

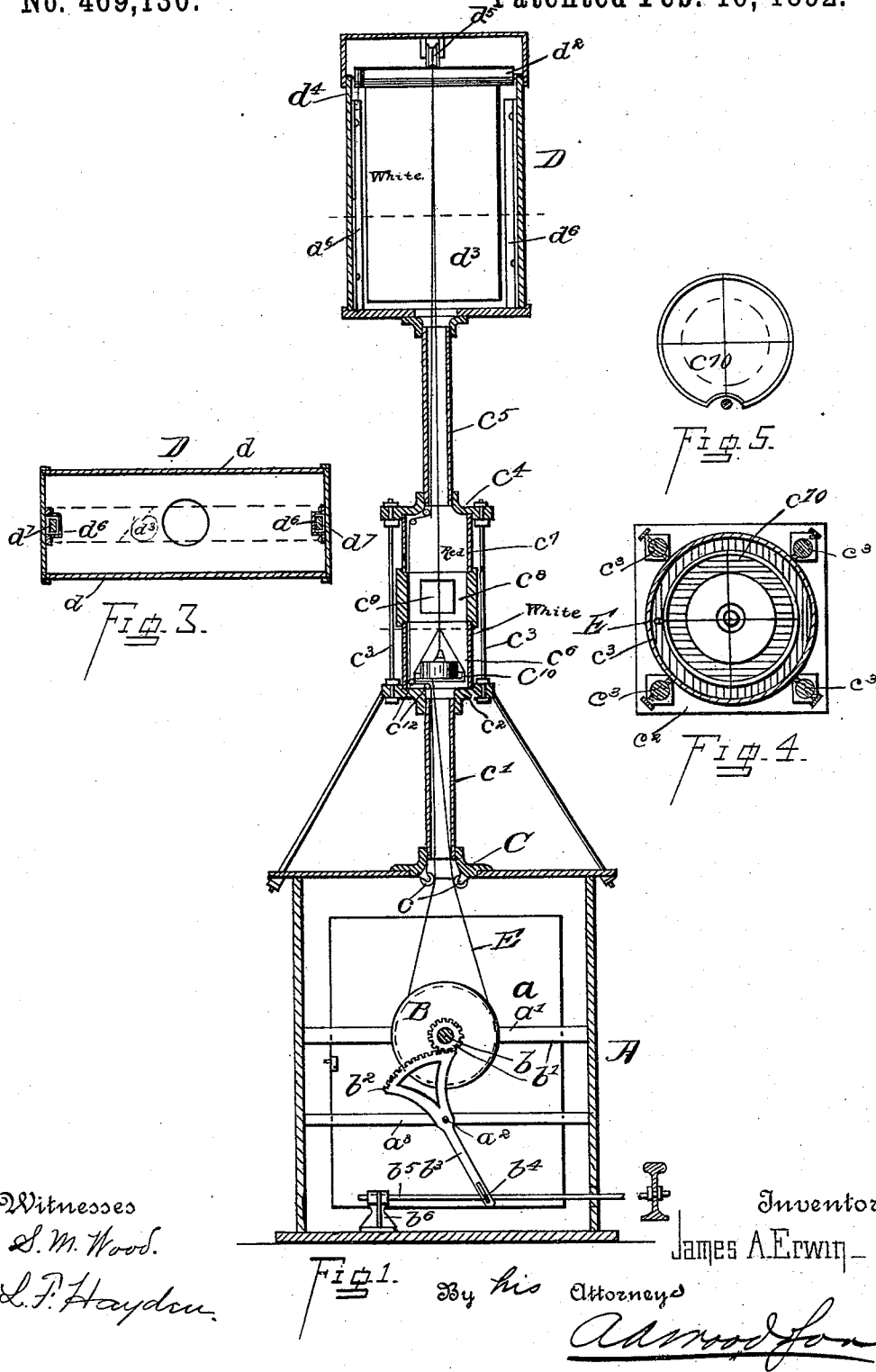
(No Model.)

2 Sheets—Sheet 1.

J. A. ERWIN.
SWITCH OR STATION SIGNAL.

No. 469,130.

Patented Feb. 16, 1892.



Witnesses
S. M. Wood.
L. F. Hayden.

Inventor
James A. Erwin.

Fig. 1. By his Attorneys

Adams & Son

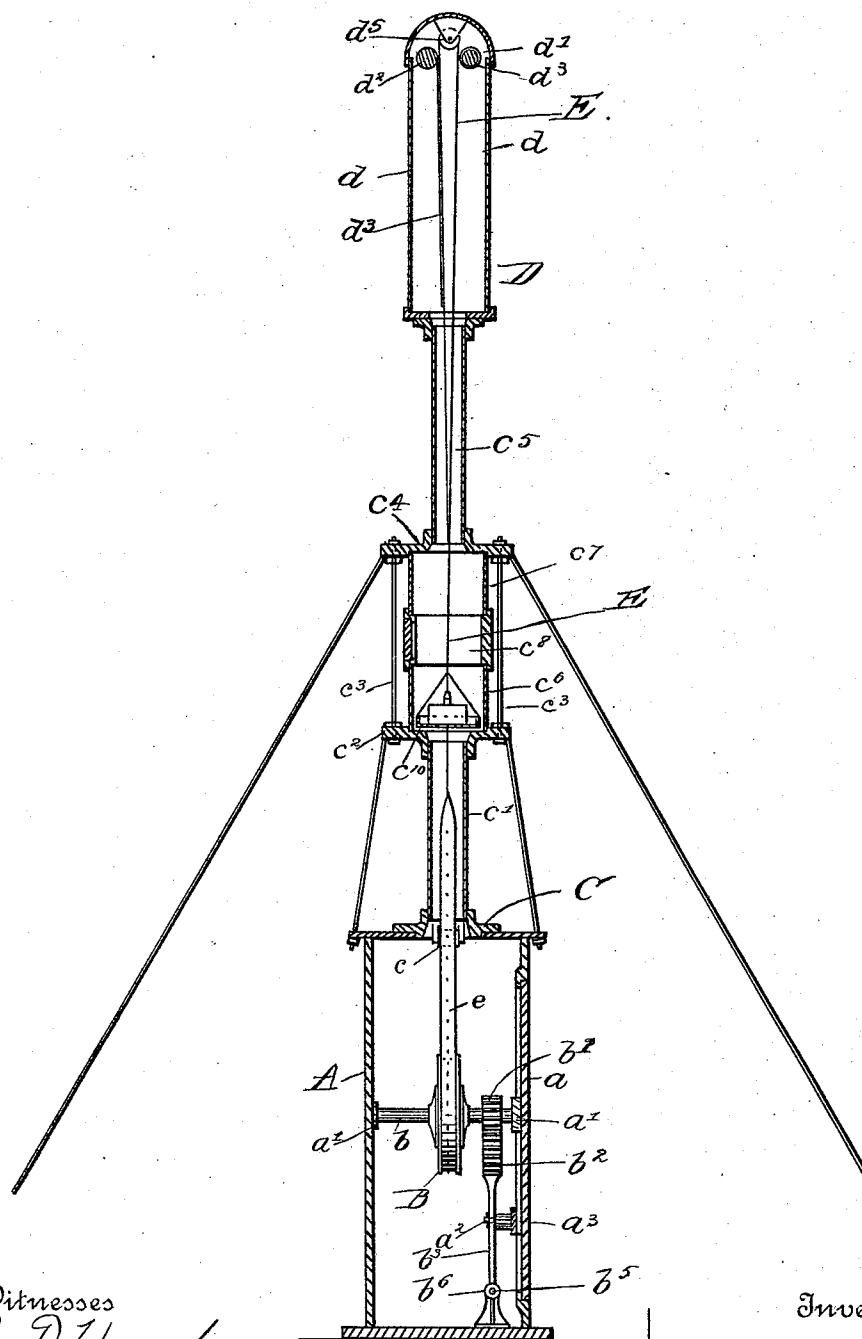
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Fig. 2.

By his Attorney.

Inventor

James A. Erwin.

A. A. Woodson

UNITED STATES PATENT OFFICE.

JAMES A. ERWIN, OF WEST POINT, GEORGIA.

SWITCH OR STATION SIGNAL.

SPECIFICATION forming part of Letters Patent No. 469,130, dated February 16, 1892.

Application filed June 16, 1891. Serial No. 396,510. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. ERWIN, of West Point, in the county of Troup and State of Georgia, have invented certain new and useful Improvements in Switch-Signals; 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to switch-signals, as above stated, the object being the provision of a day and night signal which shall be prompt in action, and when operated by the application of manual force will be easy of action, the details of all of which will be hereinafter fully specified.

In the accompanying drawings, Figure 1 is a vertical central sectional view as seen looking in a direction parallel to the track, showing most of the details. Fig. 2 is a vertical sectional view looking toward the track, further illustrating the details. Fig. 3 is a horizontal section on the line 3 3, Fig. 1, supplementing said figure in the illustration of the elements of the day-signal. Fig. 4 is a horizontal section on the line 4 4, Fig. 1, also further exhibiting details therein shown. Fig. 5 is a modification of the cup to let one of the cords pass if not carried on pulleys.

Like reference characters are uniformly employed in designation of corresponding details throughout the drawings.

The casing A is constructed, preferably, of wood and has a door *a* for access to the interior. Mounted therein on a shaft *b*, journaled in cross-pieces *a'*, is a wheel B, preferably a flanged or sprocket wheel, and also on said shaft is a pinion *b'*. Mounted on a stud *a²*, set in a cross-piece *a³*, is a segment *b²*, which is provided with a lever *b³*, slotted in its end and engaging with a sidewise-projecting pin *b⁴* on a rod *b⁵*, mounted in a guide *b⁶* or other suitable device and extending exteriorly of the box and connecting with the gate-rail of a switch or a lever in the operating-room of the station when used as a station-signal, to which purpose it is obviously well adapted. Seated over a suitable aperture is a casting or frame C, carrying rollers or guide-sheaves

c. Screwed into the casting C is a pipe *c'*, which has screwed to its upper end a plate *c²*. Braces may run from this plate to the casing A, as shown in Fig. 1, for the purpose of rigidity. Stud *c³* project from this plate *c²* upward, holding on the upper ends a plate *c⁴*, corresponding in shape to the plate *c²*, but reversed in position and having screwed thereon in a pipe *c⁵*. Between the plates *c²* and *c⁴* are secured in any suitable manner the white and red glass globes *c⁶* and *c⁷*, respectively, a wooden or metallic ring *c⁸* being interposed, wherein a door *c⁹* may be provided for access to the interior for removal of the lamp. In order to facilitate the removal and reinsertion of glass globes, the part *c⁸* may be made in two parts and the globes be held by offsets in the central opening, as shown in Figs. 1 and 2.

The distance between the white and the red globes should be such that by no chance the light can shine through the red globe when the lamp is lowered or through the white when said lamp is in the red globe, or a piston-like shade may be attached to the belt above the lamp or the lamp be otherwise shaded above.

Screwed to the upper end of the pipe *c⁵* is a box D, which has glass *d* in two sides, and in the upper end are journaled two rollers *d'* and *d²*, each of which is provided with flags *d³*, one of which is red and one white, adapted to wind thereon. Also winding upon said rollers are cords *d⁴*, each of which is attached to a spring or weight *d⁵*, each operating to wind a flag on a corresponding roller by its descent. If desired, a vertical chute *d⁶* may be arranged for each of said weights to move in. A sheave *d⁵* is pivoted in the top end of the box.

In the part C is a cup *c¹⁰*, in which the lamp *c¹¹* fits.

A belt E extends around the wheel B and upwardly over the guide-pulleys *c* through the pipe *c'*, where one side is secured to the cup *c¹⁰*, and the other, passing around said cup by way of the deflecting-pulleys *c¹²*, passes upwardly through the pipe *c⁵* and into the box D, where it is carried over the pulley *d⁵*, and thence passes back and is secured to the cup *c¹⁰*. In constructing, the elements will be brought into the relative positions shown in Fig. 1, and the light showing white the white flag will be unwound and secured to the cord

E at a point near the roller d^2 , whereon the red flag is wound. A notch may be formed in the cup, as shown in Fig. 5, if desired, making room for the cord and forming a guide for the cup.

It is clear that a movement of the parts from the position shown will allow the weight to wind the white flag and will draw the red flag from its roller and elevate the lamp to show red, and from this the full operation of the device in all its separate details will be readily deduced by any person.

The cord E may have a leather belt e incorporated, if desired, and wearing quality in contact with the sheave B be obtained thereby.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a device of the class specified, the combination of the endless cord running on suitable carrier-wheels and carrying a lamp thereon, a vari-colored cylinder surrounding said lamp; banners held normally wound on weighted rollers and secured to said cord at

their lower ends, and means for causing a movement of said cord in either direction, for the purpose specified.

2. In a device of the class specified, the combination of a cord carrying a lamp thereon, a shield therefor composed of an opaque section of wood or metal, different-colored zones of glass fitted to each end thereof, perforated metallic end plates at each end, and bolts connecting said end plates and clamping them upon the structure, substantially as and for the purpose specified.

3. In a device of the class specified, the combination of a cord carrying signals thereon and carried on end pulleys, a pinion on one of said pulleys, a segment engaging said pinion, an arm carried thereon, and a rod connecting said lever to the gate-rail of a switch, substantially as and for the purpose specified.

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Witnesses:

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