

Sept. 18, 1945.

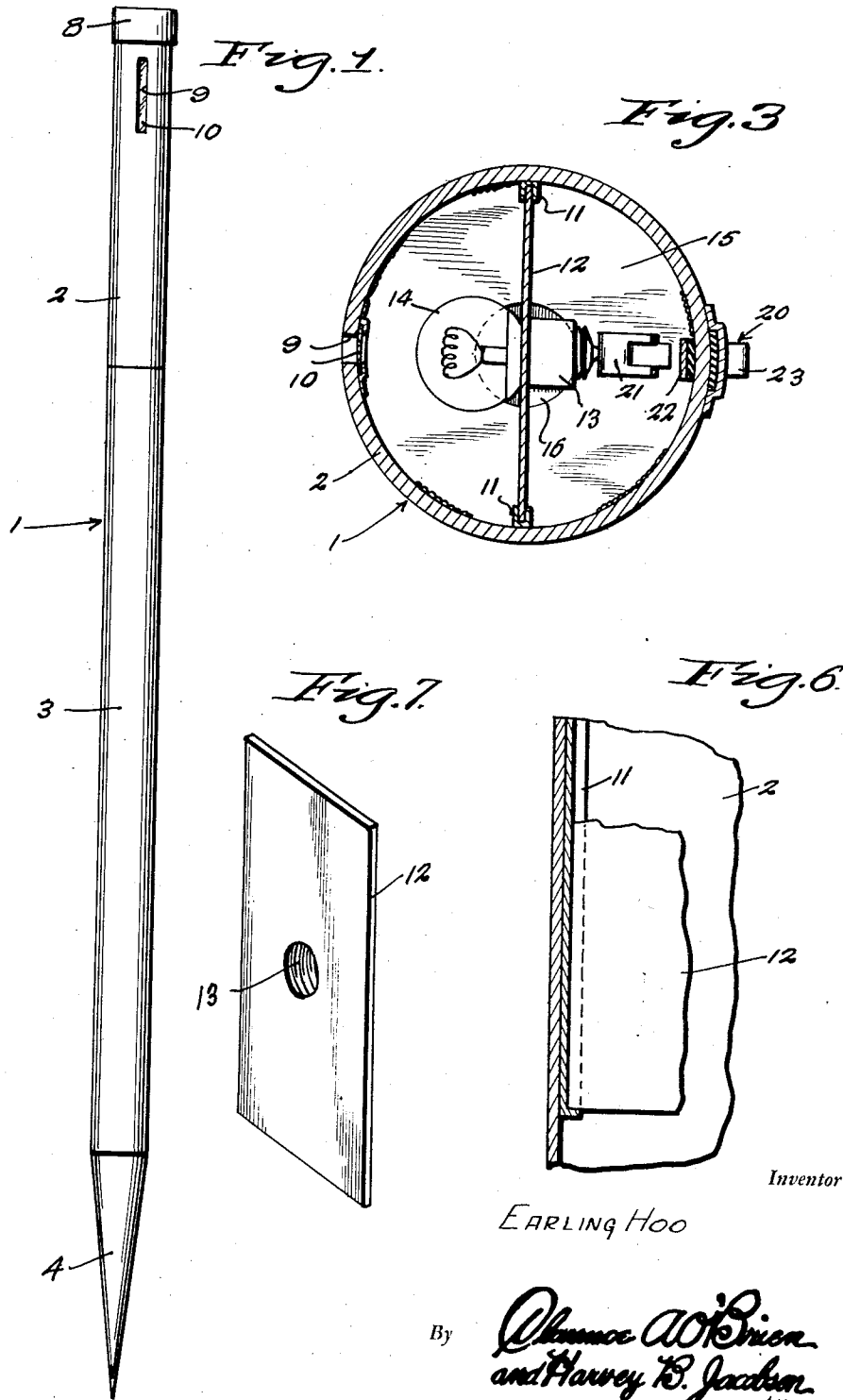
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2,385,278

FIELD ARTILLERY AIMING STAKE

Filed Jan. 5, 1944

2 Sheets-Sheet 1



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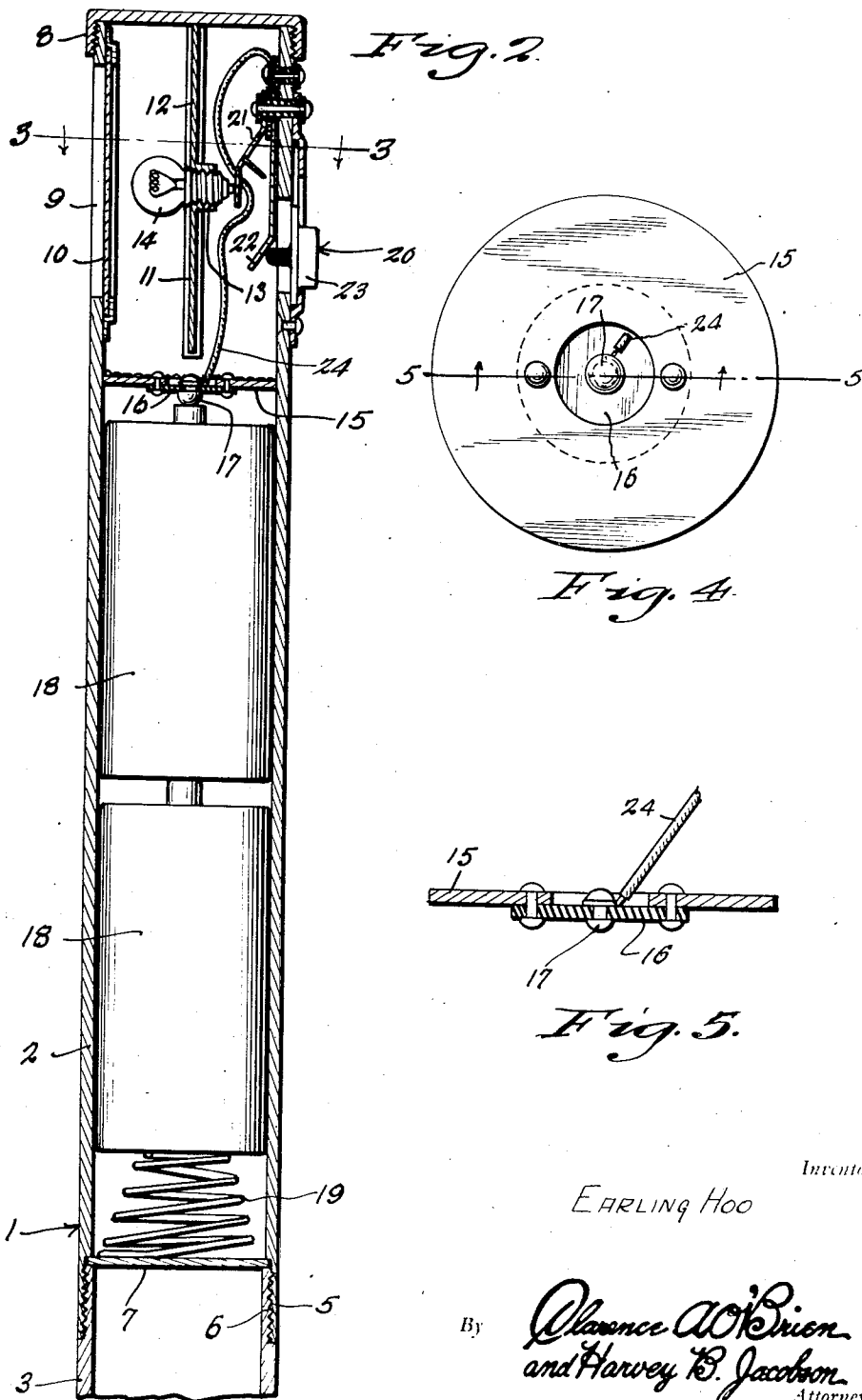
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UNITED STATES PATENT OFFICE

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FIELD ARTILLERY AIMING STAKE

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Application January 5, 1944, Serial No. 517,099

3 Claims. (Cl. 240—6.42)

The present invention relates to new and useful improvements in field artillery aiming stakes, and has for its primary object to provide, in a manner as hereinafter set forth, a self-contained device of this character which may readily be electrically illuminated for use at night.

Other objects of the invention are to provide an aiming stake of the aforementioned character which will be comparatively simple in construction, strong, durable, highly efficient and reliable in use, compact, and which may be manufactured at low cost.

All of the foregoing, and still further objects and advantages of the invention will become apparent from a study of the following specification, taken in connection with the accompanying drawings, wherein like characters of reference designate corresponding parts throughout the several views, and wherein:

Figure 1 is a view in front elevation of a field artillery aiming stake constructed in accordance with the present invention.

Figure 2 is a vertical sectional view through the upper portion of the device.

Figure 3 is a view in horizontal section, taken substantially on the line 3—3 of Figure 2.

Figure 4 is a top plan view of the stationary battery contact assembly.

Figure 5 is a fragmentary view in vertical section, taken substantially on the line 5—5 of Figure 4.

Figure 6 is a fragmentary view in vertical section through an upper portion of the device.

Figure 7 is a detail view in perspective of the electric lamp supporting plate.

Referring now to the drawings in detail, it will be seen that the embodiment of the invention which has been illustrated comprises a tubular metallic post of suitable length and diameter which is designated generally by reference character 1. The post 1 includes detachably connected upper and lower sections 2 and 3, respectively, the latter terminating in a point 4 at its lower end.

In the embodiment shown, the upper section 2 of the post 1 comprises an internally threaded lower end portion 5 which is adapted to be screwed on the externally threaded upper end portion 6 of the lower section 3. Removably mounted in the lower portion of the upper section 2 is a disk 7 which is secured by the upper end of the section 3. A removable cap 8 is threaded on the upper end of the section 2.

The section 2 is provided, in its upper portion, with a vertical slot constituting a window 9

which is covered by a sheet of transparent Celuloid 10. Vertical metallic channel guides 11 are also provided in the upper portion of the section 2 on diametrically opposite sides thereof. The guides 11 slidably receive a removable plate 12 of suitable current conducting material. The plate 12 comprises an integral, rearwardly projecting, internally threaded neck 13 which accommodates an electric lamp 14 for illuminating the window 9.

Fixed in the section 2 below the window 9 is a flat metallic ring 15. Mounted beneath the ring 15 is a disk 16 of suitable insulating material. An electric contact 17 is mounted on the disk 16. Removably mounted in the section 2, below the elements 15 and 16, is a plurality of dry cell batteries 18. A coil spring 19, which rests on the disk 16, yieldingly urges the batteries 18 upwardly for electrical connection with the contact 17.

A thumb switch 20 is provided on the upper portion of the section 2 at the rear thereof. Mounted on the switch assembly 20, within the section 2, is a resilient contact 21 for engagement by the base contact of the electric lamp 14. The contact 21, it will be observed, is insulated from the switch assembly 20. The assembly 20, in the embodiment shown, comprises a resilient contact 22 which is engageable with the contact 21, said contact 22 being operable by the push-button 23. A conductor wire 24 electrically connects the contact 22 to the contact 17.

It is thought that the manner in which the device is used will be readily apparent from a consideration of the foregoing. Briefly, the device may be used during daylight in the manner of a conventional aiming stake. At night, when illumination is desired, it is only necessary to actuate the switch 20 for closing the circuit to the electric lamp 14 which may be observed through the window 9. Access to the lamp 14 may be readily had by unscrewing the cap 8 and removing the plate 12 with said lamp thereon. This also facilitates access to the switch mechanism in the section 2. The batteries 18 may be readily removed for replacement by disconnecting the sections 2 and 3, after which the disk 7 and the coil spring 19 may be removed.

It is believed that the many advantages of a field artillery aiming stake constructed in accordance with the present invention will be readily understood, and although a preferred embodiment of the device is as illustrated and described, it is to be understood that changes in the details of

construction may be resorted to which will fall within the scope of the invention as claimed.

What is claimed is:

1. A field artillery aiming stake comprising a post adapted to be erected in the ground, said post 5 having a single, narrow, elongated window therein, vertical guide channels in the post, a removable plate slidably engaged in said guide channels, an electric lamp mounted in the plate for illuminating the window, a plurality of dry cell 10 batteries mounted in the post, and switch-controlled means for electrically connecting the batteries to the lamp.

2. A field artillery aiming stake comprising a tubular metallic post including a pair of detach- 15 able, threadedly connected sections, a disk removably mounted in the post between the sections, a ring fixed in one of the sections in spaced relation above the disk, a contact mounted on said ring and insulated therefrom, dry cell batteries 20 mounted in said one section, a coil spring mounted on the disk and engaged with the batteries for

electrically connecting said batteries to the contact, said one section having a single, narrow, elongated vertical window in its upper portion, an electric lamp mounted in said one section adjacent the window, and switch-controlled means in said one section for electrically connecting the lamp to the batteries for energizing said lamp for illuminating the window.

3. A field artillery aiming stake of the character described comprising a tubular post including a removable cap on its upper end, said post having a vertically elongated window in its upper portion, a pair of opposed, vertical guides in said upper portion of the post, said guides being open at their upper ends, a removable plate slidably engaged in the guides, the cap constituting means for securing the plate in the guides, an electric lamp mounted on the plate for illuminating the window, and switch-controlled means in the post 20 for energizing the lamp.

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