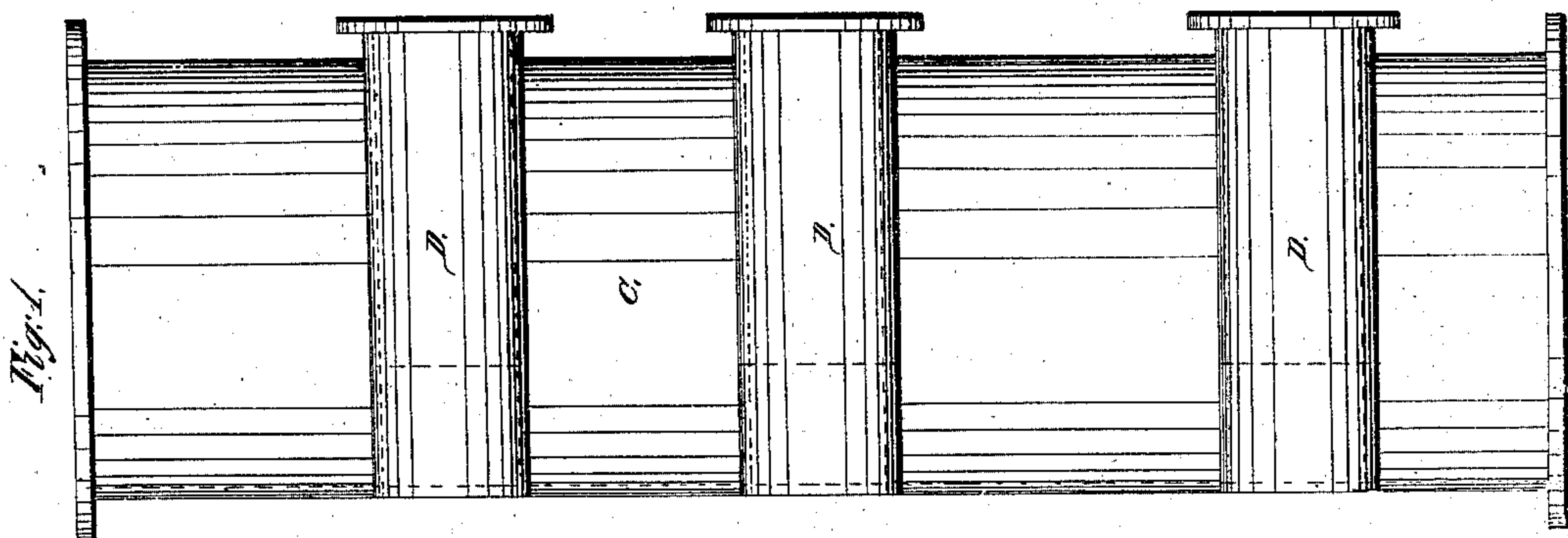
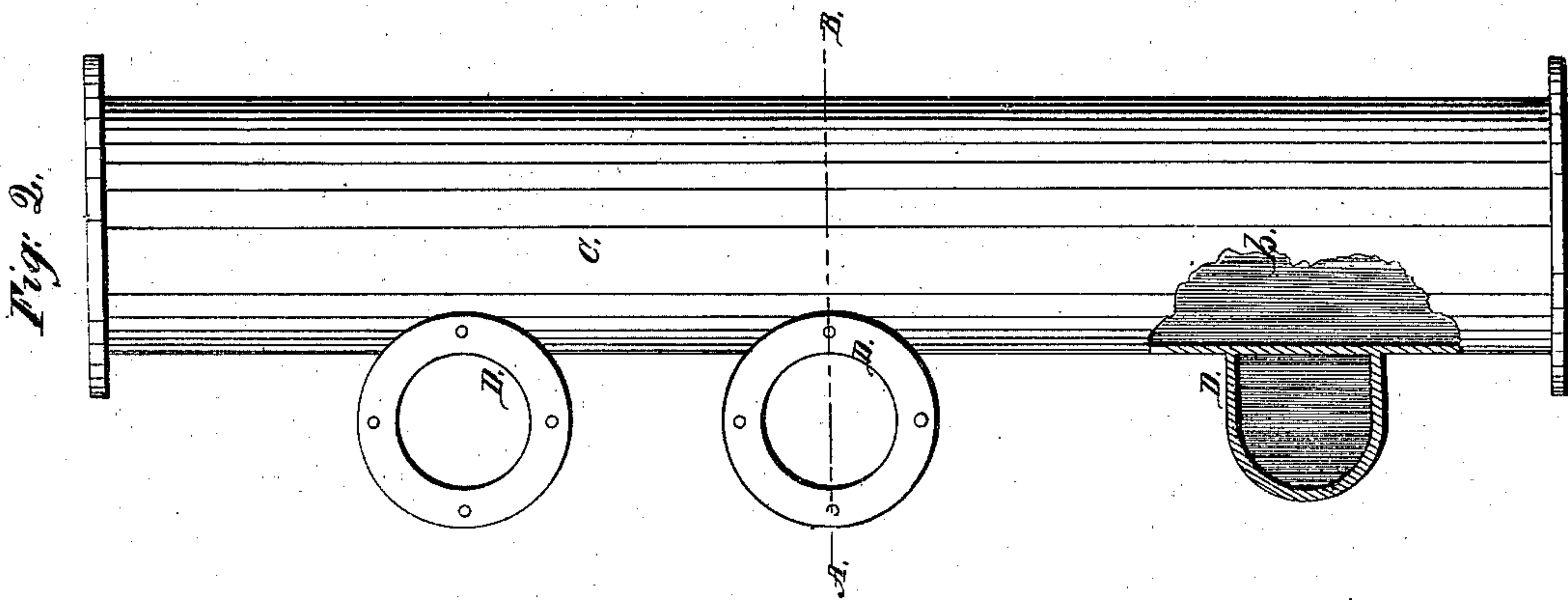
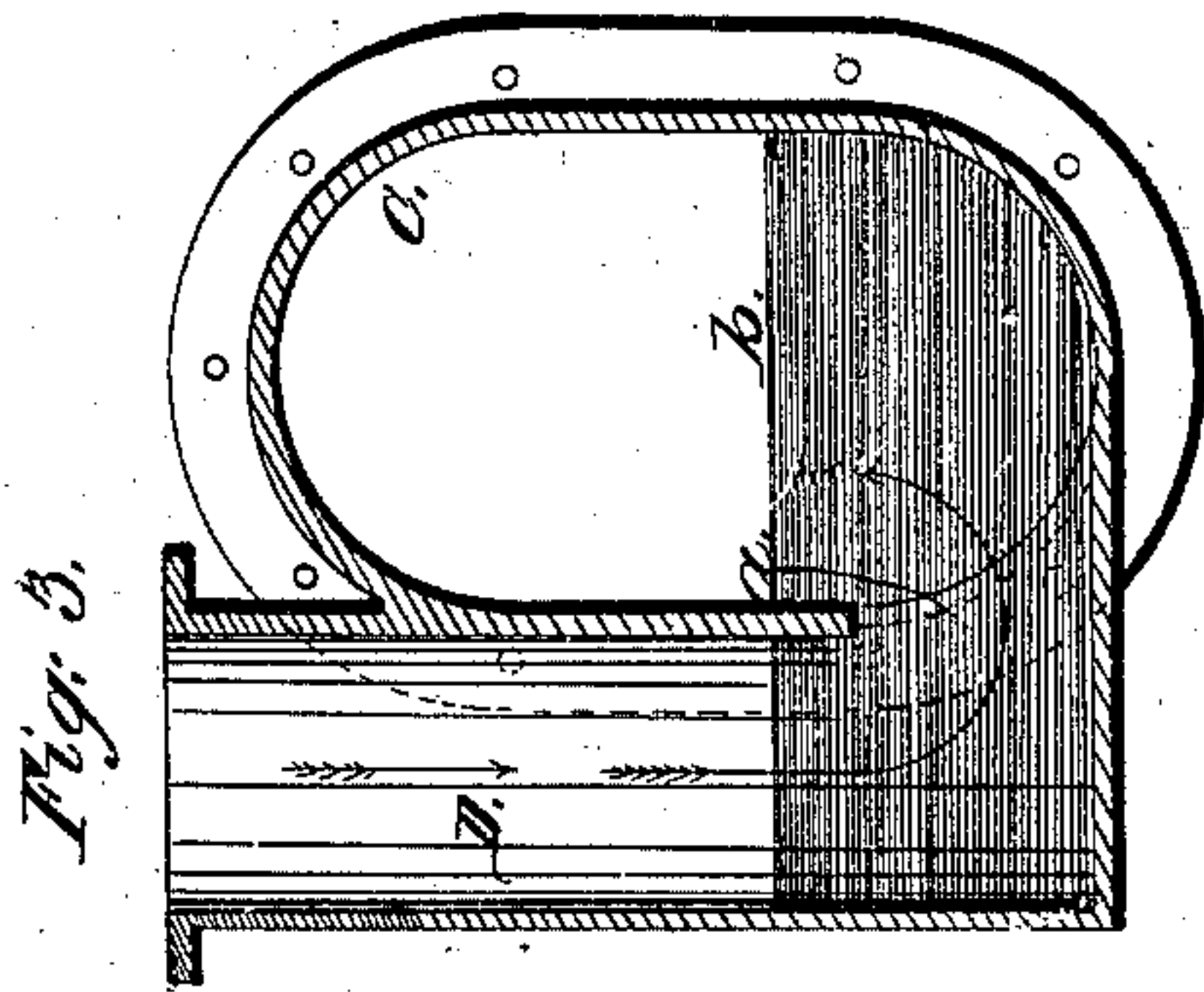


I. N. Stanley
Gas Main.

Nº 57,000

Patented Aug. 7, 1866.



Witnesses:
M. M. Livingston
Wm. Green

Inventor:
I. N. Stanley.

UNITED STATES PATENT OFFICE.

I. N. STANLEY, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN GAS-MAINS.

Specification forming part of Letters Patent No. 57,006, dated August 7, 1866.

To all whom it may concern:

Be it known that I, I. N. STANLEY, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Hydraulic Mains for Gas-Works; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of my invention; Fig. 2, a plan or top view of the same, partly in section; Fig. 3, a vertical transverse section of the same, taken in the line A B, Fig. 2.

Similar letters of reference indicate corresponding parts.

The tubes which lead from the retorts into the hydraulic main in gas-works have hitherto been curved at their upper ends so as to extend down directly into the main below the surface of the fluid therein, thereby monopolizing much room in the main and serving to materially check the free passage of gas in the main, above the fluid, in the passage of the gas to the pipe or pipes by which it is conducted into the holder or receiver.

The object of my invention is to obviate this difficulty; and to this end it consists in having the upper parts of the tubes aforesaid cast with the hydraulic main at one side of the same, and provided with openings, so as to communicate with the main below the level of the fluid therein, whereby the gas, when it escapes up through the fluid in the main, has a free unobstructed passage in the latter above the fluid.

C represents the hydraulic main, which may be cast in the usual form and with a series of tubes D at one side of it at its exterior. These

tubes D have openings *a* at their lower parts, by which they communicate with the hydraulic main C, as shown in Fig. 3, the openings *a* being below the surface of the water or fluid *b* in C. The tubes D have extensions connected to them to lead to the retorts.

These hydraulic mains, as is well known, serve as a seal between the retorts and the holder or receiver, and also as a seal between one retort and another, so that the retorts may be charged with coal and emptied of coke separately without interfering one with another.

By my improvement it will be seen that the space in the hydraulic main above the water or fluid *b* is clear or unobstructed, and a free or unobstructed passage is allowed the gas in the main, so that it may readily pass into the pipe or pipes which lead it to the coolers, holders, &c.

The present plan is to have the tubes D curve downward at their upper ends directly into the main and below the surface of *b*, and by this means the tubes are made to greatly obstruct the passage of the gas in the main—a difficulty which is fully obviated by my improvement.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

As an improvement in hydraulic mains for gas-works, the combination, with the elliptical or cylindrical main pipe C, of the external supply-tubes D D D, cast in one piece with the pipe *c*, and communicating with the lower part of the latter, as herein specified, and for the purposes set forth.

I. N. STANLEY.

Witnesses:

M. M. LIVINGSTON,
WM. F. MCNAMARA.