

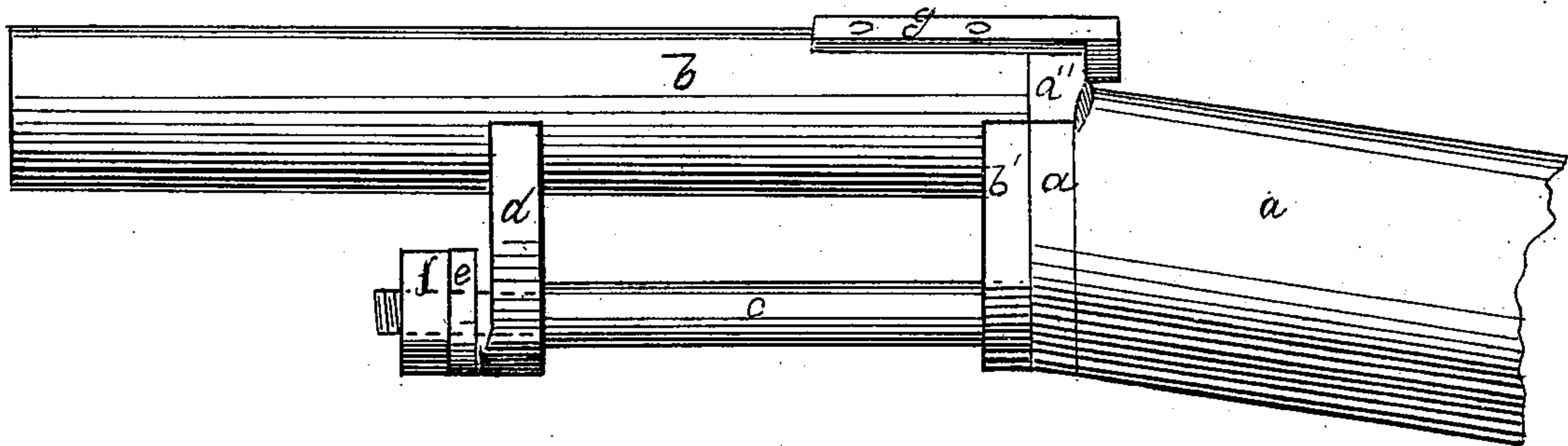
*F. E. Boyd & P. S. Tyler*  
*Breech-loading Double barreled gun.*

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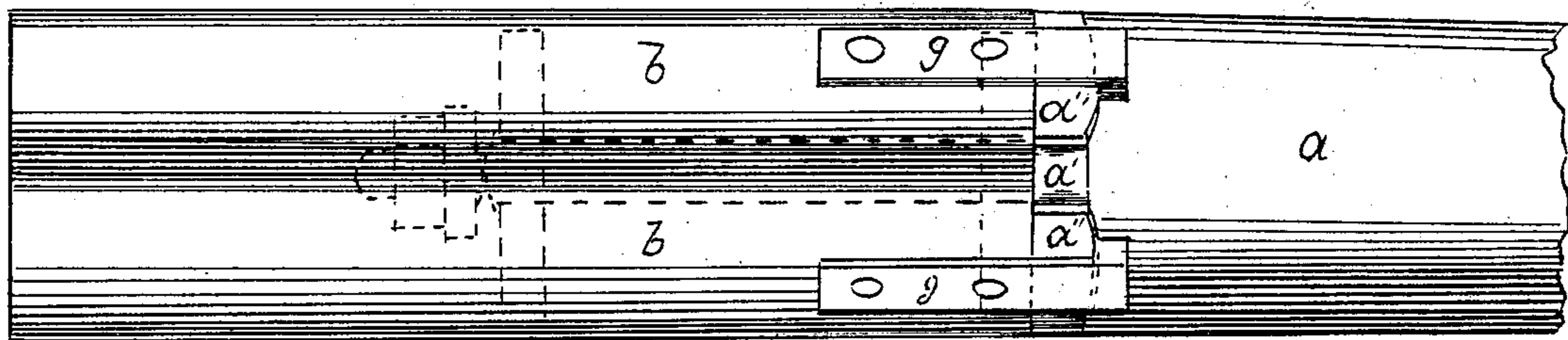
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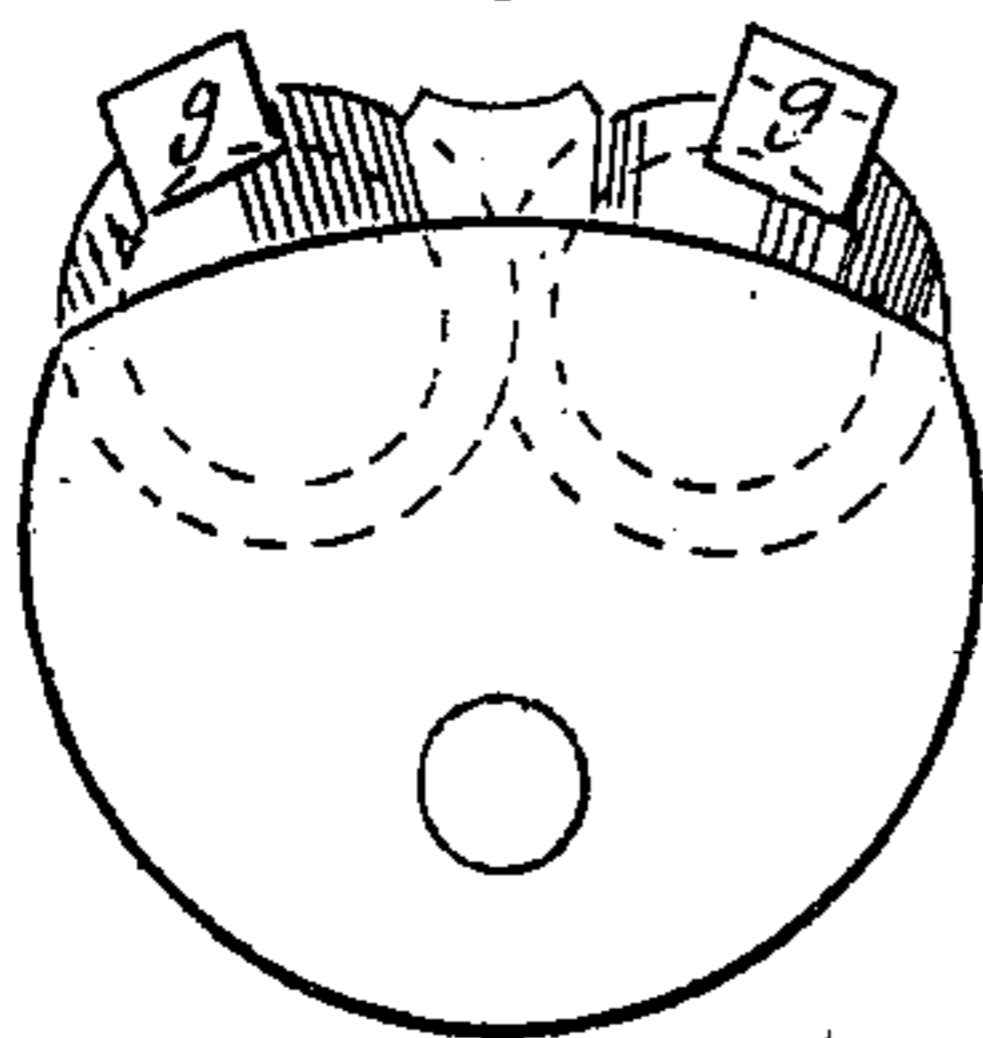
*Fig. 1.*



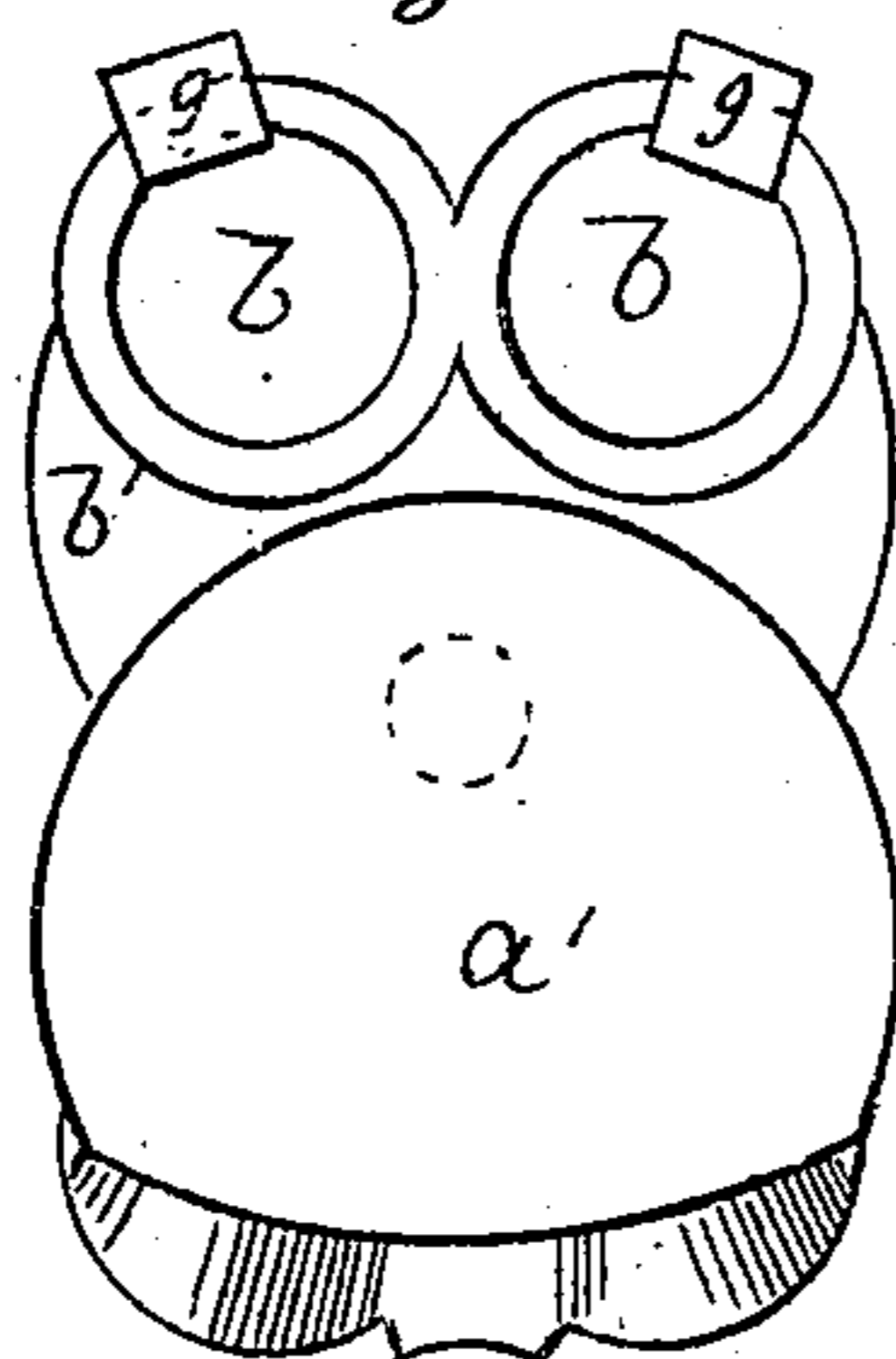
*Fig. 2.*



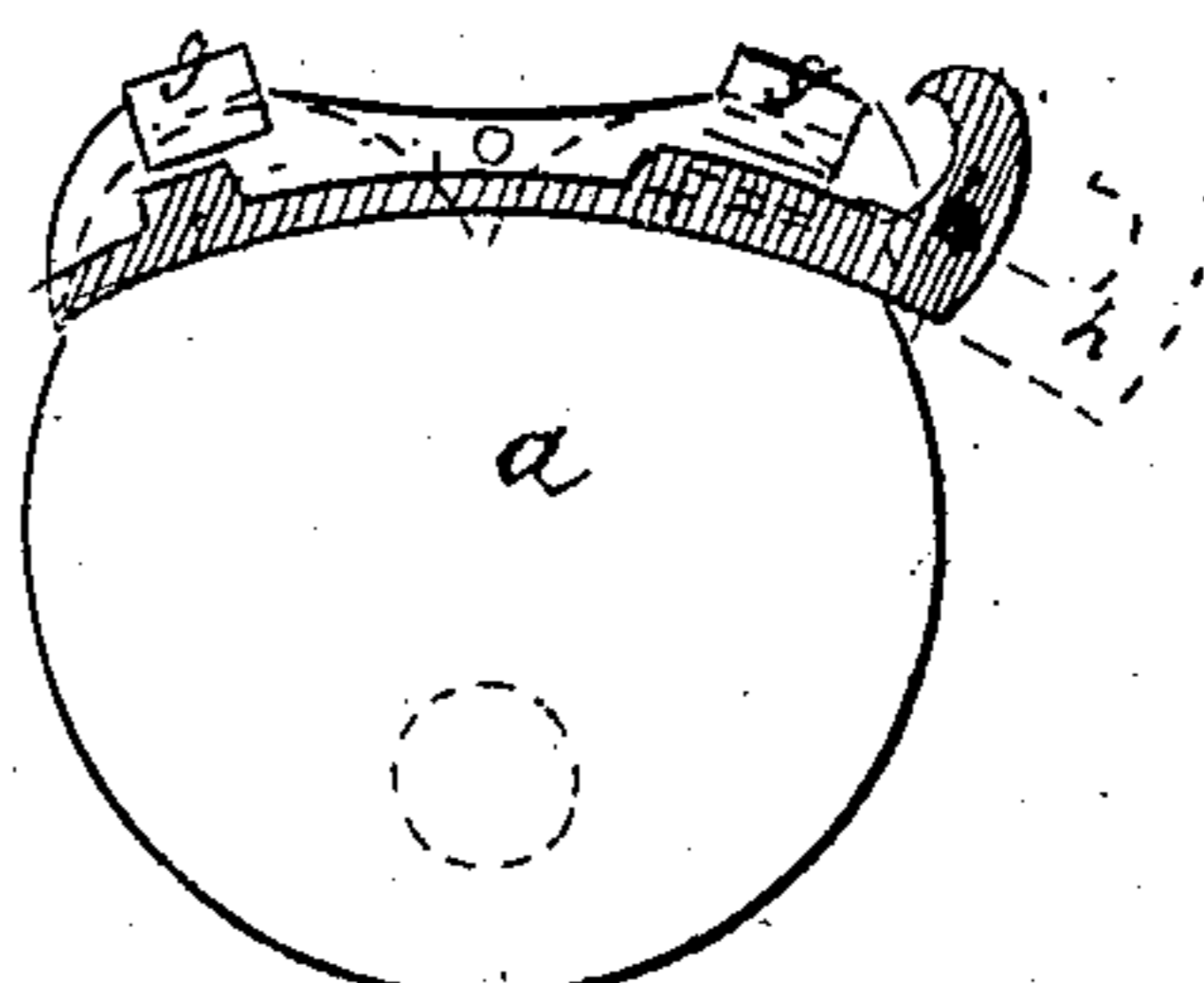
*Fig. 3.*



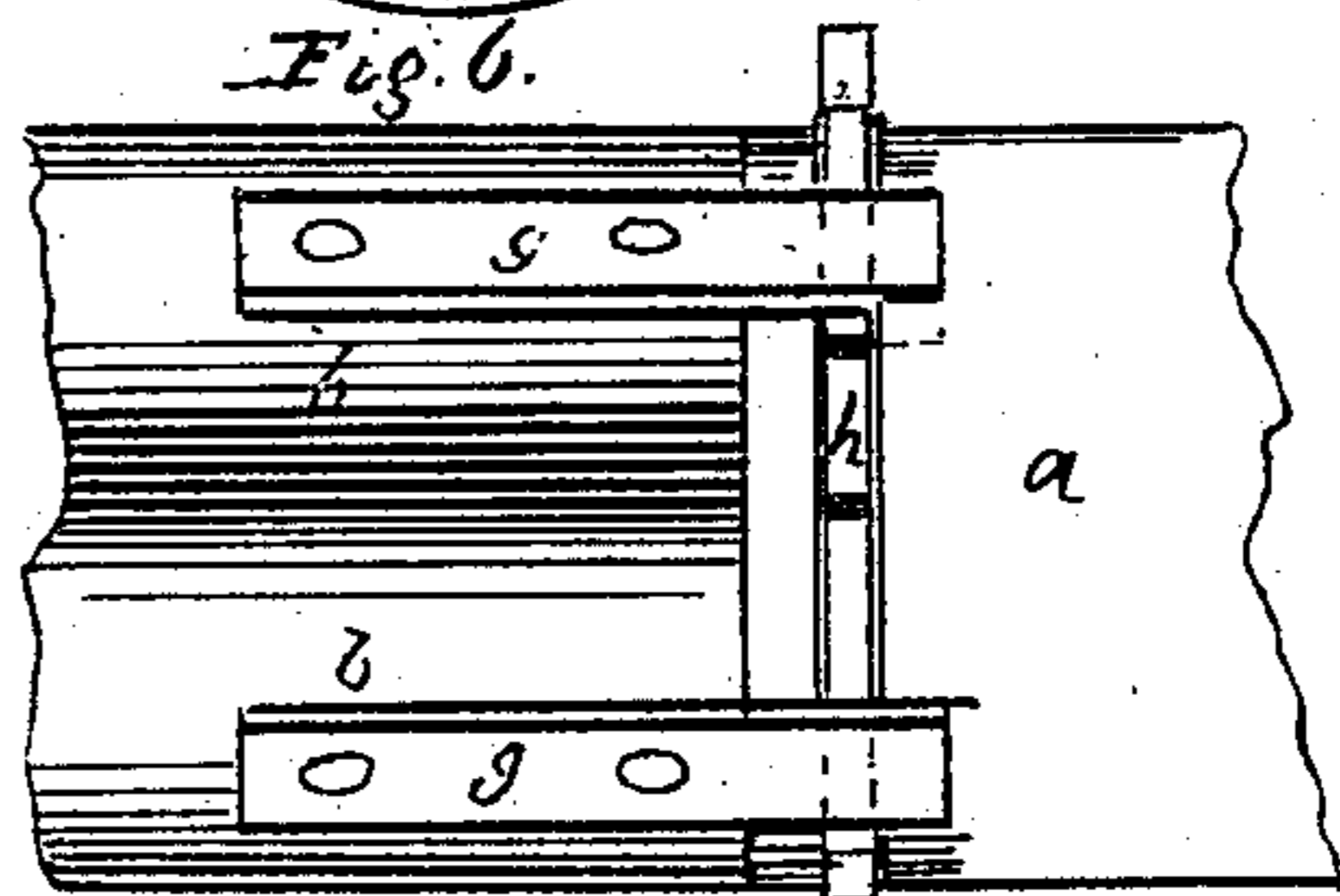
*Fig. 4.*



*Fig. 5.*



*Fig. 6.*



*Witnesses.*  
*J. M. Adams*  
*M. S. & Wilde.*

*For Invention*  
*F. E. Boyd*  
*P. S. Tyler*

# United States Patent Office.

FRANCIS E. BOYD AND P. SHELTON TYLER, OF BOSTON, MASSACHUSETTS.

*Letters Patent No. 73,494, dated January 21, 1868.*

## IMPROVEMENT IN BREECH-LOADING FIRE-ARMS.

*The Schedule referred to in these Letters Patent and making part of the same.*

Be it known that we, FRANCIS E. BOYD and P. SHELTON TYLER, of Boston, in the county of Suffolk, and State of Massachusetts, have invented a new and useful Improvement in Breech-Loading Double-Barrelled Guns, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a side elevation of a portion of a double-barrelled gun embodying our invention.

Figure 2 is a plan view of the same.

Figure 3 is a section of the rear of the breech when closed, and

Figure 4 is a view of the breech when opened.

Figures 5 and 6 are modifications of our invention.

Similar letters indicate like parts in the several figures.

The object of our invention is to provide a simple and efficient means for securing the barrels of a breech-loading gun to the breech, so as to insure a gas-tight connection, and at the same time to enable the barrels to be readily turned upon the breech for loading; and the invention consists in the employment of a clamp attached to the rear of each barrel, and fitting over the edge of the breech-plate, the latter being provided with cam-shaped projections in the rear, that serve to tighten up the clamps as they pass over the breech-plate.

The invention also consists of a washer or plate attached to the spindle upon which the barrels turn, the said washer being formed with a curved portion on one side that bears against a raised portion on one side of the plate through which the spindle passes, and which is attached to the under side of the barrels.

Referring to the drawings, *a* represents the stock, and *b b* the barrels of a double-barrelled gun. To the under side of the barrels are attached the plates *b' d*, which support the spindle *c*, and in which the said spindle freely turns. The spindle *c* is firmly secured to the breech-plate *a'*. To the rear of each barrel, on the upper side, is attached a clamp, *g*, the same consisting of a strip or plate of metal, formed with a projection at their rear ends, fitting over the edges of the face-plate *a'*, the latter being attached to the front end of the stock *a*. The edges of the face-plate *a* project above the stock, and are curved to correspond with the surface of the barrels, so as to fit snugly under the projecting clamps *g g*. The projecting portion of the face-plate *a'* is curved in the rear on each side, as shown at *a'' a''*, in figs. 1 and 2, so that as the projecting ends of the clamps are brought over them, the barrels will be drawn up close to the face-plate *a*, and form a tight joint. On the end of the spindle *c*, in front of the bearing-plate *d*, is a circular disk or washer, *e*, confined by a nut, *f*. The said washer turns with the spindle, and is formed with a cam-like projection on one side, which is made to abut against a similar projection on the front side of the bearing-plate *d* when the barrels are closed upon the breech, and thus form an additional bearing-point for securing a tight joint of the barrels upon the breech.

When in position, the barrels may be secured to the breech by means of a spring-catch, or other suitable device. The clamps *g g*, instead of being secured to the barrels, as above described, may be reversed and attached to the stock, their projecting ends engaging in cams attached to the barrels.

Figs. 5 and 6 show a modification of our invention as adapted to barrels which slide longitudinally on the spindle, instead of turning on the spindle at one side for the insertion of the charge. The barrels are secured in a closed position by means of a sliding plate, on which are formed cams or projections, which engage with the projecting ends of the clamps in a manner similar to the action of the face-plate before described.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. We claim the plate or washer *e*, formed as described, and attached to the spindle *c*, in combination with the raised or cam-shaped surface of the bearing-plate *d*, as set forth.

2. We claim the combination of the clamps *g g*, and the curved and cam projections of the face-plate, with the bearing-plate *d* and plate or disk *e*, constructed and operating substantially as and for the purpose set forth.

In testimony whereof, we have signed our names to this specification in the presence of two subscribing witnesses.

FRANCIS E. BOYD,  
P. SHELTON TYLER.

Witnesses:

J. H. ADAMS,  
E. L. DYER.