

F. DEUBLER.
SAFETY DEVICE FOR GRENADES PROJECTING FROM SMALL ARMS.
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980,215.

Patented Jan. 3, 1911.

Fig. 1.

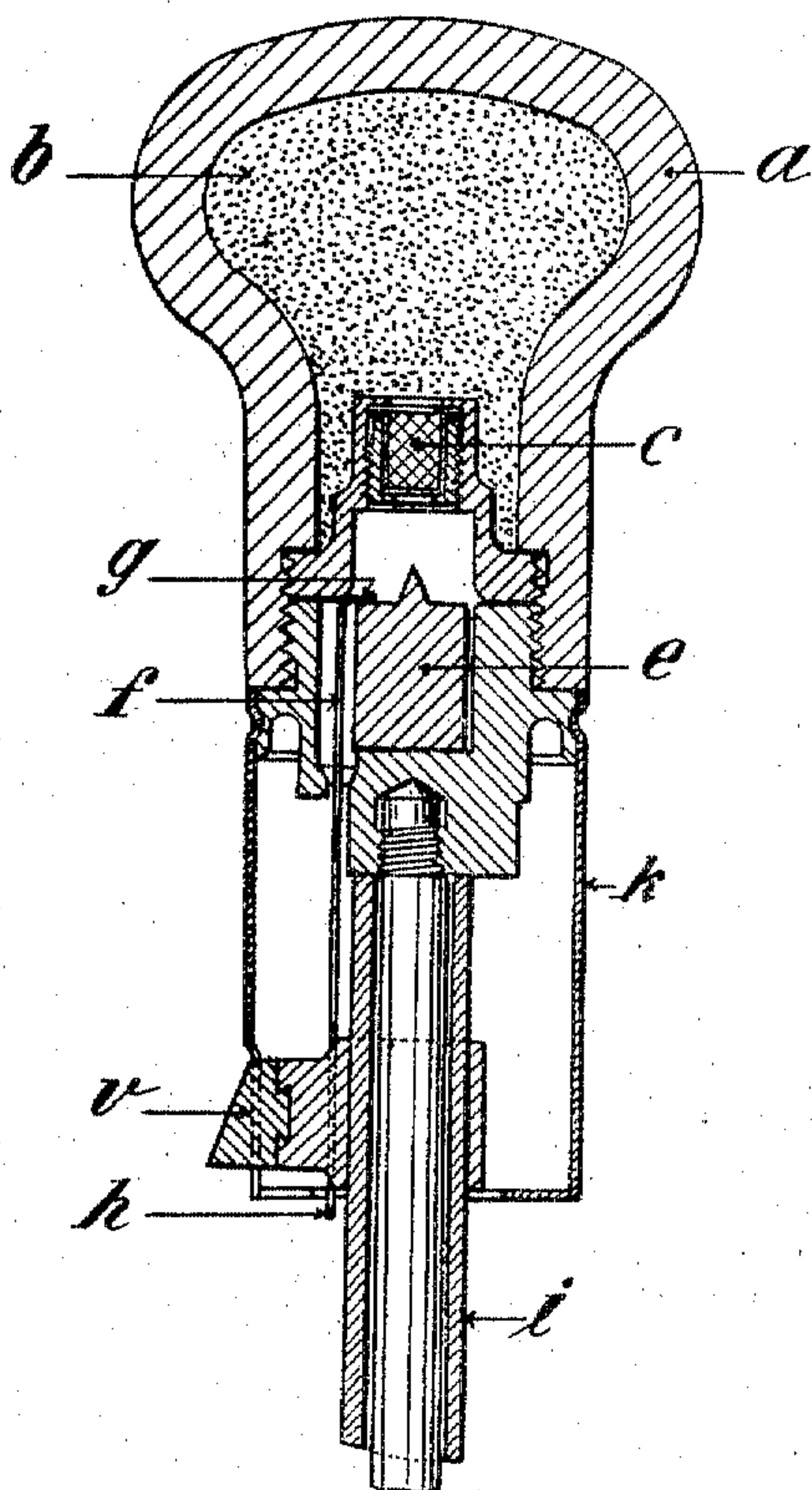
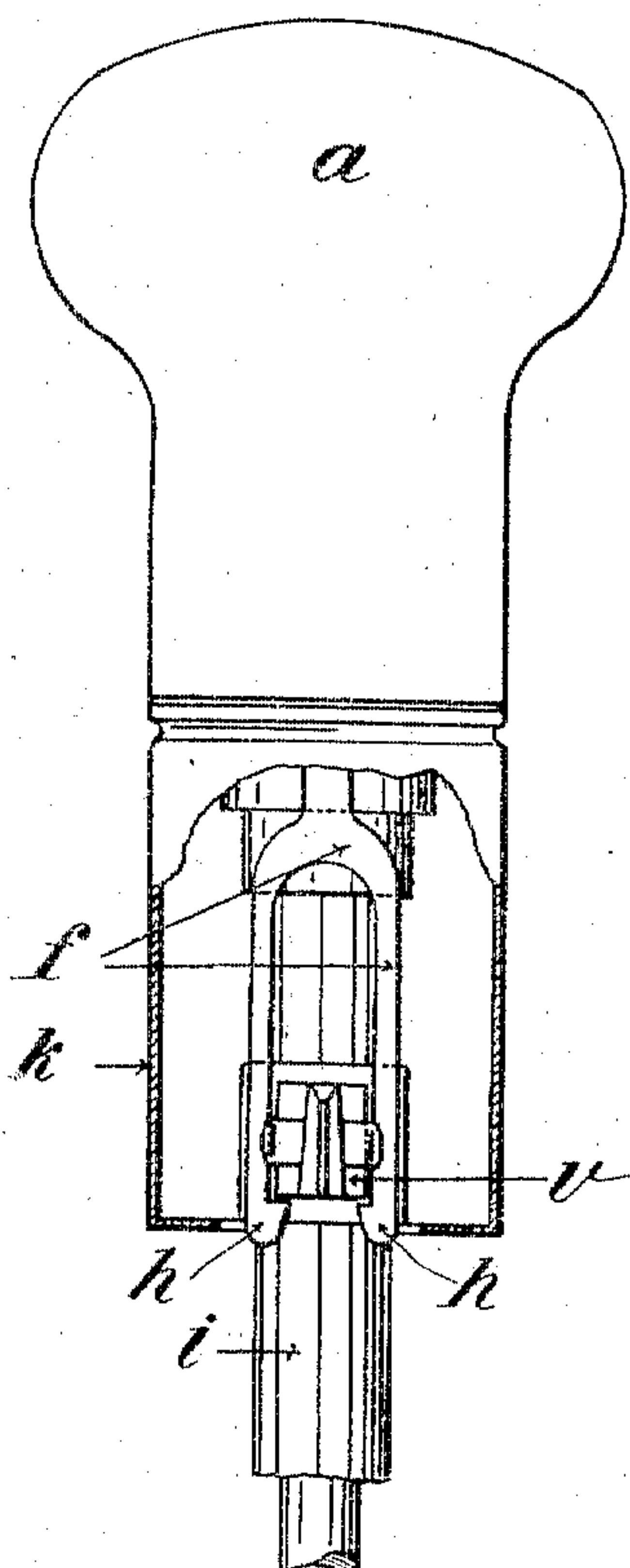


Fig. 2.



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UNITED STATES PATENT OFFICE.

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SAFETY DEVICE FOR GRENADES PROJECTING FROM SMALL-ARMS.

980,215.

Specification of Letters Patent.

Patented Jan. 3, 1911.

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To all whom it may concern:

Be it known that I, FRANZ DEUBLER, a citizen of Austria, and resident of Vienna, in the Province of Lower Austria and Empire of Austria-Hungary, have invented certain new and useful Improvements in Safety Devices for Grenades Projecting from Small-Arms, of which the following is a specification.

10 The employment of grenades, which are projected from small arms, has latterly become well known. Such grenades are provided with fuses of various kinds, which fuses must be provided with a device adapted to prevent a premature explosion of the grenades when they are transported and handled. This purpose has been served by a protruding contrivance which must be removed immediately before the rifle is fired.

20 If, after the safety device has been removed, the rifle for any reason is not discharged, the grenade thereupon constitutes a source of danger to the firer, inasmuch as an explosion may occur as the result of a slight shake or accidental drop.

25 Accordingly the object of the present invention is to so arrange the safety devices of grenades which are projected from small arms, that the disengagement of the safety device will occur only when the device is to be actually employed, consequently automatically by the act of firing.

30 In the accompanying drawing which illustrates a representative example of the present invention, Figure 1 is a longitudinal section and Fig. 2 a plan view partly broken away of a grenade fitted with the improved safety device.

35 a is the grenade, b the exploding charge, c the capsule which serves to ignite the charge b , and e the percussive bolt with the striking pin which, on striking the capsule c , cause the latter to ignite. In order to prevent the percussive bolt e from being driven forward against the capsule c should the grenade be accidentally dropped or shaken while being carried or during transport, a safety device f is provided. This device is formed as a rod or strip which engages with and retains the percussive bolt by means of the hook-shaped end g and prevents contact of the bolt with the capsule,

and which is adapted to engage with the barrel of a rifle by means of its rearwardly protruding end. For this purpose in the example illustrated, the safety device is forked rearwardly, thus providing a pair of prongs which are formed with inwardly-directed hook-shaped extremities h .

40 The method of employing the grenade is to insert the centering rod in the muzzle of the rifle and press home, whereupon the forked extremity of the safety device slides around the fore-sight v and, when the grenade is fully in position on the muzzle of the barrel, the hook-shaped extremities h engage behind the fore-sight. The grenade applied in this manner can not fall off the barrel even if the muzzle of the latter be depressed, as it has a secure hold on the fore-sight.

45 On firing, the grenade will leave the barrel, whereupon the hook g of the safety device f will be bent open due to the latter being retained by the fore-sight of the barrel z . The safety device will be withdrawn from the grenade, thus acting as a drag on the percussive bolt e and then freeing the latter. On the impact of the grenade, the percussive bolt can consequently strike forward against the capsule c and explode the grenade.

50 In order to guard against the grenade catching in any object by the forked end of the safety device a casing k may be fitted to the rear portion of the grenade so as to entirely inclose the safety device and prevent the same from becoming accidentally engaged and thereby possibly withdrawn from the grenade which would render the latter unsafe.

I claim:

1. In a grenade adapted to be projected from small fire-arms, the combination with the shell containing the explosive charge, and the ignition capsule, of a movable bolt and a bar provided with a bent portion adapted to engage the said bolt and with a forked portion adapted to engage the barrel of a fire-arm to be retained thereby, thus releasing the said bolt when the grenade is projected.

2. In a grenade adapted to be projected from small fire arms, the combination with

the shell containing the explosive charge,
and the igniting capsule of a movable bolt,
means for holding said bolt in inoperative
position and protruding from the grenade
5 to engage the barrel of the fire-arm, and a
casing fitted to the rear end of the grenade
and inclosing said means.

Signed at Vienna in the Province of
Lower Austria and Empire of Austria-Hun-
gary this 17th day of September A. D. 1909.
FRANZ DEUBLER.

Witnesses:

WILHELM BERGER,
AUGUST FUGGER.