

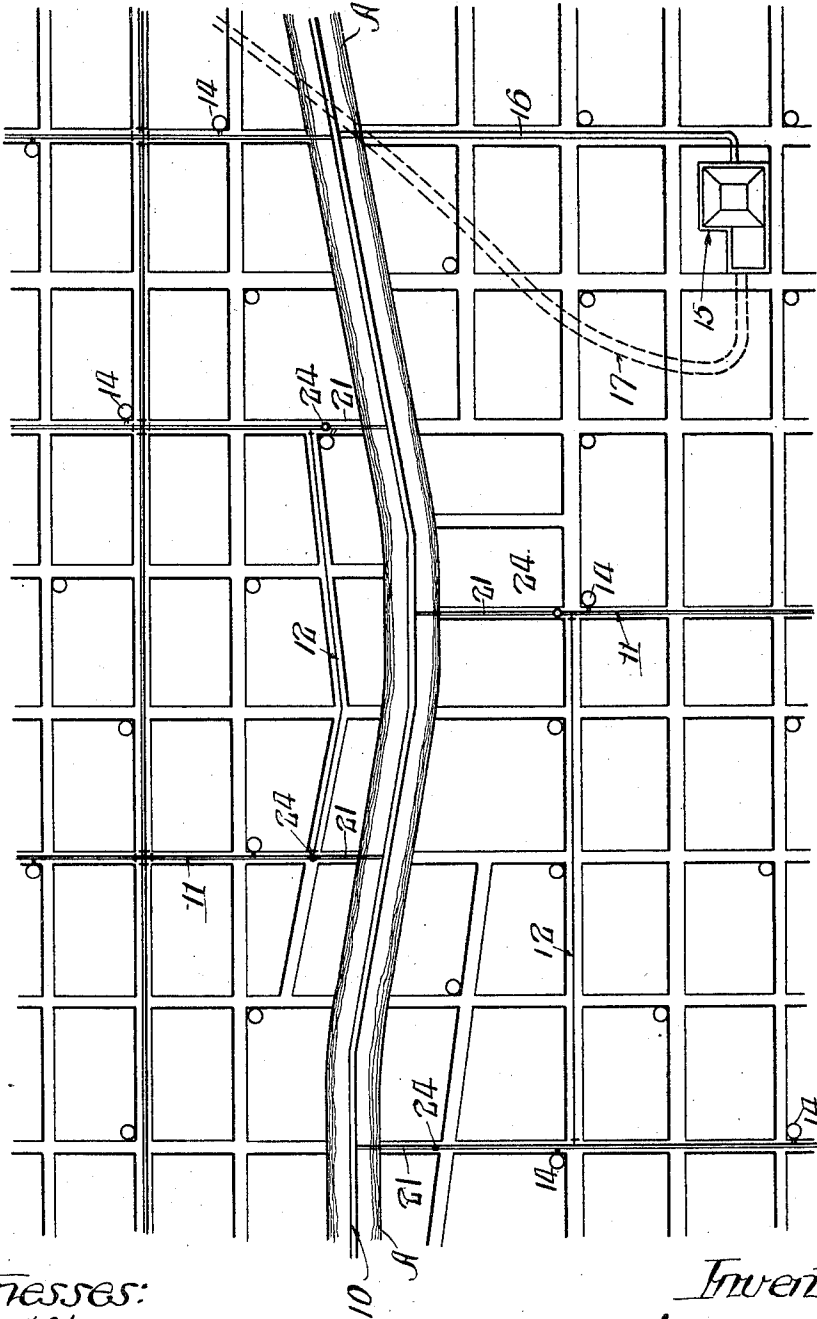
G. W. JACKSON.
HIGH PRESSURE WATER DISTRIBUTING SYSTEM.
APPLICATION FILED JULY 6, 1908.

1,030,587.

Patented June 25, 1912.

2 SHEETS-SHEET 1.

Fig. 1.



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UNITED STATES PATENT OFFICE.

GEORGE W. JACKSON, OF CHICAGO, ILLINOIS.

HIGH-PRESSURE WATER-DISTRIBUTING SYSTEM.

1,030,587.

Specification of Letters Patent.

Patented June 25, 1912.

Application filed July 6, 1908. Serial No. 442,034.

To all whom it may concern:

Be it known that I, GEORGE W. JACKSON, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in High-Pressure Water-Distributing Systems; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to a high pressure water distributing system for municipalities.

The water of the high pressure system may be used to flush the sewer system whereby the sewers may be maintained free from clogging and rendered sanitary. The high pressure system is also designed to be connected with hydrants for supplying water under pressure for use of the fire department of a city, the pressure being such as to lift the water to heights required by the local building conditions, and the water from said pressure system may also be used for flushing the streets to clean the same and for supplying water to sprinkler systems of buildings located on the adjoining streets and for other like purposes.

The invention consists in the matters hereinafter set forth and more particularly pointed out in the appended claims.

As shown in the drawings—Figure 1 is a plat illustrating the streets and blocks of a city, and illustrating the manner of laying the high pressure mains and street mains, and connecting the same with a power plant. Fig. 2 is a vertical section illustrating the location of the high pressure main and the connection thereof with the street mains.

As shown in said drawings, 10 designates the high pressure main of the high pressure water distributing system, 11, 12 the street mains which are located in the several streets of the city and 14, 14 designate a plurality of hydrants located along the lines of the street mains and connected therewith. The street mains 11 communicate directly with the high pressure main 10 and constitute feeders for the smaller street main 12.

15 designates a pumping station which is connected by a pipe 16 with the high pressure main 10 through which water is pumped into said main under pressure, the water being supplied to the power house from any

suitable source, as through an underground tunnel 17, which may receive water from the river A, or from an adjoining lake or other source.

The system is as herein indicated installed in a city through or alongside of which flows the river A, beneath whose bed is buried the high pressure main 10. This is desirable for the reason that said high pressure main is designed to carry such high pressure that, in case of bursting of the main, much damage might be occasioned by the flooding of the vicinity if the said main be buried beneath the street. As herein shown, said high pressure main 10 is located in a tunnel constructed beneath the bed of the river A. Branch pipes 21 lead from the high pressure main through lateral tunnels 22 and are connected at their outer ends with vertical pipes 23, located in shafts 24 that lead from lateral tunnel branches to or near the street level. The vertical pipes 24 are connected at their upper ends with street mains 11. The said high pressure main 10 is made of large capacity to supply the entire system of pipes connected therewith, and each lateral pipe 21, together with its connected vertical pipe 23, is made of a capacity to supply water to the parts of the system to which the respective pipe 11 is connected. Said high pressure main and the distributing and street mains are made of heavy steel pipes to withstand the heavy pressure which they carry, and are connected by flanged joints of a character to withstand heavy internal pressure. The system for supplying water for domestic and like uses is not herein shown, it being understood that the high pressure system is independent therefrom.

I claim as my invention:—

1. A high pressure water system comprising a main tunnel located beneath a water way, a high pressure main located in said main tunnel, lateral tunnels leading from said main tunnel, vertical shafts leading to said lateral tunnels, distributing pipes leading from said high pressure main located in said lateral tunnels and extending up through said vertical shafts and street mains connected with said distributing pipes.

2. A high pressure water system comprising a main tunnel located beneath a waterway, a high pressure main located in said main tunnel, auxiliary tunnels leading from said main tunnel, vertical shafts leading to

said auxiliary tunnels, distributing pipes leading from said high pressure main located in said auxiliary tunnels and extending up through said vertical shafts and
5 street mains connected with said distributing pipes.

In testimony, that I claim the foregoing

as my invention I affix my signature in the presence of two witnesses, this 21st day of May A. D. 1908.

GEORGE W. JACKSON.

Witnesses:

M. W. CLUXTON,
J. C. MOORE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."