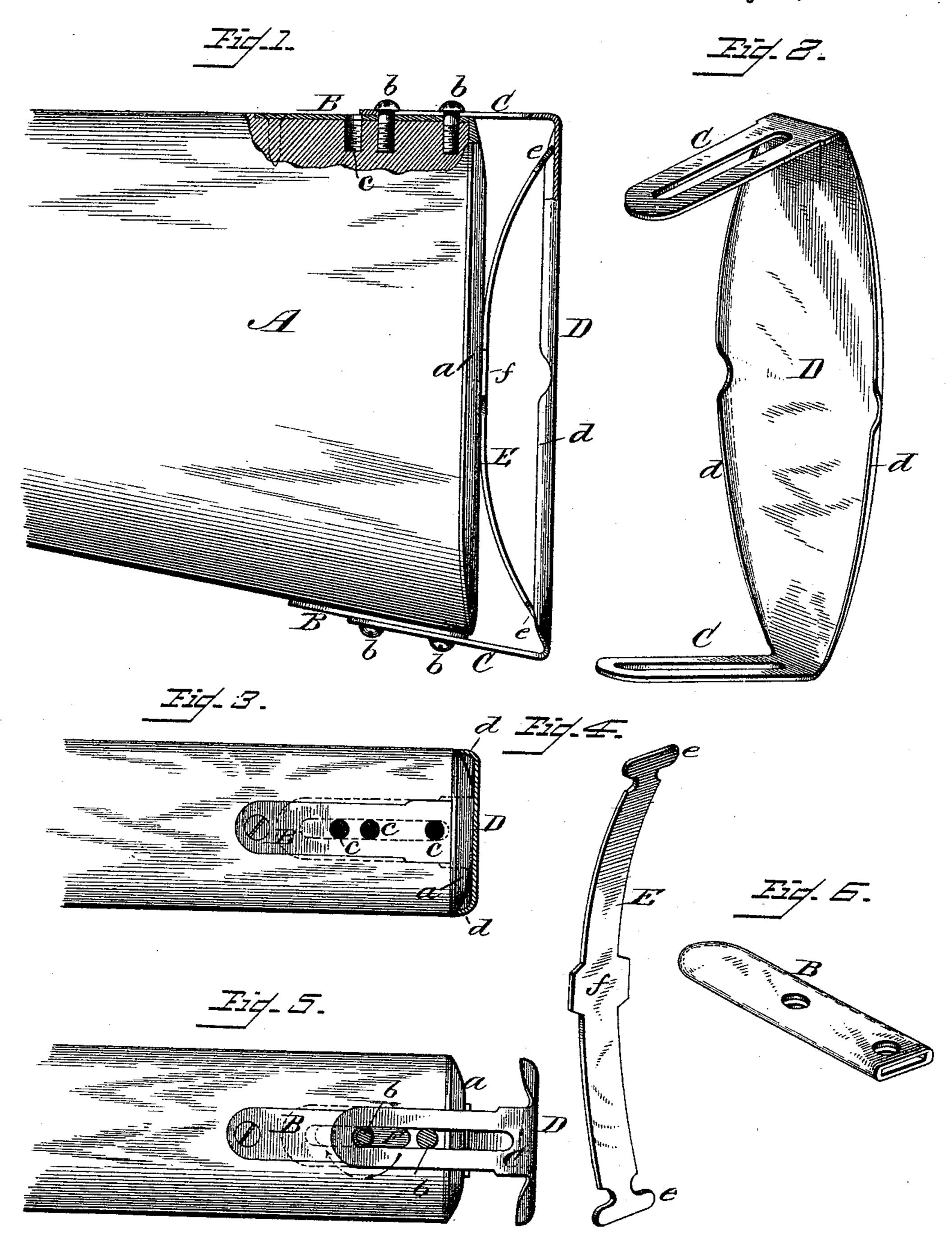
(No Model.)

## A. COTTRELL.

GUN STOCK.

No. 345,120.

Patented July 6, 1886.



Witnesses # Munday

Abraham Cottrell.

By his attorner Challestowler

## UNITED STATES PATENT OFFICE.

ABRAHAM COTTRELL, OF LANSING, MICHIGAN.

## GUNSTOCK.

SPECIFICATION forming part of Letters Patent No. 345,120, dated July 6, 1886.

Application filed April 21, 1886. Serial No. 199,599. (No model.)

To all whom it may concern:

Be it known that I, ABRAHAM COTTRELL, a citizen of the United States, residing at Lansing, in the county of Ingham and State of 5 Michigan, have invented certain new and useful Improvements in Gunstocks; 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, mak-10 ing a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a side elevation, partly in section, of the end of a gunstock, showing my invention applied thereto; Fig. 2, 15 a detail perspective of the recoil-plate; Fig. 3, an edge view of the stock with the recoil-plate in section, and showing it closed against the butt-plate of the stock when not in use; Fig. 4, a similar view showing the recoil-plate ex-20 tended for use, Fig. 5 a detail perspective view of the spring; and Fig. 6 a similar view of a modification of the friction-plate.

The present invention has for its object to provide a simple and effective recoil attach-25 ment to fire-arms.

Heretofore it has been common to provide the butt of the stock with a flanged plate, and interposed between the butt and plate a metal spring, the latter being connected by suitable 30 means to the interior of the plate; or a rubber spring was sometimes used which was unattached to the plate, but retained its position by frictional contact therewith and its elasticity. It was also common to provide the 35 plate with slotted arms and attach them to the stock by guide-screws.

It is the purpose of the invention to improve the construction of plate and spring for acting thereon, as will be hereinafter described and

40 claimed.

In the accompanying drawings, A represents the stock of a gun or fire-arm provided with the usual metal plate, a, secured to the butt by screws in the usual manner.

To the upper and lower edges of the stock A are secured friction-plates B, either let in flush with the surface of the stock or secured directly to it with the plate extending above the extent of its thickness.

In Fig. 6 is shown a modification of the friction-plate, in that it is formed in shape of an elongated socket to receive the ends of slotted arms C upon the ends of a recoil-plate D. These plates are for the purpose of taking the frictional wear of the arms off the stock, and 55

thereby prevent injury thereto.

The guide-screws b, which connect the arms C to the plates D, can be changed to bring their position nearer to or farther from the butt to increase or diminish the tension of the 60 spring E, which is located between the plate D and plate a, thus regulating the power of the spring at pleasure. To attain this end, I provide three or more screw-holes, c, so that the screws b can be changed from one hole to 65 another, as required. The spring E is formed so that it will retain its place on the butt-plate a without any fastenings or without injury or altering said plate. The recoil-plate D is formed with flanges d at its sides to keep the 70 ends e of the spring E in place, these flanges acting as guides. The ends of the spring E are widened transversely to form the transverse bearing ends e, and in like manner increased at its center to form a central bearing, f.

When not required for use, the recoil-plate D can be closed against the butt of the stock by first removing the spring E, the flanges d overlapping the edges of the butt-plate a, and prevent injury to the wood of the stock, and 80 forming a neat appearance. It will be noticed that either end of the recoil-plate will act under pressure alone, if required, which is often desired when the sportsman is in a hurry, he only having either the upper or lower corner 85

of the butt at his shoulder.

In Fig. 5 I have shown a gage-plate, F, provided with a screw, b, so as to avoid the necessity of taking the screw entirely out and placing it in another one of the holes, the gage-plate 90 simply being reversed to change the position of the screw.

A very simple inexpensive recoil attachment is provided that can be readily and conveniently applied to the butt or stock of any gun without 95 injury thereto, and when not required for use can be detached and removed, or the spring removed and the recoil-plate closed up against the butt of the stock.

The peculiar construction of the spring E, 100 and the flanges d on the recoil-plate D are considered the essential and important features

of my invention. The spring, as will be seen, is what I term a "flat bow-spring" in contradistinction to those usually employed for the purpose, the bearing portions of the spring be-5 ing widened as shown at f e, thereby greatly strengthening it where most needed, and it having three bearing-points-viz., one at its center and the other two at its extremities—a much steadier motion and a more certain and 10 perfect action of the recoil-plate is had than with the springs in ordinary use. The action of the spring also is rendered more certain by its peculiar construction, and the flanges d serve as guides for the bearing ends, and also to 15 overlap the sides of the stock A to form a neat joint between it and the recoil-plate when the latter is brought up against the end of the stock after removing the spring. Having now fully described my invention,

what I claim as new, and desire to secure by 20 Letters Patent, is—

In a recoil attachment for gunstocks, the combination, with a recoil-plate suitably connected to the stock and having side flanges, as shown, of a flat bow-spring formed with enlarged bearings at its center and extremities, and unattached to the plate, whereby it can be removed and the plate brought up with its entire surface against the end of the stock, substantially as and for the purpose set forth. 30

In testimony that I claim the above I have hereunto subscribed my name in the presence

of two witnesses.

## ABRAHAM COTTRELL.

Witnesses:
H. B. STILL,
CHAS. H. CRANE.