(No Model.)

J. HERMLE.

STOCK FOR FIRE ARMS.

No. 311,755. Patented Feb. 3, 1885.

Fig. 1.

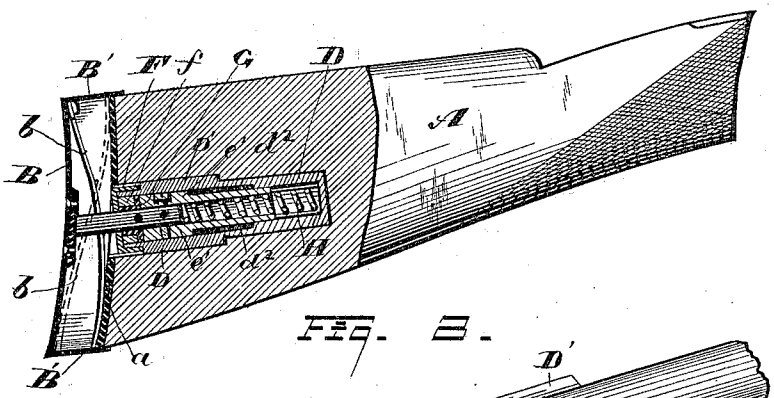


Fig. 3.

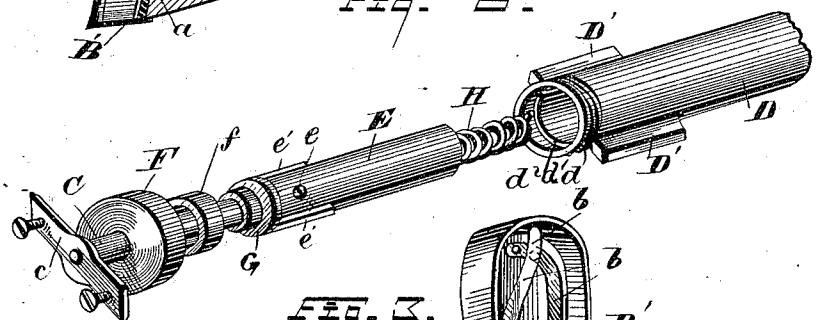
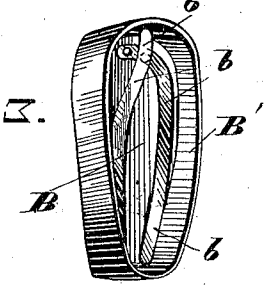


Fig. 2.



WITNESSES

Wm. A. Monroe

Chas. N. Dodge

John Hermle
INVENTOR

by Leggett & Leggett
Attorneys

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

JOHN HERMLE, OF EUCLID, OHIO.

STOCK FOR FIRE-ARMS.

SPECIFICATION forming part of Letters Patent No. 311,755, dated February 3, 1885.

Application filed October 31, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN HERMLE, of Euclid, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Stocks for Fire-Arms; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

My invention relates to improvements in stocks for fire-arms, and more especially to a butt-plate mounted on springs for a recoil-cushion; and it consists in certain features of construction, and in combination of parts, hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a side view in elevation, partly in section, of a portion of a gunstock with my improved recoil-cushion plate attached. Figs. 2 and 3 are enlarged views in perspective in detail.

A represents the gunstock, and B the butt-plate, that is provided with the rim or flange B′, that fits nicely around the stock A.

On the inside of the plate B, and secured, respectively, at opposite ends, are the springs *b*, the free ends of which stand out from the plate, so that in their normal position they separate the plate B from the stock A about as shown in Fig. 1. The stock may have a plate or a ring, *a*, set into and flush with the wood, or, preferably, projecting slightly beyond the wood, forming a rub-iron for the rim B′, and, if properly fitted to the inside of the said ring, will exclude dust and dirt without hindering the free working of the parts. The springs *b* are bent so as to lie along the edges of the plate B, as shown in Fig. 3. Next to the rim and to the center of the plate is secured the plate *c*, that is rigidly attached to the rod C. This rod fits into the end of the tube E, forming a tight joint, and is secured by the set-screw *e*, so that the rod C and the tube E together form a plunger for the larger tube D, that is firmly set into the stock, as shown in Fig. 1. The tube D is closed at the bottom, and has ribs D′, that hold the tube from turning in the wood, and is threaded at *d*, to engage internal threads in the cap F, that fits around the rod C. Before the rod C is fastened in the tube E the cap F is placed upon the rod, as is also the head G, that fits nicely around the rod and into the end of the tube D and rests on the shoulder *d*′. Packing *f* is placed around the rod, and when the parts are in position, and the cap F is screwed onto the end of the tube D, a stuffing-box is formed around the rod C, by means of which the rod C may be reciprocated endwise without wasting the oil with which the tube D is partially filled. The tube E has ribs *e*′, that fit into longitudinal grooves d^2 inside of the tube D and prevent the tube E from turning.

H is a spiral spring that is placed inside the tube E, one end of which abuts against the end of the rod C, while the other end rests on the bottom of the tube D. The spring is of such length that when the parts are in position, and the tube E is pressed outward by the spring until the end thereof abuts against the head G, the spring will still have considerable tension. As the stock is forced toward the plate B by the recoil of the gun the spring H is of course compressed into the tube E, and to its force is added that of the springs *b*. When the recoil of the springs occurs immediately after, the end of the tube E abutting against the head G forms a stop and prevents the plate B from receding too far. As aforesaid, the tube D is partially filled with oil that thoroughly lubricates the internal parts and prevents them from rusting. The arrangement of the springs *b*, supporting the plate B, respectively near the extreme ends is well adapted to prevent the parts from cramping.

What I claim is—

1. The combination, with a gunstock and a rub-plate secured to the rear end thereof, of the plate B, having a rim, B′, adapted to move in contact with the rub-iron, springs for holding the plate away from the stock, and a central guiding device secured to the plate and resting within a socket in the gunstock, substantially as set forth.

2. In a stock for fire-arms, a stationary tube set in the stock, inclosing a movable tube provided with a spring for thrusting the inner tube outward, and the inner tube provided with the rod E, connecting it with the plate B, and with longitudinal ribs engaging suitable grooves or ways in the outer tube, substantially as set forth.

3. In a stock for fire-arms, an outer and an inner tube, the former set in the stock and the latter inclosed in the former and actuated end-

wise by an internal spring, and the inner tube connected by the rod C with the plate B, and the outer tube provided with a stuffing-box around the rod C, substantially as set forth.

4. In a stock for fire-arms, the tube D, provided with the rib, the threaded end d, the shoulder d', and the grooves d^2, the tube E, provided with the ribs e, and connected by the rod C with the plate B, and the cap F and the head G, the latter arranged to form an abutment for the tube E and the spring H, substantially as set forth.

In testimony whereof I sign this specification, in the presence of two witnesses, this 18th day of October, 1884.

JOHN HERMLE.

Witnesses:
JNO. CROWELL,
CHAS. H. DORER.