

(No Model.)

2 Sheets—Sheet 1.

L. D. B. SHAW.
LIFE SAVING APPARATUS.

No. 568,960.

Patented Oct. 6, 1896.

Fig. 1.

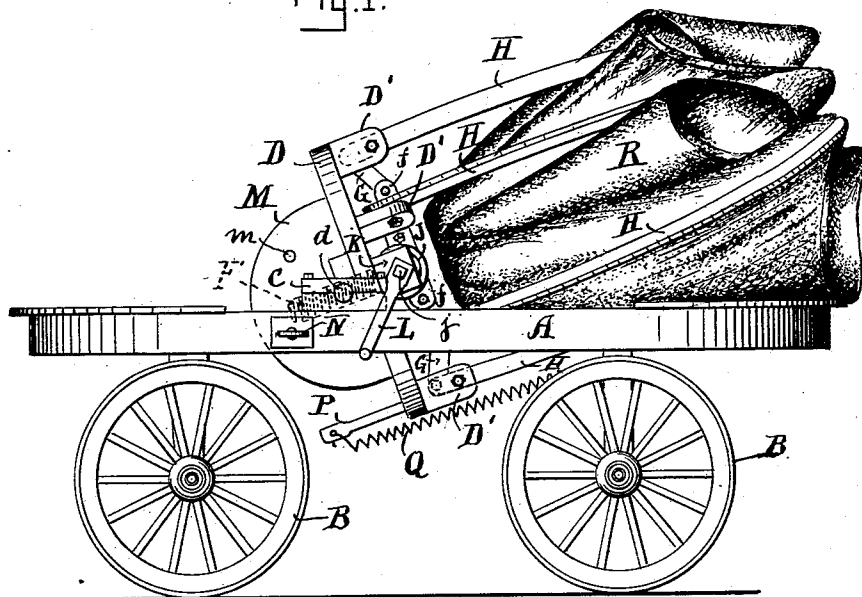
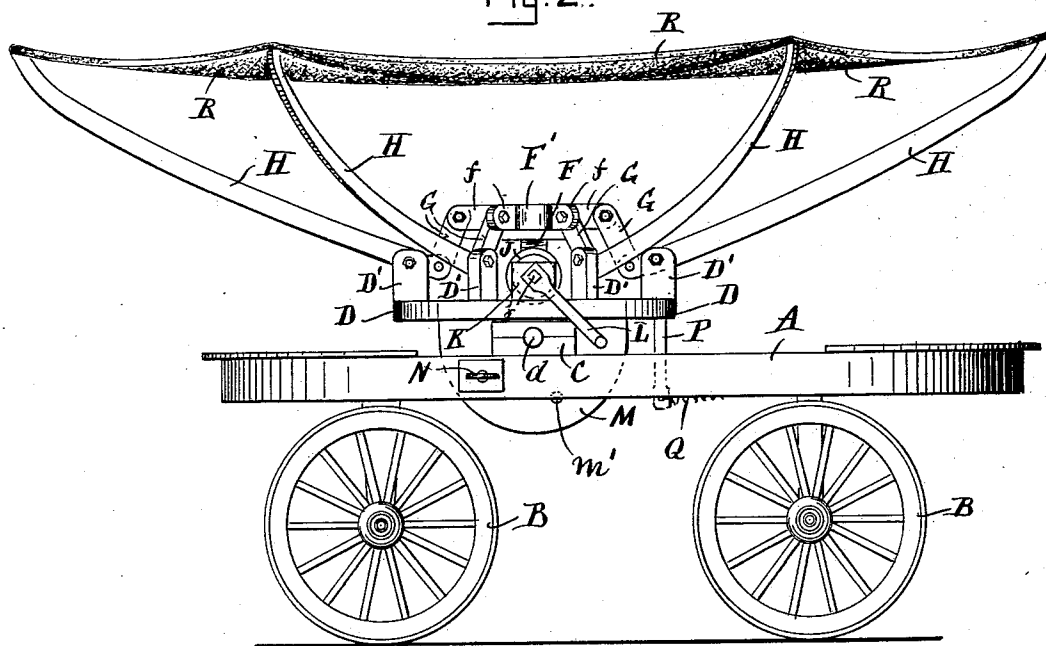


Fig. 2.



Witnesses.

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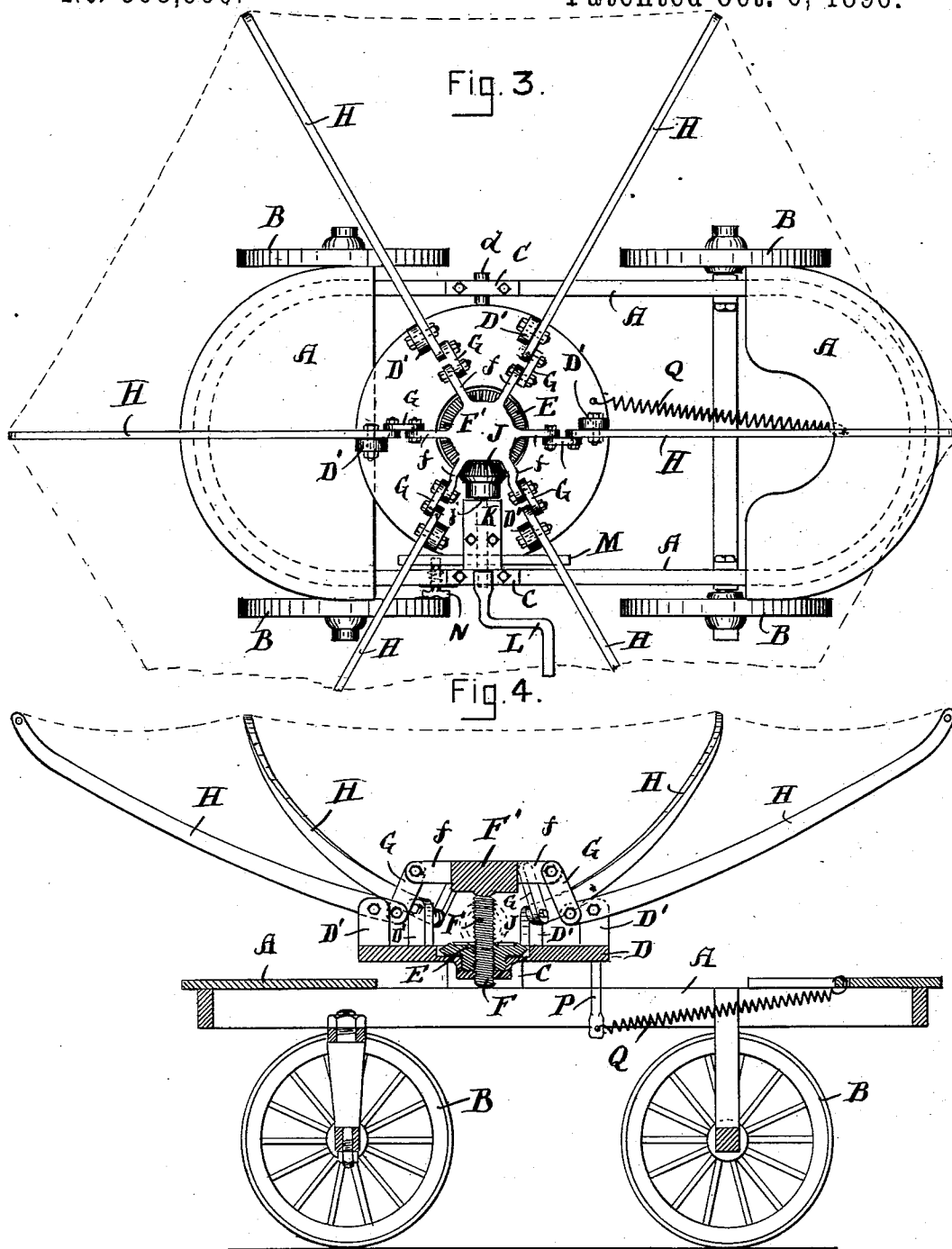
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2 Sheets—Sheet 2.

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Witnesses.
Winifred L. Krueger
Charles B. Holland

Inventor.
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UNITED STATES PATENT OFFICE.

LORENZO D. B. SHAW, OF BROOKLYN, NEW YORK.

LIFE-SAVING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 568,960, dated October 6, 1896.

Application filed July 25, 1895. Serial No. 557,069. (No model.)

To all whom it may concern:

Be it known that I, LORENZO D. B. SHAW, a citizen of the United States, residing at Brooklyn, (Coney Island,) in the county of Kings and State of New York, have invented certain new and useful Improvements in Life-Saving Apparatus, of which the following, taken in connection with the accompanying drawings, is a specification.

The object of my invention is to produce an apparatus for saving life from buildings that are on fire; and the invention consists of a series of adjustable arms mounted upon a tilting platform and operated by gears, so that said arms can be readily extended or contracted, the said tilting platform being carried on a suitable truck, netting, canvas, or other suitable material being attached to the outer ends of the adjustable arms, so that when said arms are extended a large surface of netting or other material is exposed, onto which persons may jump from any window in the building and be caught without injury, as hereinafter fully described, and pointed out in the claims.

Referring to the accompanying drawings, Figure 1 represents a side view of a life-saving apparatus embodying my invention in the folded or closed position. Fig. 2 is a similar view with the arms extended. Fig. 3 is a plan or top view of the same with arms extended and the netting or other material removed. Fig. 4 is a vertical longitudinal section with the arms extended.

A represents the body of a truck mounted upon wheels B. On each of the side frames of the truck is secured a bearing C, in which are mounted the journals *d*, carrying a circular plate or platform D, which around its edge is provided with a series of lugs or short standards D', and the center of said plate D is formed with a recess in which a bevel gear-wheel E is fitted, said bevel gear-wheel having a central screw-threaded hole through which a screw F passes, the head F' of said screw being formed with a series of lugs *f*, to which are fulcrumed short arms or connecting-pieces G, the other ends of which are attached to the inner ends of adjustable arms H, that are fulcrumed to the lugs or standards D' on the platform D, as shown.

J is a small bevel-wheel in gear with the

bevel-gear E, said wheel J being carried on the end of a short shaft *j*, mounted in a bearing K, the outer end of said shaft being formed to receive a handle L. Thus when the arms H are contracted by turning the handle L in one direction the bevel-wheel J will cause the bevel-wheel E to operate the screw F and force the head F' upward, and carrying with it the short arms G, which, being attached to the short ends of the adjustable arms H, cause the long ends of said arms to be extended, as shown in Figs. 2, 3, and 4. Of course when the handle L is turned in the reverse direction the screw F will be lowered and will cause the long ends of the adjustable arms to be brought together.

In order that the adjustable arms H may be lowered to be out of the way when the apparatus is being transported from place to place, I secure to one side of the platform D a semicircular plate M, formed with two holes *m m'*, and to the side frame is attached a bolt N, the end of which fits into one of said holes *m m'* to hold the plate or platform M in either the horizontal or lowered position, and in order to quickly turn the said platform to the horizontal position, when the apparatus has arrived at the desired place, I secure to the under side of said platform D an arm P, to which one end of a spiral spring Q is attached, the other end of said spring being secured to some suitable part of the body of the truck.

In operation, supposing the apparatus to be in the position shown in Fig. 1 and it is desired to have same assume the position shown in Fig. 2, the bolt N is first withdrawn from the hole *m'* in the plate M. When thus released, the spiral spring Q draws upon the arm P, causing the plate M to turn until the platform D assumes a horizontal position. The bolt N then passes into the hole *m* and retains it in that position. The handle L is then turned, which, through the bevel-gears E J, operates the screw F and forces it up, the short arms or connecting-pieces G being carried therewith, which arms, operating the inner ends of the adjustable arms H, cause them to be expanded, as before described.

To the ends of the adjustable arms H is secured any suitable material R, such as netting, canvas, or the like, which, when the ad-

justable arms H are extended, will present a large area, preferably, say, about twenty-five feet in diameter, on which persons jumping from a window in the building will be caught without danger to life.

Although I have shown the apparatus supported on a truck of its own, it is intended to apply same to the ladder-trucks now employed in fire departments.

What I claim is—

1. In a life-saving apparatus a series of adjustable arms radiating from a common center, a body-receptacle consisting of netting or other suitable material attached to said arms, said arms being fulcrumed to standards on a pivoted plate or platform, and means such as described for operating same substantially as set forth.

2. In a life-saving apparatus a pivoted plate or platform mounted in bearings carried by a suitable frame or truck, said platform having a series of lugs or standards, adjustable arms radiating from a common center and fulcrumed to said standards, netting or other suitable material secured to said arms, and short bars or arms connecting the inner ends of said adjustable arms to lugs on the head of a screw operated substantially as set forth.

3. In a life-saving apparatus a pivoted plate or platform mounted in bearings carried by a suitable frame or truck, said platform having a series of lugs or standards round its outer edge and a bevel-wheel arranged in its central portion, a screw passing through the center of said bevel-wheel the head of which is provided with a series of lugs, a bevel cog-

wheel in gear with said bevel-wheel and adapted to be operated by a handle, adjustable arms fulcrumed to the lugs or standards on the pivoted plate, netting or other suitable material secured to said arms and connecting-pieces attached to the inner ends of said adjustable arms and the lugs on the screw-head substantially as set forth.

4. In a life-saving apparatus a pivoted platform carrying adjustable arms and means for operating same, netting or other suitable material secured to said arms, a plate secured on one side of said platform and having holes into which a bolt on the frame is free to pass to hold same in a raised or lowered position and an arm secured to the under side of said platform, a spring attached to said arm and to the frame substantially as and for the purposes set forth.

5. In a life-saving apparatus, a pivoted plate, a platform, and means for tilting same, lugs or standards on said platform, adjustable arms radiating from a common center fulcrumed to said lugs or standards, netting or other suitable material secured to the outer ends of said arms, and means for extending and contracting said adjustable arms substantially as and for the purposes set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 25th day of March, A. D. 1895.

LORENZO D. B. SHAW.

Witnesses:

CHAS. STEERE,
EDWIN PLANTA.