nected by a tightly-fitting cork with a flask placed at a convenient distance, and the other end of the leaden pipe communicating with a recipient for the escaping vapours. Steam being generated into the flask, it passes through the leaden tube and warms the funnel and contents. This contrivance may work well, but it is not very convenient ; the inventor strangely enough adds that by employing ether, alcohol, carbon bisulphide, benzol, or anilin, in place of water, filtration can be carried on at any desired temperature. The question naturally arises why select liquids having such low boiling-points as ether (35·7°C.) and carbon bisulphide (46·6°C.) to effect *hot* filtrations ; surely the cases are rare where the temperature could not be moderated, if desired, by generating steam less rapidly. Then, too, the atmosphere of a laboratory, where a dozen or more solutions are warming by the uncondensed vapours of carbon bisulphide, would be anything but agreeable.

There seems to be room, then, for a simple, cleanly, portable, and inexpensive apparatus for keeping the contents of a funnel hot while filtrating, and it is believed that these requirements are filled by the new apparatus described in this paper.

The materials are found in any ordinary laboratory. Select a small funnel with a long stem, and a larger funnel with a wider throat, and cut the stem of the larger funnel short ; slip a piece of India-rubber tubing of the required size over the stem of the smaller funnel, and then insert it in the larger one so that it fits water-tight. The inner funnel should project about half a centimetre above the edge of the outer, and as much below the stem of the latter as it admits. We have found the three sizes named below sufficient for all operations of analytical chemistry.

Dimensions given in centimetres; the first figures gives the greatest diameter of the funnel, and the second its length including stem :—

	Outer Funnel.	Inner Funnel.
No. 1	7 × 6½	4 × 10
" 2	10½ × 9½	6½ × 12½
" 3	13½ × 13	10 × 17

Steam generated in a flask of about one litre capacity and conducted by means of a glass tube into water filling the space between the two funnels, warms the filter on the inner funnel with its contents. In one experiment the water in the outer funnel marked a temperature of 97°C., and the liquid in the former one 76°C. The temperature in the inner funnel may be greatly increased by covering it with a convex glass, or by employing a saline solution in the outer funnel.

As a matter of course, water condenses in the outer funnel, and must be removed from time to time. In the case of funnels No. 2 it accumulates at the rate of 30 to 35 c.c. in half an hour when boil-