the new gas is more dangerous or less dangerous to life and property than ordinary gas-coal gas?

"The dangers from leakage of gas are two in kind: 1. From suffocation by inhalation. 2. From explosion and fire. Of these, the last is much the most common and the most serious, involving injury to both property and life. Indeed, suffocation rarely or almost never arises from ordinary (accidental) leakage; but mostly from inexcusably culpable negligence or ignorance. Facts on record support strongly the belief that variation in composition of illuminating gases has little or no appreciable influence in its suffocating quality. The most narcotic agents present are the illuminating hydrocarbons, and a small percentage of these in air is always dangerous to life, by reason of the rapid anæsthesia which follows their inhalation; and Carbonic Oxide is also a powerful anæsthetic, but not more so than these heavy hydrocarbons, on which the illuminating value of all gases depends. As to the explosiveness of the two gases, however, and the danger arising therefrom, the new gas has a decided advantage."

Carbonic Oxide is a gas whose explosive power for equal volumes is far smaller than that of Marsh Gas, a main constituent of ordinary gas-coal gas. This is because in exploding Marsh Gas consumes four times as much Oxygen as Carbonic Oxide. The introduction of the Lowe Gas must therefore be attended with diminution of risks to life and property.

(Signed), HENRY WURTZ, Ph.D.

12 HUDSON TERRACE,
HOBOKEN, May 13, 1878.

Regarding Dr. Henry Wurtz, Prof. T. Sterry Hunt, of Montreal, writes:

"He has for many years past paid special attention to the various questions connected with gases for illumination and heating, and has by original processes much improved the method of gas analyses. I do not hesitate to say that his ability and his conscientiousness would make his judgment in all cases where such cases are involved of the greatest weight."

The following are extracts from a Report prepared at the request of this company, by Professor H. H. Croft, late Professor of Chemistry, University College, Toronto:

"The explosions caused by gas arise from its becoming mixed with Oxygen, or what comes to the same thing, atmospheric air, containing one-fifth of Oxygen.

"Olefiant Gas, with 3 parts of Oxygen (15 of air), forms a fearfully explosive mixture.