

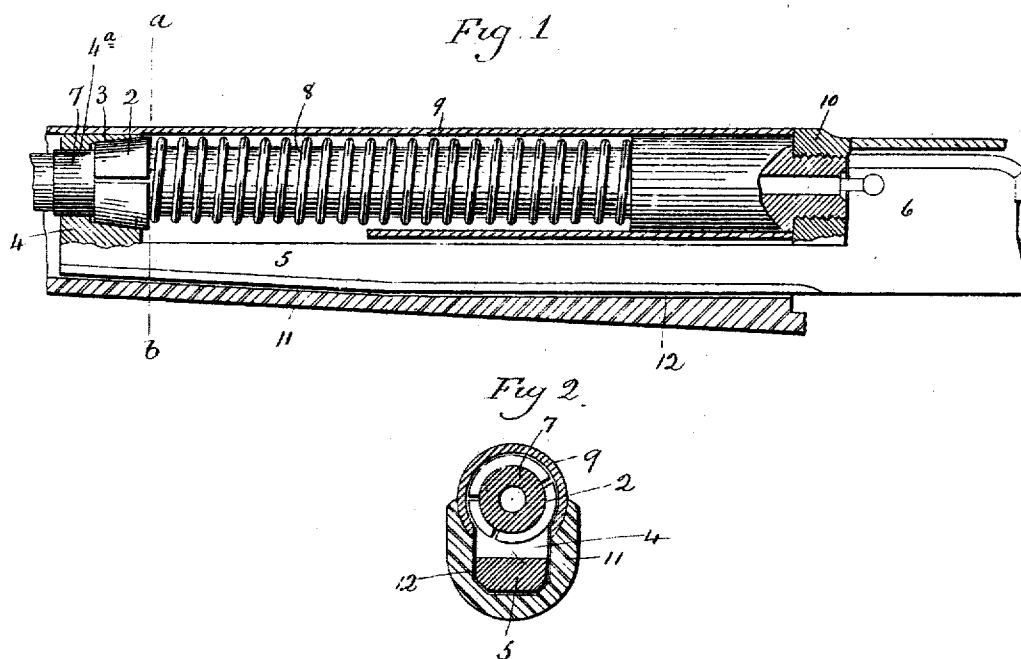
No. 813,801.

PATENTED FEB. 27, 1906.

T. C. JOHNSON.

FIREARM.

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Witnesses:
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UNITED STATES PATENT OFFICE.

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FIREARM.

No. 813,601.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, THOMAS C. JOHNSON, 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 Firearms; and I do hereby declare the following, when taken in connection with the accompanying drawings and the numerals of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a broken view, partly in side elevation and partly in vertical longitudinal section, of one of the modified forms which my invention may assume; Fig. 2, a view thereof in transverse section on the line *a b* of Fig. 1, the breech-block-closing spring not being shown.

My invention relates to an improvement in automatic firearms having non-recoiling barrels and balanced breech-blocks, the object being to provide for reducing the shock of recoil by means of a friction-brake.

With these ends in view my invention consists in a firearm 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 I employ a friction-brake in the form of a split conical sleeve 2, located in a rearwardly-opening conical friction-brake chamber 3, formed in an arm 4, turned upward at a right angle from the extreme forward end of the long forwardly-projecting balancing extension 5 of the balanced breech-block 6, which may be of any approved construction. The friction-brake 2 is clasped over the non-recoiling gun-barrel 7, over which it slides back and forth, with the production of more or less friction, the barrel passing forward through an opening 4^a, formed in the arm 4 and concentric with the conical brake-chamber 3 aforesaid. Under this construction the forward end of the said extension embraces, as it were, the non-recoiling barrel. The said barrel is encircled by a breech-block-closing spring 8, inclosed within a jacket 9, which impinges at its rear end against the gun-frame 10. The lower portion of the jacket 9 is inclosed by a fore-arm 11, which is

formed with a chamber 12 for the reception of the extension 5 aforesaid. At the time of recoil the tapering walls of the chamber 3 compress and contract the friction-brake 2 and cause the same to hug the barrel 7 tighter, so that as the breech-block 6 moves rearward it is retarded by the friction developed by the dragging of the brake 2 over the exterior surface of the barrel. After the recoil has spent itself the spring 8 operates to return the breech-block to its normal or closed position. At this time the brake expands, so as to move forward over the barrel with little or no friction.

It is apparent that in carrying out my invention some changes from the construction herein shown and described may be made. I would therefore have it understood that I do not limit myself thereto, but hold myself at liberty to make such departures therefrom as fairly fall within the spirit and scope of my invention.

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

1. In a firearm, the combination with the frame thereof, of a non-recoiling barrel, a balanced breech-block having a forwardly-projecting extension embracing the said barrel, a breech-block-closing spring encircling the said barrel, and a friction-brake located at the forward end of the said extension and co-acting directly with the non-recoiling barrel to retard the opening movement of the breech-block and so reduce the shock of recoil.

2. In a firearm the combination with the frame thereof, of a non-recoiling barrel, a balanced breech-block having a forwardly-projecting extension turned upwardly at its forward end and formed with a conical friction-brake chamber, a breech-block-closing spring, and a sleeve-like friction-brake located in the said chamber and embracing the barrel with which it coacts to retard the opening movement of the breech-block and so reduce the shock of recoil.

3. In a firearm, the combination with the frame thereof, of a non-recoiling barrel, a balanced breech-block having a forwardly-projecting extension upturned at its forward end and formed with a friction-brake chamber, a breech-block-closing spring encircling

the rear end of the said barrel, a jacket to in-
close the said spring, and a friction-brake lo-
cated in the said chamber and clasp the
barrel upon which it is forced at the time of
5 recoil by the walls of the said chamber, where-
by during the opening movement of the block
the brake is dragged over the barrel and the
shock of recoil reduced.

In testimony whereof I have signed this
specification in the presence of two subscrib- 10
ing witnesses.

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