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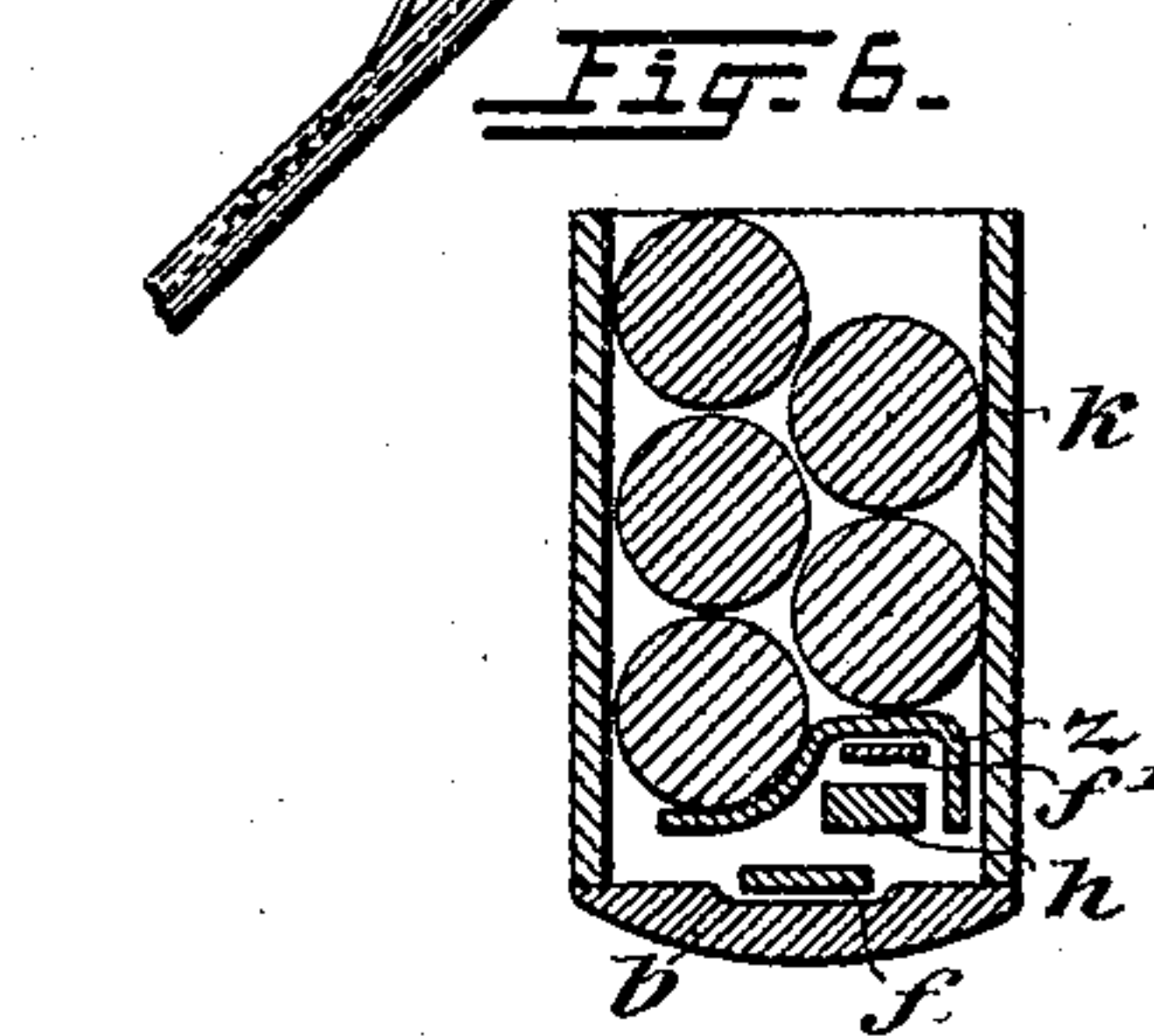
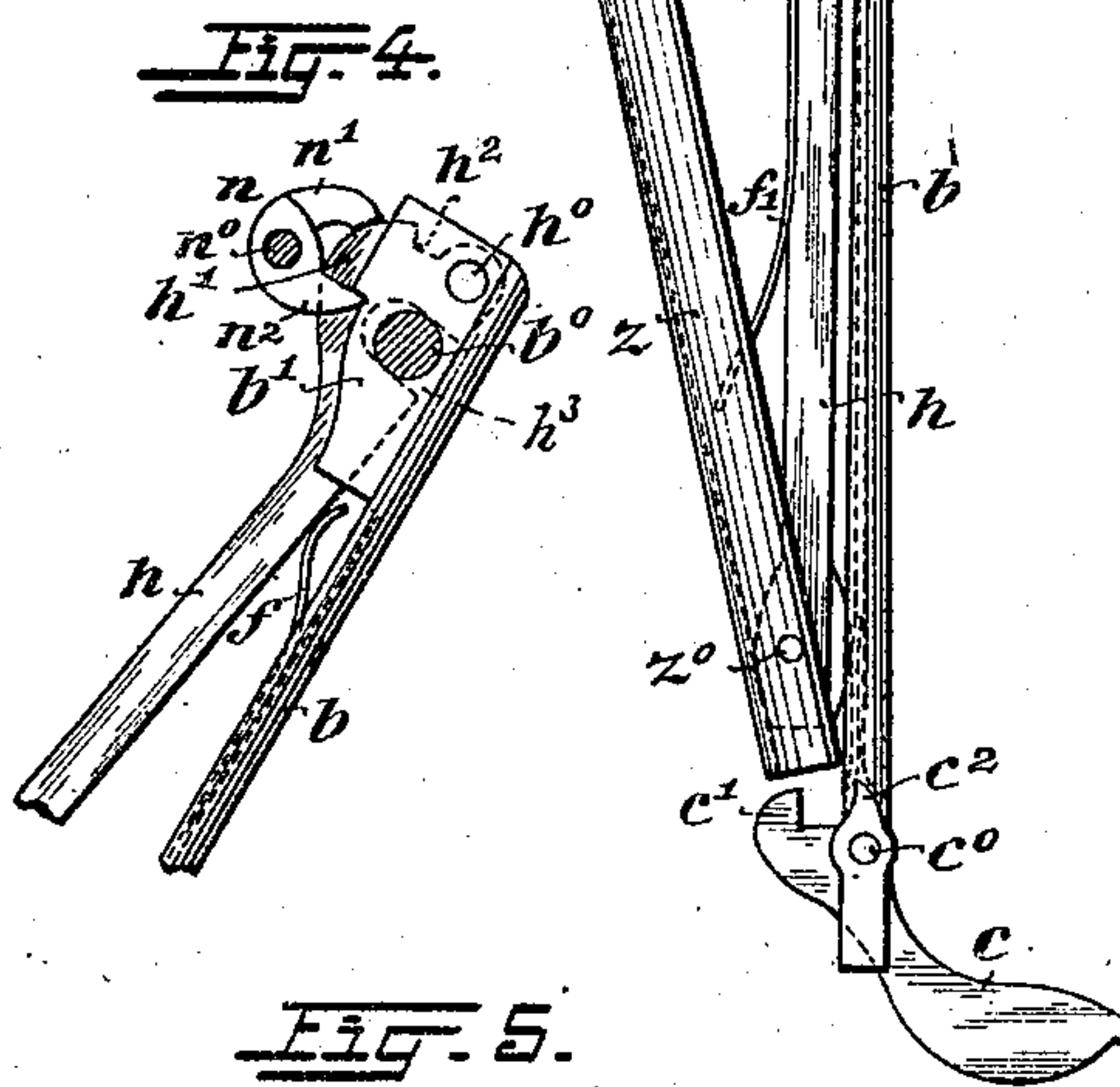
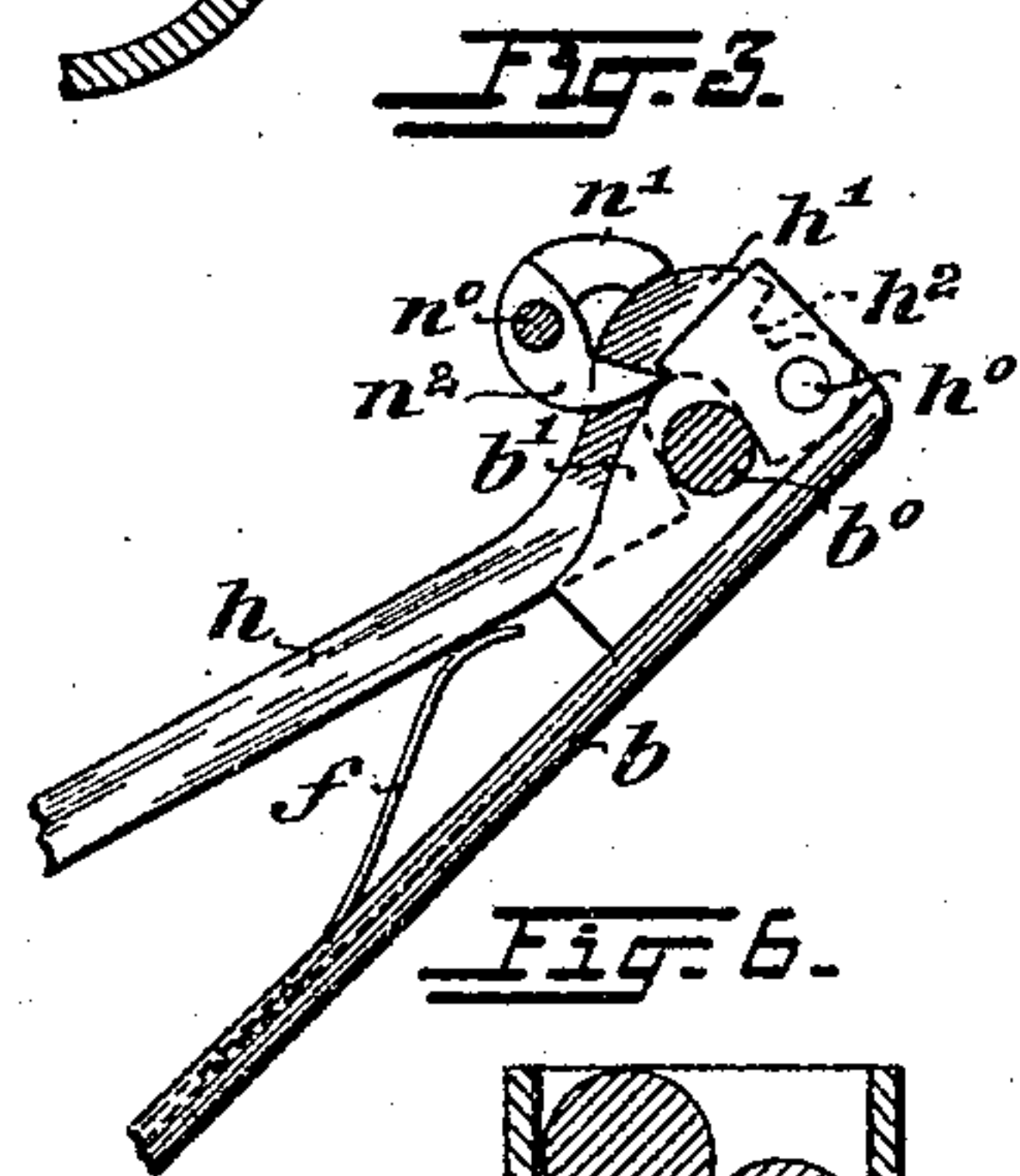
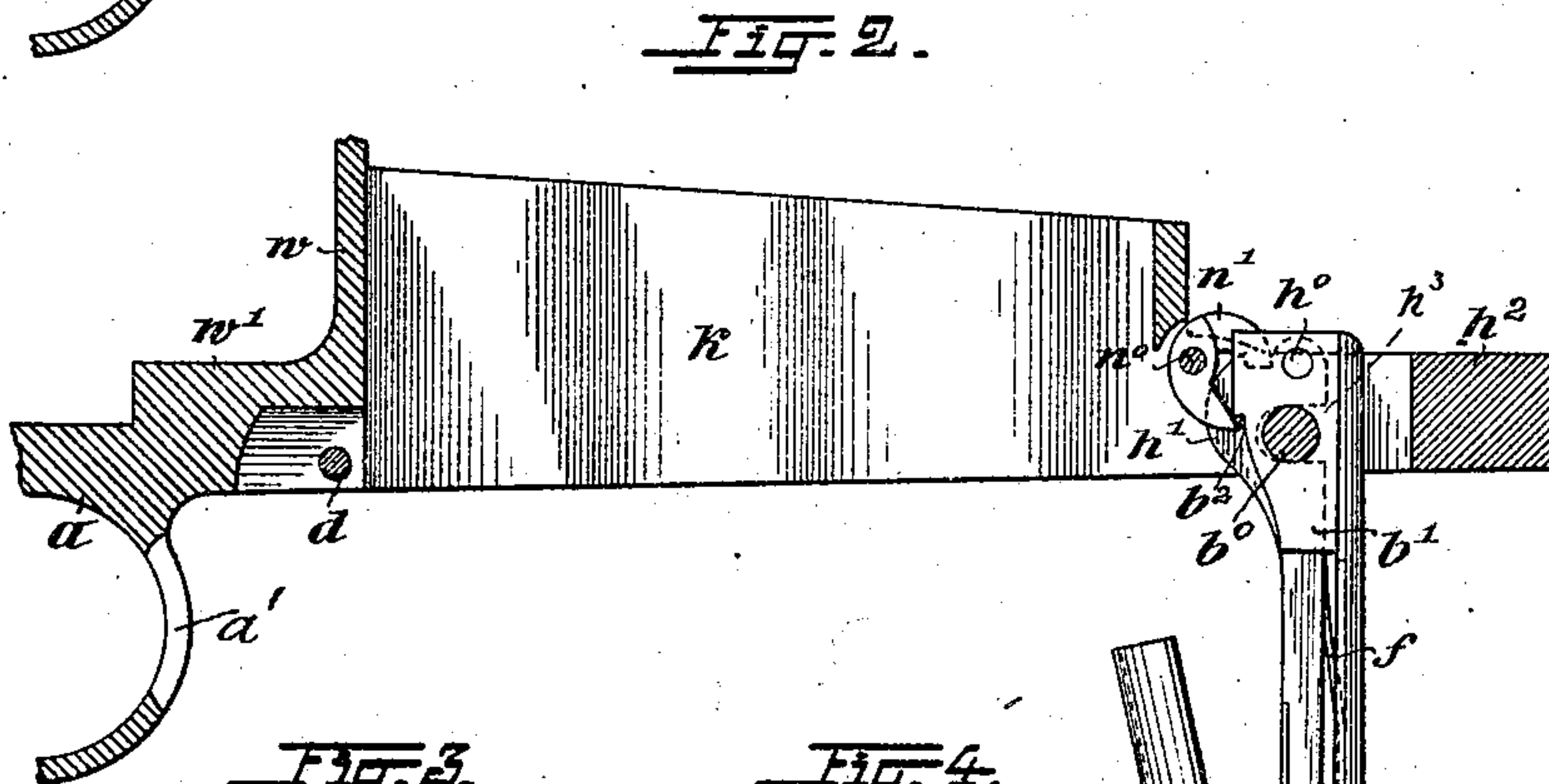
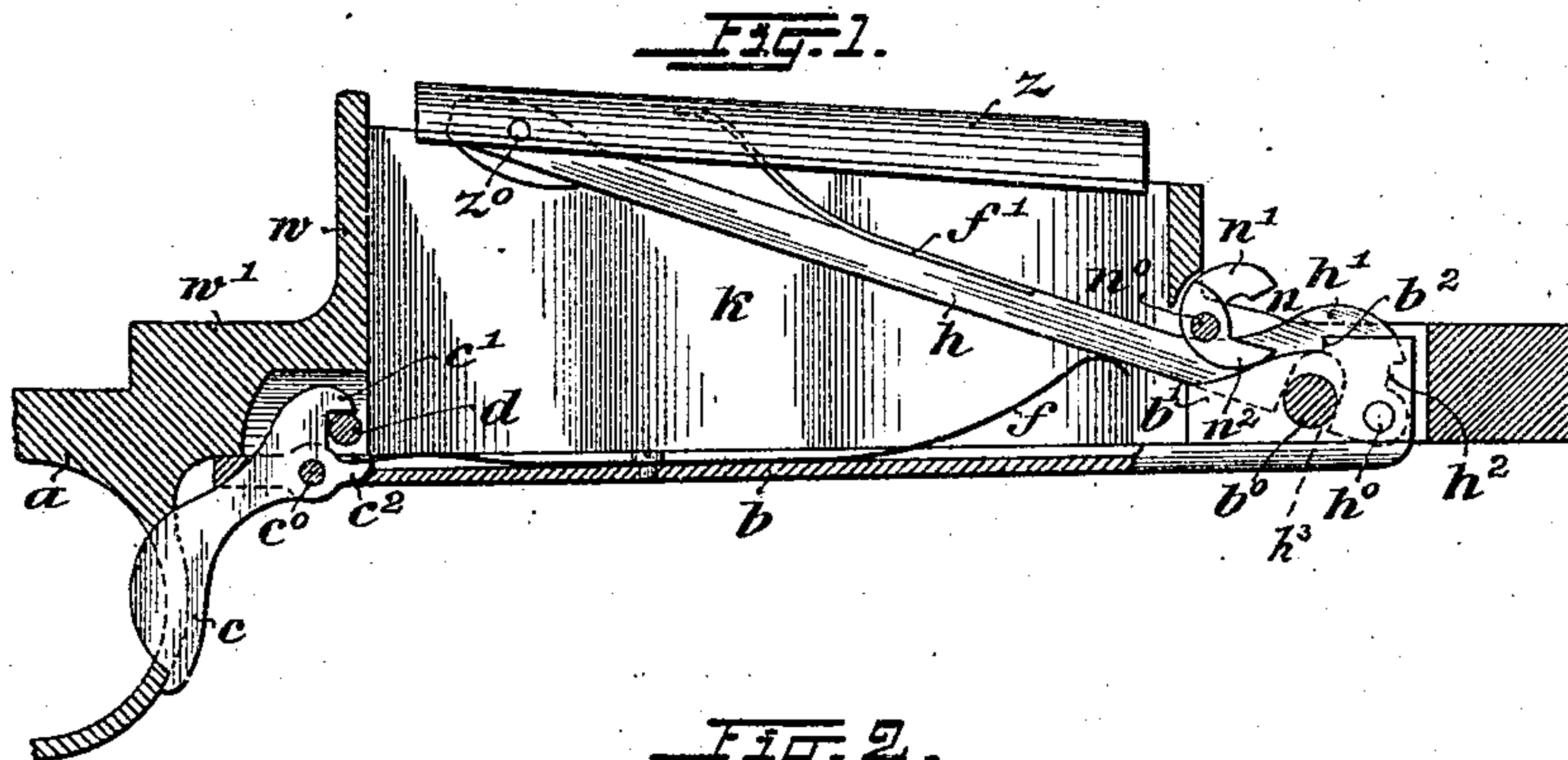
Patented Feb. 12, 1901.

C. R. WAGNER.  
CARTRIDGE MAGAZINE.

(Application filed Oct. 5, 1900.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses:  
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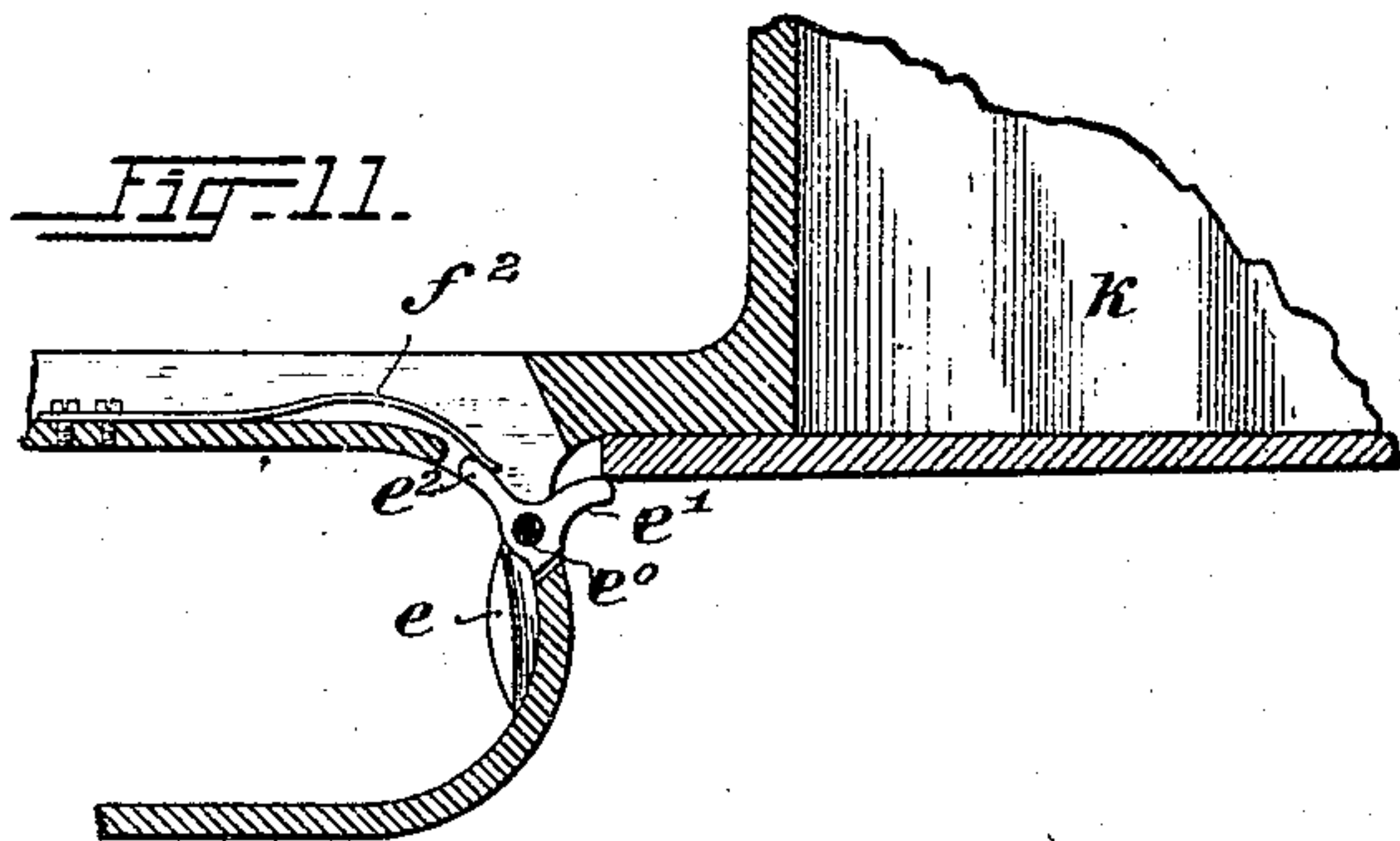
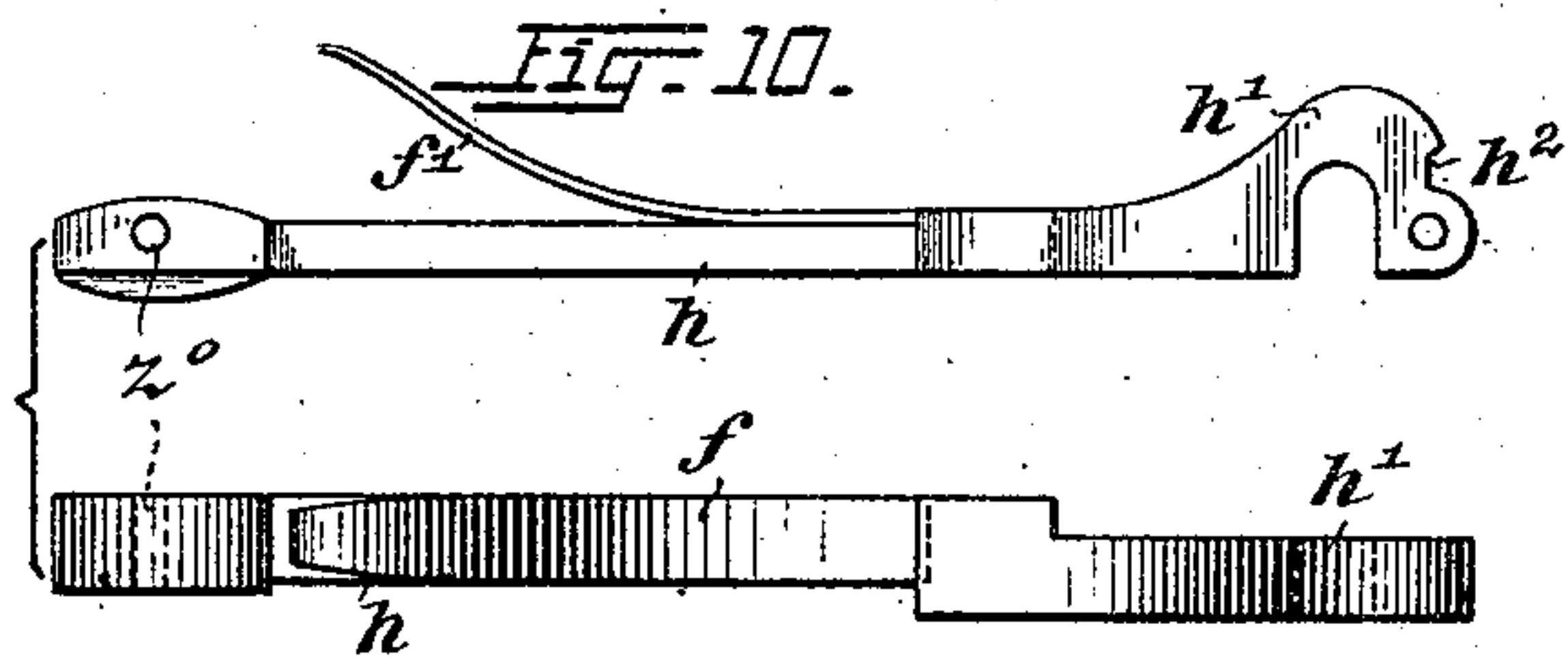
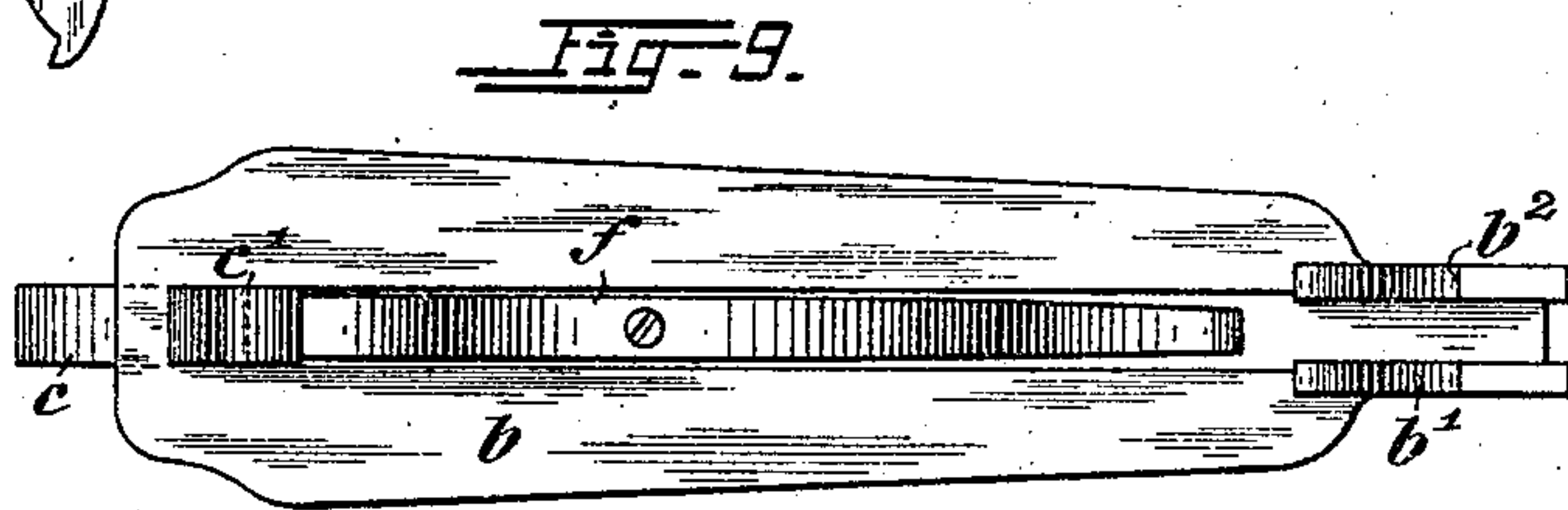
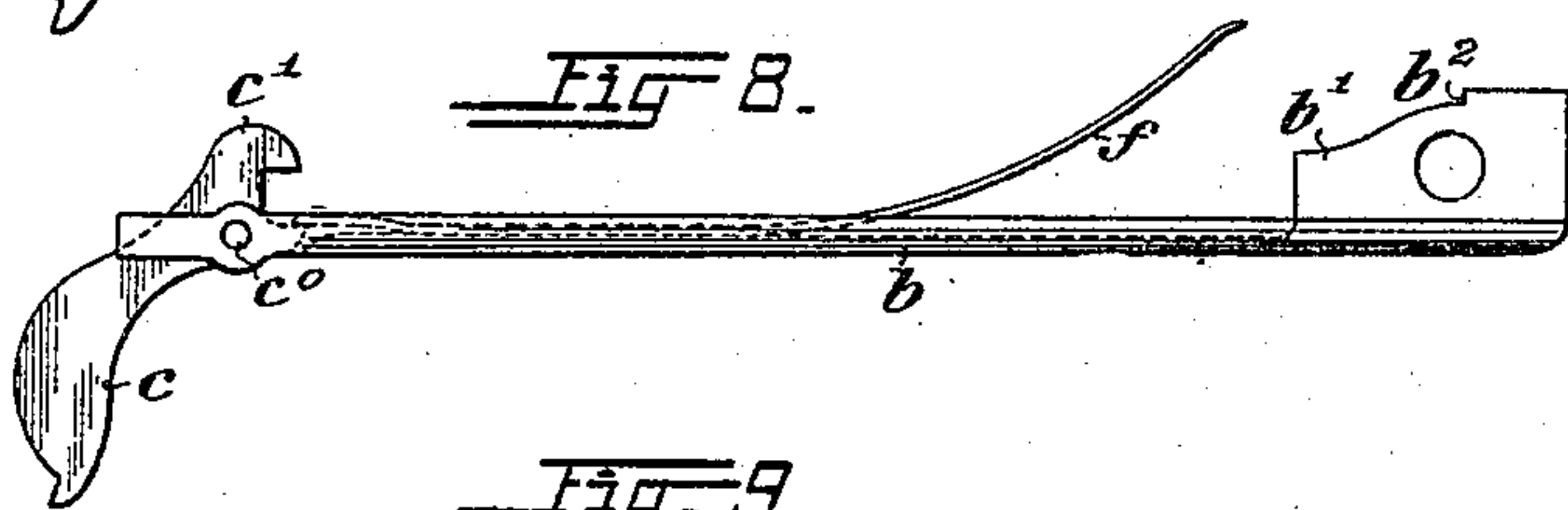
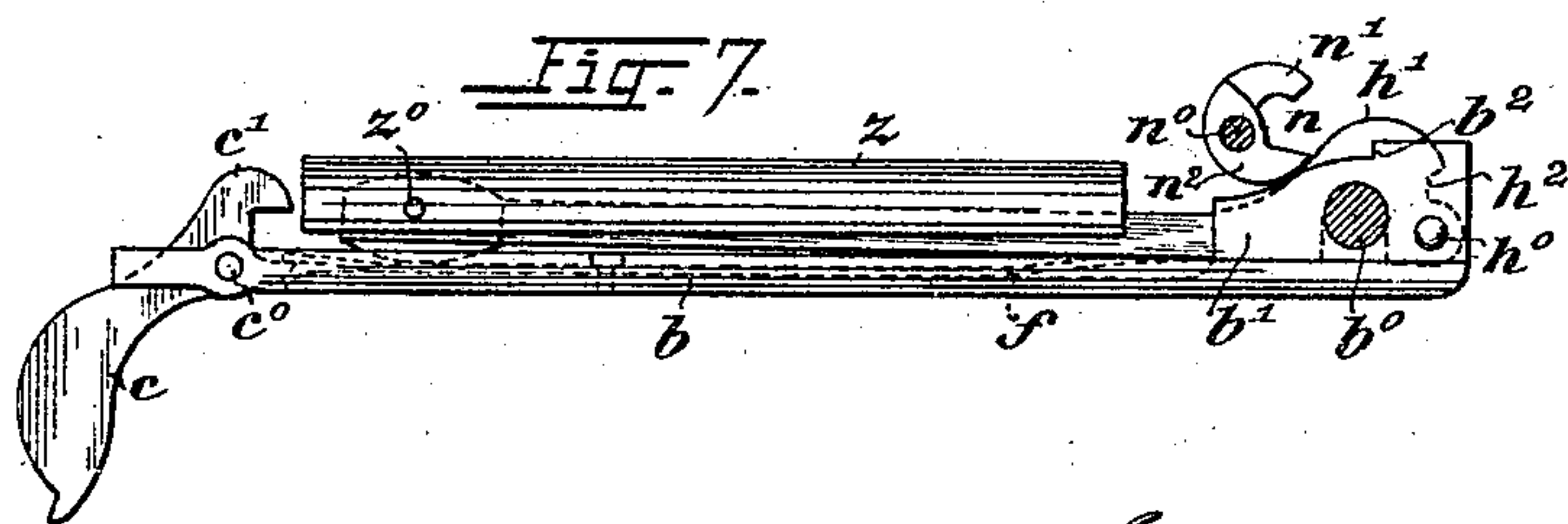
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# UNITED STATES PATENT OFFICE.

CARL ROBERT WAGNER, OF SUHL, GERMANY.

## CARTRIDGE-MAGAZINE.

SPECIFICATION forming part of Letters Patent No. 667,856, dated February 12, 1901.

Application filed October 5, 1900. Serial No. 32,141. (No model.)

*To all whom it may concern:*

Be it known that I, CARL ROBERT WAGNER, mechanical engineer, a subject of the King of Prussia, German Emperor, residing at Bahuhofstrasse 58<sup>c</sup>, Suhl, in the Kingdom of Prussia, Germany, have invented certain new and useful Improvements in or Connected with Magazines for Cylindrical-Breech Rifles or Small-Arms; 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.

This invention relates to a box-shaped magazine, opening through its hinged or folding bottom, for rifles or the like, the subject of the improvement being an arrangement whereby as the hinged bottom plate is opened the lever or arm which retains the cartridge-feeder is by positive mechanical action turned down upon the inner face of such bottom plate and retained in this lowered position until the bottom plate is turned back into its place, or, in other words, till the magazine is once more closed. Furthermore, in consequence of the arm being secured in its turned-down position the pivoted cartridge-feeder arm cannot be opened unintentionally while the magazine-bottom is open—that is, before it has been locked. The means whereby the positive depression of the feeder-lever is effected at the moment of opening the magazine-bottom is a swinging pressure-lever suspended or pivoted in the magazine-wall, which is so operated or controlled by the magazine-bottom itself while the latter is being moved that in accordance with the progress of its movement it gradually depresses the feeder-arm against the inner face of the magazine-bottom.

One form of the improved apparatus is by way of illustration represented in the accompanying drawings, in which—

Figure 1 is a longitudinal section of the magazine with its bottom closed. Fig. 2 is a similar section of the same with the bottom plate turned down to its extreme “open” position. Figs. 3 and 4 illustrate two intermediate positions of the parts referred to. Fig. 5 comprises a front elevation and a perspective view of the pressure-lever. Fig. 6 is a vertical cross-section of the magazine

charged and with its bottom plate locked. Fig. 7 shows the bottom plate detached, with the cartridge-feeding mechanism in the position which its several parts occupy while, as illustrated in Fig. 6, the magazine is charged with cartridges. Fig. 8 is another detached view of the bottom plate, showing the spring which controls the feeder-arm and the breech-lever. Fig. 9 is a top view or plan corresponding with Fig. 8. Fig. 10 represents a side elevation and a plan of the cartridge-feeder lever or arm, and Fig. 11 is a detail view of a modification.

The bottom plate *b* is made capable of turning or oscillating by being mounted on the hinge-pin *b*<sup>0</sup> at its forward end. At its rearward end there is arranged the catch or lever *c*, the outer longer arm of which engages in a notch or slot *a*<sup>1</sup>, provided in the trigger-guard, Figs. 1 and 2, while the inner shorter arm *c*<sup>1</sup> so long as the magazine-bottom is closed remains in engagement with a pin or stud *d*, firmly fixed in the wall of the magazine, thereby retaining the bottom in its closed or locked position.

The cartridge-feeding lever or arm *h* is arranged to swing or turn on the pivot *h*<sup>0</sup> in the front part of the bottom plate *b*, where the latter is provided with cheeks or lugs *b*<sup>1</sup> and where the said lever *h*, by means of a suitable notch *h*<sup>3</sup>, provided for the purpose, engages with the hinge-pin *b*<sup>0</sup> of the said bottom plate.

The feeder arm or lever *h* itself is placed under the control of a flat spring *f*, fastened to the inner face of the bottom plate *b*, while the feeder proper, *z*, linked or jointed to the said feeder-arm *h* by means of the pivot *z*<sup>0</sup>, is controlled by the spring *f*<sup>2</sup>, secured to the arm *h*, the arrangement being such that the first-named spring *f* at the same time retains the lever *c* in its closed position, its free rearward end acting upon the projecting arm *c*<sup>2</sup> of such lever *c*, revoluble on the pivot *c*<sup>0</sup>. For the reception of the upper part *c*<sup>1</sup> of this lever *c* the part *w*<sup>1</sup>, projecting from the magazine-wall *w*, is conveniently recessed, so as to make room for the said lever *c* to work in.

At the front end of the magazine *k*, over the feeder-arm *h*, the pressure-lever *n*, constructed as a bell-crank lever, the lower arm of which is formed double or forked, is adapt-



ed to swing or turn on the pivot  $n^0$ . The lower arms  $n^2 n^2$  of this pressure-lever having a slot or recess between them are adapted to take up their position against or in contact with the side lugs or cheeks  $b'$  of the bottom plate  $b$ , as is clearly shown in the drawings, whereas the upper arm  $n'$  of the said lever is situated above the feeder-lever  $h$ , which is provided with a notch  $h^2$  in its forward end, wherein the said arm  $n'$  of the pressure-lever engages and is held at rest in its terminal position, while the magazine-bottom is open, as shown at Fig. 2.

The operation of the parts just described is as follows: As the hinged bottom  $b$  of the magazine is opened its cheeks or lugs  $b'$ , by means of their projections  $b^2$ , engage with the arms  $n^2$  of the pressure-lever, thereby imparting to it a rotary movement, which by its upper arm  $n'$ , engaging with the notch  $h^2$  of the feeder-lever  $h$ , is transmitted to the said feeder-lever  $h$ , so that when the magazine-bottom becomes fully open—that is to say, by the time it reaches its terminal position—the said feeder-lever comes to rest against the inner face of such bottom and its notch  $h^2$  engages the upper arm  $n'$  of the pressure-lever  $n$ , as shown at Fig. 2. In this situation of the parts the cartridges may fall from the magazine unimpeded or be readily removed by hand, and the magazine may with equal facility be recharged from below. During the closing movement of the magazine-bottom  $b$  the projections  $b^2$  release the arms  $n^2$  of the pressure-lever and the feeder-spring  $f$  again comes into operation. While the magazine continues charged, the said feeder-spring  $f$  is entirely embedded in a suitable recess provided for the purpose in the bottom plate  $b$ , so as to leave the available depth of the magazine undiminished, as shown more particularly at Figs. 6 and 7. The feeder-lever  $h$  is preferably located under the projecting part of the corrugated plate which forms the feeder  $z$ , so as to reduce the space it takes up in the magazine-chamber, at the expense of the depth of the latter, to the least conceivable minimum. Besides, the employment of feeder mechanism, such as is shown in the drawings, enables both the spring  $f$  of the feeding-lever  $h$  and the spring  $f'$  of the feeder proper,  $z$ , to be so constructed as to insure uniformity in the process of raising the cartridges.

The most simple method of opening the magazine-bottom  $b$  is by applying pressure from within the trigger-guard  $a$  upon the portion of the arm of the locking catch or lever  $c$  which projects through the slot  $a'$  into such trigger-guard.

As illustrated in the drawings, the lever-arm just mentioned is preferably formed to fit the slot  $a'$  of the trigger-guard as snugly as possible, so that there should be no pro-

truding or bulging parts likely to interfere with the ready manipulation of the firearm for ordinary purposes or to injure the hands or damage the clothes of the marksman as he shoulders the arm.

A modified form of the locking catch or lever is presented in Fig. 11. This lever, which is here marked  $e$ , is pivoted not to the magazine-bottom, but to the trigger-guard  $a$ , so that its lower longer arm is situated within such trigger-guard, while an upper shorter arm thereof,  $e$ , protruding outward through the trigger-guard, engages with the lower edge of the magazine bottom plate  $b$  and retains the same in the closed position by the aid of a spring  $f^2$ , depressing an inwardly-directed arm  $e^2$  of the same lever. The pivot  $e^0$  of such lever  $e$  is mounted in the trigger-guard  $a$ .

What I claim is—

1. The combination, with a cartridge-magazine, a pivoted bottom plate, and a pivoted feeding-lever; of a bell-crank pressure-lever pivoted to the magazine adjacent to the pivot of its said bottom plate and engaging with the said bottom plate and feeding-lever, substantially as set forth.
2. The combination, with a cartridge-magazine, and a pivoted bottom plate therefor; of a feeding-lever pivoted to the said bottom plate in front of the pivot thereof and provided with a notch  $h^3$  for engaging with the said pivot, and a bell-crank pressure-lever pivoted to the magazine behind the pivot of the said bottom plate and engaging with the said bottom plate and feeding-lever, substantially as set forth.
3. The combination, with a cartridge-magazine, and a pivoted bottom plate therefor having projecting shoulders  $b^2$ ; of a feeding-lever pivoted to the said bottom plate and provided with a notch  $h^2$ ; and a bell-crank pressure-lever pivoted to the magazine and straddling the said feeding-lever and engaging with the said shoulders and notch, substantially as set forth.
4. The combination, with a cartridge-magazine, a pivoted bottom plate, and a pivoted feeding-lever; of a bell-crank pressure-lever pivoted to the magazine adjacent to the pivot of its said bottom plate and engaging with the said bottom plate and feeding-lever, a catch-lever pivoted to the free end portion of the said bottom plate, a single spring operating the said feeding-lever and catch-lever, and a catch on the magazine for the said catch-lever to engage with, substantially as set forth.

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

CARL ROBERT WAGNER.

Witnesses:

ERNEST GUMPERT,  
E. DEL STROTHER.