

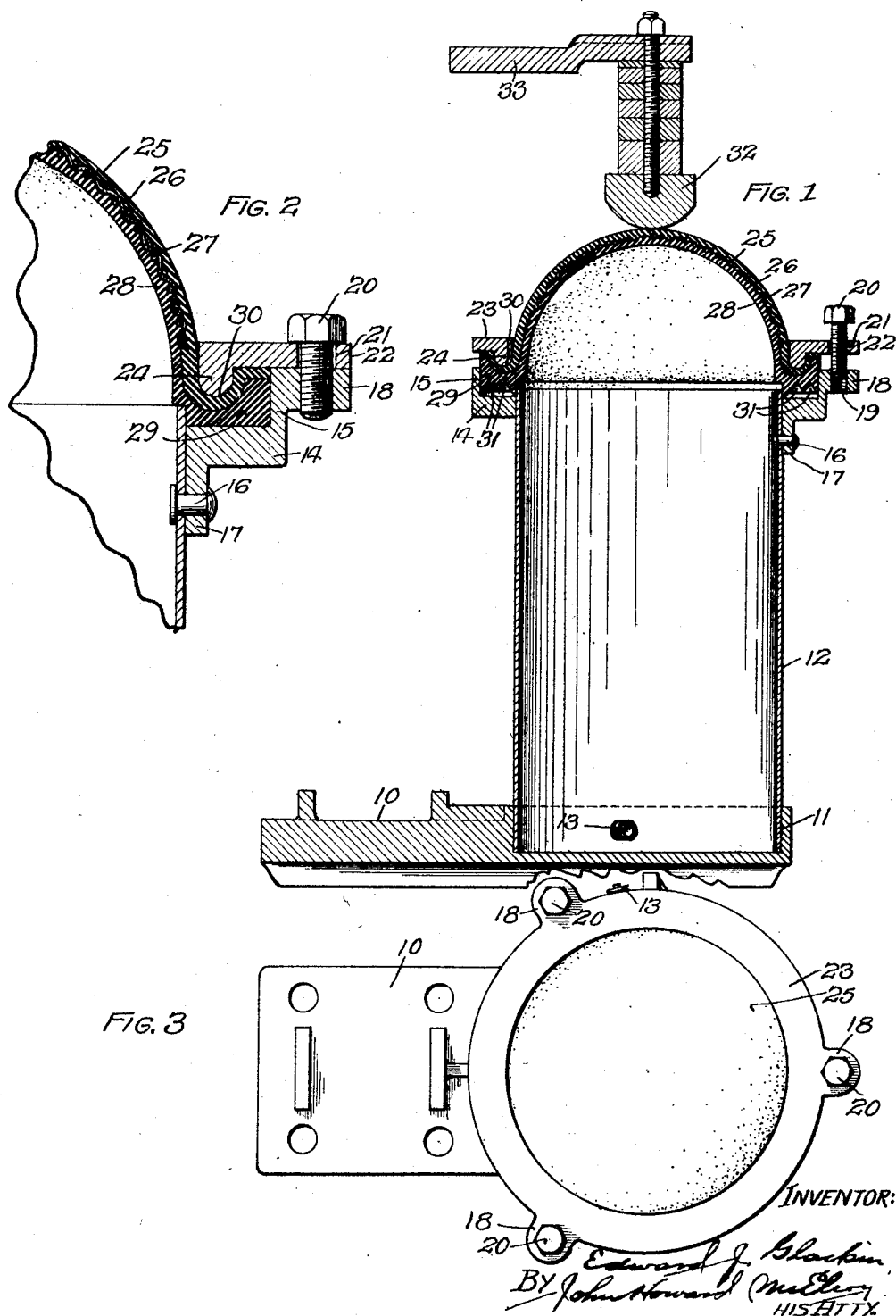
May 12, 1925.

1,537,112

E. J. GLACKIN

AIR CUSHION

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INVENTOR:

Edward J. Glackin
 BY John Howard McElroy
 HIS ATTORNEY

Patented May 12, 1925.

1,537,112

UNITED STATES PATENT OFFICE.

EDWARD J. GLACKIN, OF CHICAGO, ILLINOIS.

AIR CUSHION.

Application filed December 1, 1922. Serial No. 604,311.

To all whom it may concern:

Be it known that I, EDWARD J. GLACKIN, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Air Cushions, of which the following is a specification.

My invention is concerned with air cushions, of the type shown in my Patent No. 1,418,912, granted June 6, 1922, and is designed to produce a device of the class described which shall be simple in construction, and consequently more cheaply manufactured and more readily renewed, but which shall nevertheless produce a tighter and more enduring joint between the metal cap and the flexible dome than I have heretofore been able to secure. To these ends, it consists of the novel construction hereinafter described, and particularly pointed out in the claims.

To illustrate my invention, I have annexed hereto a sheet of drawings, in which the same reference characters are used to designate identical parts in all the figures, of which,—

Fig. 1 is a central vertical section through an air cushion embodying my invention, but before the dome has been clamped in place;

Fig. 2 is a fractional view of the structure shown in Fig. 1, but on a larger scale and showing the dome securely clamped in place to make an air-tight joint; and

Fig. 3 is a top plan view of the air cushion on the scale of Fig. 1.

As heretofore, I preferably construct the rigid portion of the cushion with the metallic base casting 10, which is shaped to adapt it to be secured to the desired portion of an automobile or other apparatus to which the cushions are applied, and in the casting, I provide the circular recesses 11 in which the sheet-metal cylinder 12 is accurately fitted and soldered to make an air-tight joint. Entering into the cylinder through the base casting 10 is the customary air-inflation valve 13. At the top of the sleeve or body portion 12, I secure the ring 14, which is generally L-shaped in cross section, consisting of the thickened horizontal portion constituting the base of the ring, with the vertical flange portion 15, the base being secured to the body 12 by the rivets 16 passed through ears 17 provided on the under side of the base portion 15 at suitable intervals. The joint is made further air-tight by being

thoroughly soldered or brazed so that no air can escape in the joint between the ring and the body portion. The flange 15 preferably has projecting outwardly therefrom the ears 18, which preferably have the threaded apertures 19 to receive the screws 20, which are passed through apertures 21 in the ears 22 projecting from the clamping ring 23, which is preferably provided with the rounded annular flange 24 on its under side. The shape of the ring 14 forms an annular channel surrounding the top of the body portion or sleeve 12.

The flexible dome element is preferably made of what are originally two parts, i. e., the outer dome portion 25, which is preferably semispherical, and consists of a layer of comparatively hard rubber 26 in which is embedded the reinforcing fabric 27, which may be canvas or any other desired material. Within the portion 25, and finally secured thereto during the flexing operation, is the inner semispherical portion 28, of comparatively soft rubber, which is provided at its outer end with the enlarged portion or flange 29, which is of the proper width to fit in the annular channel, and which preferably has the annular channel 30 formed therein between its inner wall and the lower end of the reinforced portion 25, this channel being adapted to receive the flange 24 of the ring 23. On the under side of this thickened rim 29, I preferably form the pair of preferably angular grooves 31, so that before the flexible dome is secured in place, there is an air space between the bottom of the channel and the under side of the rim 29. When the screws 20 are screwed down to bring the under side of the ring 23 in contact with the top of the flange 15, or as nearly so as possible, the soft rubber of the rim 29 is crushed into the channel, filling the same and making an air-tight joint between the body portion 12 and flexible dome portion, which co-operates with the plunger portion 32 which is carried by an arm 33 secured to a relatively movable portion of the vehicle or other apparatus to which it is applied in a manner which will be readily understood.

While I have shown and described my invention as embodied in the form which I at present consider best adapted to carry out its purposes, it will be understood that it is capable of modifications, and that I do not desire to be limited in the interpretation of

the following claims except as may be necessitated by the state of the prior art.

What I claim as new, and desire to secure by Letters Patent of the United States, is:

5 1. In an air cushion, a dome having its exterior formed of reinforced rubber, and a rim integral therewith formed of substantially softer rubber.

2. In an air cushion, a dome having its exterior formed of reinforced rubber, and a rim integral therewith formed of substantially softer rubber, and the interior of the

dome being lined with said softer rubber vulcanized thereto.

3. In an air cushion, a dome having its exterior formed of a comparatively hard rubber, and a rim and lining vulcanized thereto formed of substantially softer rubber.

In witness whereof, I have hereunto set my hand this 28th day of November, 1922.

EDWARD J. GLACKIN.

In the presence of a witness:

JOHN HOWARD McELROY.