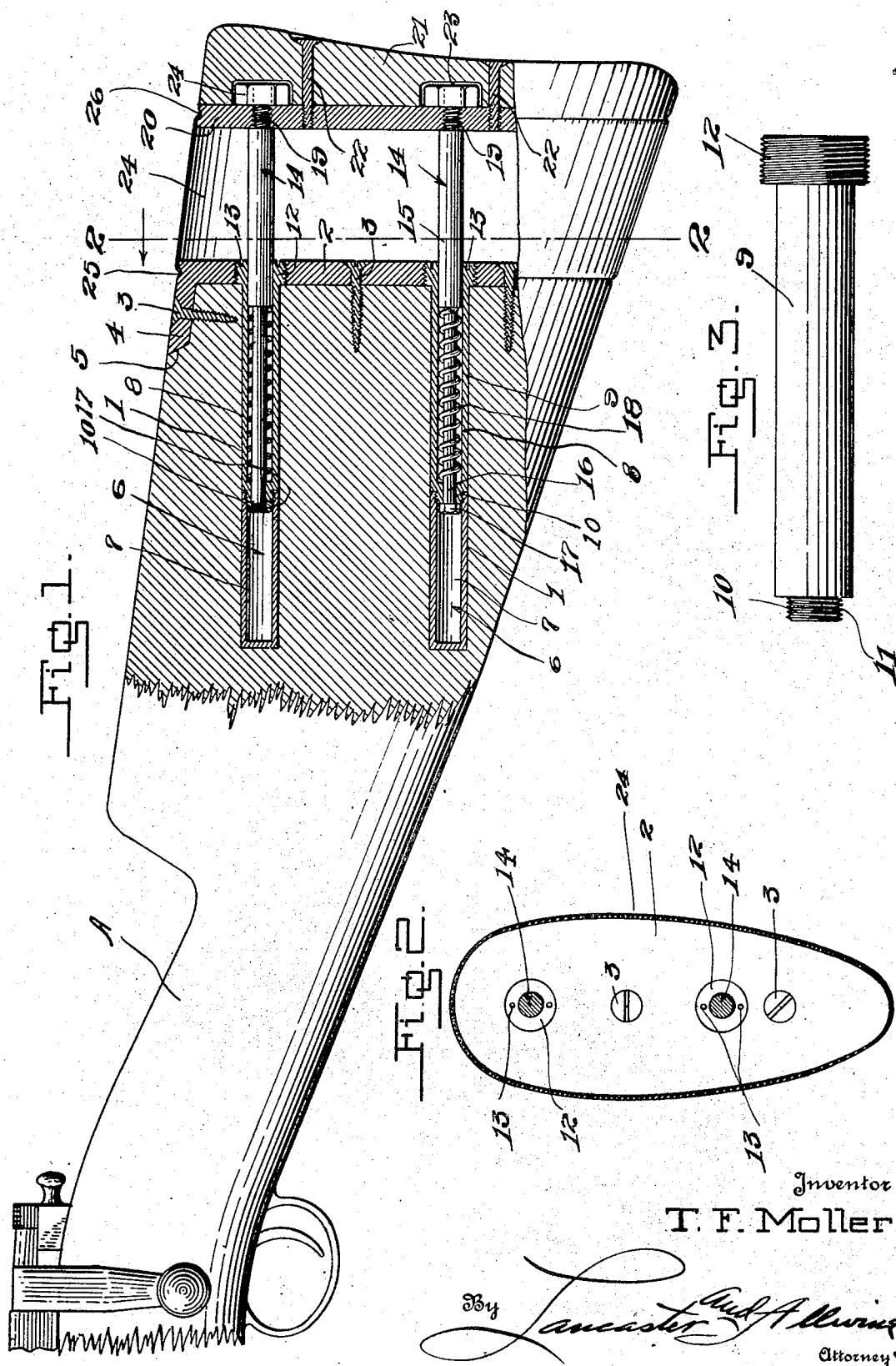


T. F. MOLLER.
 RECOIL ABSORBING ATTACHMENT FOR FIREARMS.
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Inventor
 T. F. Moller

By *Lancaster* *and A. Moller*
 Attorney

UNITED STATES PATENT OFFICE.

TONIES F. MOLLER, OF ATLANTIC HIGHLANDS, NEW JERSEY.

RECOIL-ABSORBING ATTACHMENT FOR FIREARMS.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, TONIES F. MOLLER, a citizen of the United States, and a resident of Atlantic Highlands, in the county of Monmouth and State of New Jersey, have invented certain new and useful Improvements in Recoil-Absorbing Attachments for Firearms, of which the following is a specification.

10 An object of the invention is to provide an attachment for the butt end of a gun stock which includes a yieldably supported butt plate for engagement against the shoulder of the person shooting the rifle, and resilient means, including a plurality of spring controlled plungers for absorbing the recoil shocks of the gun or rifle and preventing injury to the shoulder of the person firing the gun.

20 Another object of the invention is to provide a recoil absorbing device as specified in which the shock absorbing plungers extend parallel with the barrel of the rifle or gun so as to prevent them from interfering in any way with the proper sighting of the gun.

25 Other objects of the invention will appear in the following detailed description, taken in connection with the accompanying drawing, forming a part of this specification, and in which drawing:

30 Figure 1 is a side elevation of a gun stock showing the improved recoil absorbing attachment applied thereto and illustrating parts of the stock attachment in section.

35 Fig. 2 is a cross section on the line 2—2 of Fig. 1.

Fig. 3 is a detail side elevation of a part of the recoil absorbing mechanism.

Referring more particularly to the drawing, A indicates the gun stock, a portion of which, substantially one and three quarter inches, is cut off at the butt end, prior to the attachment of the recoil absorbing mechanism, so as to maintain substantially the same length and shape of the gun stock, after the recoil absorbing mechanism is attached.

40 The stock A is provided with a pair of parallel recesses or bores 1 bored thereinto, which bores are parallel with the barrel of the gun. A metal plate 2 is fitted over the end of the gun stock A and attached thereto by suitable screws 3 portions of which extend through the main portion of the plate 2 and others of which extend through the flanges 4 formed upon the ends of the plate 2 which are seated in suitable recesses 5

formed in the gun stock. Tubes 6 are mounted within the bores 1 and each of these tubes comprises a pair of sections, namely the innermost section 7 which has its inner end closed and which is provided with internal screw threads as indicated at 8 at its outermost end. The inner section 7 is much shorter than the length of the bore in which it fits, and it has the outer section 9 of the sleeve connected thereto. This outer section 9 is provided with a reduced shank 10 on its inner end which is externally threaded as shown at 11 for engagement with the internal threads 8 of the section 7. The bore of the shank 10 is reduced, with respect to the bore of the sleeve sections 7 and 9. A threaded head 12 is formed upon the outer end of the outer section 9 and this threaded head engages in a threaded opening in the plate 2, for securely connecting the sleeve structures 6 to the gun stock. The threads of the head 12 are cut oppositely to the threads 11 of the shank 10 so that when a wrench is inserted in the wrench receiving socket 13 in the head 12, both sections 7 and 9 of the sleeve structures 6 may be removed from the bores 1.

Plungers 14 are provided, one for each sleeve structure 6. These plungers 14 comprise main body portions 15 upon which are formed reduced shanks 16. The shanks 16 extend longitudinally within the sleeve sections 9, their inner ends extending through and fitting snugly within the bores of the shanks 10. Nuts 17 are mounted upon the inner ends of the shanks 16 and engage against the inner ends of the shanks 10 for limiting the outward movement of the plungers. Spiral shock absorbing or recoil absorbing springs 18 are coiled about the shanks 16, and their inner ends engage against the shoulders formed by the shanks 10 while their outer ends engage against the shoulders or inner ends of the main body portions 15 of the plungers 14.

45 The plungers 14 are provided with reduced screw threaded shanks 19 upon their outer ends which extend through openings formed in a metal plate 20. A butt plate 21 which is preferably constructed of hard rubber, fiber, or analogous material, is attached to the plate 20 by screws or analogous fastening devices 22. This butt plate 21 is shaped to properly fit the shoulder of the person firing the rifle or gun, and it is provided with recesses 23 in its inner surface,

which receives the nuts 24 that are mounted upon the threaded ends 19 of the plungers 14.

5 The plate 20 is normally held spaced from the plate 2, and the space between these plates is inclosed by a flexible or elastic covering 24, the edges of which fit in grooves 25 and 26 formed in the plates 2 and 20 respectively.

10 The recoil shocks of the rifle or gun are absorbed by the springs 18, and they allow the gun stock A to move rearwardly toward the butt plate 21, upon the recoil of the gun, absorbing the shocks of the recoil and preventing their transmission to the shoulder of 15 the person firing the gun.

Changes in details may be made without departing from the spirit of this invention, but;

I claim:

20 In a recoil attachment for firearms, the combination of a gun stock provided with a

pair of bores extending thereinto from its butt end, a plate attached to said butt end, sleeves having enlarged externally screw threaded heads, formed upon their outer 25 ends, said plate provided with threaded openings for engagement with said heads, the inner ends of said sleeves having the bore thereof restricted, a butt plate, plungers carried by said butt plate and extending into 30 said sleeves, said plungers projecting through the reduced bore in the inner ends of said sleeves, and having nuts on their inner ends to limit the outward movement of the plungers, shoulders formed upon said plungers, 35 and springs coiled about the plungers within said sleeves for normally urging the plungers outwardly to yieldably maintain said butt plate in spaced relation from the butt end of said gun stock.

TONIES F. MOLLER.