut will be found both convenient and accurate. It has been in use by myself and others for over three years, and in addition to being inexpensive and simple, it has been found capable of more rapid and fully as accurate work as many of the



complicated and expensive forms of extractors. It consists of a small shallow dish spun out of very light copper, and fitted with two tight caps (see illustration). One is shallow while the other is longer, and perforated with several small holes on the bottom similar to a Gooch crucible. To use the extractor the shallow cap is fitted on the dish, as in the cut, then five cc. of milk are introduced and evaporated to dryness on a water-bath. I have found that one-half hour is usually sufficient to accomplish this, although, when porcelain milk dishes are used, three hours are considered necessary. The solids may now be weighed. The shallow cap is then removed, and placed inside the dish. The perforated cap having a thin layer of asbestos in the bottom, is put on, and the solids treated with the boiling solvent, ether or benzene. Care should be taken that the asbestos is so packed, that the solvent runs through slowly, say a drop every two or three seconds. The solution of the fat may be caught in a small beaker and the fat dried and weighed. I find that fifty cc. of the solvent is usually sufficient to remove all the fat, and although I have examined the residue many times for traces of fat, I have never succeeded in finding over one-tenth of one per cent. of the total fat present in the sample of milk. Were this dish made of platinum, instead of copper, besides being useful for various purposes in the laboratory, all the determinations called for in an ordinary milk analysis, for example, solids, fat and ash, could be made with a single sample, or five cc. of the milk under consideration.

VERNON J. HALL.

CHEMICAL LABORATORY, NORTHWESTERN UNIVERSITY,  
EVANSTON, ILL.