

W. J. SIMPSON.  
RAILWAY SIGNAL.  
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944,246.

Patented Dec. 21, 1909.

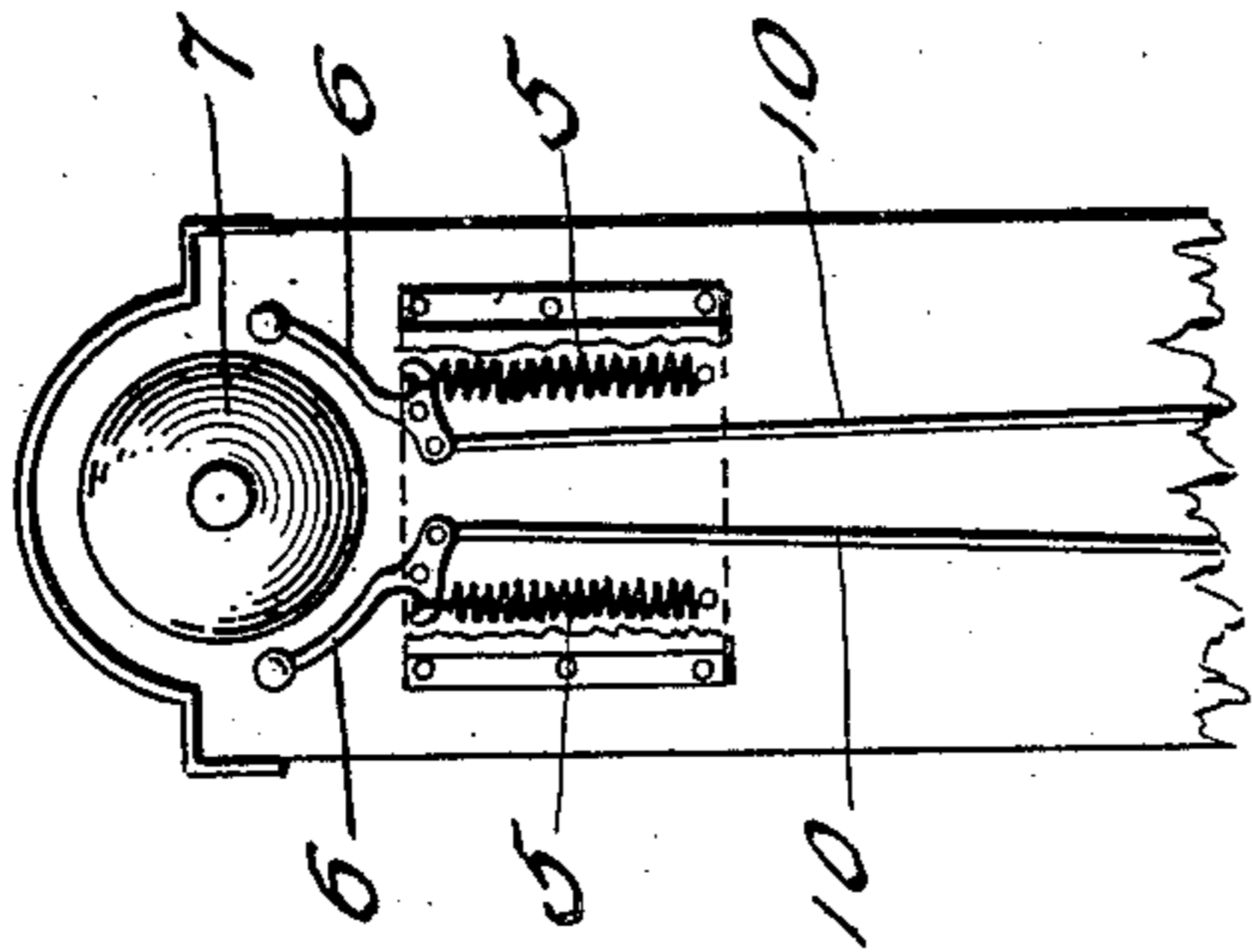


FIG. 1.

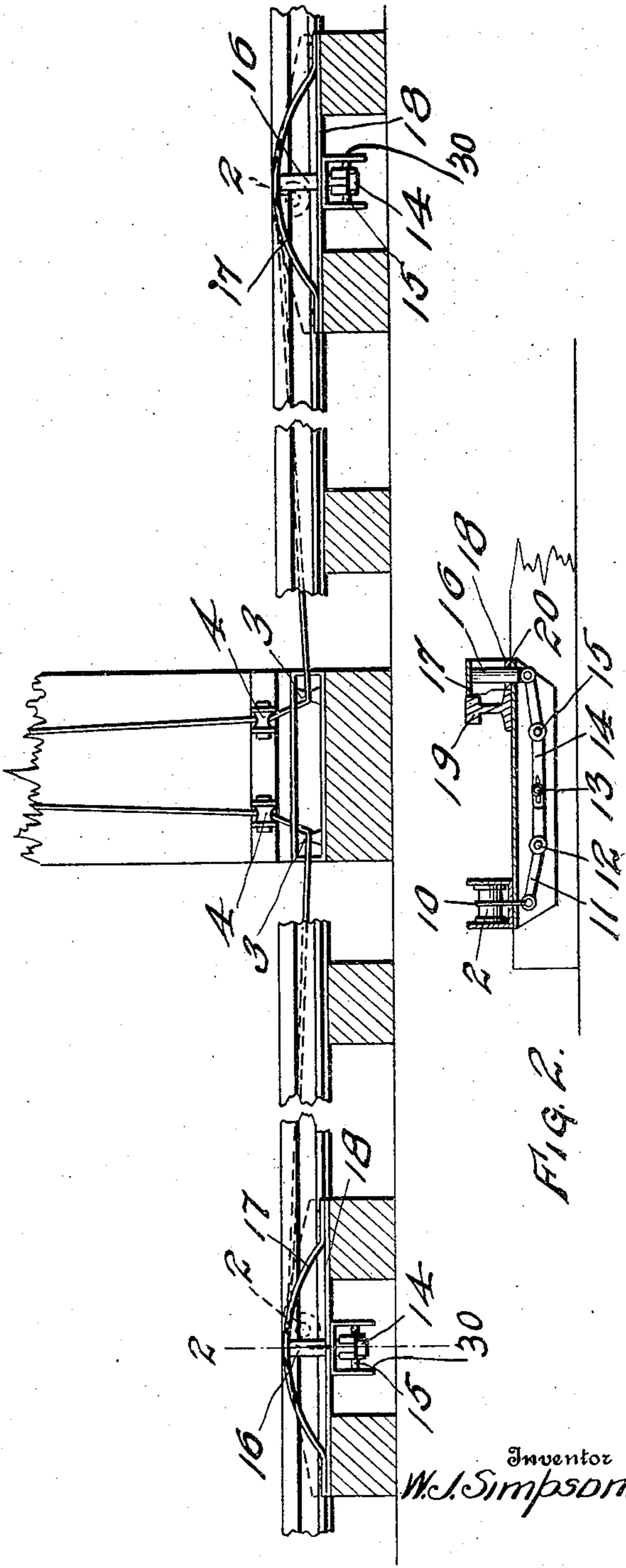


FIG. 2.

Witnesses  
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# UNITED STATES PATENT OFFICE.

WILLIAM J. SIMPSON, OF HOPE, IDAHO.

RAILWAY-SIGNAL.

944,246.

Specification of Letters Patent.

Patented Dec. 21, 1909.

Application filed June 30, 1909. Serial No. 505,195.

*To all whom it may concern:*

Be it known that I, WILLIAM J. SIMPSON, a citizen of the United States, residing at Hope, in the county of Bonner and State of Idaho, have invented certain new and useful Improvements in Railway-Signals, of which the following is a specification.

This invention relates to railway signals, and has for its object to provide an improved device for sounding a bell at a crossing or otherwise to serve as a warning of approaching trains or cars, the bell being automatically operated by the wheel flanges by means of a tripping device located adjacent to the rail of the track.

The invention is illustrated in the accompanying drawings in which—

Figure 1 is a front elevation thereof; Fig. 2 is a section on the line 2—2 of Fig. 1.

Referring specifically to the drawings, 7 indicates a bell mounted upon any suitable standard or post adjacent the crossing or other place where the signal is to be given. This bell is sounded by hammers 6 pivoted to the post, and connected to springs 5 to return the hammers after striking. Each hammer is connected by means of a wire 10 to a lever 11 which is fulcrumed at 12 and connected at 13 by a pin and slot joint to one end of a lever 14 which is fulcrumed at 15, between the depending flanges of a channel piece 30 extending across under the rail and the other end of the lever 15 is connected to the lower end of a push rod 16 depending from the middle of a flat spring 17 the ends of which rest on a board 18 placed beside the rail 19 and conveniently resting at its ends on two of the ties. The stem 16 works through a guide hole 20 in the board or base 18, and the spring is located adjacent the rail in position to be struck by the flange of

a wheel passing along the rail. The levers 14 and 11 extend across under the rail to locate the wire 10 beside the track, and said wire passes over guide pulleys 2, 3 and 4 to connection with the bell hammer. The wires of the respective bell hammers extend in opposite directions to the desired distance on both sides of the crossing, so as to protect the same from the approach of trains either way.

In operation, as the train or car approaches the crossing, the wheel flanges will ride over and depress the springs 17 which by the connections shown will pull the hammer and strike the bell, one stroke being given for each wheel as it passes over the tripping device.

The particular form of the tripping device is such that it is not apt to get out of order, and it may be quickly and easily applied, even by unskilled persons, and costs nothing for maintenance as with electric signals.

I claim:

A railway signal comprising in combination a base adjacent one of the rails, an arched spring resting at its ends on said base and having a stem depending from the middle thereof, a cross piece extending under the rail and having depending flanges, a lever connected to the lower end of the stem, and extending across under the said rail and fulcrumed between the said flanges, and a signal device operatively connected to the lever.

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

WILLIAM J. SIMPSON.

Witnesses:

RUSH QUIGLEY,  
E. E. UPTEGROVE.