

(10cc), filter through a small filter, if necessary, and test the sol. for am. sulphocyanate with ferric chloride. By this process we have succeeded in finding one part of hydrocyanic acid in 200,000 parts of water and organic matter. The method is especially recommended in cases of toxic analysis, where the ferro and ferri-cyanides may be present.

1.4 DIAMINO-CYCLOHEXANE. By W. A. NOYES AND H. H. BALLARD.

[ABSTRACT.]

The chloride was prepared from succinylosuccinic ester by saponification with sulphuric acid formation of the dioxime, and reduction with sodium and alcohol. Solutions of a mixture of equivalent quantities of the amino-chloride and sodium nitrite evolve on heating nearly two atoms of nitrogen. The same is true of a solution of the amino nitrite, prepared by adding silver nitrite to the amino chloride.

The products of the reaction as deduced from their chloroplatinates are 1.4 amino-hydroxy-cyclohexane and L^3 tetrahydro-aniline.

ON A CASE OF STEREO-ISOMERISM IN THE HYDRAZONES OF BENZOIN. By ALEXANDER SMITH.

Only four or five cases of isomerism have as yet been discovered among the hydrazones. In each case the two isomers are made in a similar manner and possess similar chemical properties, indicating identity in constitution. In each case, however, the isomers may be distinguished by difference in solubility, melting point and stability. The two hydrazones of benzoïn described in this paper are related to each other in the same way, and, therefore, fall into line with the previously described cases.

Both are formed when benzoïn and phenylhydrazine are heated in alcoholic solution, while the β -hydrazone alone is produced when the ingredients are heated without any solvent.

The α -hydrazone melts at 158° - 159° , is very stable in comparison with the other variety, and is only one-fourth as soluble in alcohol.