

S. S. UNDERWOOD.
BRAKE BEAM HANGER.
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942,985.

Patented Dec. 14, 1909.

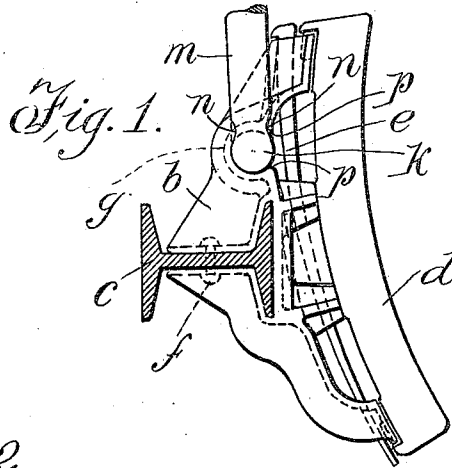


Fig. 2.

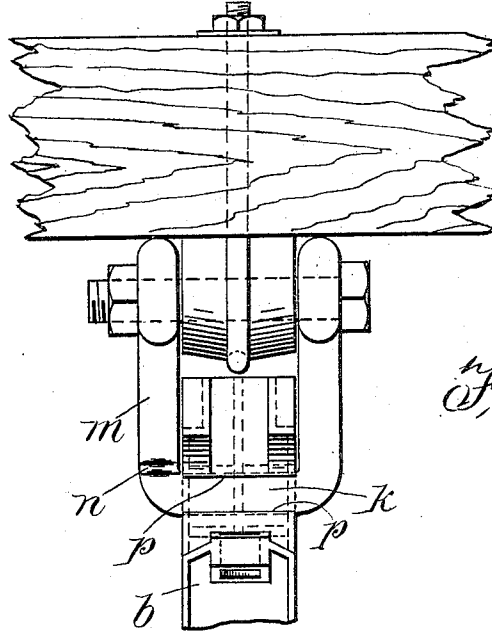
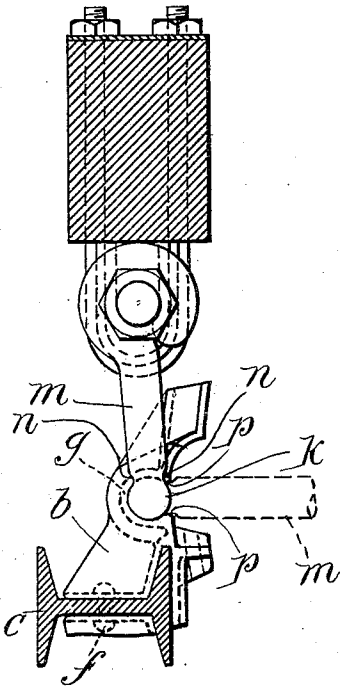


Fig. 3.

Witnesses

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BRAKE-BEAM HANGER.

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Specification of Letters Patent.

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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; and Fig. 3 is a face view of the parts (excepting the brake beam) illustrated in Fig. 2.

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 preferred embodiment of my invention consists of a one piece hanger of U-form the horizontal portion *k* whereof is substantially equal in diameter to the socket *g*, and having one, *m*, of its legs connected to such horizontal portion by a neck *n* sufficiently reduced to be passed endwise 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 partially inclosing lips *p* of the socket and longitudinally thereto by the upper section of brake head which is straddled by the legs.

To facilitate correct positioning of the hanger in the socket I prefer to form one only of the legs with the neck *n* the other remaining of full size and acting as a stop by engaging the lips, thus limiting the movement of the hanger when being inserted into the socket.

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.

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 means permitting the hanger to enter the socket longitudinally.

2. 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 portion permitting the hanger to enter the socket and be automatically held therein against other displacement than rotary.

3. 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 having means permitting the same to enter the socket longitudinally and means limiting the said longitudinal movement of the hanger.

4. 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 of U-form the horizontal portion whereof is equal in diameter to the socket, and having one of its legs formed with a neck permitting the insertion of such horizontal portion longitudinally into the socket.

5. 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 of U-form the horizontal portion whereof is equal in diameter to the socket, and having one of its legs formed with a neck permitting the insertion of such horizontal portion longitudinally into the socket, and the other leg adapted to act as a stop.

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

SIDNEY SMITH UNDERWOOD.

Witnesses:

WILLIAM P. McFEAT,
ARTHUR H. EVANS.