

VII.—*Note on the Formation of Carbon Tetrabromide in the  
Manufacture of Bromine.*

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A QUANTITY of a white crystalline substance which had been obtained as a residue after the distillation of a quantity of commercial bromine was given to me by Professor Thorpe, with the request that I would ascertain its nature and composition. From its physical properties Dr. Thorpe was of opinion that it was carbon tetrabromide, a supposition which my analysis has confirmed. It had the characteristic smell of this compound, melted at  $90\cdot1^{\circ}$ , and solidified at  $88\cdot6^{\circ}$ . Recrystallisation from alcohol made no appreciable alteration in the fusing point. Boiled with an alcoholic solution of soda it was at once decomposed, with formation of a white precipitate of sodium bromide, which readily dissolved on addition of water. On acidulating the liquid with nitric acid and adding silver nitrate, silver bromide was formed. An analysis made by means of this decomposition yielded the following results:—

0·3424 gram gave 0·7754 AgBr and 0·0036 Ag = 97·1 per cent. Br.  
Carbon tetrabromide contains 96·4 per cent. Br.

The formation of this body in the manufacture of bromine has not hitherto been noticed. It is probably formed by the action of the halogen on the organic matters derived from the sea-weed from which the bromine made in this country is procured.