

need be carried on only a minute or two (during which time the chlorine is preferably diverted from entering the cylinder) and then the apparatus is ready for the demonstration.

When put away, the electrolysis vessel, etc., should be filled with distilled water.

I am indebted to Dr. E. P. Schoch, of this laboratory, for the fundamental notions of this design.

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A Supposedly New Compound from Wheat Oil.—While engaged in investigating the properties of bleached flours¹ at the University of Nebraska the writer had occasion to extract about 100 cc. of wheat oil from unbleached flour by means of ether. This oil on standing for a short time was observed to deposit a considerable number of small, white crystals. Some of these crystals were removed from the oil by suction and washed on the filter with ether in which they are not readily soluble. The crystals so obtained were oily to the touch and melted to a colorless liquid at 93–94°. By recrystallization from absolute alcohol this melting point was raised to 96.5°.

That the compound contained nitrogen was proven by the usual tests.

Some attempts were made to saponify the compound by boiling with 10 per cent. alcoholic potash but the melting point remained unchanged.

At this point the investigation was broken off, owing to the fact that it was not directly concerned with the bleaching of flours. There was not obtained sufficient of the compound for a complete investigation although it is hoped by the writer to prepare larger quantities in the near future.

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Determination of Phosphorus in Ash Analysis.—In our article in the March number of THE JOURNAL, attention was called to the fact that when the ash of cereals is burned at too high a temperature or fused, the method of determining phosphoric acid by extracting the ash with hot nitric acid gave an apparent loss of the phosphorus, although no appreciable loss in the ash occurred. More recent investigations show that the loss is not entirely due to volatilization of the organic phosphorus as was supposed, but to a conversion of the phosphorus to a form which is not precipitated by ammonium molybdate.

The following results show that even boiling the ash with strong nitric acid for an hour is not quite sufficient to recover all of the phosphorus.

¹ Alway and Gortner, THIS JOURNAL, 29, 1503 (Oct., 1907).