

The statement that the present gas carries with it tar or other heavy substances, which necessitates the blowing out of the pipes, etc., is incorrect, the fact being that there is much less tarry deposit and condensation in the pipes from this gas than Coal Gas. The stoppages complained of have been caused by the deposition of Naphthaline, which it is well known is a very old and serious trouble with Coal Gas works, and is not peculiar to Water Gas; and in the past, when making Coal Gas, this Company has had relatively greater difficulty from this cause that it has had recently.

This difficulty has been completely overcome, and I am satisfied no more stoppages from it need be apprehended. Naphthaline is not an impurity.

And now as to the charge of the *danger* incurred from the use of the gas.

This charge is made on the ground of there being a large amount of Carbonic Oxide in the gas, and in corroboration of this claim it is asserted that more accidents result from its use than from Coal Gas, which contains a smaller amount of Carbonic Oxide. Mr. Littlehales very properly says that this question "is really one to be decided by chemists," and a number of authorities are quoted, both by him and in the "Report," testifying to the dangerous nature of *Carbonic Oxide*, but *not one is quoted in condemnation of what is called Water Gas.*

But I would submit, that the question is not whether or not *Carbonic Oxide* is a poisonous and dangerous gas, but whether the so-called Water Gas, containing say 22% of Carbonic Oxide, and less of other deleterious gases, is on the whole more dangerous than Coal Gas containing say 7% of Carbonic Oxide, and a larger proportion of other deleterious gases; and in estimating the relatively injurious nature of these gases, two elements of danger must be taken into consideration—their *poisonous and suffocating character and their explosiveness*; and hitherto more accidents have taken place from the latter than from the former.

As it is stated in the "Report" that Water Gas was prohibited in Paris because of its dangerous character, I give, in addition to explanations given for its not having been adopted there by Prof. Adolphe Wurtz in Appendix C, the following one by Gideon E. Moore, Ph.D., of Jersey City, N.J.:

"The objections to Water Gas in general on account of its contents in Carbonic Oxide, are based on an entire misconception of the meaning of the reports of the eminent scientific men who were called to pronounce upon its safety in France.