

ment of the gas renders it necessary for me to speak of in order to show his unreliability and apparent determination to misrepresent facts.—(See Appendix "A.")

In the tests made here—72 in number—taken at different periods between February 1st and September 30th last, when we were making Water Gas exclusively, *only a difference of 2.75 candles was shown between the highest and lowest of the whole record*, and no Government tests made since then show any greater difference. The correctness of the Government tests is confirmed by the tests made three times a day, at least, by this Company, which have not shown in a long time a variation of two candles. Surely if there was any such variation as is claimed, it would have manifested itself during some of the tests spread over so long a period. I assert, notwithstanding Mr. Littlehales' knowledge of "the principles involved and the details of manufacture," that it *is* quite possible to maintain a very uniform quality of illuminating power with Water Gas and that the tests made here show this. In further proof, thereof I give the testimony of the managers of three Lowe Process Works; and others could be given if necessary.—(See Appendix "B.")

Let us see what the record says of the *Coal Gas made at Mr. Littlehales' Works in Hamilton*. In the Government Report for the year ending June 30th, 1879, the last I have received, I find that 49 tests were made of Hamilton gas, the highest illuminating power shown being 17.20, and the lowest 12.96, *a difference of 4.24 candles*. Taking Mr. Littlehales on his own ground, that the tests fail to show truly the variation in illumination, *how great then must have been the variation in the Coal Gas in Hamilton, the photometer itself showing, with the comparatively few tests made, over fifty per cent. more than Toronto*. Nor do the records of the previous year say anything more in favor of the gas made there; in this respect, indeed, the difference is greater. *In fact, quite as great a difference is shown in the gas made by all the Coal Gas companies in the Dominion*. In further proof of the incorrectness of Mr. Littlehales' conclusions, it will only be necessary for me to say that the records of 1878 *show a variation in the gas made by the St. John, N. B., Company, of from 19.79 to 10.24 candles, or a difference of 9.55 candles*; and great variations are shown in three of the eight months in which the tests were taken.

The statement is made in the "Report," that the manager of this Company acknowledges the imperfections of the gas by