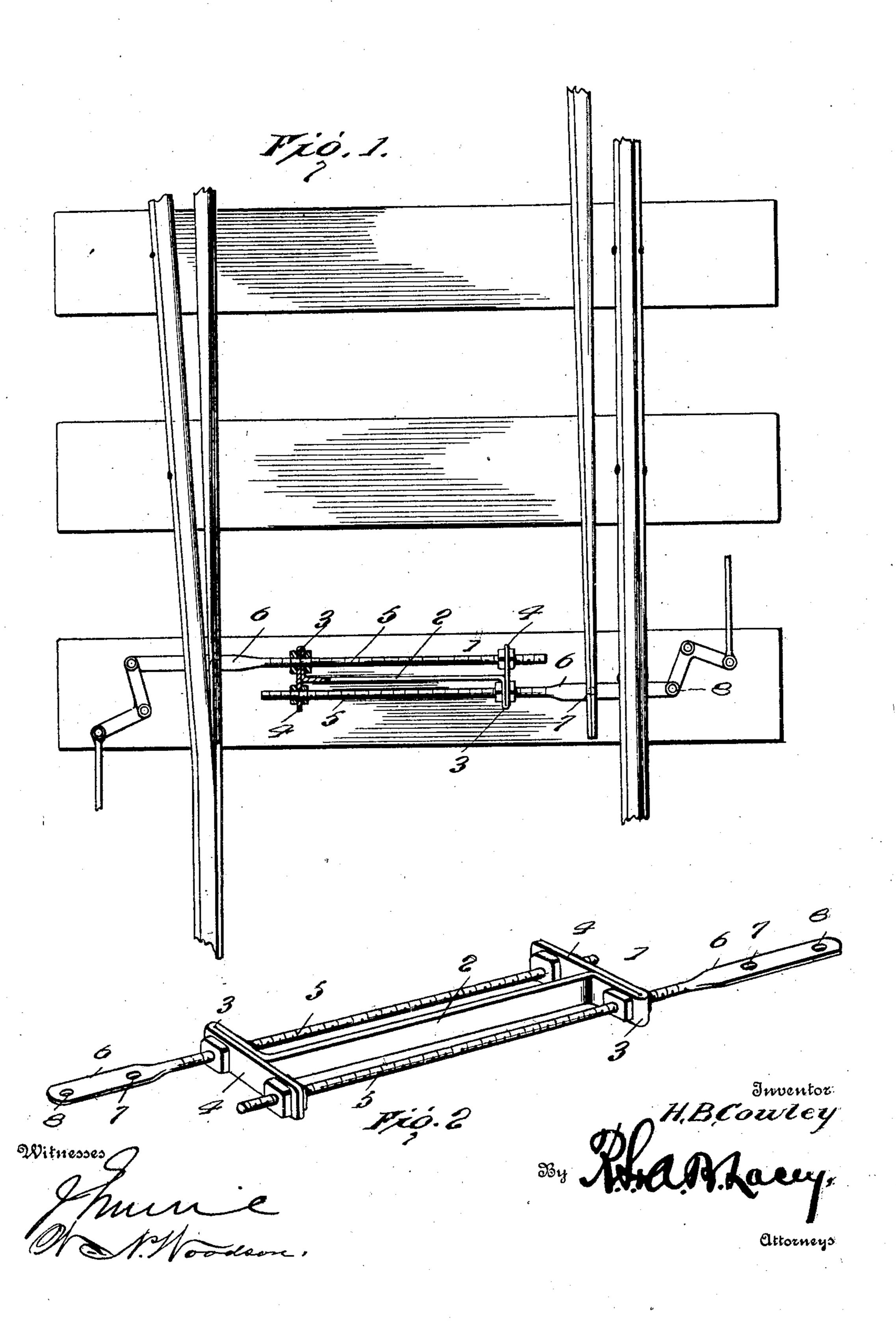
H. B. COWLEY.

SWITCH BAR.

APPLICATION FILED AUG. 13, 1906.



HE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HIRAM B. COWLEY, OF BESSEMER, ALABAMA.

SWITCH-BAR.

No. 836,962.

Specification of Letters Patent.

Patented Nov. 27, 1906.

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To all whom it may concern:

Be it known that I, HIRAM B. COWLEY, a citizen of the United States, residing at Bessemer, in the county of Jefferson and State 5 of Alabama, have invented certain new and useful Improvements in Switch-Bars, of which the following is a specification.

The object of my invention is to provide an improved construction of switch-bar aro ranged to rigidly connect a pair of switchpoints to the switch-actuating mechanism and adapted to be adjusted wherever necessary to compensate for the spreading or contraction of the switch-points due to differ-5 ences in the atmosphere and other causes.

The invention consists in the constructions and arrangements of the parts hereinafter fully described, and particularly pointed out

in the appended claims.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and ac-5 companying drawings, in which—

Figure 1 is a plan view of my improved switch-bar, illustrating it applied. Fig. 2 is a

perspective view thereof.

Corresponding and like parts are referred o to in the following description and indicated in both views of the drawings by the same reference characters.

My improved switch-bar 1 comprises a preferably integral strip of metal so shaped 5 upon itself as to produce a main connecting member 2, which extends transversely of the track and between two adjacent ties, oppositely-extending laterals 3 at the ends of the main member 2, and return portions 4, that o are doubled upon the laterals 3, so as to provide a double thickness of the metal producing the laterals, the extremities of said returned portions projecting beyond the main supporting member 2 in opposite directions, 5 as shown, and constituting portions for the attachment of securing-rods 5. These latter are provided with threaded shanks inserted through apertures in transverse alinement with the laterals and extensions 4, as shown, o and each of said securing-rods is preferably flattened at its end, as indicated at 6, and is provided with two apertures, (designated 7 and 8, respectively.) The switch-points are secured to the flattened portion 6 of the rods 5 by any desired fastening means, and bellcranks or other operating devices are con-

nected to the securing-rods 5 at the other apertures 8, said bell-cranks or other operating devices being connected by link-rods or similar means to the switch-throwing levers, 60 which may be of any desired construction

and arrangement.

The two securing-rods 5 are held rigidly in connection with the switch-bar 1 and directly to the portions 3 and 4 thereof by 65 means of opposite jam-nuts 11, which work on the threaded portions of the said rods at opposite sides of the portions of the switchbar 1. Hence the switch-bar is securely connected to the rods 5, and at the same time 70 provision is made for adjusting the said rods with respect to the switch-bar so as to compensate for the contraction and expansion of the switch-points due to changes in atmospheric conditions or any other causes.

From the foregoing description, in connection with the accompanying drawings, it will be seen that I have provided improved means for securing the switch-points together and to the switch-actuating mechan-80 ism, which will hold the switch-points at their proper relative positions under all circumstances, and materially assist in the proper maintenance and operation of the switch.

Having thus described the invention, what 85

is claimed as new is--

1. Switch - point - securing means of the character described, comprising a bar provided with a transverse main supporting portion and oppositely-extending laterals at its 90 ends, and securing-rods connected to said laterals.

2. Switch-point-connecting means of the character described, comprising a bar provided with a main supporting member, said 95 member extending transversely of the track and provided at each end with a lateral, said laterals extending in opposite directions from the main supporting portion and being doubled upon themselves and extending in op- 100 posite directions beyond said main supporting portion, and securing-rods adjustably connected to said laterals and to said returned extremities, substantially as set forth.

3. Switch-point-connecting means of the 105 character described, comprising a bar provided with a main supporting member, said member extending transversely of the track and provided at each end with a lateral, said laterals extending in opposite directions from 110 the main supporting portion and being doubled upon themselves and extending in op-

posite directions beyond said main supporting portion, and securing-rods connected to said laterals and to said returned extremities,

substantially as set forth.

4. Switch-point-connecting means of the character described comprising a bar embodying a transversely-extending main supporting portion, and oppositely-extending lateral portions doubled upon themselves 10 and projecting in opposite directions beyond the main supporting portion, securing-rods provided with threaded portions extending through transversely opposite extremities and laterals of the said bar, as set forth, and means for securing said rods to the portions in presence of two witnesses. of the bar before named, the outer ends of each rod being flattened and provided with apertures, for the purpose specified.

5. Switch-point-connecting means of the 20 character described, comprising a bar em-

bodying a transversely-extending main supporting member, and oppositely-extending lateral portions doubled upon themselves and projecting in opposite directions beyond the ends of the main supporting portion, se- 25 curing-rods provided with threaded portions extending through transversely opposite extremities and laterals of the said bar, as set forth, and jam-nuts on the threaded portions of said rods on both sides of each of the said 30 laterals and extremities thereof, the outer ends of each rod being flattened and provided with apertures for the purpose specified.

In testimony whereof I affix my signature

HIRAM B. COWLEY. [L. s.]

Witnesses:

A. S. FITZPATRICK,

J. A. Estes.