containing 1 mg of merthiolate per ml, the final pH being about 7.2. The proteins dissolve readily in the buffer solution, yielding clear solutions at protein concentrations greater than 10 per cent. It is the practice here to dissolve the precipitated proteins in a volume of buffer equal to one quarter of the original serum volume. By this means, sufficiently high concentrations have always been obtained. The solution may be further clarified by recentrifugation at high speed or by filtration through a fine sinter-glass filter. The proteins precipitated under the above conditions comprise about 10 to 15 per cent. of the total serum proteins and contains from 90 to 100 per cent. of the isoagglutinating activity originally present in the pooled serums.

The separated and concentrated material lends itself well for blood-grouping purposes. It is not as viscous as whole serum, but possesses sufficient surface tension to form well-rounded droplets on a glass slide. The addition of merthiolate to a final concentration of 1:1000 does not appear to interfere with the interactions of the isoagglutinins with the red cells and further eliminates the necessity for filtering out bacteria. The isoagglutinating activity of the separated globulines stored at room temperature (25° C) remained unimpaired for four weeks.

Employing the macroscopic slide technique, the concentration of this material can be adjusted so that agglutination with incompatible erythrocytes occurs visibly in 5 seconds time, with complete agglutination occurring in 60 seconds.

Studies are now in progress on the physico-chemical and immunological properties of the separated and concentrated proteins, and attempts are being made to further purify the isoagglutinins from this material. The details of this study will be reported later.

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A SIMPLE PROCEDURE FOR THE RECOVERY OF AGAR

RECENTLY, there was published a notice[1] of the War Production Board's request that agar be conserved. It was suggested that work be done on developing methods whereby agar may be recovered from culture media and re-used.

In this connection, therefore, attention is called to the common practice in the manufacture of agar of dissolving it in hot water and then removing the water by freezing.

A satisfactory procedure for the recovery of agar, based on the freezing method, has been employed in this laboratory. Discarded culture media containing agar is kept in separate waste pans from liquid media. This used media is autoclaved as usual for the purpose of sterilizing, and while still in the fluid state is filtered through cheese-cloth to remove coagulated proteins, *i.e.,* blood and serum. It is then poured into trays from the freezing compartment of a refrigerator and allowed to cool. The trays are returned to the freezing compartment and left overnight.

The following morning the frozen material is rapidly melted in warm alcohol. The aqueous alcohol, containing the particles of agar, is filtered, with cheese-cloth again being used instead of paper in order to speed the filtration. The agar thus collected is washed repeatedly with distilled water.

Dehydration of the agar is secured by washing with alcohol. We have found it convenient, following the washing with water, to gather the corners of the cheese-cloth together to form a sack. This sack is immersed in 95 per cent. alcohol and compressed to remove the water. The shreds of agar thus obtained are spread out in a porcelain evaporating dish and dried by placing in a 37° C. incubator or in a desiccator.

Agar recovered in this manner is as satisfactory as the fresh commercial product. The quantity recovered depends largely on the care taken in handling the material throughout the above procedure.

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[1] *News Letter of the Society of American Bacteriologists,* Vol. 8: No. 2, p. 3, Office of the Secretary-Treasurer, April, 1942.

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