

J. R. WINTERS.
RECOIL PAD FOR GUNS.

Patented Aug. 6, 1895.

Fig. 1. A perspective view of a book. The cover is labeled 'B' and the page is labeled 'C'. The binding is shown with numbered parts 1 through 7.

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UNITED STATES PATENT OFFICE.

JACOB R. WINTERS, OF CLINTON, MISSOURI.

RECOIL-PAD FOR GUNS.

SPECIFICATION forming part of Letters Patent No. 544,269, dated August 6, 1895.

Application filed September 24, 1894. Serial No. 523,955. (No model.)

To all whom it may concern:

Be it known that I, JACOB R. WINTERS, a citizen of the United States, residing at Clinton, in the county of Henry and State of Missouri, have invented certain new and useful Improvements in Recoil-Pads for Guns, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an improved pneumatic recoil-pad for gun-stocks; and it has for its object the production of a pad for use on muskets, shotguns, and the like, which will protect the user from the recoil of the gun when fired, which can be readily and conveniently applied to and removed from the gun-stock, and which can be folded into a small package when not in use.

Pneumatic recoil-pads or shoulder-guards have heretofore been constructed with a number of small rubber tubes placed close together and forming air-cells open at the ends. Pads of this form are objectionable in that they have no provision for inflation beyond atmospheric pressure, and therefore lack the essential element of a perfect air-cushion. Another form of pneumatic pad has also been used, which consists of a strip of rubber attached at its ends to the gun-stock, and having guiding-studs projecting from its inner face and entering recesses in the butt of the stock. A pad of this form is open to the same objection as the one mentioned above, because the air-chamber is open to the outside atmosphere; but aside from this objection there is still another in that the butt of the stock must be specially prepared to receive it, causing its disfigurement when the pad is not in place.

In my recoil-pad there is but a single air-chamber, and it is normally closed to the outside atmosphere, but is provided with means whereby it may be inflated to any desired degree by use of a small air-pump.

The invention will first be described in connection with the accompanying drawings, and then pointed out in the claim.

Figure 1 is an elevation of a gun, showing the stock provided with my improved recoil-pad. Fig. 2 is an enlarged vertical central section of a portion of the same, showing the valve closed. Fig. 3 is a vertical central sec-

tion of my pad detached, showing the valve open. Fig. 4 is an enlarged broken sectional view of so much of the pad as is necessary to show the valve and its manner of operation.

Referring to the drawings, A is the gun, the stock *a* of which is provided with my improved recoil-pad.

B is the recoil-pad, made of elastic material, preferably of soft rubber. In the rear end of the pad there is formed an air-chamber C, the front wall *c* of which is shaped to conform to the butt-end of the gun-stock, the chamber extending the full depth and width of the same. In the under side of the pad is formed an air-inlet opening 1, leading into the air-chamber; and in this opening is fitted a tube 2, flanged on its inner end, as at 3, this flange being seated in a recess 4, formed in the lower wall of the chamber, so as to present an even surface on the inner side. The outer end of the tube 2 projects a short distance outside of the pad, and is exteriorly screw-threaded for the reception of a small air-pump (not shown) to force air into the chamber to inflate the pad and thereby form an effective air-cushion, and also for the purpose of receiving a cap 5 when the pump is detached. Spanning the air-inlet on the inner side is a narrow strip 6, of rubber or other elastic material, cemented or otherwise secured at its ends to the lower wall of the chamber, and on this strip, in register with the air-inlet, is formed or secured a valve 7, adapted to automatically close the said inlet against the escape of air under pressure.

The forward end of the pad is in the form of a sleeve *b*, adapted to fit over and closely embrace the butt of the gun-stock, whereby the pad is held in place by its own elasticity.

When it is desired to use the recoil-pad, the cap 5 is removed and the pipe of a small air-pump screwed on the projecting end of the tube 2. Air being forced into the tube the valve is forced from its seat, the elastic strip 6 permitting the necessary movement, and the air enters the air-chamber C. When the action of the pump is stopped, the pressure behind the strip 6, aided by the latter's elasticity, returns the valve to its seat, thus preventing the escape of the air. When desired, the air may be allowed to escape by forcing the

valve inward from its seat by any suitable instrument and the pad can then be folded into a comparatively small package.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

An elastic recoil-pad having an air-chamber, an air-inlet opening leading into said chamber, an elastic strip spanning said opening, and a valve carried by the strip, whereby

the valve is adapted to close said opening independent of the pressure within the chamber.

In testimony whereof I affix my signature in presence of witnesses.

JACOB R. WINTERS.

Witnesses:

J. A. DE LA VERGNEH,
D. JACK BARNETT.