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(No Model.)

W. H. DAVENPORT.
COCKING DEVICE FOR BREAKDOWN GUNS.

No. 549,706.

Patented Nov. 12, 1895.

Fig. 2.

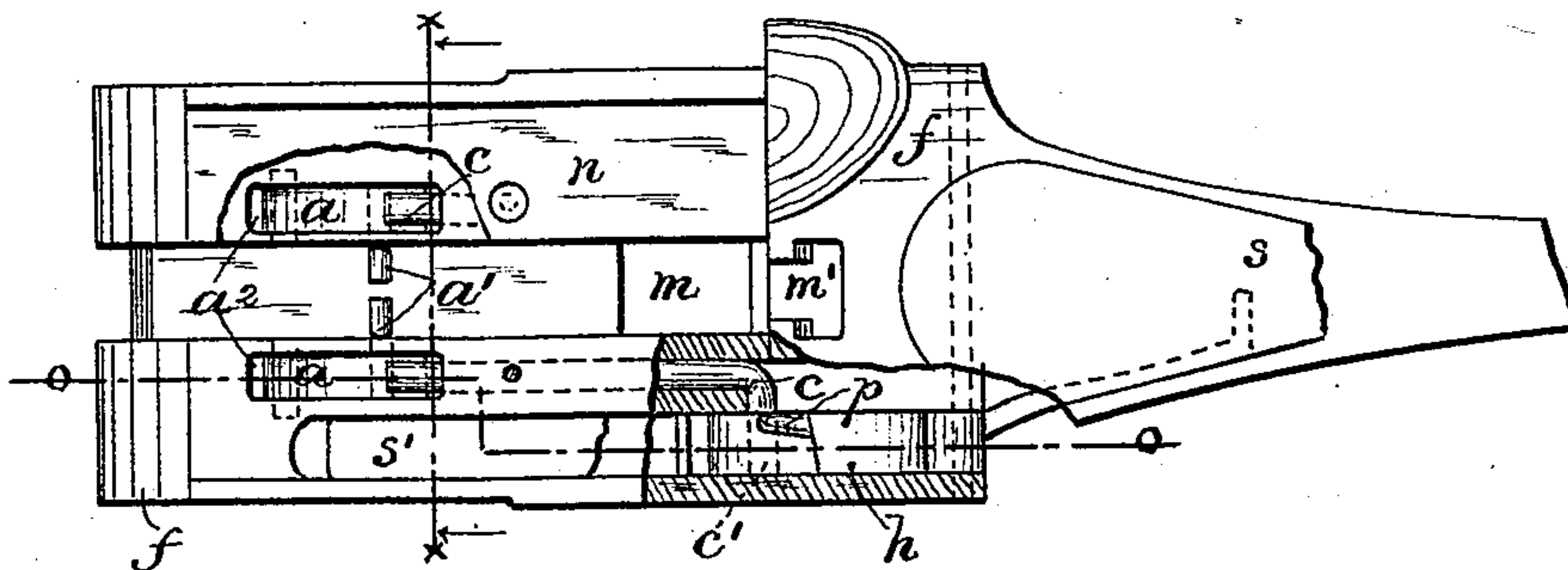


Fig. 1.

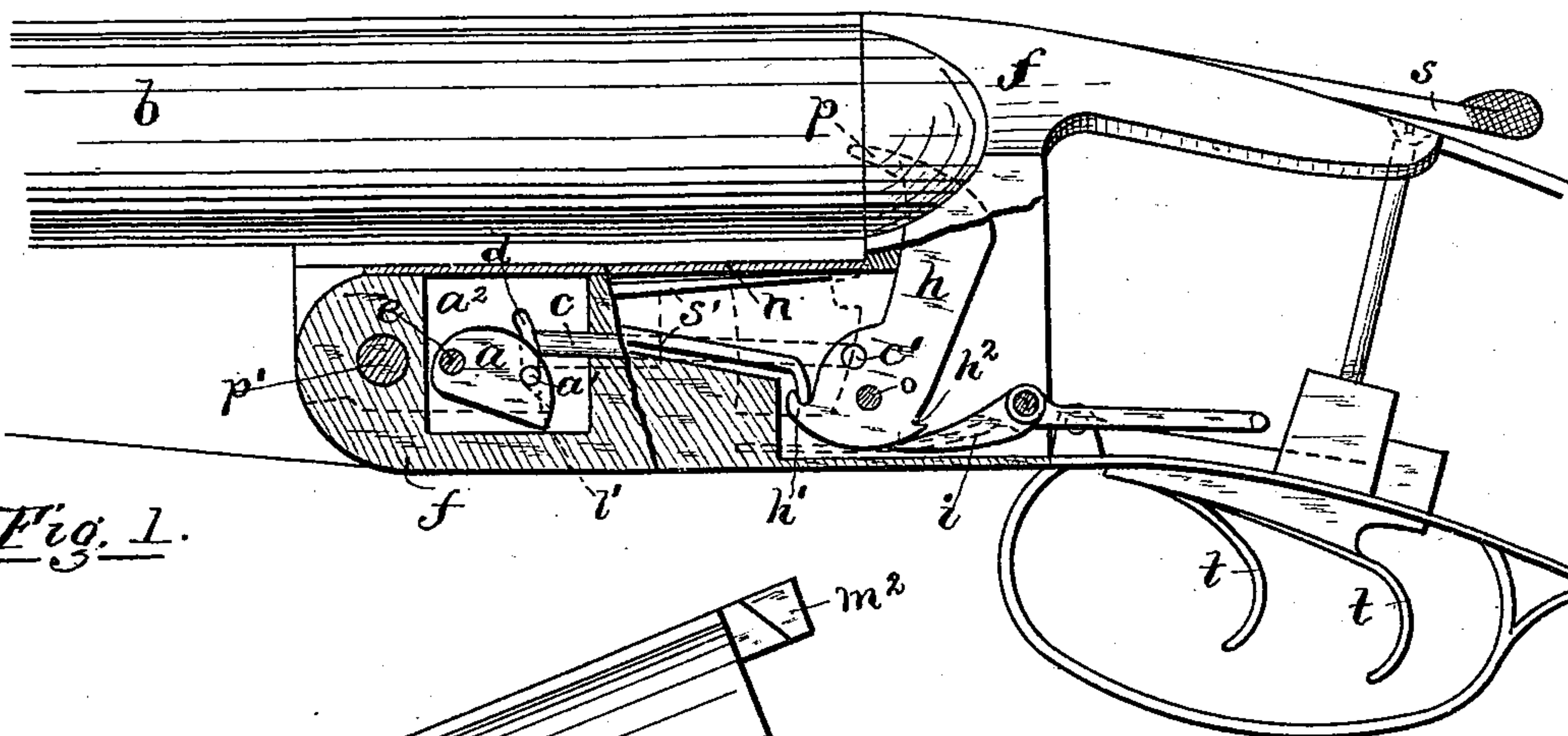


Fig. 3.

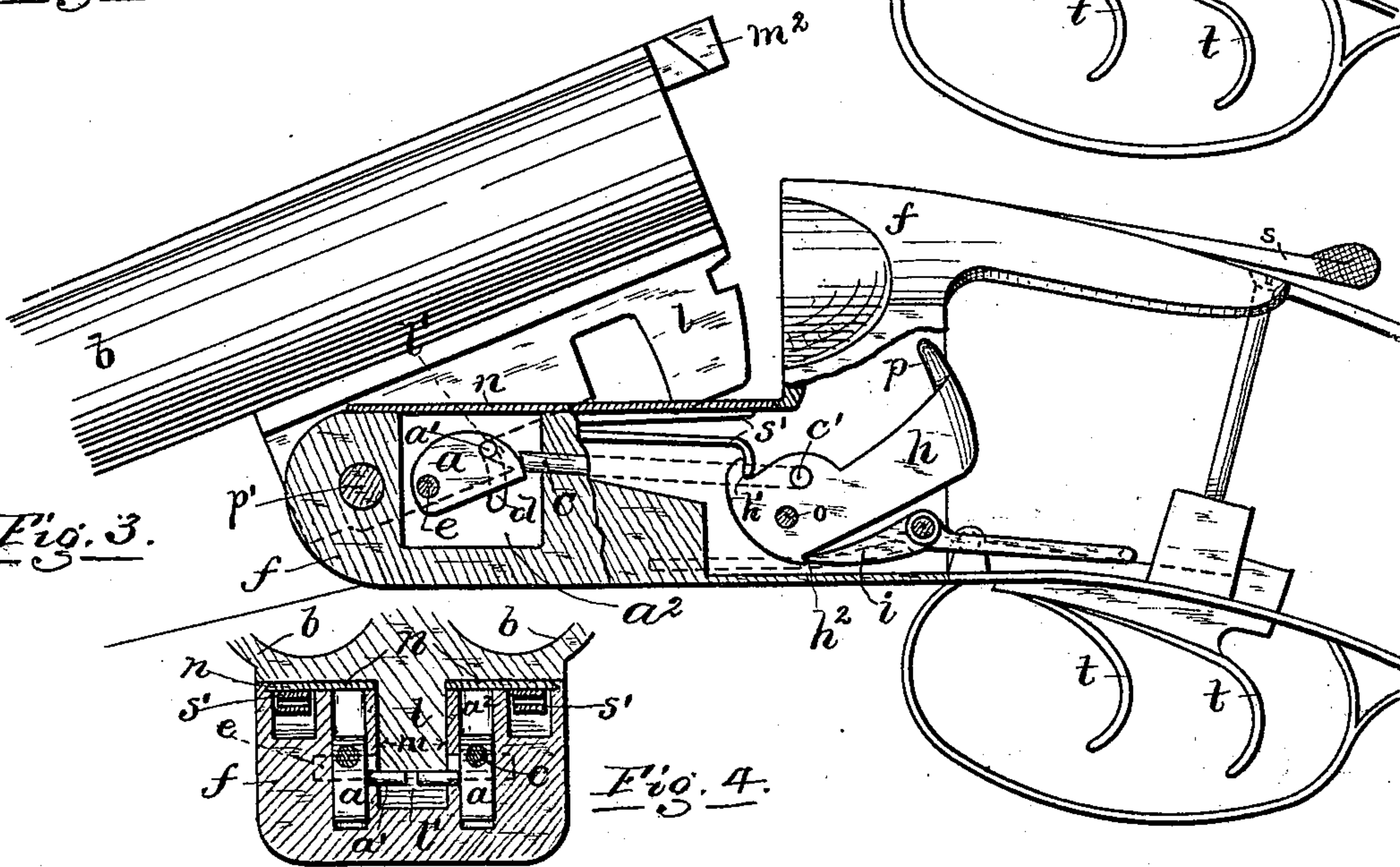


Fig. 4.

WITNESSES,

Fred Arnold

Ida M. Warren.

INVENTOR-

William H. Davenport.

by Remington & Henthorne
Atty's.

UNITED STATES PATENT OFFICE.

WILLIAM H. DAVENPORT, OF NORWICH, CONNECTICUT.

COCKING DEVICE FOR BREAKDOWN GUNS.

SPECIFICATION forming part of Letters Patent No. 549,706, dated November 12, 1895.

Application filed January 24, 1894. Serial No. 497,845. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. DAVENPORT, a citizen of the United States, residing at Norwich, in the county of New London and State of Connecticut, have invented certain new and useful Improvements in Cocking Devices for Breech-Loading Firearms; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in cocking mechanism for breech-loading firearms of the "breakdown" type; and it consists, essentially, in the combination, with the usual adjunctive devices, of a cam journaled in the breech-frame and connected with the barrel-lug and a link jointed to the hammer and bearing against the periphery of the cam.

The object I have in view is to simplify and cheapen the construction of cocking mechanism of breech-loading firearms and at the same time to render such guns safer and more readily operated, all as will be more fully hereinafter set forth and claimed.

In the accompanying sheet of drawings, Figure 1 is a side elevation, in partial section, of the breech portion of a hammerless double gun provided with my improved cocking device, the parts being in the normal position and the line of section being taken on line *o o* of Fig. 2. Fig. 2 is a corresponding plan view, the barrels being removed. Fig. 3 is a side view similar to Fig. 1, the gun being in the open or breakdown position; and Fig. 4 is a transverse sectional view taken on line *x x* of Fig. 2 and also showing the relation of the barrels to the breech-frame and cocking mechanism.

My improvement is, as before stated, particularly applicable to firearms of the breakdown type, such as are provided with two barrels, each having independent firing mechanism, the hammers being concealed within the breech-frame and adapted to be cocked by the act of opening and closing the gun.

In the drawings the breech-frame *f*, hammers *h*, spring-sears *i*, triggers *t t*, the locking means, and barrels *b* are represented sub-

stantially as common to guns of this class, except the changes introduced in the frame *f* for the reception of the cocking device, and which latter forms the subject of my present invention.

The hammers *h* are pivoted to pins *o*, located in the lower portion of the frame *f*, each hammer being provided at its upper end with the usual pin or cap-exploder *p*, notch *h²* for the sear, and spring *s'* for quickly throwing the hammer forward when released or tripped by the trigger to explode the shell.

The forward end of the frame *f* is provided with a key or joint-pin *p'*, passing transversely through it and the barrel-lug *l*, substantially as common. This lug *l* is located at the rear end of the barrels and depends centrally therefrom between them. (See Fig. 4.) The under side of the lug is provided with a recess or notch *l'*, (see dotted lines, Figs. 1 and 3,) in which are seated the adjacent projecting end portions of the cam-pins *a'*. (See also Fig. 4.) The frame *f* has a downwardly-extending longitudinal central groove *m* formed therein to freely receive the lug *l*. At each side of this groove, near the location of the said joint-pin, the frame is cut away to form a rectangular-shaped pocket *a²*, a removable cap or cover *n* serving to close the top. In these openings *a²* are located the cocking-cams *a*, the same as drawn being substantially semi-circular in form and loosely mounted on journals *e*, fixed in the frame *f*, the journals passing through the forward end portion of the cams. The opposite or rear end of each cam is provided with a pin *a'*, which extends transversely through an elongated opening *d*, formed in the frame-wall contiguous to the central main opening *m*, containing the barrel-lug, the latter having a notch or recess *l'* to receive the projecting portion of said pin, as before stated. From this it will be apparent that the cams are positively and simultaneously swung up and down in unison with the barrel's movement whenever the gun is opened and closed. Now in order to transmit the cam's movement to the hammer *h*, I introduce a link or member *c*, the same being mounted to move longitudinally in the frame *f*. The rear end of the link is bent, as at *c'*, Fig. 2, and enters a hole formed in the hammer for the purpose a short distance above

the hammer-fulcrum. The opposite or front end of the link extends into the opening a^2 and is fitted to engage the peripheral surface of the cam, all as clearly shown. The cams and links may be made of steel hardened, so as to successfully withstand the wear incident to continued use.

It will be noticed that when the several parts are in the normal position, as shown in Fig. 1, the hammers being tripped, the end of the link bears lightly against the cam, since the hammer-spring s' is for the time relaxed, the corresponding relation of the parts being such that the cam is adapted to act with the least force or leverage.

To cock the hammers, the top-snap lever s is first vibrated to withdraw the locking-bolt, as usual, after which the barrels are tilted, thereby at the same time swinging the rear tongue m^2 from its seat or socket m' in the breech-frame and vibrating the cam upwardly by means of the latter's engagement with the lug-notch l' . While the cam is thus being moved it gradually forces the link c rearwardly against the tension of the spring s' until the hammer is brought back to the full-cock position represented in Fig. 3, the toe of the cam being elongated sufficiently to prevent it from passing entirely beyond the link. After replacing loaded shells in the barrels and closing the gun it will be found that the hammers are left in the full-cock position ready for use.

If desired, the gun may be provided with any suitable safety device, arranged, as usual, to engage with the sear i and under the control of the gunner.

I claim as new and desire to secure by United States Letters Patent—

1. The cocking device, for breech-loading fire-arms of the break-down type, substantially as hereinbefore described, the same consisting of the swinging cam a pivoted in a recess formed in the breech-frame, a pin fixed

in said cam and extending laterally therefrom, a guided link or connection c jointed to the usual trigger-released hammer having its forward end in contact with the cam's surface, and the pivotally mounted gun-barrel provided with a lug on its under side having the outer or projecting portion of said cam-pin mounted therein, whereby the act of tilting the barrel, as in opening and closing the gun, elevates and depresses the cam and cocks the hammer, as set forth.

2. The combination of the pivotally mounted spring-resisted hammer, a trigger capable of coacting with said hammer as usual, a tilting gun-barrel having its rear portion provided with a notched lug l on its under side, a pivotally mounted cam a , a pin a' fixed in said cam and in engagement with the notched portion of said lug l , and a suitably mounted link or connection c having its forward or free end bearing against the said cam's surface, its opposite end being jointed to the said hammer at a point above the hammer-pivot, substantially as hereinbefore described.

3. The combination with a tilting gun-barrel having a lug on its under side, the usual spring-resisted hammer, and the breech frame having a recess or chamber, as a^2 , formed therein contiguous to the barrel pivot or joint, of a swinging cam, as a , mounted in said recess, a pin fixed in said cam extending laterally through an elongated opening formed in one of the recess walls and in operative engagement with said barrel-lug, and the guided connection c jointed to the hammer and in frictional contact with the cam's surface, substantially as described.

In testimony whereof I have affixed my signature in presence of two witnesses.

WILLIAM H. DAVENPORT.

Witnesses:

GEO. H. REMINGTON,
IDA M. WARREN.