

(No Model.)

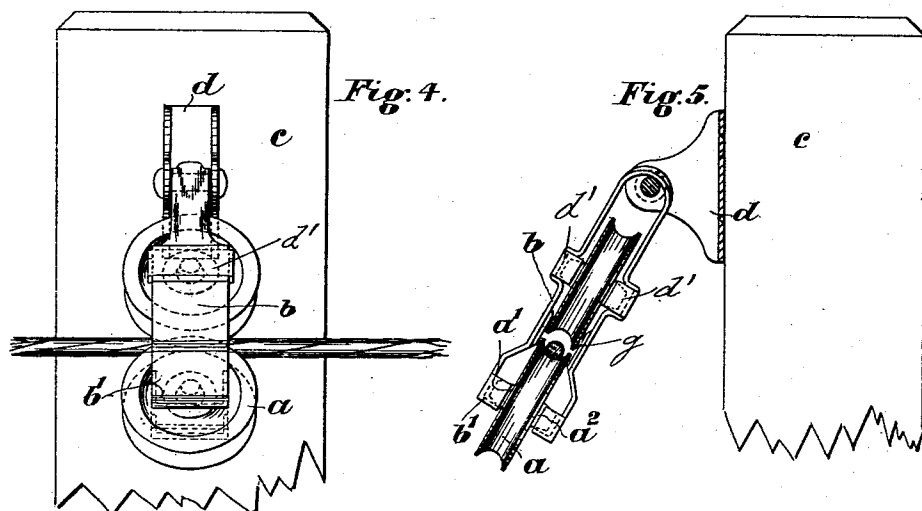
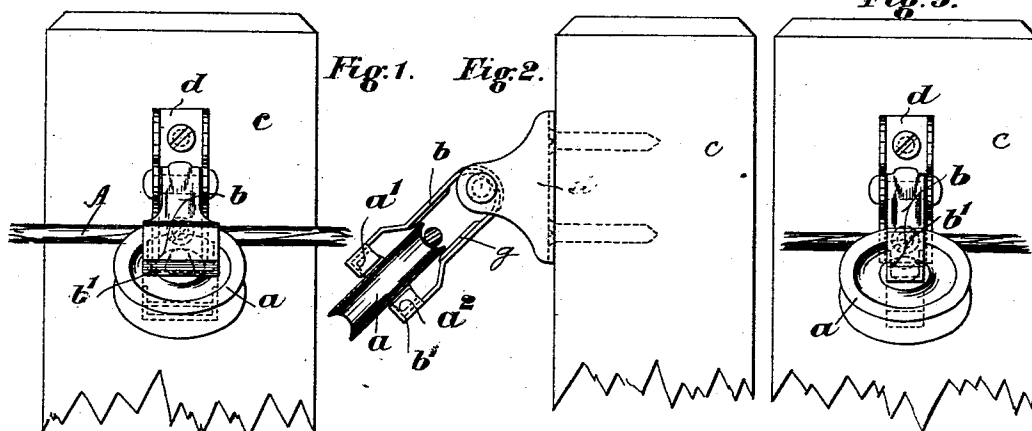
A. G. EVANS.

PULLEY FOR WIRES OF RAILWAY SIGNALS AND POINT BOLTS.

No. 569,007.

Patented Oct. 6, 1896.

*Fig. 3.*



Witnesses:

Arthur Woodman  
W. B. Landry

Inventor

A. G. Evans

per  
John P. [Signature]

# UNITED STATES PATENT OFFICE.

ARTHUR GEORGE EVANS, OF LONDON, ENGLAND.

## PULLEY FOR WIRES OF RAILWAY-SIGNALS AND POINT-BOLTS.

SPECIFICATION forming part of Letters Patent No. 569,007, dated October 6, 1896.

Application filed September 12, 1895. Serial No. 562,267. (No model.) Patented in England February 20, 1894, No. 3,634.

*To all whom it may concern:*

Be it known that I, ARTHUR GEORGE EVANS, a subject of the Queen of Great Britain and Ireland, residing at 116 Palace Chambers, 5 Bridge Street, Westminster, London, in the county of Middlesex, England, have invented new and useful Improvements in Pulleys for the Wires of Railway-Signals and Point-Bolts and the Like, (for which I have obtained a patent in Great Britain, No. 3,634, bearing date 10 February 20, 1894,) of which the following is a specification.

My invention relates to improvements in the pulleys employed as supports for the operating-wires of signals, point-bolts, or any 15 other apparatus which is operated by wire for railway-signaling purposes.

This invention consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In order that my said invention may be better understood and more readily carried into effect, I will describe the drawings hereunto annexed.

25 Figures 1 and 2 illustrate a traveling pulley supported in a bracket stamped out of sheet metal. In these figures no top roller is provided. Fig. 3 is similar to Figs. 1 and 2, but no travel is allowed to the pulley, although 30 it is provided with spindles or pivots. The same pulley is dropped into a similar bracket, but without the facilities for traveling, the object being, while not obtaining a traveling pulley, to obtain a universal pulley, which 35 can facilitate the traveling of a wire round a reverse curve, that is to say, a curve the opposite angle to that shown in Fig. 2. Figs. 4 and 5 illustrate the same principle of pulley to that illustrated in Figs. 1 and 2 and a 40 similar kind of bracket, but with a traveling top pulley.

*a* is the pulley.

*a'* *a''* are the pivots or spindles.

45 *b'* is the path supporting the pulley and along which the pivots travel.

*c* is the wooden or iron stake by which the bracket is supported.

*d*, Figs. 1 to 5, is the support, screwed to the post by which the bracket *b* is suspended.

50 The wire rests in the groove of the pulley and is prevented from wedging between it and the bracket by the guide-strips *g*. The

wire may rise out of the groove in the pulley, but is guided back again by the said strips. The forked bracket *b* is looped over the pin 55 of the bracket *d*, so that it may not merely swing upon the said pin as a center, but may have a circumferential sliding motion upon the pin, and may also tilt to a slight extent in a direction longitudinal to the said pin. 60 This construction is very inexpensive, and the freedom of movement afforded both to the wire and to the bracket *b* which supports it saves the wire from becoming abraded and worn away. 65

What I claim is—

1. The combination, with a supporting-post, and a forked bracket secured thereto and provided with a pin; of the forked bracket *b* looped over the said pin and provided with 70 longitudinal paths *b'* at its lower part, and guide-strips *g*; and a grooved pulley for supporting the wire, said pulley being provided with pivots which are free to roll in the paths *b'* and having its flanges between the said 75 guide-strips whereby the wire is kept in the groove of the pulley, substantially as set forth.

2. The combination, with a supporting-post, and a forked bracket secured thereto and provided with a pin; of the forked bracket *b* 80 looped over the said pin and provided with longitudinal paths *b'* at its lower part and *d'* at its middle part, and guide-strips *g* between the said paths; a grooved pulley for supporting the wire, and a grooved guide-pulley, said 85 pulleys being each provided with pivots which are free to roll in the respective paths *b'* and *d'* and having their flanges between the said guide-strips, substantially as set forth.

3. The combination, with a supporting-post, 90 and a forked bracket secured thereto and provided with a pin; of a forked bracket looped over the pin and free to tilt and slide circumferentially as well as to swing upon the said pin and provided with parallel paths *b'* at its 95 lower part; and a grooved pulley, for supporting the wire, free to revolve and roll longitudinally in the said bracket, substantially as set forth.

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Witnesses:

FREDERICK PURDON,  
GUY EVANS.