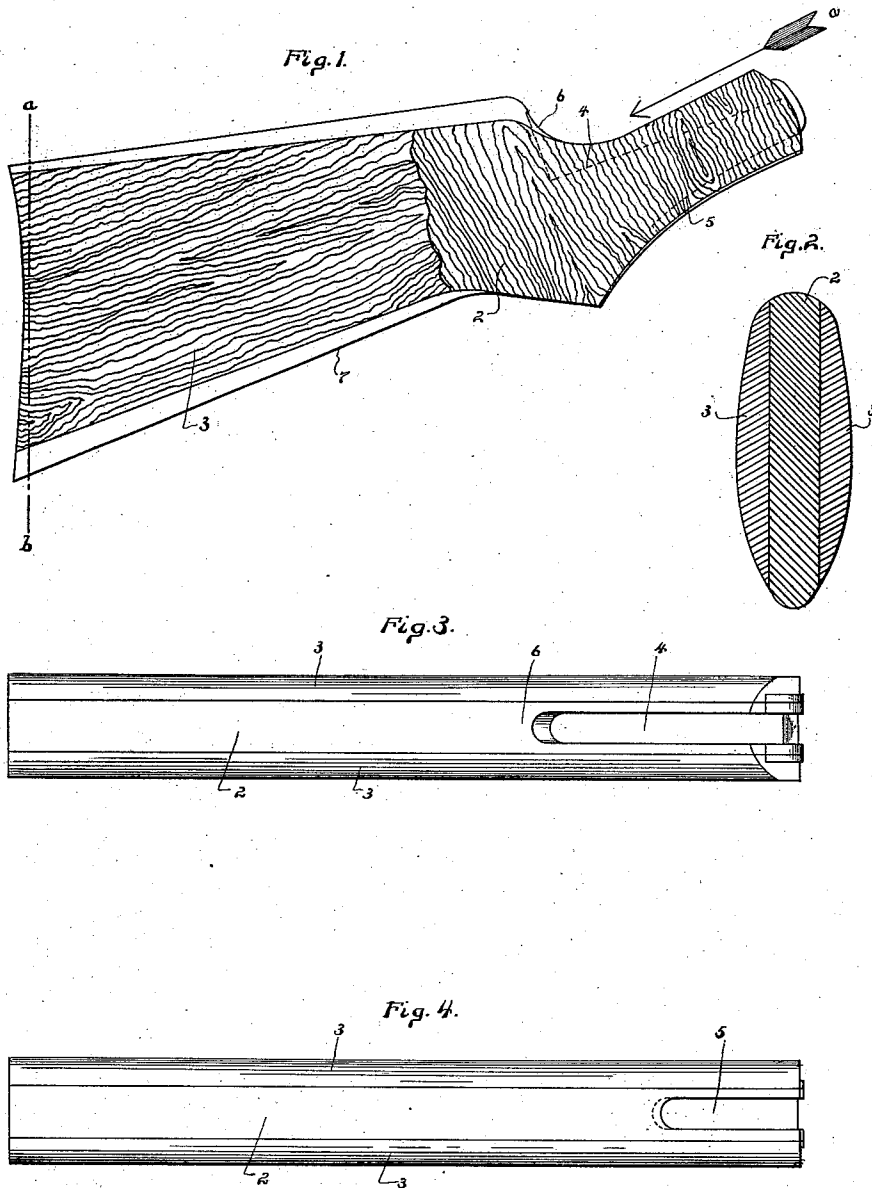


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 BUTT STOCK FOR SHOULDER ARMS.
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1,025,550.

Patented May 7, 1912.



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UNITED STATES PATENT OFFICE.

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BUTT-STOCK FOR SHOULDER-ARMS.

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To all whom it may concern:

Be it known that I, WALTER H. TILTON, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Butt-Stocks for Shoulder-Arms; and I do hereby declare the following, when taken in connection with the accompanying drawings and the characters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this application, and represent, in—

Figure 1 a view partly in side elevation, and partly in vertical section, of a butt-stock constructed in accordance with my invention. Fig. 2 a view thereof in transverse section, on the line *a—b* of Fig. 1. Fig. 3 a plan view thereof. Fig. 4 a reverse plan view thereof.

Formerly butt-stocks for small arms or shoulder-arms were fashioned from single pieces of wood carefully selected with special reference to having the grain run parallel with the lower edge or bottom line of the butt-stock. With the advent of smokeless powders, however, such butt-stocks proved unequal, in a great many cases, to resisting the heavier shocks produced by the explosions of these powders, with the result that the stocks were frequently cracked and split by the recoil following the discharge of the arm.

The object of my invention is to adapt butt-stocks to successfully resist the heavy recoils attendant upon the use of smokeless powders.

With these ends in view my invention consists in a composite butt-stock having a tang-piece in which the grain at the comb of the stock extends across the lines on which the force of recoil is exerted.

My invention further consists in a composite butt-stock having cheek-pieces and a tang-piece, the grain of the said tang-piece being arranged to cross the grain of the said cheek-pieces and at the comb of the stock to extend across the lines on which the force of recoil is exerted.

My invention further consists in a composite butt-stock having certain details of construction and combinations of parts as will be hereinafter described and pointed out in the claims.

In carrying out my invention as herein

shown, my improved butt-stock consists of a vertically arranged central tang-piece 2, and two vertically arranged cheek-pieces 3, the latter exactly corresponding to each other in size and contour, and firmly cemented or in some way firmly adhered to the opposite faces of the tang-piece which, as shown, is of considerably greater bulk than either of the cheek-pieces, and may properly be called the tang-piece because its forward end receives the cuts 4 and 5 adapting the tang (not shown) of the gun to be fitted into it.

The two cheek-pieces 3 are selected as to direction of grain so that in the finished stock the grain in the cheek-pieces will run parallel or substantially parallel, with the bottom line 7 of the butt-stock, as clearly shown in Fig. 1. On the other hand, the tang-piece 2 is chosen with reference to having its grain at the comb 6 of the stock extend across the lines of force exerted by the recoil following the explosion of a cartridge in the arm, these lines being indicated by the arrow *a* placed close to the said comb 6. The grain of the tang-piece 2 will therefore cross the grain of the cheek-pieces 3. I do not prescribe the angle at which the grain of the tang-piece shall cross the lines of force of the recoil at the comb 6 of the butt-stock, nor the angle at which the grain of the tang-piece shall cross the grain of the cheek-pieces. But preferably the grain of the stock should, at the said comb 6 thereof, lie flatwise, or substantially flatwise, as shown in Fig. 1, to the lines of recoil as exerted at the comb, where the splitting of stocks, as ordinarily constructed, generally takes place. In no case should the edge of the grain be in line with the lines of recoil since that is the very reason that butt-stocks constructed as formerly have split at or about the comb.

Butt-stocks constructed in accordance with my invention present much the same exterior appearance as ordinary butt-stocks in so far as the grain in their cheek-pieces runs parallel with the bottom line of the stock. While the butt-stock herein shown is made in three pieces, it is apparent that I am not limited to this number. The tang-piece might, for instance, be composite instead of simple; but in any event the tang-piece whether made in one or more pieces, will have its grain arranged not to be in line with the lines of recoil.

I claim:—

1. A composite butt-stock having a vertically arranged tang-piece, and two cheek-pieces applied to the opposite faces thereof, the grain in the tang-piece running across the lines of force exerted at the comb of the stock, at the time of the recoil following the discharge of the gun.
2. A composite butt-stock having a vertically arranged tang-piece in which the grain at the comb of the stock extends flatwise or substantially flatwise across the lines on which the force of recoil is exerted.
3. A composite butt-stock composed of a centrally arranged tang-piece and two cheek-pieces applied to the opposite sides thereof, the grain of the said tang-piece being presented, at the comb of the stock, flat-

wise or substantially flatwise to the lines on which the force of recoil is exerted.

4. A composite butt-stock composed of a centrally arranged tang-piece and two cheek-pieces applied to the opposite sides thereof, the grain of the cheek-pieces running parallel with the bottom of the stock, and the grain of the tang-piece extending flatwise or substantially flatwise to the lines on which the force of recoil is exerted at or about the comb of the stock.

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

WALTER H. TILTON.

Witnesses:

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ALBERT TILTON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."