NOTES.

Errors Arising from the Use of Cork Stoppers in Quantitative Extractions with Acetone.—The use of cork stoppers for quantitative extractions is generally considered to be unobjectionable, but that such is not the case was recently called to my attention during a series of rubber analyses. The ordinary method of determining the acetone extract with the use of a Soxhlet extractor and cork stoppers was being used, but it was found almost impossible to remove all the soluble extract although the extraction was continued for 90 hours. An examination of the cork stoppers furnished a ready explanation. A white resinous matter had separated out in the cracks of the cork, and a ring of the same material had formed on the stopper and also on the glass where the two came in contact. It was evident that soluble matter was being extracted.

The amount of this soluble matter was determined by cutting up a cork weighing 4.18 grams, placing it in an extraction thimble and extracting with acetone for five hours. 0.2080 grams of a white resinous material was obtained. It is not considered that the extraction was complete but it had proceeded far enough for the purpose of the experiment.

The importance of this matter, especially in rubber analyses where the total weight of extract (in Para rubber) seldom exceeds 0.0600 grams can readily be seen. It is true that cutting the cork into small pieces as in the above experiment made the conditions for the extraction of soluble matter more favorable than in an analysis, but the porosity of the cork is so great that even under actual conditions a very considerable amount would be dissolved. Furthermore an extraction usually continues for a longer time than above and extraction proceeds from two stoppers instead of one.

Disregard of this matter is probably one of the factors which are responsible for the great discrepancies noted between the results of different chemists in the analysis of rubber. The remedy obviously lies in the use of ground glass connections between flask and extractor and extractor and condenser.

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Otto Dimroth's Paper: "Behavior of Diazonium Compounds Towards Ketonic and Enolic Desmotrophy".—In a recent paper,[1] bearing the above title, Prof. Otto Dimroth describes the behavior of a number of ketonic and enolic compounds towards *p*-nitrobenzenediazonium hydroxide. The enolic compounds yield azo derivatives $HO\overset{|}{C}:\overset{|}{C}N:NR$, whereas the ketonic compounds fail to react. Dimroth discusses the various possible methods of formulating the reaction as follows: (1) $OCCHR' + HON:$

[1] Ber. **40**, 2404.