

C. RÖSTEL.

MEANS FOR SETTING THE TIME FUSES OF CARTRIDGES, &c.

APPLICATION FILED APR. 12, 1902.

NO MODEL.

Fig. 4.

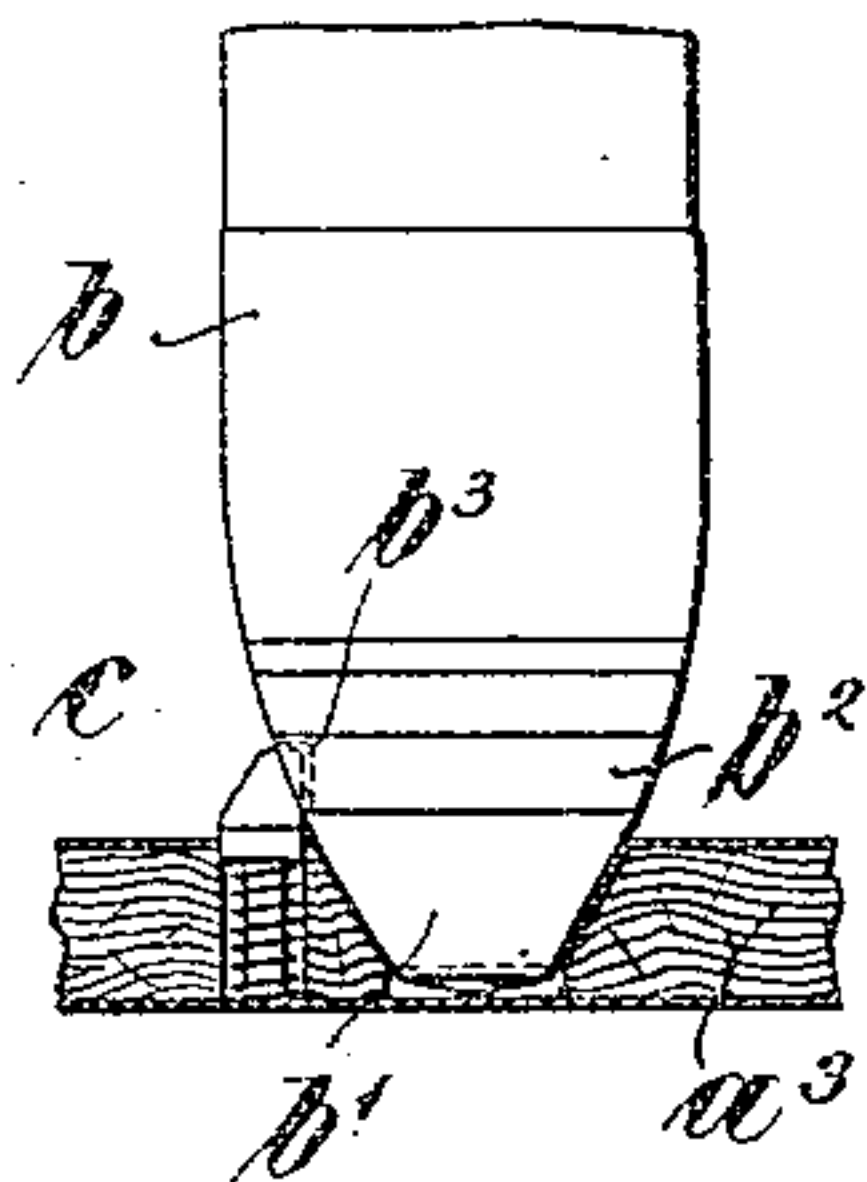


Fig. 1.

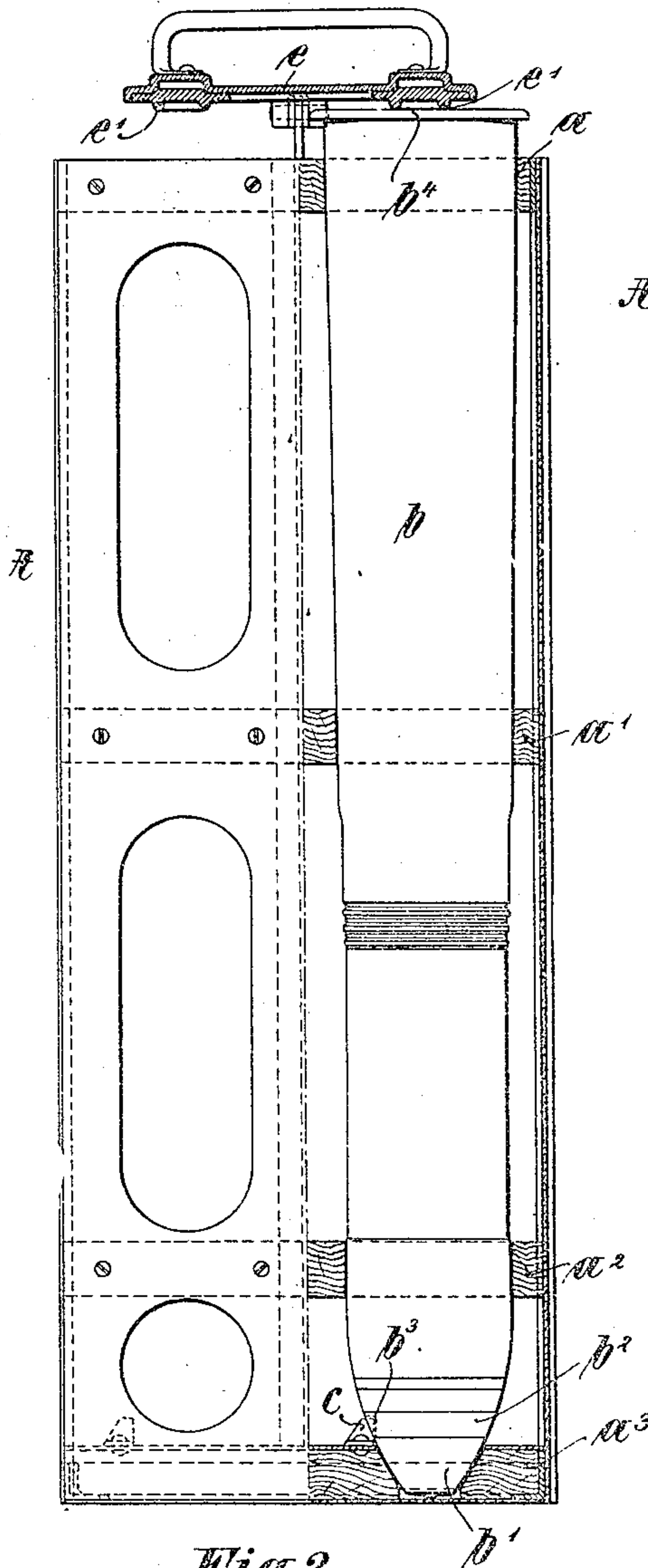


Fig. 3.

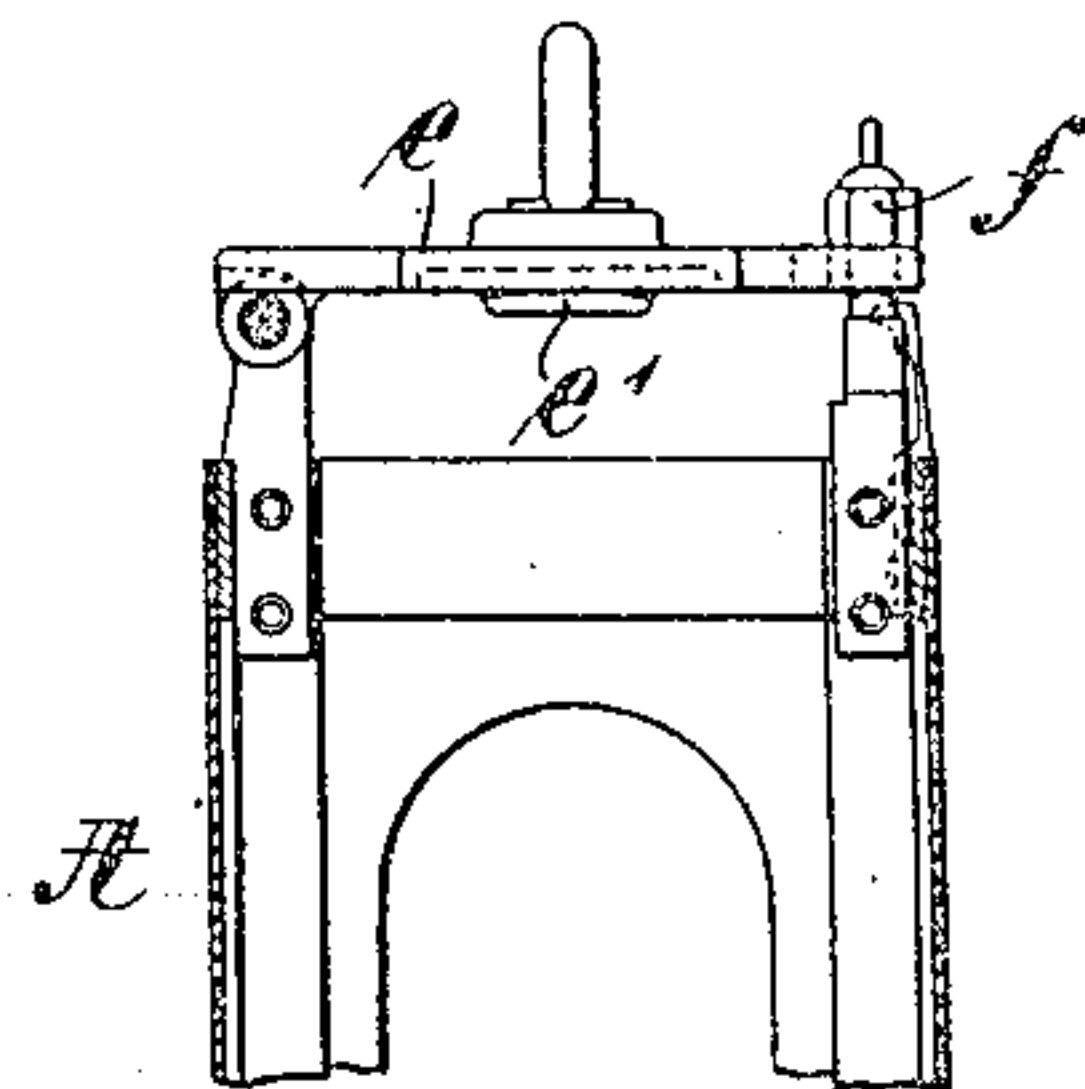


Fig. 5.

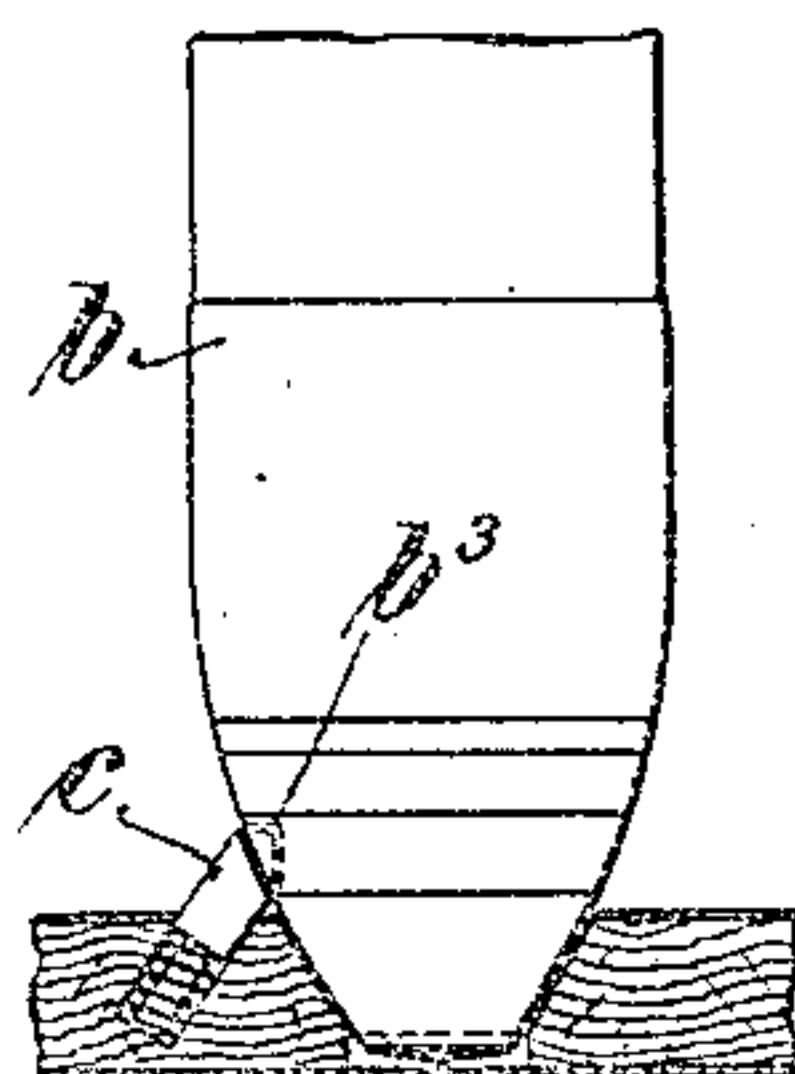


Fig. 7.

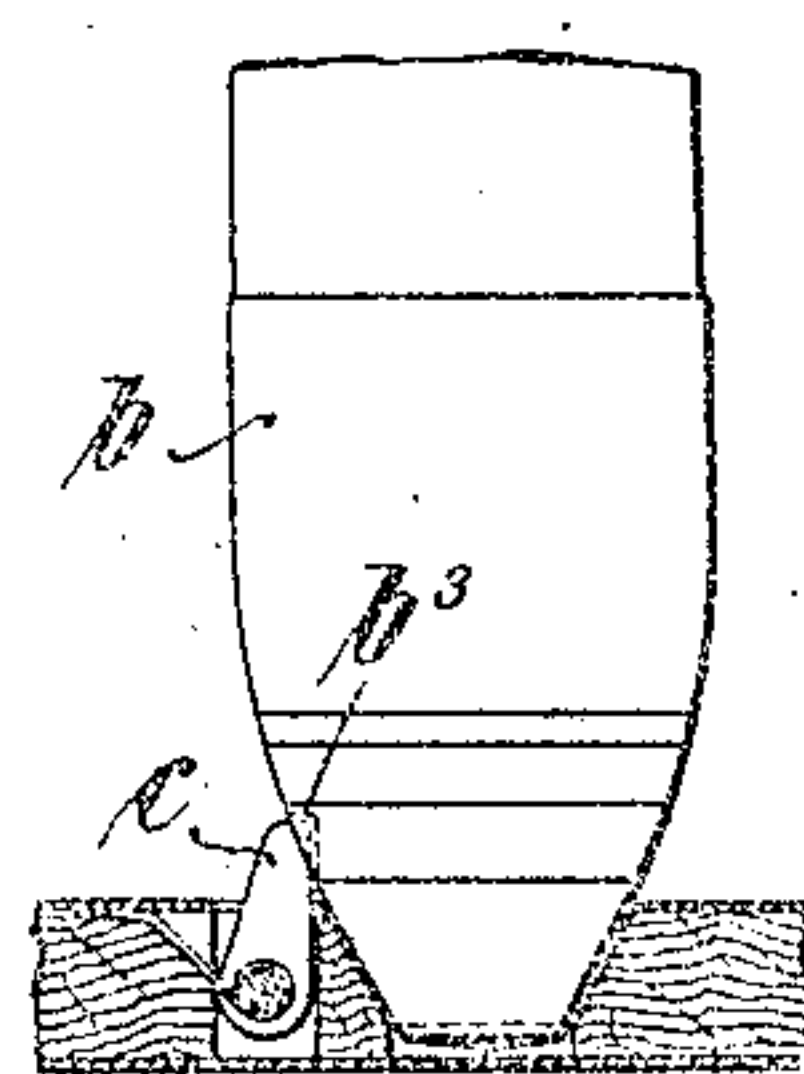


Fig. 6.

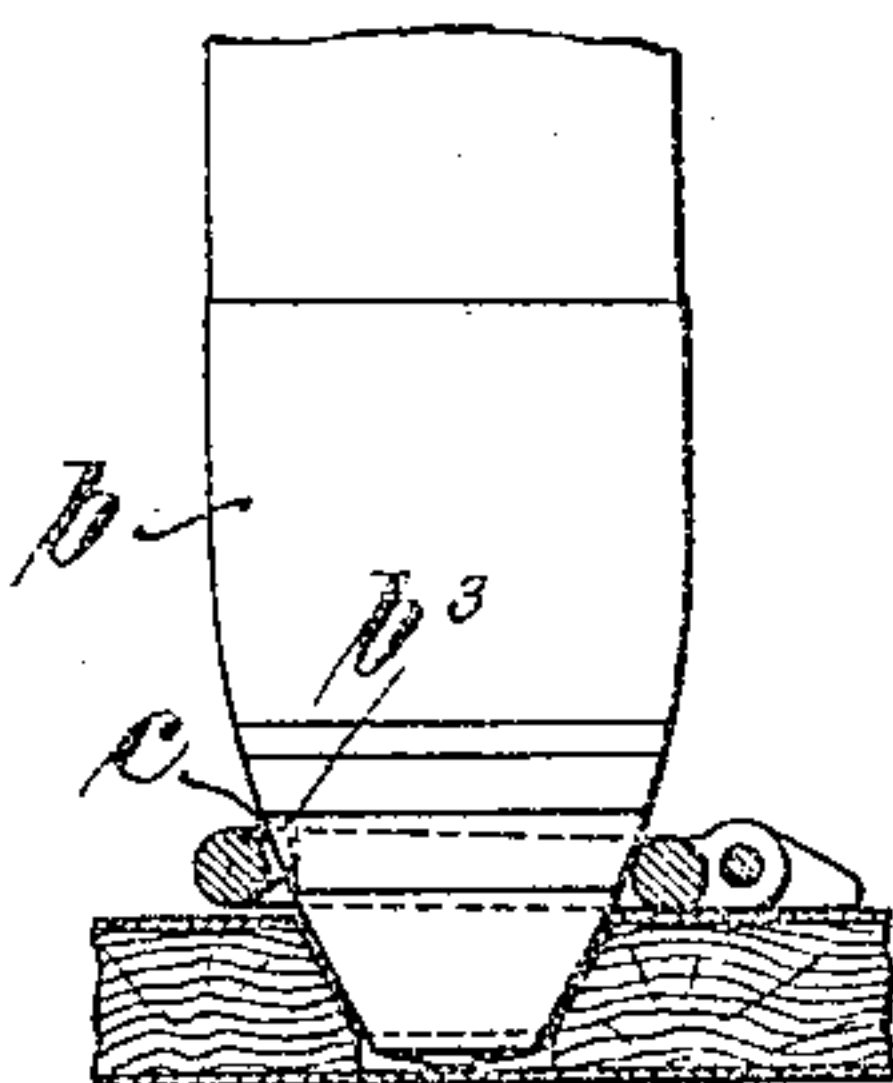


Fig. 8.

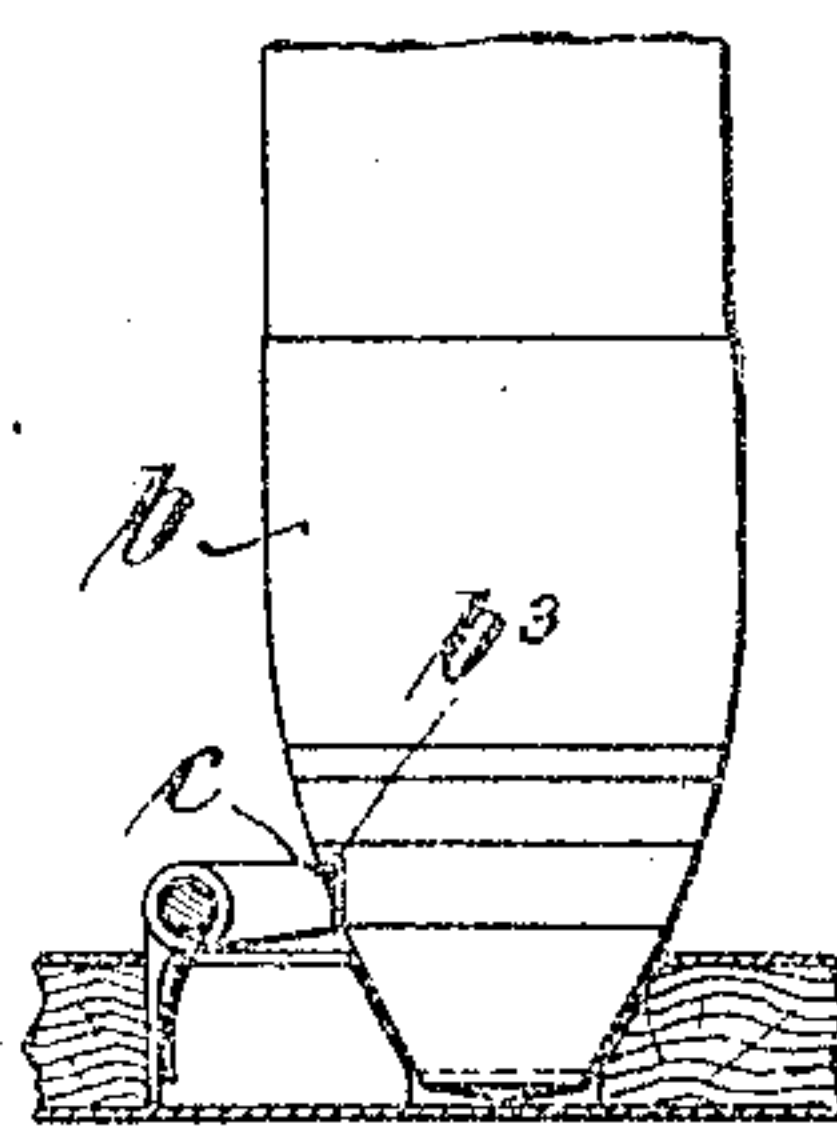
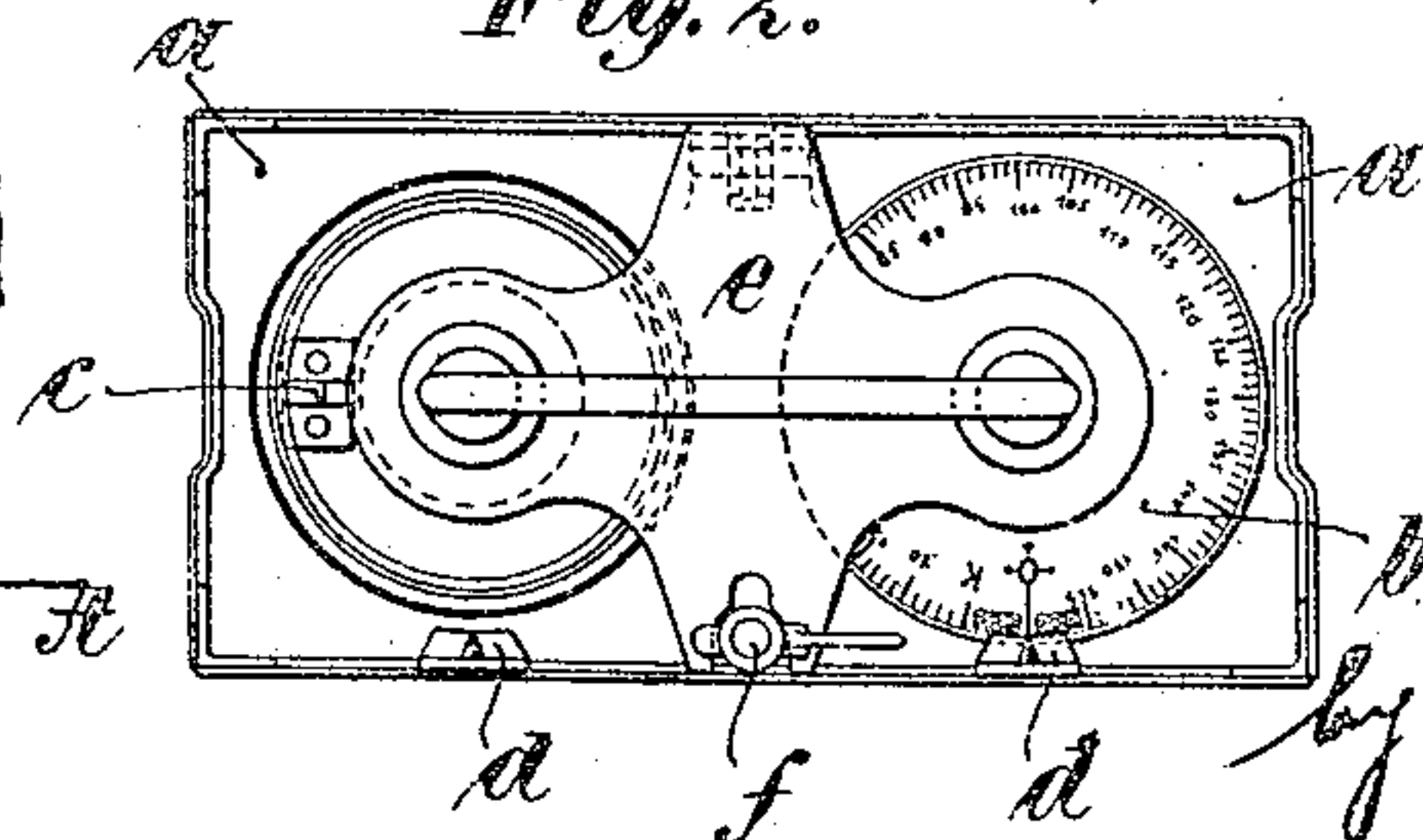


Fig. 2.



Witnesses:

Anton Schöper  
F. H. Schott

Inventor:

Carl Röstel,  
by Max Singer  
his attorney.



# UNITED STATES PATENT OFFICE.

CARL RÖSTEL, OF CHARLOTTENBURG, GERMANY.

## MEANS FOR SETTING THE TIME-FUSES OF CARTRIDGES, &c.

SPECIFICATION forming part of Letters Patent No. 741,838, dated October 20, 1903.

Application filed April 12, 1902. Serial No. 102,538. (No model.)

*To all whom it may concern:*

Be it known that I, CARL RÖSTEL, engineer, a subject of the Emperor of Germany, residing at 93 Fasanenstrasse, Charlottenburg, in the Empire of Germany, have invented certain new and useful Improvements in or Connected with Means for Setting the Time-Fuses of Cartridges or the Like, of which the following is a specification, reference being had to the drawings hereunto annexed and to the letters marked thereon.

The invention relates to means whereby the setting of the time-fuses of cartridges or projectiles may be effected by turning or rotating said cartridges while lying in their seats or beds in the limber-box or in the ammunition-boxes without necessitating the removal of the same therefrom; and the object thereof is to save time in setting the fuses and also to dispense with the use of tools, such as keys or the like.

In the accompanying drawings, Figure 1 shows an ammunition-box, partly in section and containing a cartridge or projectile in position in its bed, having the present invention applied thereto; and Fig. 2 is an end view thereof. Fig. 3 is a detail thereof. Figs. 4 and 5 show engaging lugs or pins spring-actuated longitudinally. Fig. 6 represents a modified form in which the engaging pin may be brought into and out of operative relation to the timing-ring. Figs. 7 and 8 show pivoted spring-actuated engaging pins or lugs.

Throughout the specification and claims I use the term "ammunition-box" in its more technical sense as defining the limber-box or box for storing and transporting ammunition generally as distinguished from a temporary receptacle, rack, or other support for the cartridge intermediate the ammunition-box and the gun.

In the foremost part of the bed  $a$   $a'$   $a^2$   $a^3$  within the box A—that is to say, that part  $a^3$  in which the point of the projectile  $b'$  seats—is arranged a lug or projection  $c$  or the like, fixed so as to be immovable in a lateral direction and which enters into or engages a suitable notch or recess  $b^3$ , provided in the setting-ring or timing-disk  $b^2$  of the projectile, when the entire cartridge  $b$  is turned bodily in its bed. Upon the rear end or base  $b^1$  of

the cartridge  $b$  is provided a scale, and in fixed relation to the lug or projection  $c$ , a co-acting bench mark, line, or the like  $d$  is provided upon the rearmost part  $a$  of the cartridge-bed, which mark corresponds in position to a mark or line on the nose of the projectile  $b'$  or on the fuse-disk  $b^2$  and permits accurate setting to said scale by turning the entire cartridge  $b$  in its bed. In this bed it is normally held in its position by means of the folding cover  $e$ , which presses with its parts  $e'$  against the base of the cartridge and which is fastened by means of a thumb-screw  $f$ .

The drawings illustrate, by way of example, means for carrying out the above-mentioned arrangement, and it will be understood from the examples and modifications shown in Figs. 4 to 8 that the structural details, which essentially will always be dependent upon the mode of packing or storing the ammunition, as well as upon the form of the ammunition itself, are not limited in any way to this particular kind of arrangement, provided only that they serve the essential purpose of the invention—namely, the setting of time-fuses by turning cartridges in their beds.

Having now particularly described and ascertained the nature of the said invention and in what manner the same is to be performed, I declare that what I claim is—

1. Means for setting the time-fuses of cartridges and the like, comprising, in combination with an ammunition-box, means adapted to hold the timing mechanism against movement while permitting the free rotation of the cartridge.

2. Means for setting the time-fuses of cartridges and the like, comprising, in combination with an ammunition-box, means adapted to hold the timing mechanism against movement while permitting the free rotation of the cartridge, and means for indicating the extent to which the cartridge is rotated.

3. Means for setting the time-fuses of cartridges and the like, comprising, in combination with an ammunition-box, means adapted to hold the timing mechanism against movement while permitting the free rotation of the cartridge, and an index upon a fixed portion



of the device adapted to cooperate with an index upon the cartridge whereby the degree of relative rotation may be determined.

4. Means for setting the fuses of cartridges and the like, comprising an ammunition-box adapted to hold the timing mechanism against movement while permitting the free rotation of the cartridge, and an index upon the rear of the box adapted to cooperate with a graduated scale carried by the cartridge whereby the degree of relative rotation may be determined.

5. Means for setting the time-fuses of cartridges, comprising an ammunition-box, and catch mounted thereon and adapted to engage and hold the timing-ring of the cartridge while at the same time leaving the cartridge free to be turned on its axis.

6. Means for setting the time-fuses of cartridges, comprising an ammunition-box fitted to receive the cartridge and provided with a spring-actuated lug adapted to engage the timing-ring and to hold the same in fixed relation to the ammunition-box while permitting the cartridge to be rotated upon its axis in its bed.

7. Means for setting the time-fuses of cartridges, comprising an ammunition-box fitted to receive the cartridge and having mounted thereon a spring-actuated lug adapted to en-

gage a recess in the timing-ring and to hold the ring in fixed relation to the ammunition-box while permitting the free rotation of the cartridge itself, and an index adapted to cooperate with a graduated scale to indicate the degree to which the cartridge is rotated relative to the engaging lug and timing-ring.

8. Means for setting the time-fuses of cartridges, comprising an ammunition-box fitted to receive the cartridge and provided in that portion adapted to receive the timing-ring of the cartridge with a spring-actuated lug adapted to lie in a recess in the timing-ring and to secure the ring against rotary movement relative to the ammunition-box while allowing the cartridge itself free rotary movement upon its axis, and an index upon the ammunition-box adapted to cooperate with a graduated scale upon the base of the cartridge, whereby the act of rotating the cartridge in its bed will set the time-fuse and at the same time automatically indicate upon the scale the time to which said fuse is set.

In witness whereof I have hereunto signed my name this 29th day of March, 1902, in the presence of two subscribing witnesses.

CARL RÖSTEL.

Witnesses:

HENRY HASPER,

WOLDEMAR HAUPT.