 ABSTRACTS OF PAPERS READ BEFORE THE BRITISH PHARMACEUTICAL
CONFERENCE AT SWANSEA.

DETERMINATION OF THE STRENGTH OF ALCOHOLIC SOLUTIONS OF CHLOROFORM.

REPORT ON COMMERCIAL SPECIMENS OF SAL VOLATILE AND CHLORIC ETHER.

By *J. C. Thresh, F.C.S.*

MR. THRESH had sent a letter to about 100 chemists, including the heads of most of the best-known dispensing establishments, asking them what they were in the habit of dispensing and retailing when chloric ether (eth. chlor. or sp. eth. chlor.) and sal volatile (sp. ammon. co. or sal volatil) are prescribed or asked for.

The replies showed that 27 firms used sp. chlorof. B.P., 11 used Duncan's chloric ether only, 14 used a solution of chloroform in alcohol stronger than the B.P.; 6 others who replied used special products of their own.

Respecting sal volatile, 44 employ sp. ammon. arom. B.P., exclusively, both in dispensing and retailing; 6 use sp. ammon. co. P.L., 1836; 6 use special preparations of certain makers. Many chemists, the author added, invariably use sp. ammon. ar. B.P., for dispensing, but retail special preparations as sal volatile.

Mr. Thresh had also obtained samples of chloric ether and sal volatile from manufacturers or large wholesale houses, with three from retail houses.

All the firms to whom he wrote sent two or more samples, in many cases with replies explaining what course they usually followed under the circumstances. Many, for chloric ether, supplied Duncan's preparation; others "special distilled products;" others the B.P. sp. chloroformi; and others, solutions of chloroform in spirit, stronger than the B.P. preparation. The samples obtained were 20 in number, sp. gr. from .861 to .922, and in percentage of chloroform (by volume) from 2 to 12½ per cent. He was rather surprised at the small percentage of chloroform contained in the distilled "chloric ethers." There seems to be an impression abroad that this preparation, though more miscible with water than the B.P. sp. chloroformi, is richer in chloroform. This is a fallacy. The preparation which so many understand to be intended when "chloric ether" is prescribed contains only from 2 to 3 per cent. of chloroform, although, judging from its specific gravity (which has deceived so many), it would contain 7 to 9 per cent.

With regard to sal volatile Mr. Thresh found that with perhaps one exception, every wholesale house made a sp. ammon. co., besides the B.P. sp. ammon. aromat.

His examination of the samples sent him proved that the special preparations varied in specific gravity from .840 to .954, and the percentage of ammonia from .813 to 2.326. He was not surprised to meet with a good deal of variation in these articles, but he thought it was unsatisfactory that the samples of B.P. should also prove very different in their chemical characters. Among these the specific gravity ranged from .865 to .894, and the percentage of ammonia from 1.067 to 2.849. It was also found that there was no ratio whatever as to the proportion of ammonia present in the free form, or as carbonate.