No. 796,226. PATENTED AUG. 1, 1905.

J. KURIG.

SWINGING FORE SIGHT CARRIER FOR GUNS.

APPLICATION FILED SEPT. 26, 1904.

2 SHEETS—SHEET 1.

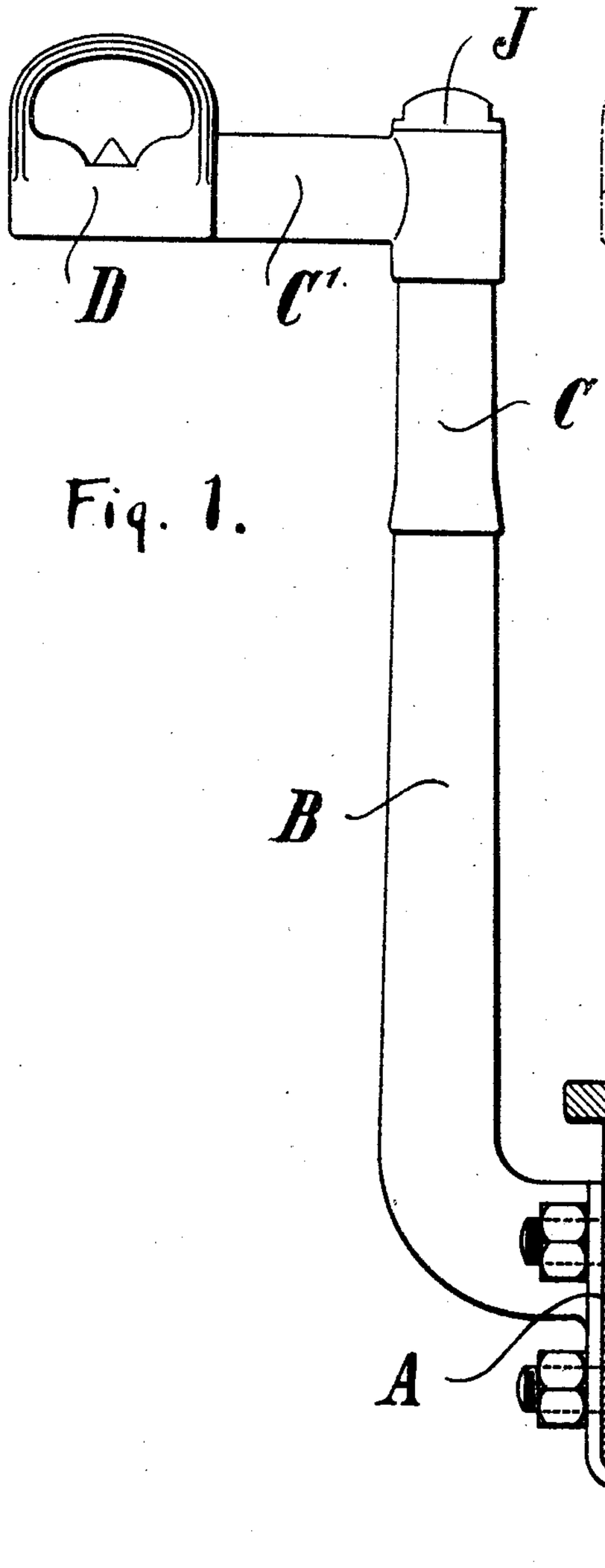

Fig. 1.

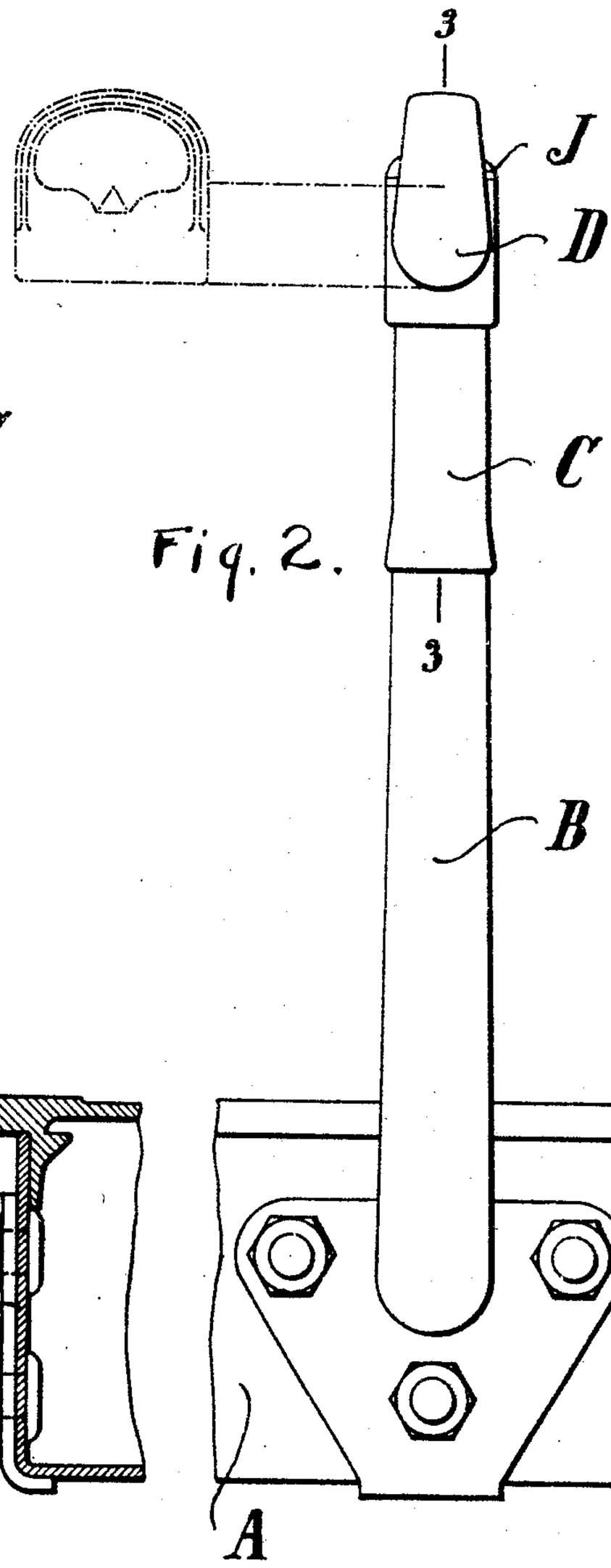

Fig. 2.

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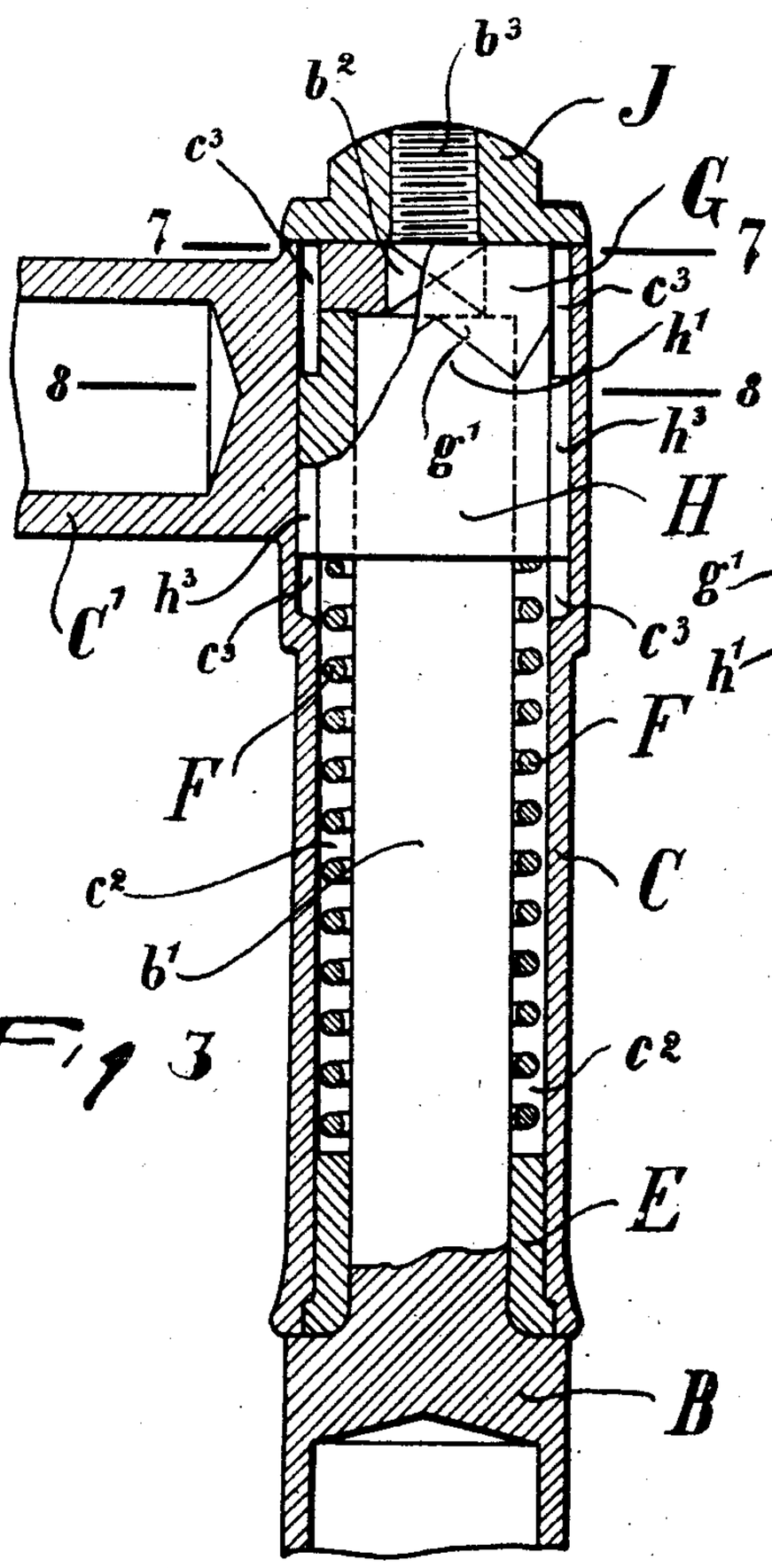


Fig 3

Fig. 5.

Fig. 4.

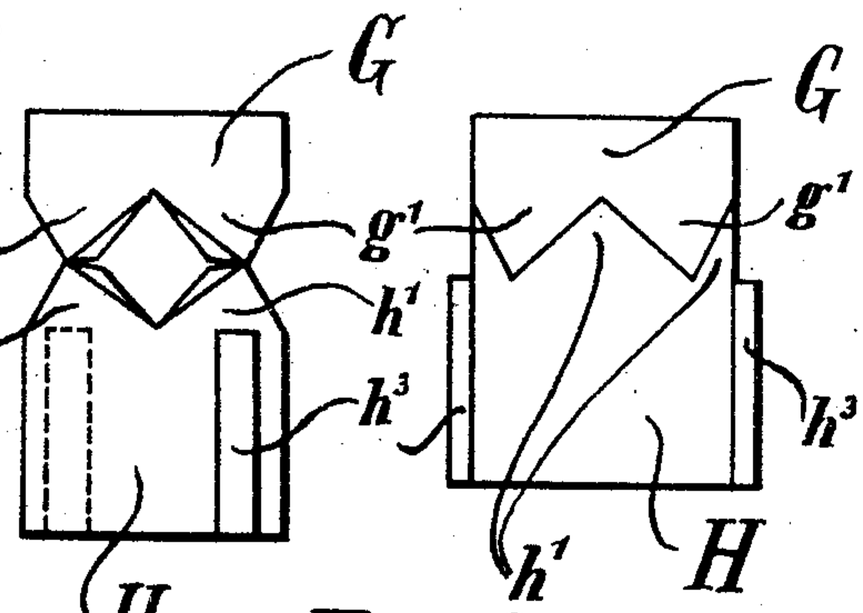


Fig. 6.

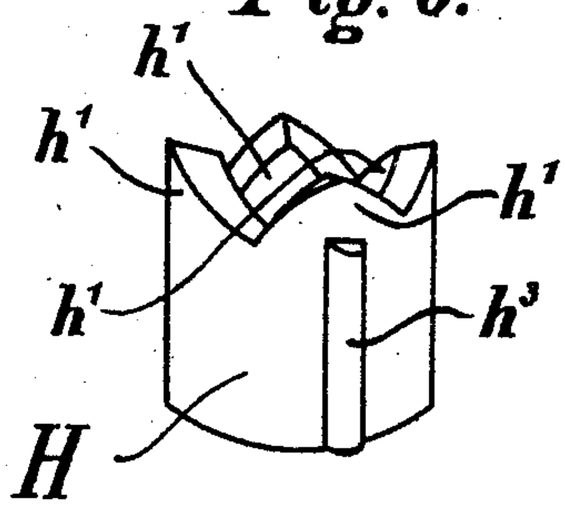


Fig. 8.

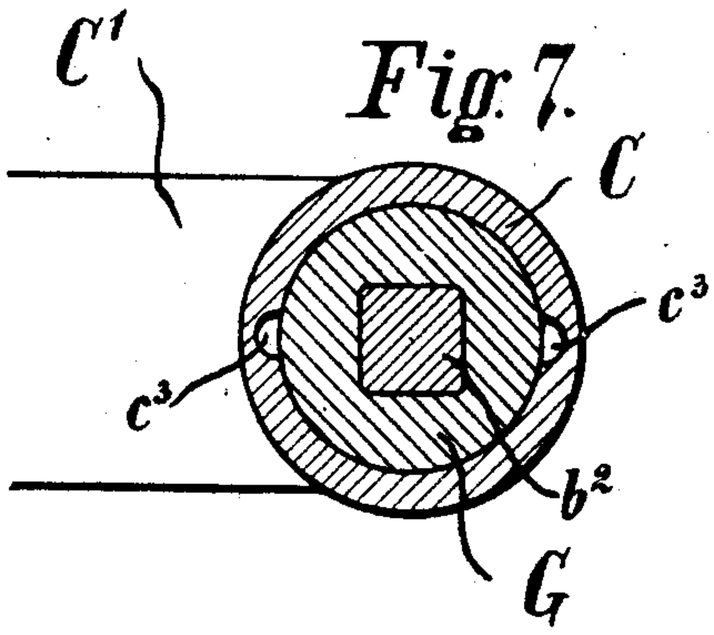
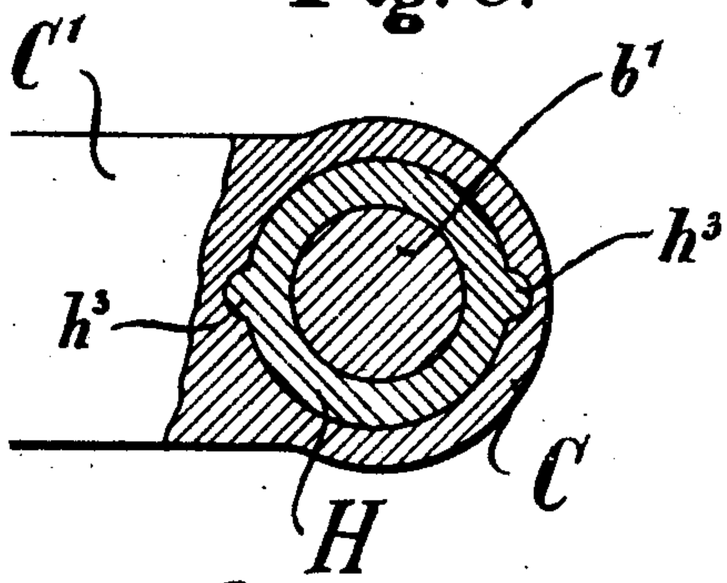


Fig. 7.



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SWINGING FORE-SIGHT CARRIER FOR GUNS.

No. 796,226. Specification of Letters Patent. Patented Aug. 1, 1905.

Application filed September 26, 1904. Serial No. 226,034.

To all whom it may concern:

Be it known that I, JOSEF KURIG, a subject of the Emperor of Germany, and a resident of 16 Holzstrasse, Essen-on-the-Ruhr, Germany, have invented certain new and useful Improvements in Swinging Fore-Sight Carriers for Guns, of which the following is a specification.

This invention relates to swinging fore-sight carriers for guns.

In a recoil-gun the back and the front sight have been arranged laterally on the upper gun-carriage, each with a special carrier, in such a manner that the men serving the sighting apparatus are entirely outside of the recoil slide-track of the gun-barrel. Since the distance of the front sight from the notch of the back sight is bound to a certain limit, these lateral arrangements of the sighting apparatus in portable guns involve the location of the front sight over one of the axle-seats. This circumstance in order to avoid interference with the free use of the axle-seat has resulted in arranging the sight-carrier movably on the upper carriage in such a manner that it can be shifted from the sighting position into a special transport position.

The present invention has for its object to provide a front-sight carrier having these movements with a spring-ratchet which will secure the front-sight carrier in the two positions which it has to assume in use, the arrangement being such that the spring-ratchet is protected against dirt in both positions.

In carrying out the present invention the surfaces of the spring-ratchet are inclosed within a hollow cylindrical housing which surrounds the turning post of the front-sight carrier.

In the accompanying drawings, which represent one embodiment of the present invention by way of example, Figure 1 is a rear elevation of the sight-carrier with the parts in sighting position. Fig. 2 is a side elevation of the same. Fig. 3 is a section on the line 3 3, Fig. 2, on an enlarged scale. Fig. 4 is a side view of the spring-ratchet closed. Fig. 5 is a side view of the spring-ratchet opened. Fig. 6 is a perspective view of a part of the spring-ratchet. Fig. 7 is a section on the line 7 7 of Fig. 3 seen from above, and Fig. 8 is a section on the line 8 8 of Fig. 3.

To the upper carriage A, Figs. 1 and 2, of the gun is secured a shaft B, which carries a post b', Figs. 3 and 8. Surrounding this post b' is a housing C, which is rigidly connected with the horizontally-projecting front-sight carrier C'. The housing C is provided with a longitudinal bore c^2, which fits over a bushing E, surrounding the post b' at the lower end of the housing, while above this bushing rests a spring F, Fig. 3, and two ratchet members G H, Figs. 3–8, these two ratchet members and the spring constituting the spring-ratchet. The ratchet members G H are of the same diameter as the bore c^2. The upper ratchet member G is mounted on the rectangular upper end b^2 of the post b', so that it is fixed against turning relatively to said post, and consequently to the shaft B. Upon its under side, presented toward the ratchet member H, it is formed with four teeth g', which may be of the particular form and arrangement shown in the drawings. The lower ratchet member H is rotatable upon the post b', as well as longitudinally movable thereon, and is provided on its upper face with four teeth h', corresponding with the teeth g' of the ratchet member G, the teeth on one ratchet member filling the notches in the other member when the ratchet is closed, as will be understood by reference to the Figs. 3 and 4. The ratchet member H is further provided with two diametrically opposite splines h^3, which engage in grooves c^3, formed in the wall of the bore c^2. In consequence of this arrangement the ratchet member H is forced to partake of any turning movement of the front-sight carrier C'. The length of the grooves c^3 is so determined that the ratchet member H can slide from the position shown in Fig. 3 toward the bushing E a distance corresponding to the height of the teeth g' h'. The spring F is put under strong initial tension and abuts at one end against the ratchet member H and at the other end against the bushing E. On the rectangular portion b^2 of the post and projecting beyond the front-sight carrier is a threaded portion b^3, upon which is secured a nut J, Figs. 1 to 3, lying in the horizontal plane of the front-sight carrier and also of the upper face of the ratchet member G, so that the bore c^2 is closed dust-proof by this nut and displacement of the sight-carrier, as well as the ratchet member G upward on the post b', is prevented.

In the sighting position the sight-carrier assumes the position shown in full lines in the

drawings. The spring-ratchet is then closed and holds the sight-carrier automatically in a fixed position. In order to shift the sight-carrier from the sighting position into the transport position indicated by broken lines in Fig. 2, the sight-carrier is swung in the direction of clock-hands. The ratchet member H partakes of this turning, while the ratchet member G remains stationary, and the turning of the member H causes the teeth h' to slide over the teeth g' of the member G until the member H reaches the position shown in Fig. 5 in relation to the member G. In this position the member H has moved toward the bushing E by the distance of the height of the teeth g' h', and the spring F has been compressed, and the spring-ratchet is now opened. As soon as the ratchet member H is forced through the front-sight carrier a slight distance beyond the position indicated in Fig. 5 the teeth h' spring into the next grooves of the member G under the influence of the spring F and the ratchet is closed, so that the front-sight carrier is quickly forced into the transport position and there held automatically by the spring. In order to swing the front-sight carrier back to sighting position the same operation takes place in the reverse direction.

Having thus described my invention, the following is what is claimed therein:

1. A sighting attachment for guns comprising a post, a front-sight carrier swingingly mounted on the post, a connection between the post and the front-sight carrier permitting the front-sight carrier to swing on the post and to be held in its various positions, and a housing surrounding said connection.

2. A sighting attachment for guns comprising a post, a front-sight carrier swingingly mounted on the post, a connection between the post and the front-sight carrier permitting the front-sight carrier to swing on the post and to be held in its various positions, and a housing carried by the front-sight carrier and inclosing the said connection.

3. A sighting attachment for guns comprising a post, a front-sight carrier swingingly mounted on the post, a housing and a spring-ratchet connection between the post and the swinging sight-carrier, mounted within the housing and permitting the adjustment of the swinging sight-carrier without elevating the sight-carrier relatively to the sight-post and the housing.

4. A sighting attachment for guns comprising a post, a front-sight carrier swingingly mounted on the post and a spring-ratchet permitting the adjustment without elevating the sight-carrier relatively to the housing.

5. In a front-sight carrier for guns, a post, a front-sight carrier extending laterally therefrom, a front sight at the outer end of the carrier, a spring-ratchet holding the front sight-carrier in different positions and a housing surrounding the post and inclosing the spring-ratchet.

6. In a front-sight carrier for guns, a post, a front-sight carrier extending laterally therefrom, a front sight at the outer end of the carrier, a hollow cylindrical housing surrounding the post and from which the front-sight carrier projects laterally and a spring-ratchet inclosed in said housing, holding the front-sight carrier in the different positions in which it may be moved.

7. In a front-sight carrier for guns, a post upon which the front-sight carrier is mounted to swing, a hollow cylindrical housing surrounding the post and from which the front-sight carrier projects and the toothed spring-ratchet, one member of which is fixed relatively to the post and the other member of which is movably mounted on the post but secured against turning in the hollow cylinder.

8. The combination of the post the housing surrounding the post and having a front-sight carrier projecting therefrom, the fixed ratchet member carried by the upper end of the post, the movable ratchet member mounted to rotate on the post but fixed against rotation relatively to the housing and the spring surrounding the post and forcing the movable ratchet member against the fixed ratchet member.

The foregoing specification signed at Essen-on-the-Ruhr this 12th day of September, 1904.

JOSEF KURIG.

In presence of—

HARRY L. MEFFORD,
FRANZ LANOURKE.