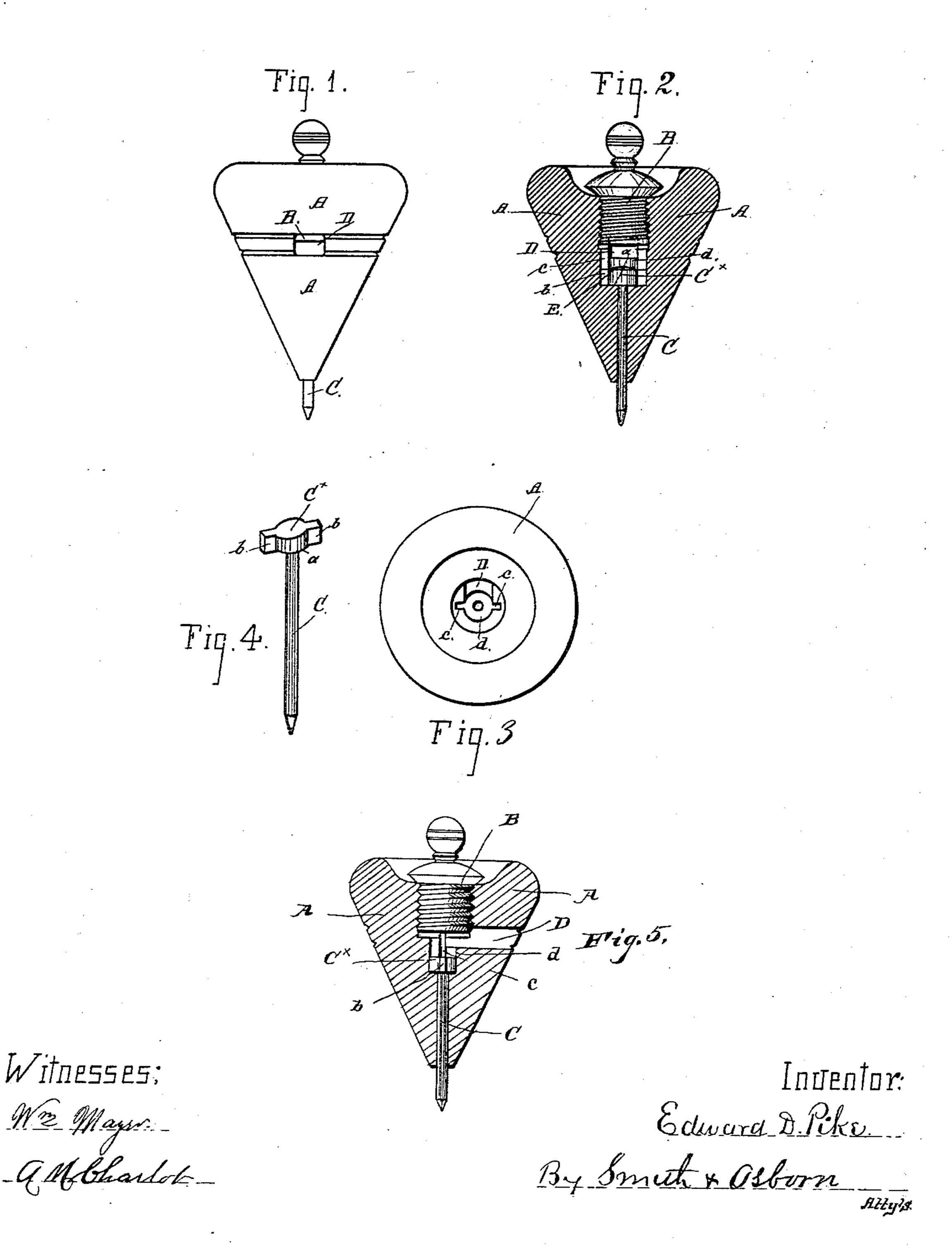
(No Model.)

## E. D. PIKE. DETONATING TOP.

No. 457,520.

Patented Aug. 11, 1891.



## United States Patent Office.

EDWARD D. PIKE, OF SAN FRANCISCO, CALIFORNIA.

## DETONATING TOP.

SPECIFICATION forming part of Letters Patent No. 457,520, dated August 11, 1891.

Application filed August 18, 1890. Serial No. 362,325. (No model.)

To all whom it may concern:

Be it known that I, EDWARD D. PIKE, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented a new and useful Detonating Top, of which the following is a specification.

This invention relates to a detonating spinning-top, usually spun by means of a cord

10 coiled around it.

It consists in forming a chamber in the body of the top to receive a screw-plug, the lower end of which forms an indurated or hardened surface, against which a hammer formed on the upper end of a movable spindle strikes upon a fulminating cap which causes an explosion of the fulminate. The lower end of the spindle forms the spinning point, and when this point is projected upon a hard substance the spindle is forced upward in the top and the explosion takes place to the delight of the spinner.

In the accompanying drawings, which form a part of this specification, Figure-1 is an elevation of my detonating top. Fig. 2 represents a transverse vertical section of the same. Fig. 3 is a top view of the top with the plug removed. Fig. 4 is a perspective view of the spinning and detonating spindle. Fig. 5 is a vertical section of the top when taken at right angles to the section shown in Fig. 2.

A is designed to represent the body of the top, which is chambered and screw-threaded to receive the screw-plug B, the lower end of

35 which forms an anvil or surface.

The lower portion of the top is bored to receive a spindle C, upon the upper end of which is formed a hammer  $C^{\times}$ , having a shoulder a, and wings or flanges b b, which fit into corresponding slots c c and a round chamber d in the point of the top, and when in position the point of the spindle extends a considerable distance from the end of the top.

The body of the top is pierced from one side at about mid-height of the top above the top of the hammer C\*, as at D, and through this hole or opening is passed the fulminate or cap E, (usually in the form of a wafer or half-wafer,) which drops down upon the face of the hammer C\*, sufficient space being left between the lower end of the screw-plug B and upper face of the hammer to produce the

necessary blow to explode the cap when the spindle is forced upward against the anvil so formed.

By having the exploding-chamber in the body of the top and the radial entrance thereto above the top of the hammer, the fulminate will be retained without being pressed between the hammer and the anvil, as in the case 6c where springs are used, so that when the top is thrown by the spinner a positive blow is given to the fulminate like that from the hammer of a gun, and less force is required and greater certainty attained in the explosion. 65

The spindle is dropped into its seat after the screw-plug has been removed, and the wings or flanges enter and follow the slotted guides until the shoulder of the spindle rests on its seat in the point of the top, and when 70 the plug is screwed home to its seat just above the fulminate-opening D the lower end thereof will limit the play or upward movement of the spindle and prevent the wings or flanges from extending above the guiding-slots, and 75 yet a sufficient space is had between the face of the hammer and face of the plug to give the necessary blow of the hammer against the face of the plug or anvil to explode the cap when the point of the spindle strikes a hard 80 substance, such as the floor of an apartment or top of a table. It should here be observed that the point of the spindle will project a sufficient distance for spinning purposes after it has been forced upward against the facing 85 of the plug or anvil to produce the concussion of the cap.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

In a detonating spinning-top, the combination, with a top-body having a radial opening, of a plug in the head of the top having an anvil-surface on its bottom and a movable spinning spindle projecting through the point 95 of the top, and having a hammer-head lying normally below the radial entrance, as set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal.

EDWARD D. PIKE. [L. s.] Witnesses:

C. W. M. SMITH, A. M. CHARLOT.