Results from the above described process, when compared with the Bunsen furnace, were very good.

Platinum Furnace. Total Carbon.	Bunsen Furnace. Total Carbon.
3.03	3.03
3.03	3.05
3.05	...

The convenience of this apparatus in expediting work in the laboratory has led me to write this description, in the hope that it might be of service to other chemists.

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NOTE ON THE SOLUBILITY OF BISMUTH SULPHIDE IN ALKALINE SULPHIDES.

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IN the August number of this Journal there is a note by Prof. Stillman on this subject; he shows that if a solution containing bismuth is made alkaline by sodium hydroxide and then heated with an excess of an alkaline sulphide a considerable amount of bismuth is held in solution. On repeating his experiments qualitatively I obtained the same result, but when the bismuth was first precipitated as sulphide from an acid solution and then treated with an alkaline sulphide but little if any was dissolved.

To test the solubility quantitatively I made a solution of about one and two-tenths grams of bismuth hydroxide in 500 cc. of very dilute hydrochloric acid; in two portions, of fifty cc. each. I determined the bismuth by precipitation by ammonium carbonate, finding 0.0966 and 0.0965 gram.

I next precipitated the bismuth in two more lots of the same solution by hydrogen sulphide, filtered and heated the precipitate for half an hour with a large excess of potassium sulphide, filtered, dissolved and reprecipitated by ammonium carbonate, the bismuth weighed 0.0981 and 0.0970 gram.

Two more lots treated in the same manner, except that they were heated with ammonium sulphide, gave 0.0970 and 0.0976 gram of bismuth.

From the above it seems fair to conclude that bismuth sulphide precipitated from an acid solution is not dissolved by subsequent treatment with an alkaline sulphide.