

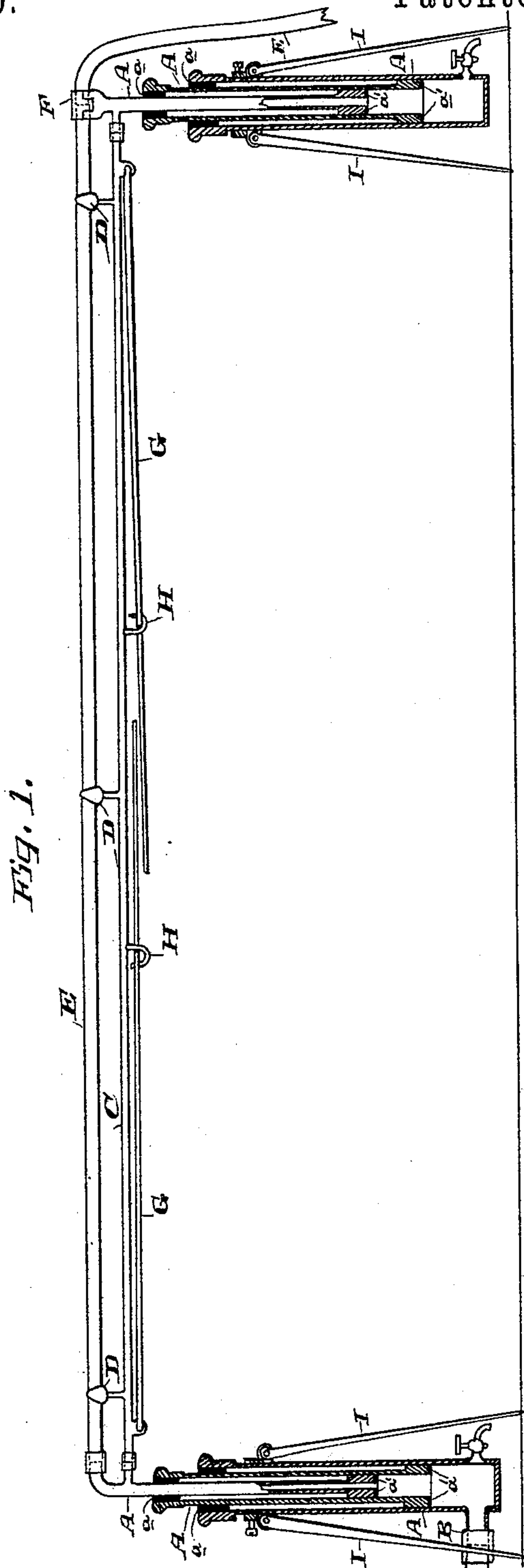
(No Model.)

2 Sheets—Sheet 1.

H. TUCKER & P. J. KEEGAN.
HOSE BRIDGE.

No. 390,920.

Patented Oct. 9, 1888.



Witnesses,
Geo. H. Strong.
J. H. Morse.

Inventors,
H. Tucker.
P. J. Keegan.
By Dewey & Co.
attys

(No Model.)

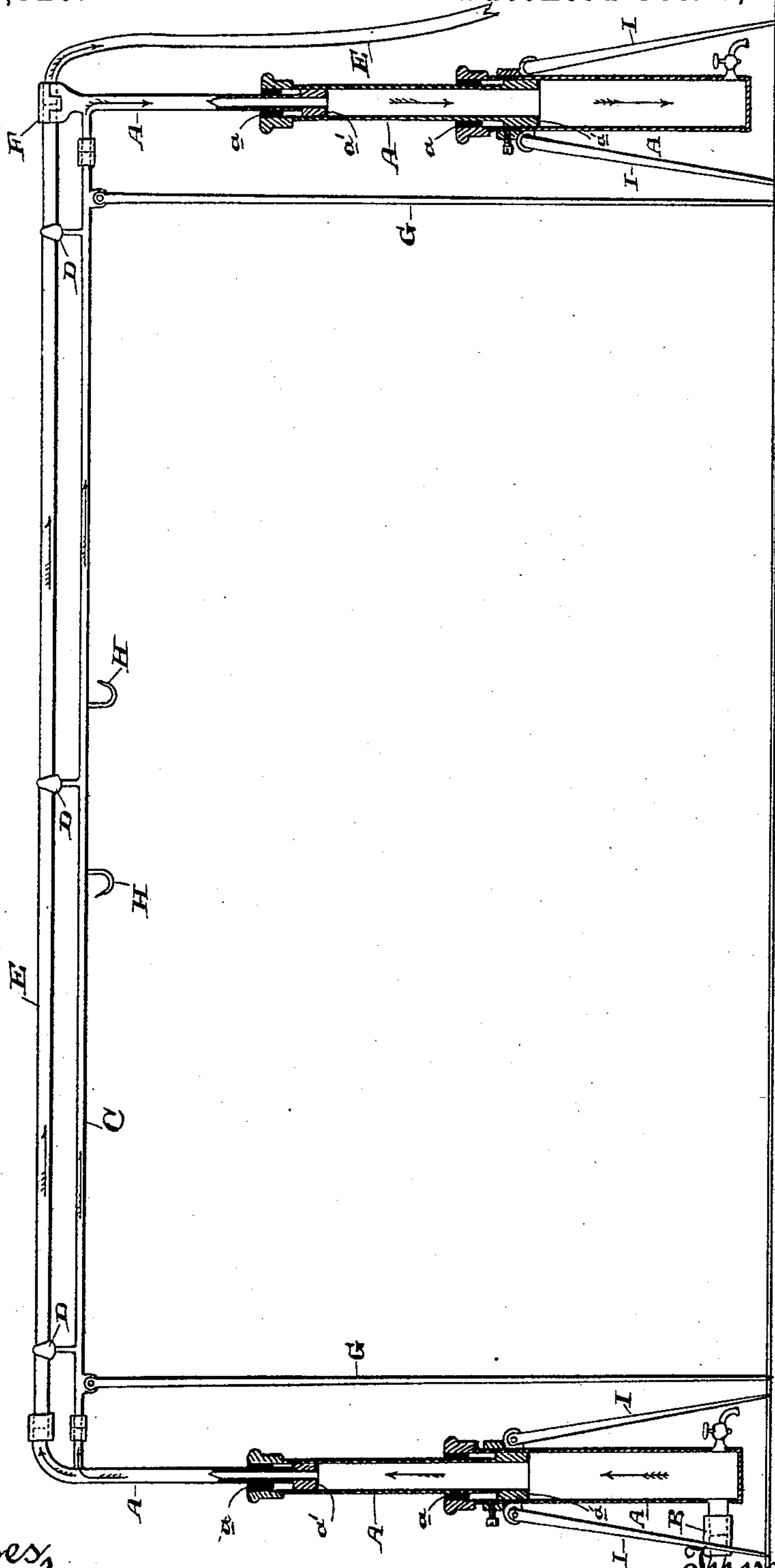
2 Sheets—Sheet 2.

H. TUCKER & P. J. KEEGAN.
HOSE BRIDGE.

No. 390,920.

Patented Oct. 9, 1888.

Fig. 2



Witnesses,
Geo. H. Strong.
J. H. Brown.

Inventors,
H. Tucker.
P. J. Keegan.
Delvey & Co. attys.

UNITED STATES PATENT OFFICE.

HENRY TUCKER AND PATRICK J. KEEGAN, OF SAN FRANCISCO,
CALIFORNIA.

HOSE-BRIDGE.

SPECIFICATION forming part of Letters Patent No. 390,920, dated October 9, 1888.

Application filed May 4, 1888. Serial No. 272,823. (No model.)

To all whom it may concern:

Be it known that we, HENRY TUCKER and PATRICK J. KEEGAN, of the city and county of San Francisco, State of California, have invented an Improvement in Hose-Bridges; and we hereby declare the following to be a full, clear, and exact description of the same.

Our invention relates to the class of bridges or frames which are used for carrying hose over railway-tracks in the streets of cities, whereby interference with the travel of the cars is avoided; and our invention consists in novel vertically-movable sides composed of telescoped pipe-sections, said sides being connected so that they shall operate simultaneously under the pressure of water introduced to one of the sides, and in details of construction and arrangement by which the hose is coupled to and carried by the sides, and by which the bridge is supported when in position, all of which we shall hereinafter fully describe.

The object of our invention is to provide a simple and readily operative hose-bridge which can be easily transported to the scene of the fire and there rapidly adjusted for the purpose of carrying the hose over the track and avoiding interference with the cars.

Referring to the accompanying drawings for a more complete explanation of our invention, Figure 1 is a vertical section and elevation of our bridge, showing it collapsed and ready for raising. Fig. 2 shows it elevated.

The sides or main standards of the bridge, which are placed on each side of the railway-tracks, are composed of telescoping pipe-sections A, fitted together with suitable packing or stuffing boxes, *a*, and pressure-heads *a'*, whereby, when water is admitted, the sections are projected and the sides extended under its pressure.

Water is admitted at the base of one of the sides, as shown, by the coupling B, at which point that side is united with the fire-engine. The two sides are connected by a cross-pipe, C, which is coupled to the innermost pipe of each side, so that when admitting the water at the base of one of the sides, as described, it passes through the connecting-pipe C into the other side and raises its sections simultaneously with the elevation of the first side.

When the water is introduced into the section A through the coupling B, it passes from said section through the hose, and also through the connecting-pipe, that portion of the water passing through the connecting-pipe being discharged into the other section, A. As the discharge-opening in the hose-nozzle is generally much smaller than the diameter of the hose, the water is necessarily "backed up" in the hose, and the pressure exerted thereby, combined with the pressure of the engine, will cause the telescopic sections to move upward, and thereby elevate the hose. The connecting-pipe C also serves as a support for the hose by having upon it brackets D, in which the hose E lies, said hose being connected at one end by a suitable coupling with the innermost pipe of the first side of the frame, and being supported on the top of the innermost pipe of the other side by means of a clamp, F, which said clamp provides for drawing the hose down when the sides collapse at the completion of the use of the bridge. A small outlet-cock is provided at the base of the sides of the bridge to let the water out to collapse them.

Hinged legs G are connected with the cross-pipe C, and are supported when not in use by the hooks H; but when the bridge is about to be used these legs are released from the hooks and allowed to drop, so that they support the bridge in an elevated position independent of the water-pressure.

Hinged legs I support the sides of the standards of the bridge. In using the device it is carried along, packed in small compass, to the place where it is needed, and there, being set up, is coupled, at B, to the engine, and upon the first pressure of water the sides are elevated, carrying the hose up with it, and forming the bridge over the railway.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A hose-bridge the standards or sides of which are composed of telescoping sections, whereby they may be extended under pressure of water introduced and the bridge thereby elevated, substantially as herein described.

2. A hose-bridge consisting of standards or sides, each composed of telescoping sections, and a pipe-connection between their tops,

whereby they are extended simultaneously under the pressure of water admitted to one, substantially as herein described.

3. A hose-bridge consisting of extensible standards or sides, each composed of telescoping pipe-sections, a pipe-connection between their tops, whereby they are caused to operate simultaneously, and a coupling for a connection between the base of one of said sides and the source of water under pressure or force, substantially as herein described.

4. A hose-bridge consisting of extensible standards or sides, each composed of telescoping pipe-sections, a pipe-connection between them, whereby they operate simultaneously, a coupling at the base of one of said standards or sides for a connection with a source of water under pressure, a coupling for the hose at the top of one of the standards or sides, and a rest or support for said hose on the top of the other standard or side, substantially as herein described.

5. A hose-bridge consisting of extensible standards or sides composed of telescoping pipe-sections, a cross-pipe connecting the tops of the two standards or sides, a coupling at the base of one of the sides for a connection with the source of water under pressure, a coupling at the top of the first standard or side for the hose, and suitable supports on the

connecting-pipe for carrying the hose between the sides, substantially as herein described.

6. In a hose-bridge, the extensible standards or sides composed of telescoping pipe-sections connected with the source of water under pressure and with the hose, and supporting it, in combination with the cross-pipe connecting the two standards or sides, whereby they operate simultaneously, and the hinged supporting-legs connected with the cross-pipe, substantially as herein described.

7. A hose-bridge comprising the extensible standards or sides composed of telescopic pipe-sections, one standard or side being connected with the source of water under pressure and with the hose, and the other supporting said hose, the cross-pipe connecting the two standards or sides, the hinged legs carried by the cross-pipe for supporting the bridge, and the supports on said pipe for carrying the hose between the standards or sides, substantially as herein described.

In witness whereof we have hereunto set our hands.

HENRY TUCKER.
PATRICK J. KEEGAN.

Witnesses:

S. H. NOURSE,
H. C. LEE.