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 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 longitudinal vertical section, of a gun containing my improvement; Fig. 2, a detached view, in front elevation, of the fore-arm thereof with the flanged magazine-plug in place; Fig. 3, a similar view with the magazine in vertical section to show the circular series of locking-notches in the front end tenon of the fore-arm.

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

With these ends in view my invention consists in 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 form a circular series of shallow locking-notches 2 in the front face of a ring-shaped tenon-piece 3, located in and projecting forward from the forward end of a sheet-metal fore-arm 4, the rear end of which is furnished with a U-shaped tenon-piece 5, rigidly secured to and projecting rearward from it and having a tenon or rib 6 for entrance into a groove 7 in the lower portion of the front face of the receiver or gun-frame 8. The locking-notches 2 receive the rounded rear end or nose of a friction-plunger 9, having an enlarged base and located in a circular chamber 10 in an integral annular take-down flange 11 at the forward end of the tubular magazine 12, the rear end of which is furnished with threads 13 for being screwed into a threaded opening 14 in the receiver 8. As thus constructed and arranged the said plunger 9 forms a yielding magazine-lock. By preference the edge of the flange 11 is knurled or formed with teeth 11a to facilitate its being turned by the fingers. The plunger 9 has its shank encircled by a coiled spring 15, which maintains the nose of the plunger in engagement with the notches 2, the said spring being held in place by the flange or overhang 16 of a magazine plug or cap 17, 60 employed to close the front end of the magazine and having two holes 18 for the reception of the pins of a spanner-wrench. As shown, the flange 11 is formed with three radial holes 19 for the reception of any convenient instrument, such as a wire pin, for turning the magazine in taking down or assembling the gun. When the magazine 12 has been screwed nearly to its home position, the nose of the plunger 9 begins to ride over the partitions between the locking-notches 2, yielding as it jumps, so to speak, from notch to notch. The spring 11 is put under more and more tension as the magazine is turned, until finally when the magazine reaches its home position the spring will have been placed under sufficient tension to cause the magazine to be held against turning reversely under the jarring action of recoil or other corresponding shock; but of course the tension of the spring will never prevent the magazine from being unscrewed manually.

It is apparent that in carrying out my invention some changes from the construction herein shown and described may be made. I claim—

1. In a tubular-magazine firearm, the combination with the fore-arm thereof, of a tubular magazine passing through the said fore-arm, and a yielding magazine-lock mounted in the forward end of the magazine and cooperating with the forward end of the fore-arm to prevent the magazine from jarring loose when firing the gun, but yielding to permit the magazine to be screwed into the gun-frame or unscrewed therefrom manually.

2. In a tubular-magazine firearm, the combination with a wrought-metal fore-arm, of a tubular magazine passing through the said fore-arm, and a yielding magazine-lock mounted in the forward end of the magazine.
and coacting with the forward end of the fore-arm to prevent the same from jarring loose when firing the gun.

3. In a tubular-magazine firearm, the combination with a wrought-metal fore-arm, of a tenon inserted into the front end of the said fore-arm, a tubular magazine passing through the said fore-arm and tenon, and a yielding magazine-lock mounted in the forward end of the said magazine and coacting with the said tenon to prevent the fore-arm from jarring loose when firing the gun.

4. In a tubular-magazine firearm, the combination with a wrought-metal fore-arm, of a ring-like metal tenon inserted into the forward end of the said fore-arm and projecting therefrom and formed in its front face with a circular series of locking-notches, a tubular magazine passing through the said fore-arm and formed with a take-down flange, and a yielding magazine-lock mounted in the said flange and coacting with the said notches for preventing the magazine from jarring loose when firing the gun.

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

THOMAS C. JOHNSON.

Witnesses:

daniel h. veader,
herbert f. beebe.