

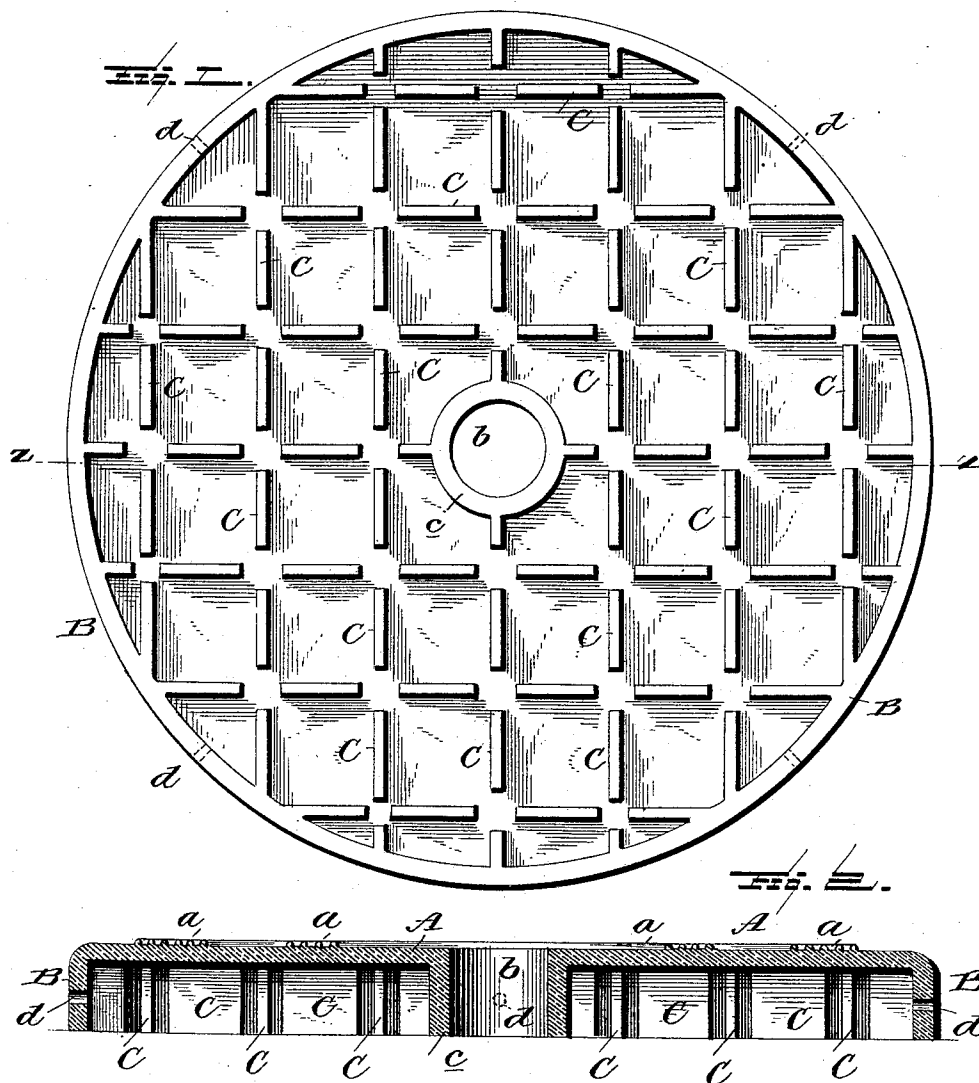
(No Model.)

E. L. PERRY.

SELF INFLATING MAT OR CUSHION FOR SLIDING POLES.

No. 452,234.

Patented May 12, 1891.



Witnesses
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UNITED STATES PATENT OFFICE.

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SELF-INFLATING MAT OR CUSHION FOR SLIDING-POLES.

SPECIFICATION forming part of Letters Patent No. 452,234, dated May 12, 1891.

Application filed January 21, 1891. Serial No. 378,529. (No model.)

To all whom it may concern:

Be it known that I, EDWARD L. PERRY, a citizen of the United States, residing at Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Self-Inflating Mats or Cushions; 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 a part of this specification, and to the letters of reference marked thereon.

The object of this invention is to provide a self-inflating mat or cushion designed more particularly as a landing-mat for firemen in the engine-house to prevent injury to the men as they descend the pole provided for their descent from the room above to the ground floor. It is well known that in engine-houses it is the practice to provide a fixed (usually brass) pole, down which the firemen slide in a hurry in case of an alarm of fire, and it has often happened that in their rapid descent they land upon the floor with such force as to permanently injure themselves. Quite recently numerous cases have been recorded where the person has struck heavily upon his heels and ruptured himself or otherwise been injured to such an extent as to disable him for life.

The object of this invention is to provide a mat or cushion to be placed at the foot of this pole, whereupon the firemen may land in safety. I provide a mat of any desired form and size and of any suitable material suited to the purpose, preferably, however, rubber, and having a top and sides without bottom; or in some cases it may be provided with a bottom, if desired. The mat or cushion is provided with a plurality of pillows or ribs which are so arranged as to normally support the mat or cushion in its inflated condition, but which will yield to outside pressure, so that when the person steps or lands on the cushion the same will yield and permit of the escape of the air within the cells of the mat, and when pressure is removed the said cells will refill automatically through apertures provided in the mat or cushion.

Other objects and advantages of the inven-

tion will hereinafter appear, and the novel features thereof will be specifically defined by the appended claims.

The invention in its preferable form is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a bottom plan of my improved mat or cushion. Fig. 2 is a vertical cross-section through the same on the line $z z$ of Fig. 1.

Like letters of reference indicate like parts in both views.

Referring now to the details of the drawings by letter, A designates the top of the mat, which may or may not be corrugated or roughened, as shown at a in Fig. 2.

When designed to be used around the pole above referred to, the mat or cushion should be provided with a hole b , usually at its center, through which the pole is to be passed, being secured thereto if necessary; but I prefer to make the hole of such a size as to enable the mat to be held to the pole by frictional contact of the parts. When provided with this hole, (shown at b ,) I preferably provide a circular neck or ring c of the same height as the body of the mat, as seen in Fig. 2, so as to make a firm support around the pole.

The sides B of the mat or cushion may be of any desired height, and are preferably formed integral with the top.

At any suitable place or places—such, for instance, as seen at d —I provide apertures as many as may be deemed necessary. Through these apertures the confined air escapes when the mat is under pressure and through them the mat is inflated as soon as pressure thereon is removed.

Care supports or ribs attached to or formed integral with the top and depending from its under side, as shown. These may be arranged in any desired manner. That shown in the drawings has proved to be an efficient way of arranging them. These ribs form a support for the top of the mat and assist the same in resuming its normal shape after pressure is removed.

The entire device is preferably formed of india-rubber in one piece, although this is not absolutely necessary. Some of the ribs extend inward from the sides, as seen in Fig. 1, and serve to materially strengthen and brace the same. The ribs or supports are elastic, and while they will yield when pressure is applied upon the top of the mat they will as readily assume their normal position after pressure is removed therefrom, and thus, together with the indrawn air, re-form the mat.

The advantages of this construction of mat or cushion are manifest. Its manner of use will be readily understood and appreciated. It is self-inflating, so that as soon as it has served its function for one person it is ready to receive another without any attention on the part of the persons for whose use it is designed. It is durable, can be made at a small cost, and its practicability has been established by practical actual tests.

What I claim as new is—

1. A bottomless self-inflating mat having a perforated rim, substantially as and for the purposes set forth.

2. A self-inflating mat or cushion having provision for receiving a pole or other like upright, as set forth.

3. A self-inflating mat or cushion provided

with elastic supports, apertures, and a roughened top, as set forth.

4. A self-inflating mat or cushion provided with a central opening, as and for the purposes specified.

5. A self-inflating mat or cushion having elastic supports and a central opening, as set forth.

6. A rubber mat or cushion provided with apertured sides and integral depending supports, as set forth.

7. A rubber mat in one piece, comprising a top, sides, a central opening, and a plurality of supports upon the inner surface of its top, as set forth.

8. The rubber self-inflating mat or cushion herein described, formed of a single piece of rubber, and comprising a top, a central depending ring, apertured sides, and a plurality of separated independently-operating flexible supports, as set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

EDWARD L. PERRY.

Witnesses:

L. C. HILLS,

W. G. WINANS.