

(No Model.)

E. O. WOOD.
DETONATOR.

No. 551,519.

Patented Dec. 17, 1895.

FIG. 1.

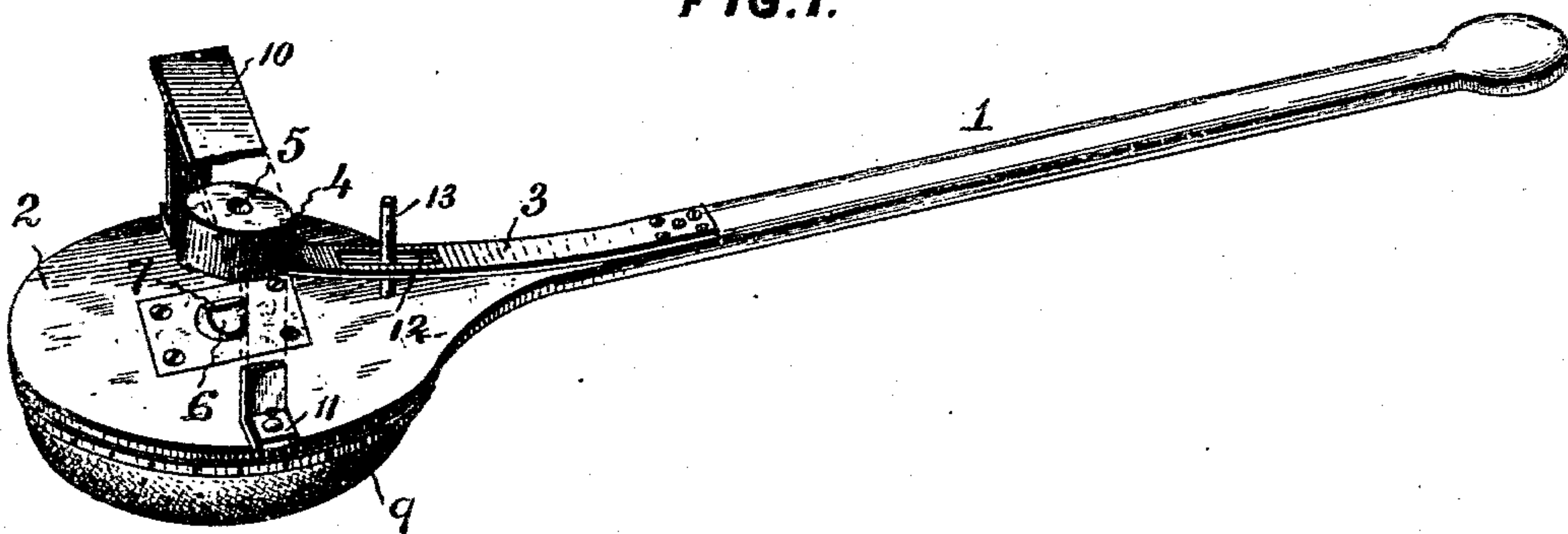
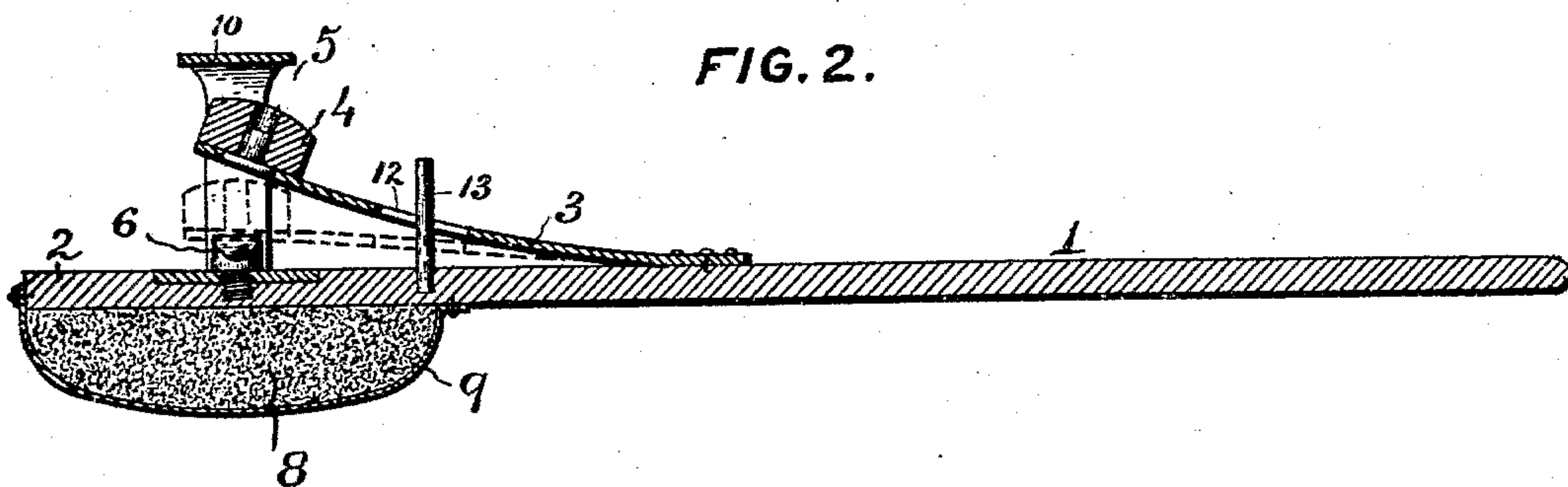


FIG. 2.



ATTEST.

E. O. Wood
Alex. Scott

INVENTOR.

Edwin O. Wood.

By *J. Henry Kaiser.*
Attorney.

UNITED STATES PATENT OFFICE.

EDWIN O. WOOD, OF FLINT, MICHIGAN.

DETONATOR.

SPECIFICATION forming part of Letters Patent No. 551,519, dated December 17, 1895.

Application filed August 22, 1895. Serial No. 560,161. (No model.)

To all whom it may concern:

Be it known that I, EDWIN O. WOOD, a citizen of the United States, residing at Flint, in the county of Genesee and State of Michigan, have invented certain new and useful Improvements in Detonators; 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.

My invention relates to an improved detonator, and has for its object to provide a detonator for the purpose of amusement by means of which a cartridge or cap may be exploded with a loud noise when a person is struck with the device, the blow and the sound of the explosion startling the person struck, to the amusement of the spectators.

To this end my invention consists in the novel features and in the construction, arrangement or combination of parts hereinafter described, and pointed out in the claims following the description, reference being had to the accompanying drawings, forming a part of this specification, wherein—

Figure 1 is a perspective view of my improved detonator, and Fig. 2 is a longitudinal central section thereof.

Referring to the drawings, the numeral 1 indicates a handle provided at one end with an enlargement or head 2. To the handle is secured one end of a leaf-spring 3 carrying at its opposite end a weight 4. The weight 4 is centrally apertured, as at 5, and the spring is so attached to the handle 1 that the weight 4 will normally be supported a short distance above or away from the head 2. Attached to the head 2, and in alignment with the aperture 5 in the weight 4, is an anvil 6, which is preferably provided with a knife-edge 7. The other side of the head 2 is provided with a pad 8, consisting of a leather covering 9 stuffed with hair or other suitable material.

In operation a blank cartridge is inserted in the aperture 5 of the weight 4, and when a blow is struck with the padded end of the device upon the body of a person the weight 4 is caused by the impact to violently abut against the anvil 6 and the cartridge is thereby exploded. The explosion of the cartridge occurs the instant the blow is struck, and the impact of the blow and the sound of the ex-

plosion combine to produce a startling shock to the person struck. The padding serves to render the impact of the blow harmless and painless, and the cartridge being carried upon the side of the head opposite the padded side no damage can occur from its explosion.

With a view to preventing the explosion of the powder damaging the apparel or body of the person struck I arrange a guard over the weight 4, consisting of a substantially U-shaped metallic strap 10, which is provided at its opposite extremities with perforated feet 11, by means of which, and suitable screws, as shown most clearly in Fig. 1, the said guard is secured in place upon the head 2 in such manner as to straddle or rest over the aperture in the weight 4. The guard, while permitting the free vibration of the weight, effectually operates to prevent the escape of burning powder. I also prefer to slot the shank of the spring 3, as at 12, and arrange therein a guide-pin 13 which operates to center the aperture in the weight 4 directly over the anvil 7, causing said weight to descend with perfect accuracy over the anvil and explode the cartridge.

Having described my invention, what I claim is—

1. The combination with the handle 1, having at one end a head 2, of an anvil 6 fixed on said head, and a weight 4, yieldingly attached to said handle and normally resting above said anvil, said weight being provided with a central aperture for the reception of a cartridge and operating when a blow is struck with the device to cause the cartridge to impinge against said anvil, substantially as described.

2. The combination with the handle 1, of an anvil 6 carried thereby, a spring secured at one end to said handle, and an apertured weight attached to the free end of said spring and disposed over said anvil, substantially as described.

3. The combination with the handle 1 having a head 2 padded upon one side, of an anvil 6 attached to the opposite side of said head, and an apertured weight freely suspended over said anvil, substantially as described.

4. The combination with the handle 1, of an anvil 6 carried thereby, an apertured weight freely suspended over said anvil and adapted

to be brought in contact therewith when a blow is struck with said handle, and a shield secured over and above said weight, substantially as described.

- 5 5. The combination with the handle 1, of an anvil 6 carried thereby, a spring secured at one end to said handle and provided intermediate its ends with a slot, a fixed guide pin disposed within said slot, and an apertured

weight attached to the free end of said spring 10 and disposed over said anvil, substantially as described.

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

EDWIN O. WOOD.

Witnesses:

JOHN H. HICOK,

HALLIE E. DAY.