One of Westinghouse's first concerns after he opened his first gas well in 1884 and determined to develop a public utility from it, was with making the use of gas safe. leakage from conducting pipe and joints, was the first concern. But it soon became necessary that there must be devices for protecting and well as preventing leakage. Attention was forced on Westinghouse, even if it hadn't been the natural bent of his mind, by necessity to prevent the terrible explosions which were taking place constantly. to the ability to control natural gas. if he expects to develop a merely effective fuel.

In June 1887 Westinghouse took out a patent for a long-distance gas distribution, an important matter not only in regard to gas, but in regard to a problem which he was already facing in electricity. What he did by this was to use a main of constantly increasing diameter.

"The essential feature of this patent is the use of a main of constantly increasing diameter. "It was the practice before this invention to lay lines of uniform diameter, and when it was desired to increase the quantity of gas to lay an additional line. The pipe used varied from five inches to eight inches in diameter." This necessitated a high pressure throughout. In this invention the size and capacity of the main are increased at successive intervals. The advantage of enlarging the pipe is not only to lessen the average general pressure but also to provide a considerable reservoir capacity and at the same time to greatly accelerate the flow of the gas from the well to points of distribution."

(Prout, Henry G. C.E., A.M., LL.D. A Life of George Westinghouse 1926. Page 365, 265.

Digital Image, 2011, The Ida M. Tarbell Collection, 1890-1944, Allegheny College Pelletier Library.

was named.

See A

When it came to handling

One point in his argument for the alternating current ~~system was~~ he adapted this idea to this method of long distance gas distribution.

"The alternating system not only permits the use of a current of one thousand volts for street mains, but requires its conversion into currents of fifty volts or less for house-wiring. The converters are so constructed that the primary or street current can never by any possibility enter the house. ... No person coming in contact with the alternating current as used for domestic lighting would be aware of its presence."

Leupp, Francis. George Westinghouse, His Life and Achievements. 1916. Page 149, 150)

The same year, 1887, he took out a patent for a system of electrical distribution, The idea is about the same in that of gas distribution. ~~(350, Prout)~~

Digital Image, 2011. The Ida M. Tarbell Collection, 1890-1944, Allegheny College Pelletier Library.

Big Business: Organization of Business, causes.

Trace the story of the Philadelphia Company.

For the story of this see Leupp. Page 124

Also see book on Philadelphia Company in Westinghouse-Burton file.

By the end of our period there were many corporations

Municipal ownership

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