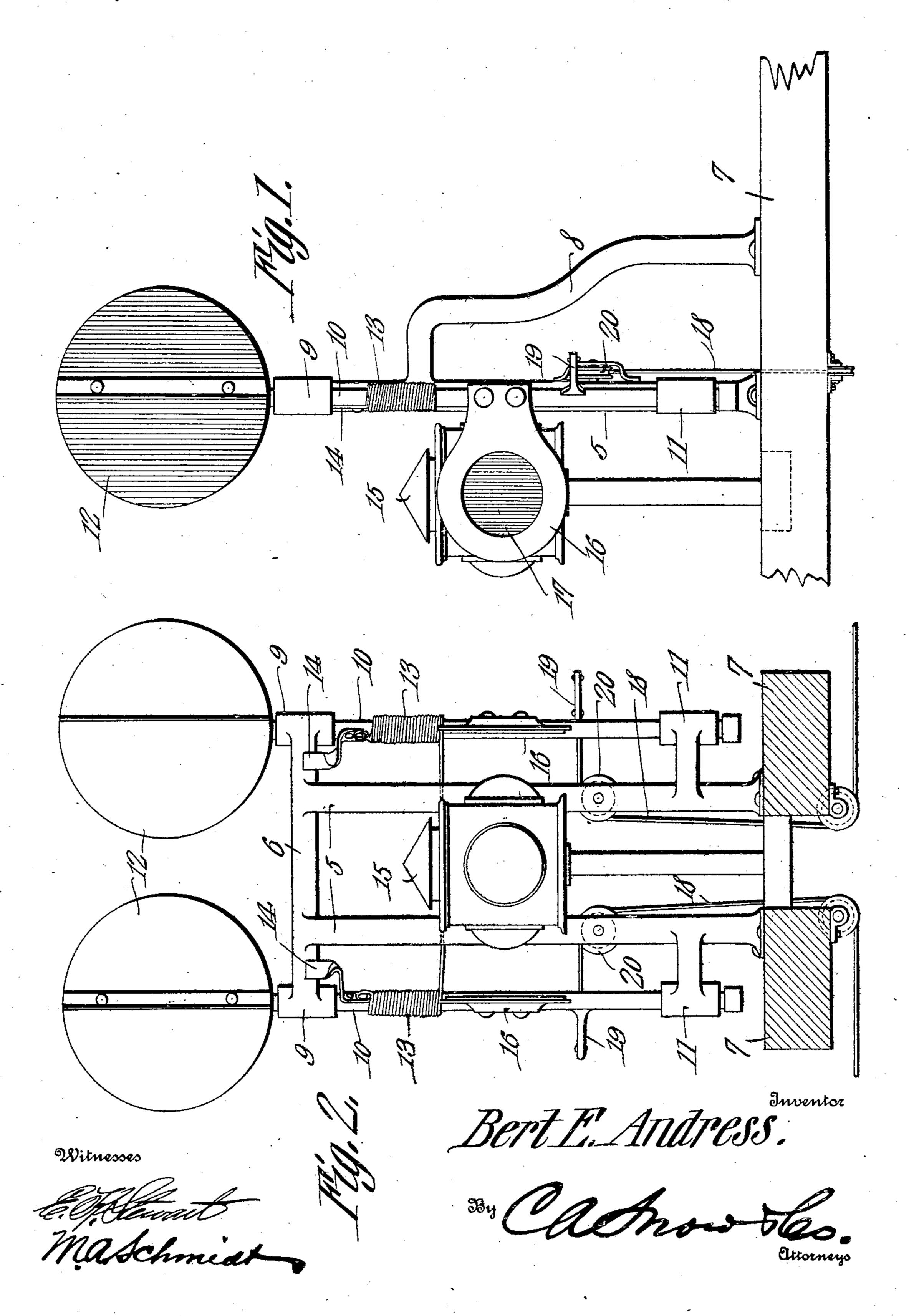
## B. E. ANDRESS. RAILWAY SIGNAL. APPLICATION FILED DEC. 29, 1908.

931,666.

Patented Aug. 17, 1909.



## UNITED STATES PATENT OFFICE.

BERT E. ANDRESS, OF PORT ALLEGANY, PENNSYLVANIA.

## RAILWAY-SIGNAL.

No. 931,666.

Specification of Letters Patent.

Patented Aug. 17, 1909.

Application filed December 29, 1908. Serial No. 469,756.

To all whom it may concern:

Be it known that I, Bert E. Andress, a citizen of the United States, residing at Port Allegany, in the county of McKean and State of Pennsylvania, have invented a new and useful Railway-Signal, of which the following is a specification.

This invention relates to a device for use on railroads for giving visual signals to trains approaching train-order stations, as well as for indicating the condition of switches, crossings, etc., or for any other

signaling purpose.

The object of the present invention is to provide a signal device which is simple in structure, and which is efficient and reliable in operation, and also one which is constructed and arranged for day and night use.

The signal consists of a pair of rotatable targets for day use, and a lamp for night use, the target shaft being fitted with a blade carrying a red glass, and adapted to be swung so that the rays of light from the lamp will shine through said glass. Two targets and two blades are provided, in order that the signal may be visible to a train approaching the same in either direction.

In the accompanying drawings:—Figure 1 is a front elevation of the invention: Fig.

30 2 is a side elevation thereof.

The signal device is supported by a stand, comprising a pair of uprights 5, connected at their upper ends by a cross piece 6. The uprights are mounted on the ties 7 of the stand, or on any other suitable foundation. The stand is braced by props 8, extending between the uprights and the ties or other foundation, and secured to the latter.

At the outer end of the cross piece 6 are bearings 9, in each of which is mounted to rotate therein, a vertically disposed shaft 10, said shafts also being supported, at their lower ends, in bearings 11, carried by, and projecting from, the uprights 5. On the upper end of each shaft 10 is mounted a target 12, colored and constructed as usual, to display red or white.

Each shaft 10 is adapted to be partly rotated in one direction by a spring 13, 50 coiled around the same, one end of said spring being secured to the shaft, and the other end to the respective standard 5 adjacent thereto. Each shaft is also fitted with a

projecting arm 14, which serves to limit the rotation of the shaft in one direction, by 55 engaging the outer end of the cross-piece 6, the latter being in the path of the arm. The arms 14 are located so as to engage the cross-piece 6 when the targets 12 assume the position displaying red, and they are normally 60 held in this position by the springs 13.

The night signal comprises a lamp 15, of ordinary or preferred construction, mounted to one side of the stand, and coöperating with blades 16, provided with openings fitted 65 with a pane 17 of red glass, said blades being so located, and adapted to be swung so that the rays of light from the lamp will shine through said glass. The lamp is mounted midway between the two blades, and, as in 70 the day signal, the blades are so arranged that red is normally displayed, the blades being mounted respectively on the shafts 10 to turn therewith.

The shafts 10 are operated to display 75 white, and thus indicate safety, by means of cables 18, connected to crank arms 19 projecting from the shafts 10, said cables passing over guide pulleys 20, mounted on the uprights 5, and thence to a distant signal 80 tower or station, in which the operator controlling the signal is stationed. A pull on the cable rotates the shafts 10 in a direction to present the white or safety side of the targets, and, at the same time, swings the 85 blades 16 away from the lamp, thus exhibiting a white light at night.

The signal device herein described is visible to a train approaching the same in either direction, and it is simple in construction, and has no complicated parts to get out of order. It is also easily operated, and therefore effectually serves the purpose for which

What is claimed is:—

it is intended.

In a signal device, a stand comprising a pair of uprights, and a cross-bar connecting the upper ends thereof, vertically spaced bearings on the stand, a pair of vertical shafts rotatably mounted in said bearings, 100 a target on each shaft, a lamp, blades projecting from the shaft and working on opposite sides of the lamp, said blades having glazed openings through which the lamp is exposed when the blades are swung in front 105 thereof, springs connected to the shafts for

turning the same in one direction, stop arms projecting from each shaft, and engageable with the cross-bar when the targets and the blades are in "danger" position, whereby said parts are normally held in this position, and means for turning the shaft in the opposite direction.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

BERT E. ANDRESS.

Witnesses:

F. M. LARRABEE, HOWARD C. FIELD.