

No. 827,978.

PATENTED AUG. 7, 1906.

T. C. JOHNSON.  
TUBULAR MAGAZINE FIREARM.  
APPLICATION FILED APR. 21, 1906.

Fig. 1.

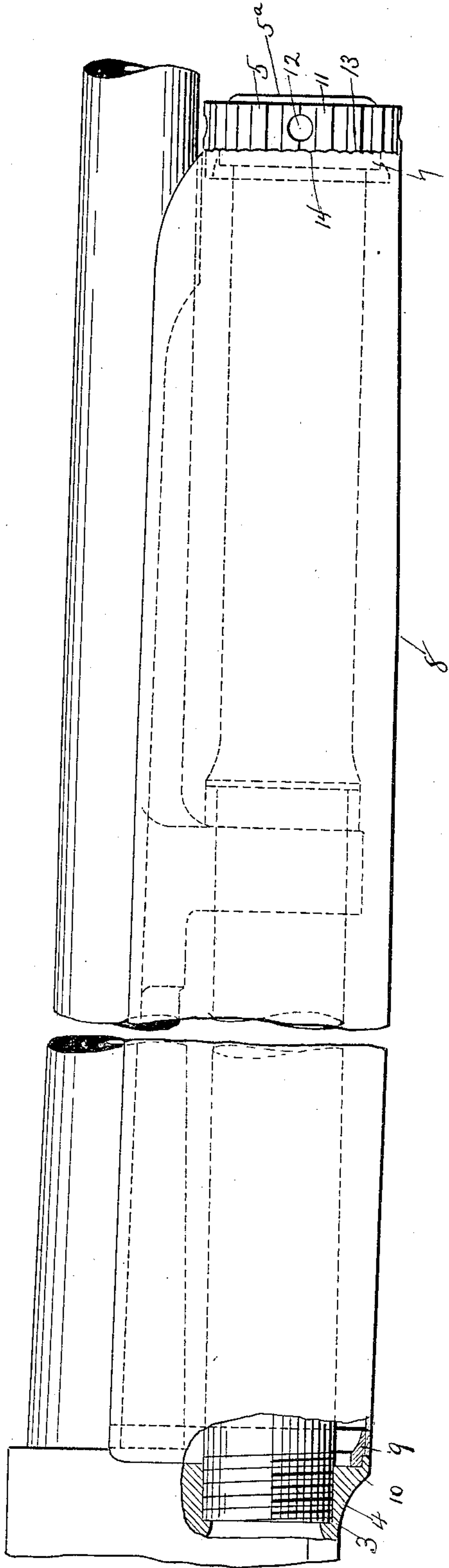


Fig. 4.

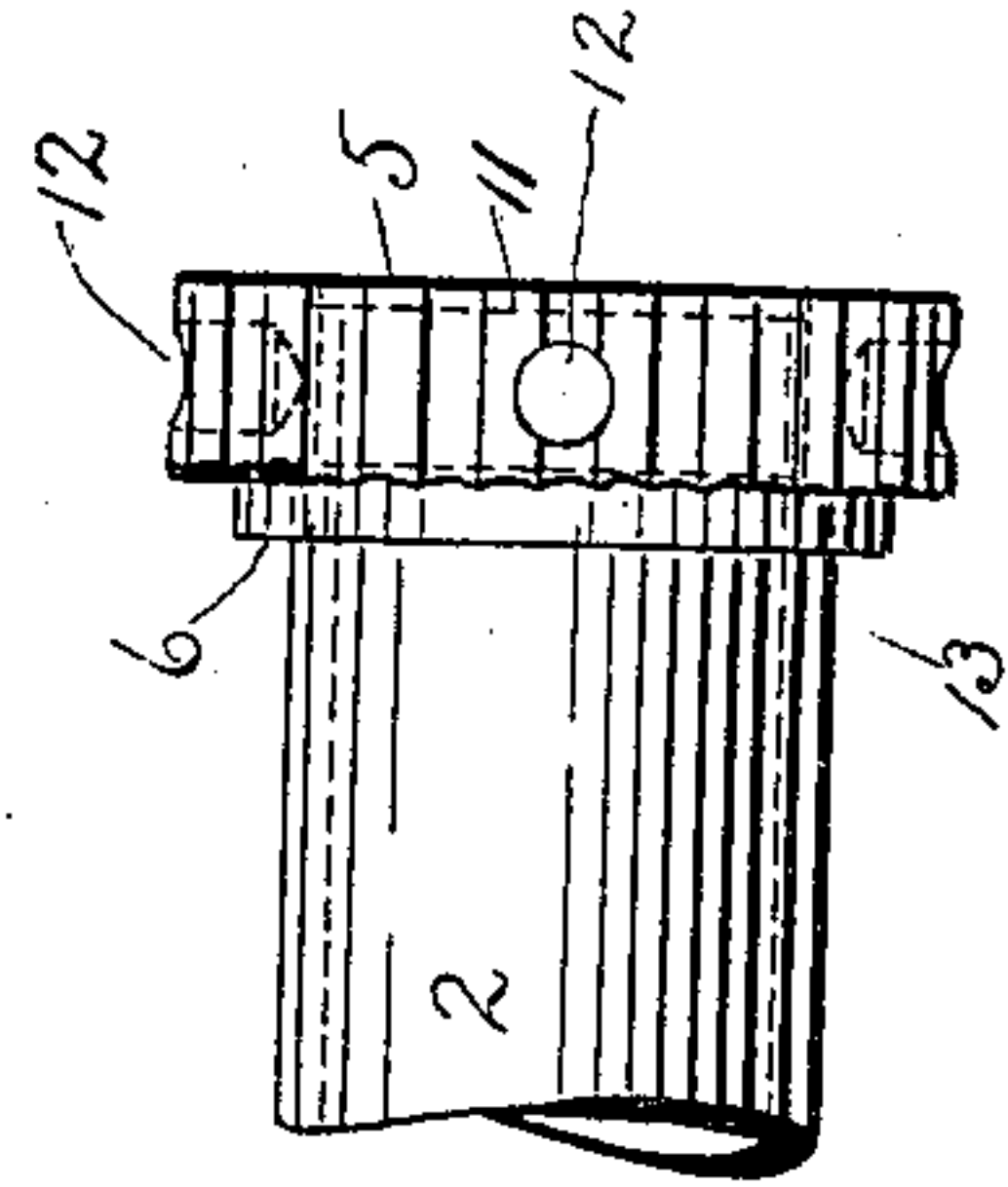


Fig. 3.

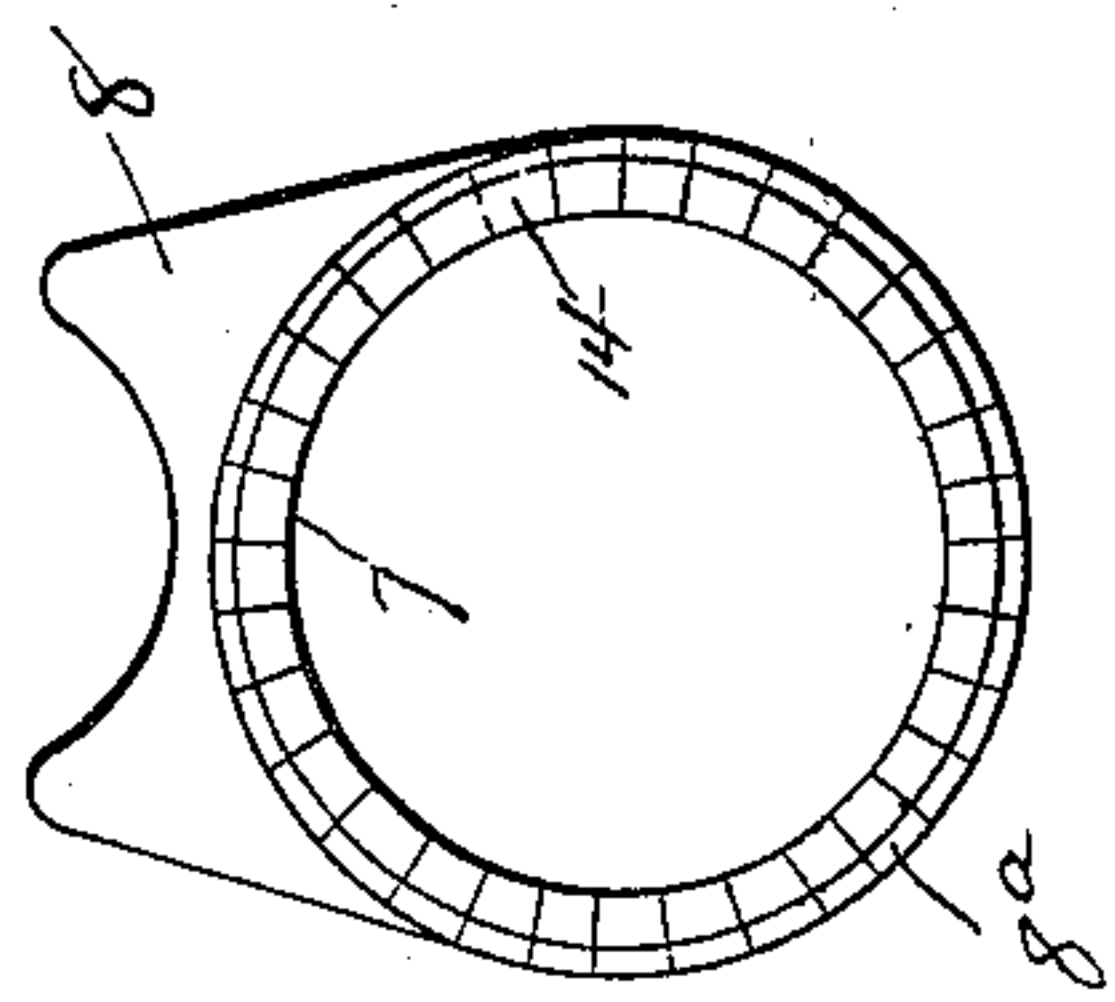


Fig. 2.

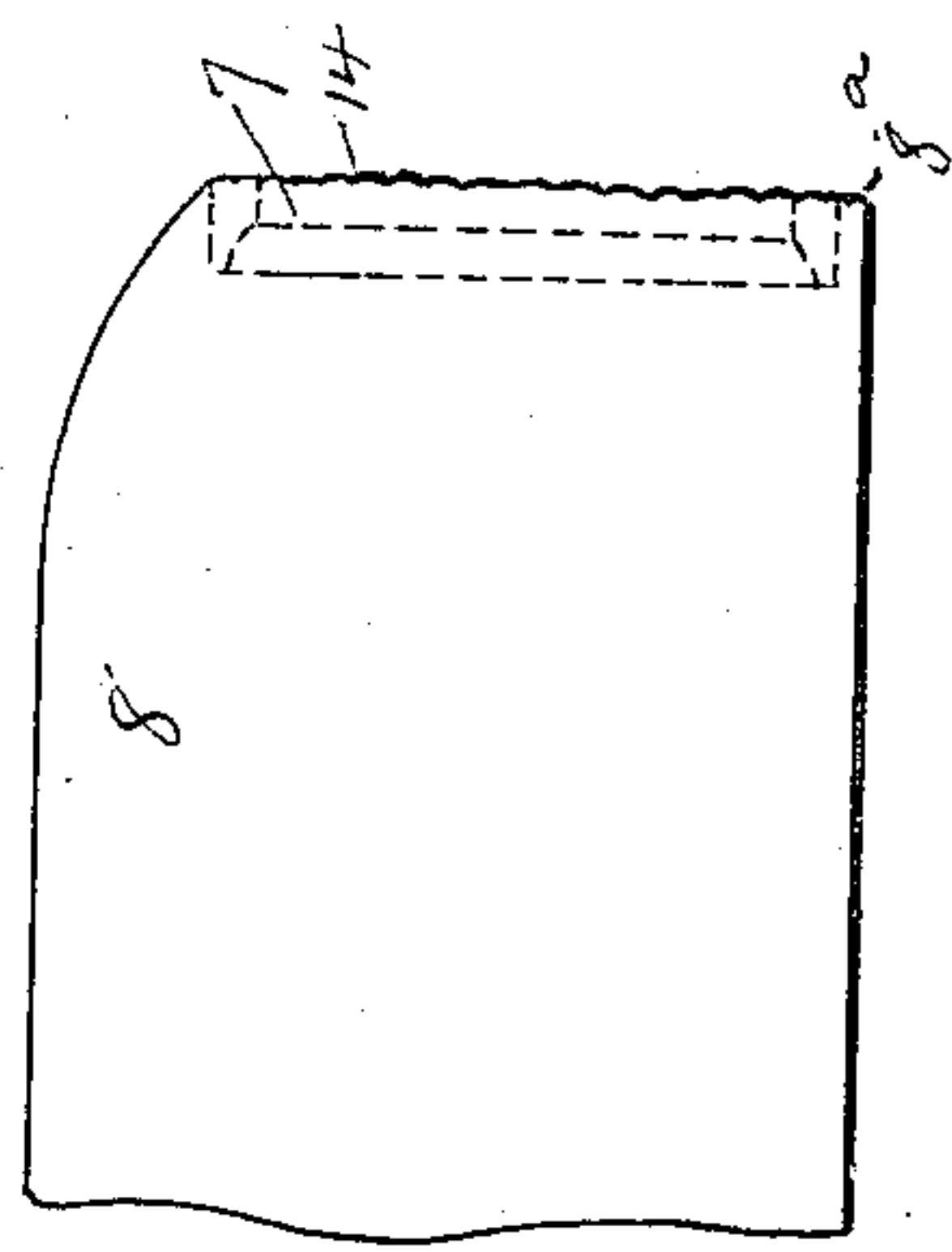
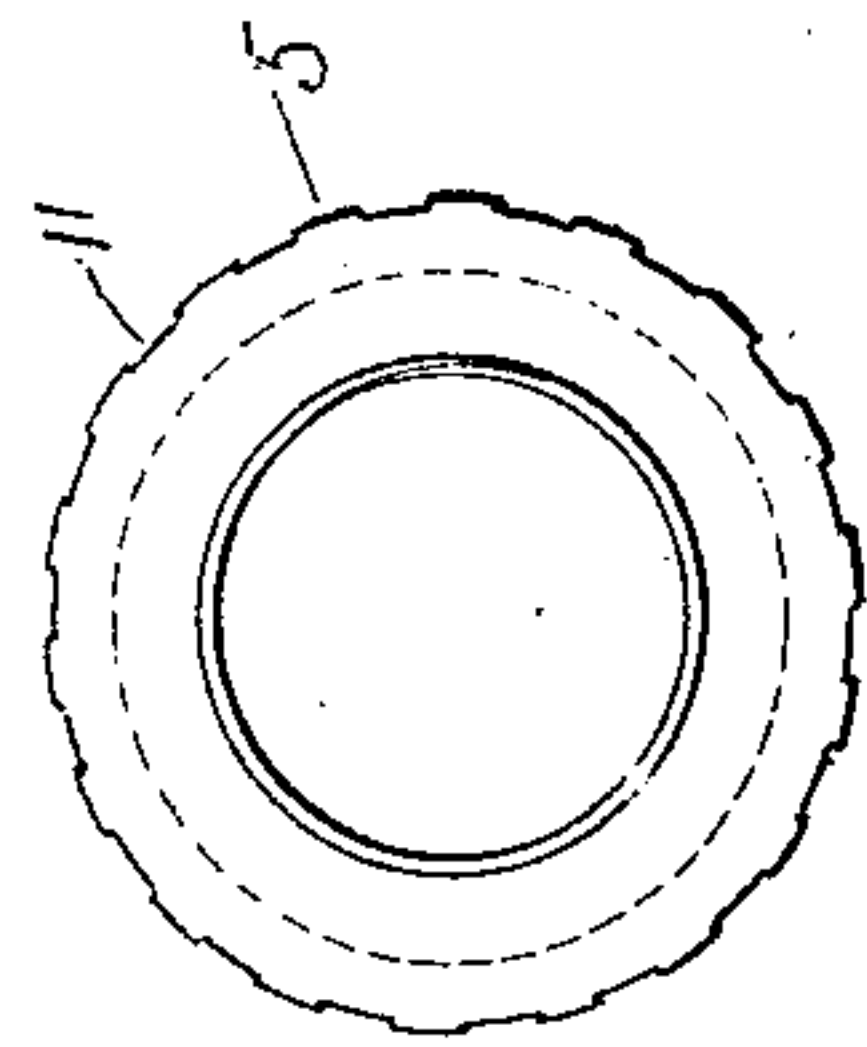


Fig. 5.



Witnesses  
J. F. Shumway.  
C. L. Weed.

Thomas C. Johnson  
Inventor  
by Seymour Pearce  
Att'y.



# UNITED STATES PATENT OFFICE.

THOMAS C. JOHNSON, OF NEW HAVEN, CONNECTICUT, ASSIGNOR  
TO WINCHESTER REPEATING ARMS CO., OF NEW HAVEN, CON-  
NECTICUT, A CORPORATION.

## TUBULAR-MAGAZINE FIREARM.

No. 827,978.

Specification of Letters Patent.

Patented Aug. 7, 1906.

Application filed April 21, 1906. Serial No. 313,011.

*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 Tubular-Magazine Firearms; and I do hereby declare the following, when taken in connection with the accompanying drawings and the figures 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 section, of the forward portion of a gun provided with my improvement; Fig. 2, a detached broken view, in side elevation, of the forward end of the sheet-metal fore-arm, showing the friction-lock collar mounted therein; Fig. 3, a view thereof in front elevation; Fig. 4, a detached broken view, in side elevation, of the front end of the magazine, showing its take-down flange; Fig. 5, a detached view, in front elevation, of the magazine with the plug thereof removed.

My invention relates to an improvement in tubular-magazine firearms, the object being to provide a simple, durable, and effective friction-lock for preventing the magazine from jarring loose and turning in firing the gun.

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.

For the illustration of my invention I have shown it as applied to a gun having a sheet-metal fore-arm, although such a fore-arm is not essential to the use of my improvement. As herein shown, then, the tubular magazine 2, which passes forward through the said fore-arm, is formed at its rear end in the usual manner with threads 3, by means of which it is firmly secured to the gun-frame or receiver 4. For screwing it home and unscrewing it for its removal I provide it at its forward end with an integral ring-like take-down flange 5, provided upon its rear face with an annular centering-shoulder 6, adapted in size to snugly fit within a friction-lock collar 7, brazed or otherwise secured within the for-

ward end of the thin, and therefore slightly elastic-sheet-metal fore-arm 8, the rear end of which is provided with a U-shaped tenon-piece 9, projecting rearwardly and adapted to enter a groove or recess 10 in the front face of the frame or receiver, as shown and described in my prior patent, No. 808,375, granted December 26, 1905. The forward end of the fore-arm is supported, as I may say here, by the front end of the magazine, while the rear end of the fore-arm is supported directly by the receiver, as just above set forth. The periphery of the said flange 5 is formed with a continuous series of shallow notches 11, which sufficiently roughen its surface to enable it to be firmly gripped for manually screwing and unscrewing the magazine; but to screw the magazine solidly into its home position, as well as to start it back in unscrewing it, the flange is preferably provided with radial holes 12 for the reception of the pins of a spanner-wrench or corresponding implement, such as a piece of wire or a rod. As shown, the flange 5 is adapted for the reception of a magazine-plug 5<sup>a</sup> of usual construction. Now to prevent the magazine from jarring loose and turning in firing the gun I form upon the rear face of the said flange a continuous series of shallow friction-lock notches or undulations 13, which coact with a continuous series of corresponding shallow notches or undulations 14, formed upon the outer face of the collar 7, as well as with a continuous series of shallow notches or undulations 8<sup>a</sup>, registering with the notches or undulations 14 and formed in the front end of the fore-arm itself. The said notches or undulations 14 and 8<sup>a</sup> form a locking-face for coaction with the notches or undulations 13, which form a locking-face upon the rear face of the flange 5. Just before the magazine comes to a stop in screwing it home the high points of the notches 13 engage with the high points of the notches 14. Then as the turning of the flange 5 is continued the elastic sheet-metal fore-arm 8 yields just enough to permit the flange 5 to be turned until the notches 13 and 14 are well fitted together, in which relation they are held by the spring of the sheet-metal fore-arm. Now if the magazine as the result of the jarring and shock of use should be loosened it will not turn, because it is held



by the coaction of the notches 13 and 14. In unscrewing the magazine some little force must, of course, be exerted in order to spring the fore-arm sufficiently to enable the high points of the notches 13 to ride over and clear themselves from the high points of the notches 14.

I claim—

1. In a tubular-magazine gun, the combination with the frame thereof, of a tubular magazine adapted at its rear end to be screwed into the said frame and provided at its front end with a take-down flange, and a fore-arm, the said flange coacting with a yielding locking-face at the front end of the fore-arm to lock the magazine against turning except as the said locking-face at the front end of the fore-arm yields to permit it.

2. In a tubular-magazine gun, the combination with the frame thereof, of a tubular magazine adapted at its rear end to be screwed into the said frame and provided at its front end with a take-down flange having a locking-face, and a yielding fore-arm having a locking-face to coact with the locking-face of the said flange, the said fore-arm yielding to permit the said locking-faces to ride over each other when the magazine is screwed home into the frame and when it is unscrewed preparatory to its removal therefrom.

3. In a tubular-magazine gun, the combination with the frame thereof, of a tubular magazine adapted at its rear end to be screwed into the said frame and provided at its front end with a take-down flange, a fore-arm, and a collar mounted in the front end thereof, the said flange and collar coacting to form a lock and the collar yielding to permit them to ride over each other in screwing the magazine home into the gun-frame and in unscrewing it preparatory to its removal therefrom.

4. In a tubular-magazine firearm, the combination with a yielding fore-arm, of a tubular magazine provided at its front end with a

take-down flange having its rear face formed with notches, and a collar located in the front end of the fore-arm and formed with notches corresponding to those of the said flange, the said fore-arm yielding to permit the notched faces of the flange and collar to ride over each other in screwing the magazine home into the gun-frame and in unscrewing it therefrom preparatory to its removal from the gun.

5. In a tubular-magazine firearm, the combination with a yielding fore-arm, of a tubular magazine provided at its front end with a take-down flange having a centering-shoulder and a series of notches, and a collar mounted in the front end of the fore-arm and receiving the said centering-shoulder and having a series of notches coacting with those of the flange to form a lock for the magazine, the said forearm yielding to permit the notched faces of the flange and collar to ride over each other in screwing the magazine home into the gun-frame and in unscrewing it therefrom preparatory to its removal from the gun.

6. In a tubular-magazine firearm, the combination with a sheet-metal fore-arm, of a tubular magazine passing through the said fore-arm and provided at its front end with a take-down flange having its rear face formed with a series of notches, and a collar mounted in the front end of the fore-arm and formed with a series of notches coacting with those of the flange to lock the magazine against turning, the sheet-metal fore-arm yielding to permit the high points of the notches to ride over each other when the magazine is screwed home into the frame and unscrewed preparatory to its removal therefrom.

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

THOMAS C. JOHNSON.

Witnesses:

HERBERT F. BEEBE,  
DANIEL H. VEADER.