1,166,811.

W. F. BOWERS. LANDING MAT. APPLICATION FILED MAR. 10, 1915.

Patented Jan. 4, 1916.





WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM F. BOWERS, OF SAN FRANCISCO, CALIFORNIA.

LANDING-MAT.

Specification of Letters Patent. **Patented Jan. 4, 1916.** 1,166,811. Application filed March 10, 1915. Serial No. 13,537.

To all whom it may concern: Be it known that I, WILLIAM F. BOWERS, a citizen of the United States, residing at the city and county of San Francisco and 5 State of California, have invented certain new and useful Improvements in Landing-Mats, of which the following is a specification. The present invention relates to landing 10 pads or cushions for use in fire engine houses at the base of the sliding pole, and is adapted to provide a yieldable surface at the base of the pole to prevent accidents when descending the pole.

necting wall of a suitably shaped mat or cushioning member, preferably formed of rubber or other flexible material, and preferably circular in configuration. The top and bottom walls 1 and 2 are secured in any 69 suitable manner to the respective upper and lower edges of the side wall, as by vulcanization, and the side wall is provided in its surface with one or more vent apertures 4 through which air is admitted into and es- 65 capes from the interior chamber 7 of the structure. The structure is formed with a central aperture 5 through which is adapted to extend the slide pole. Suitable tubular cushioning members or 70 posts 6 are arranged vertically within the chamber 7 in the mat or cushioning member and the ends of the flexible walls 8 of the members are secured in any suitable manner, as by vulcanization to the inner faces of the 75 respective top and bottom walls 2 and 3. Apertures 9 are formed in the walls 8 of the cushioning members and through said openings air is admitted into and escapes from the interior of the cushioning members. 80 It will be apparent that when the feet of the descending firemen contact with the upper surface 1 of the mat, the air contained in the cushioning members 6 will be gradually forced outwardly through the openings 85 9 in the walls 8 and into the larger chamber 7, and the air in this chamber will gradually pass outwardly through the aperture 4 in the side wall 3, the cushioning members serving as individual springs in absorbing 90 the shock. As soon as the weight of the firemen passes from the mat, the compressed or distorted walls 8 of the cushioning members will assume their normal position and in doing so will draw air through the openings 95 9 into the interior of the cushioning members. I have provided a structure formed with a plurality of air cushioning devices in an 45 To more fully comprehend the invention interior chamber and which are adapted, 100 when weight is applied thereto, to gradually collapse, the air contained therein passing into a larger chamber and thence into the atmosphere through an opening in the wall of the cushioning member, thus two cush- 105 ioning actions taking place---one on the escape of the air from the cushioning devices into the larger chamber, and one on the escape of the air from the larger chamber to 110 the atmosphere.

- The invention consists in a suitable rubber 15 pad formed with an interior chamber open to the atmosphere at its side walls and in said chamber are positioned a number of tubular cushioning members which connect 20 with the upper and lower pad surfaces, and are also formed with openings connecting with the interior of the chamber to permit the escape of the air from the tubular cush
 - ioning members.
- 25 The invention has for its objects to provide a mat formed with a plurality of pneumatic cushioning members on its interior and each provided with an air escape opening which will permit a portion of the air to 30 escape therefrom when pressure is applied to the exterior of the mat by a person landing thereon.

With the above mentioned and other objects in view, the invention consists in the 35 novel construction and combination of parts hereinafter described, illustrated in the accompanying drawings and pointed out in the claim hereto appended; it being understood that various changes in the form, pro-40 portion, size and minor details of construction within the scope of the claim may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

reference is directed to the accompanying drawings, wherein--

Figure 1 is a broken plan view of an embodiment of my invention. Fig. 2 is a trans-50 verse sectional view taken on line 2-2 of Fig. 1. Fig. 3 is an enlarged sectional view of a portion of the structure disclosed in Fig. 2.

In the drawings-1 designates the top 55 wall, 2 the bottom wall, and 3 the side con2

It is desirable to construct the mat of rubber, but it is to be understood that any suitable flexible material may be employed. Having thus described my invention what 5 is desired to protect by Letters Patent is:-A rubber landing mat comprising top, bottom and side walls, one of said walls having a vent, the top and bottom walls being spaced from one another, and a series of 10 tubular members interposed between the top and bottom walls and united at opposite

ends to the same, whereby any lateral yielding of the tubular member at the top and bottom is resisted, and said tubular members having intermediate the ends thereof a vent. 15 In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM F. BOWERS. Witnesses: W. A. Acker, D. B. RICHARDS.

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