Fatested Oct. 12.1869. Fig. 2. Inventor The Sils by

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Anited States Patent Office.

JOHN SILSBY, OF NEW YORK, N. Y.

Letters Patent No. 95,844, dated October 12, 1869.

HOUSE-CONNECTION FOR SEWER, WATER, AND GAS-PIPES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, John Silsby, of the city, county, and State of New York, have invented a new and useful Improvement in the House-Connection of Sewer, Water, and Gas-Pipes; and I do hereby declare the following to be 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 drawing, forming part of this specification, in which drawing—

Figure 1 represents a transverse section of a street,

showing my invention.

Figure 2 is a similar section of a modification thereof.

Similar letters indicate corresponding parts.

This invention consists in the arrangement of tubes leading from a tunnel situated under the street, and enclosing the main sewer, water, and gas-pipes, into the houses on the opposite sides of the street, said tubes serving to enclose the house-connections of the sewer, water, and gas-pipes in such a manner, that if said connections, or either of them, are getting out of order or defective, they can readily be removed and replaced, without the necessity of tearing up the pavement and digging down to said connections, a necessity which is unavoidable with the house-connections of sewer, water, and gas-pipes as now arranged, and which causes much inconvenience and expense.

In the drawings—

The letter A designates a tunnel, of sufficient interior size to admit the sewer, water, and gas-pipes, and to allow sufficient room for the passage of the workmen within it.

This tunnel may be constructed of brick, or of such other material as may be convenient, and its shape may be such as shown in fig. 1 of the drawing, or it may be built in the shape shown in fig. 2, with a depression, B*, to serve as the main sewer, or it may be built in any other convenient shape or manner.

Through this tunnel extend the sewer-pipe B, the water-pipe C, and the gas-pipe D, said pipes being arranged and secured therein in any convenient manner.

From these pipes extend the connections b c d to the houses on the opposite sides of the street, and these connections are enclosed in tubes E, which pass from the sides of the tunnel to and through the walls of the houses, being open at both ends, so that either of said house-connections can be readily taken out and replaced, without tearing open the pavement in the street and digging down to it.

In order to prevent the house-connections from getting mixed up or from interfering one with the other,

they may be kept separate in the tubes E, by suitable

braces or partitions.

After the several house-connections have been properly made, the inner ends of the tubes E may be closed by suitable luting, which can be readily removed, if the necessity arises, and which, when not removed, will prevent any nauseous gases or odors passing from the tunnel A into the houses.

It is needless to enlarge on the advantages of my tubes for enclosing the house-connections $b\ c\ d$ —they

are self-evident.

With the present arrangement of said connections, it is unavoidable, if either of them gets out of order and requires repairs, that the pavement in the street shall be torn up, and a hole dug, until the defective connection is reached, an operation which not only necessitates much expense and delay, but which, in most cases, tends to disfigure or actually injure the pavement, according to the nature or construction of the same.

By enclosing the house-connections in the tubes E. I am enabled to remove either or all of them, and to replace them with the least possible trouble or delay, the pavement does not require to be disturbed, and said connections can be kept in order with the greatest ease and facility.

It is obvious that the tunnels A may also be made to enclose a pipe for telegraph-wires, or other purposes, and in this case corresponding connections will

be made to pass through the tubes E.

If desired, my tubes E may also be applied to enclose the connection of a lamp-post with a gas-main, or the connection of a hydrant with a water-main, and in either case, the advantages of said tubes are readily understood from the foregoing description.

I do not claim a tunnel running along under the centre of a street, and containing gas, water, and sewer-pipes. Neither do I claim to provide each tunnel with openings in its sides, to admit the house-connections of the gas, water, and sewer-pipes; but

What I claim as new, and desire to secure by Let-

ters Patent, is—

The tubular cases E, extending from the houses on the opposite sides of a street, under said street, and into the sides of the tunnel A, to form permanent channels, through which the house-connections of gas, water, and sewer-pipes, either or all, can be introduced, without disturbing the street or sidewalk, as shown and described.

Witnesses:

JNO. SILSBY.

W. HAUFF, E. F. KASTENHUBER.