

S. S. UNDERWOOD.
BRAKE BEAM HANGER.
APPLICATION FILED FEB. 21, 1910.

966,141.

Patented Aug. 2, 1910.

Fig. 1.

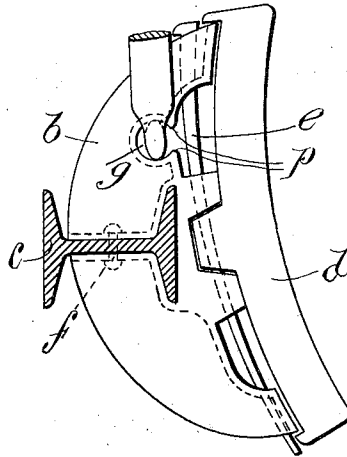


Fig. 2.

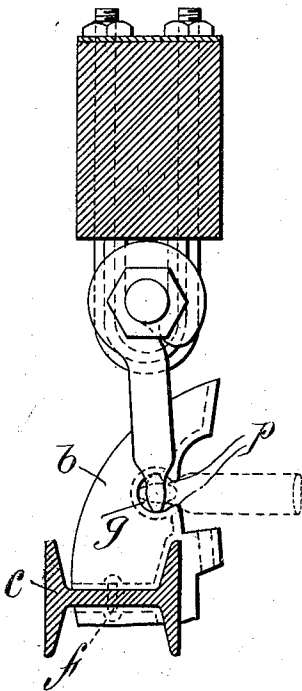


Fig. 3.

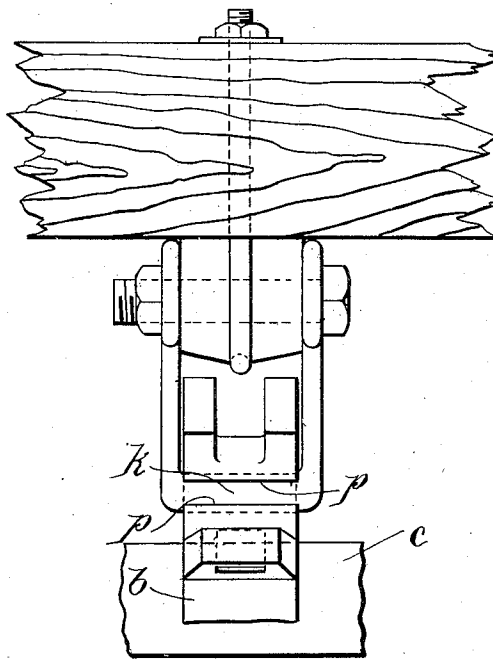
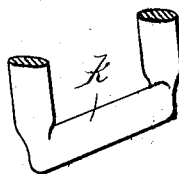


Fig. 4.



Witnesses
Arthur Ditchler
Ed. J. [Signature]

Sidney A. Underwood
Inventor
By Attorney
John N. [Signature]

UNITED STATES PATENT OFFICE.

SIDNEY SMITH UNDERWOOD, OF MONTREAL, QUEBEC, CANADA.

BRAKE-BEAM HANGER.

966,141.

Specification of Letters Patent.

Patented Aug. 2, 1910.

Application filed February 21, 1910. Serial No. 545,094.

To all whom it may concern:

Be it known that I, SIDNEY SMITH UNDERWOOD, of the city of Montreal, Province of Quebec, Canada, have invented certain new and useful Improvements in Brake-Beam Hangers; and I do hereby declare that the following is a full, clear, and exact description of the same.

The invention has for its object to prevent the brake head and with it the beam from becoming disengaged from the hanger in the event of the brake shoe key being removed; and it may be said briefly to consist of the particular construction of the hanger hereinafter described and pointed out in the claims.

For full comprehension, however, of my invention reference must be had to the accompanying drawings, forming a part of this specification, in which similar reference characters indicate the same parts, and wherein—

Figure 1 is a side elevation of a brake head with brake shoe in place, the brake beam being shown in transverse section, and the whole supported by my improved hanger; Fig. 2 is a side elevation of the upper portion of the brake head and a part of the truck, the latter in sectional view, with my improved hanger engaged therewith; Fig. 3 is a face view of the parts illustrated in Fig. 2; and Fig. 4 is a detail perspective view of my improved hanger removed.

The brake head *b*, beam *c*, shoe *d*, and key *e* for detachably fastening the shoe to the head are of usual construction and well known in the art, there being, of course, a pair of heads and shoes on each beam, and a pair of hangers suspending the brake heads and through them the shoes and beam. The brake heads are fixed to the brake beam by rivets *f* or otherwise, and each is formed with a transverse socket *g* having a longitudinal mouth the lips *p* whereof reduce its width to less than the diameter of the socket *g* in which the horizontal portion *k* of its hanger has heretofore been held by the key. This arrangement is defective for the reason that unauthorized persons are enabled to disengage the brake heads, shoes and beam from the hanger by simply removing the keys, and the same disengagement would take place at one or both ends if either or both keys should happen to be displaced by breakage. In order to overcome this defect I so construct the hanging means that the

heads will be self held against displacement from the hanger while the latter is attached to the truck and readily either set in place in the socket of the head or freed therefrom when the hanger is disconnected from the truck.

The present embodiment of my invention consists of a one piece hanger of U-form the horizontal portion *k* whereof is in one direction substantially equal in thickness to the socket *g*, and at right angles thereto or substantially at right angles thereto equal to the space between the lips of the mouth of the socket, the cross-section being preferably oval in form and the hanger constructed with the greater diameter of the horizontal portion of said hanger. The lower ends of the legs are substantially equal to the horizontal portion to enable them to pass the lips to enter the socket endwise. This is unnecessary however where the hangers are entered sidewise. This construction permits the horizontal portion of the hanger to be passed either longitudinally or sidewise into the socket. When the hanger is turned to the position shown in dotted lines in Fig. 2, the effect being that after the parts have been so fitted and the hanger turned to its normal position and connected to the truck, relative displacement (other than that due to the pivotal relation) is prevented laterally to the hanger by the lips *p* of the socket partially inclosing the greater thickness of the horizontal portion, and longitudinally thereto by the upper section of brake head which is straddled by the legs. With this construction and arrangement the brake heads and beams are positively locked against displacement from the hanger while the latter is connected to the truck, and worn or broken brake shoes may be replaced with new ones, or the shoes stripped from the heads by unauthorized persons, without danger of displacement of the heads and beam.

I do not claim broadly the construction whereby the hanger is permitted to enter the socket longitudinally as it is covered in Patent No. 942,985 granted to me on Dec. 14, 1909.

What I claim is as follows:

1. The combination with a brake head having a transverse socket with a longitudinal mouth of less measurement transversely to the socket than the diameter of the said socket, of a hanger presenting a horizontal portion equal in thickness in one direction

to the diameter of the socket, and equal in thickness at right angles to the said direction to the said measurement of the mouth for the purpose of permitting the hanger to
5 enter the socket longitudinally when turned to abnormal angular position and be held therein when in normal angular position.

2. The combination with a brake head having a transverse socket with a longitudinal mouth of less measurement transversely
10 to the socket than the diameter of the said

socket, of a hanger presenting a horizontal portion of oval cross-section with its greatest diameter in the plane of the hanger.

In testimony whereof, I have signed my name to this specification, in the presence of
15 two subscribing witnesses.

SIDNEY SMITH UNDERWOOD.

Witnesses:

WILLIAM P. McFEAT,
FRED J. SEARS.