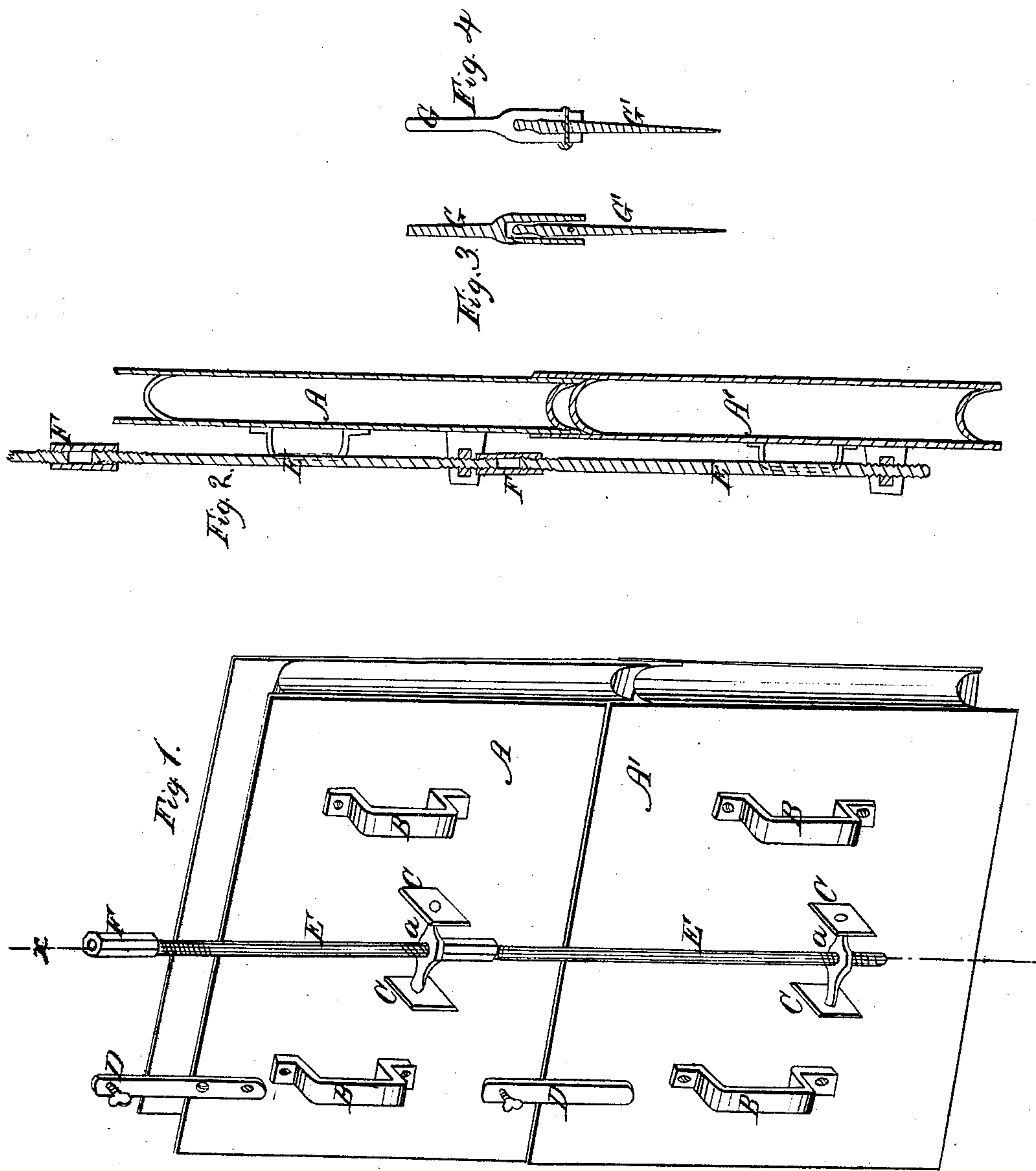


J. F. Bishop,

Fire Wall.

No. 96,386.

Patented Nov. 2, 1869.



Witnesses.
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JOSHUA F. BISHOP, OF AFTON, IOWA.

Letters Patent No. 96,386, dated November 2, 1869.

IMPROVED PORTABLE FIRE-WALL.

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, JOSHUA F. BISHOP, of Afton, in the county of Union, and State of Iowa, have invented a new and useful Improvement in Portable Fire-Proof Walls; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a perspective view of two sections of a wall, constructed in accordance with my invention, and placed one upon the other, showing, also, the rods which secure them together while in position for use;

Figure 2 is a transverse vertical section on line *x-x* of fig. 1;

Figure 3 is an elevation of the support or stay, which may be used in connection with the wall; and

Figure 4 is a transverse section of the same.

Corresponding letters refer to corresponding parts in the several figures.

This invention relates to fire-proof walls, for the protection of firemen and the persons who may be engaged in protecting buildings from fire or in extinguishing those that are on fire; and

It consists in fire-shields, or walls constructed in sections, so as to be portable and easily removed from one locality to another; as will be more fully explained hereinafter.

A A', in the drawings, represent two sections of a shield or wall, of which there may be any required number, placed one upon the other, to raise them to such an altitude as to protect the persons who may be called to work behind them.

They are to be constructed of sheet-metal, the sheets being placed at some distance from each other, so as to leave an air-space between them of two or more inches, they being held together by other sheets, which are bent into the form shown in fig. 2, and riveted to the side-sheets, in such a manner and at such points as to leave said sheets projecting beyond them a distance sufficient to permit them to be interlocked, as shown in fig. 1.

The curved connecting sheets, which are between the sheets A A', should have perforations in them, so as to permit the escape of the air which may be between them when the same becomes heated, and also to allow cool air to enter and take the place of that which is expelled by the heat, and thus prevent the radiation of heat through the shield, or wall. The dimensions are to be such, that two persons can, by grasping the handles secured thereto, readily carry them, and place them in position, one upon the other.

B B represent the handles, which are to be riveted to one side of the sections, and at such points as to enable them to carry such sections to the place where they are to be used.

C C represent ears, which are to be riveted to the same side of the shields upon which the handles are placed, they being bent outward at a right angle to such shields, and having, in their outwardly-projecting arms or portions, apertures or holes for the reception of the ends of a bar or nut, which can turn freely therein, and which has a screw-thread formed in the centre thereof, to receive the threaded end of the bolts, or rods E, which are to be used for securing the sections together.

D D represent bars of metal, which are to be secured to each of the sections, as shown in fig. 1, that portion which projects beyond the edge of the section to which it is attached being provided with a set-screw, or a thumb-screw, which passes through it, and is to be used to press against the section which is to be added, for the purpose of pressing the projecting flanges of the sections firmly together.

E E represent bolts, or bars of iron, with screw-threads upon their ends, each one of which is to be screwed into the nut, or bar *a*, they being for the purpose of securing the sections in position after they have been placed, as shown, in fig. 1 of the drawings.

F represents a nut, which is to be placed upon the bolt E, one end of which enters such nut, after having passed through the nut, or bar *a*, by which means a continuous connection is formed between any number of sections which it may be found necessary to place together.

In figs. 3 and 4, I have shown an elevation and a section of an anchor which I propose to use in connection with my shields or walls. That portion of this anchor designated by G' is intended to be driven into the ground at some distance from the shield, while that portion marked G is to be of sufficient length to extend up to, and be secured into the nut, or bar *a*, upon the upper section of the shield, thus forming a brace, the angle of which will be sufficient to prevent the wall from being upset or thrown down by the wind, or in consequence of any person or thing coming in contact therewith.

The operation of my shield is as follows:

The parts having been constructed as represented, they may be stored in any convenient place in any city or town, the buildings in which the fire-engines are kept being a suitable place, from which they may be taken upon the breaking out of a fire, and carried to any place where it is desired to protect firemen or other persons from the heat of the burning. The lower one of the tier being placed upon the ground, others are to be placed upon it, as herein described, and the whole secured together and stayed, to prevent them from being turned over.

It will be found that a wall erected of shields, as above described, will be a great protection to persons whose duty it is to operate engines on such occasions,

and also to persons who may be required to use buckets for the purpose of carrying water to be used in extinguishing the flames, as well as to buildings upon the opposite sides of alleys and streets to those that may be on fire.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent, is—

1. A fire-shield, or wall, constructed with an airspace between the walls or sheets thereof, substantially as and for the purpose set forth.

2. The combination of the sections A A', bolts or rods E, and bars D, for securing the sections in position, substantially as shown and described.

3. The arrangement of the nut or bar α with reference to the sections to which they are secured, substantially as shown and described.

4. The arrangement of the anchor G G', with reference to the shell A A', in such a manner as to prevent it from being toppled over, substantially as shown and described.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

JOSHUA F. BISHOP.

Witnesses:

J. C. LUCAS;

A. R. BOWEN.