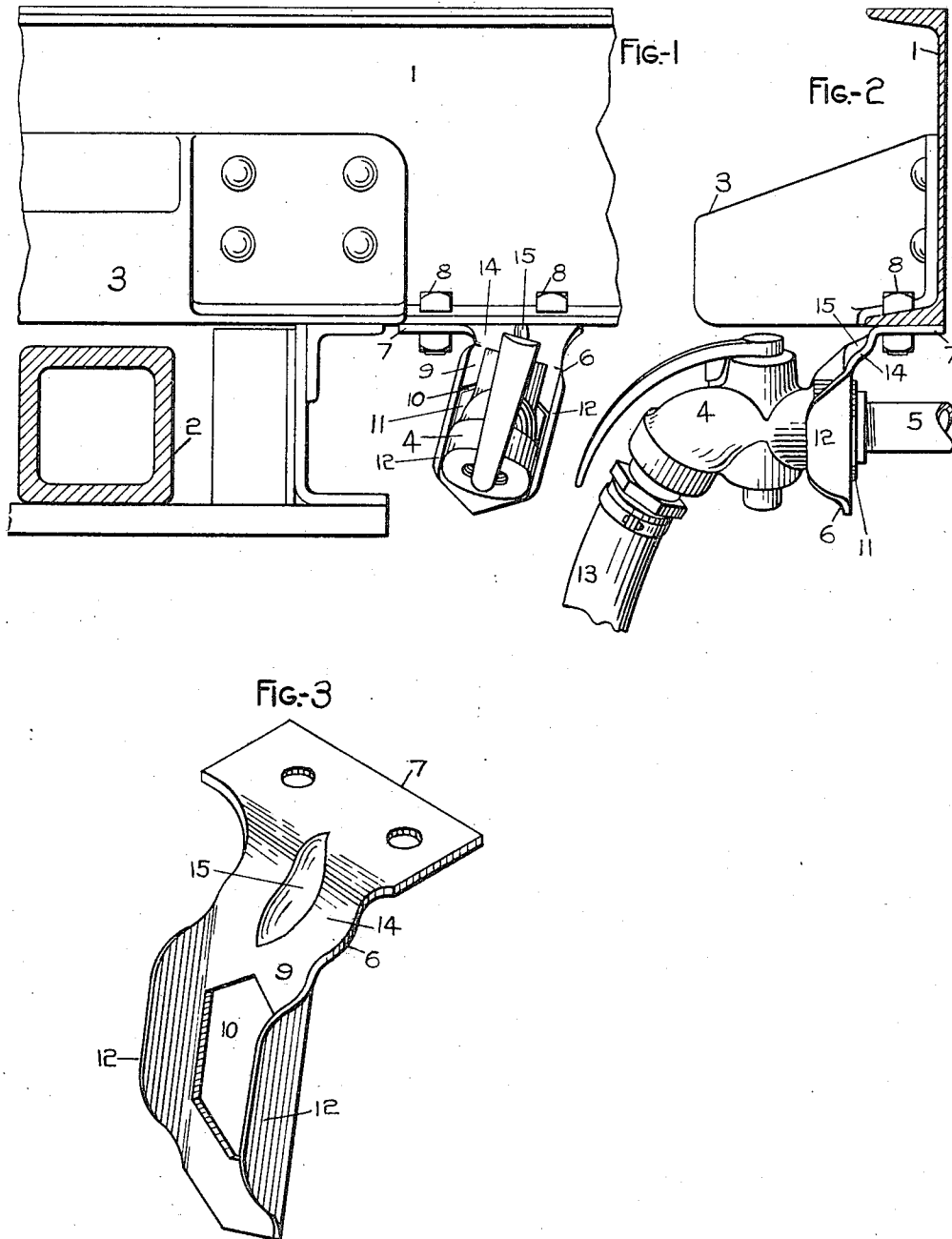


R. W. BURNETT.
ANGLE COCK HANGER FOR AIR BRAKE PIPES OF RAILWAY CARS.
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1,031,835.

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UNITED STATES PATENT OFFICE.

RICHARD WEBB BURNETT, OF MONTREAL, QUEBEC, CANADA.

ANGLE-COCK HANGER FOR AIR-BRAKE PIPES OF RAILWAY-CARS.

1,031,835.

Specification of Letters Patent.

Patented July 9, 1912.

Application filed March 20, 1911. Serial No. 615,807.

To all whom it may concern:

Be it known that I, RICHARD W. BURNETT, a citizen of the United States, residing in Montreal, in the Province of Quebec, Dominion of Canada, have invented a new and useful Improvement in Angle-Cock Hangers for Air-Brake Pipes of Railway-Cars, of which the following is a specification.

My invention relates to improvements in angle cock hangers for air brake pipes of cars.

Heretofore in practical operation of air brake mechanism of railway cars, serious difficulties have been experienced, resulting in accidents and loss of life and property, due to failure of the brake mechanism to properly act, owing to leaky train pipes and connections caused by insecure fastenings and the shifting of the pipes and angle cocks when cars are bumped in switching and other usage. For efficient operation, the angle cocks should stand at an angle of fifteen degrees or thereabout from the vertical toward the center of the car to bring the connecting hose between cars naturally toward the hose on the next car without kinking. The ordinary angle cock hanger heretofore generally in use has consisted of a two piece clamp bolted together around the pipe and which allows the pipe to turn so that while the angle cocks would usually be properly located when leaving the car shop, in a short time they are all more or less out of position, many hanging fifteen degrees to the wrong side. This is very hard on the hose and also makes it impossible to keep a tight train line on account of leaks at the couplings, especially in cold weather, thus resulting in greatly decreased efficiency of the brakes. In some angle cock hangers, it has been proposed to secure the angle cock from end movement—longitudinal movement in respect to the car,—but this frequently results in a broken train pipe at the angle cock when the car rebounds or straightens out after a severe shock.

The object of my invention is to provide an improved construction of angle cock hanger which will practically obviate the difficulties heretofore experienced and materially increase the efficiency of the brakes in practical operation.

My invention consists in the means I employ to practically accomplish this object or result, the same consisting essentially in a

one piece hanger having a horizontal member adapted to be bolted to the end sill of the car frame and an inwardly inclined member furnished with a hexagonal opening adapted to receive the hexagonal portion of the angle cock and hold it at the proper inward inclination toward the center of the car, and at the same time permit of a limited free longitudinal movement of the angle cock through or in respect to the hanger, the inwardly inclined portion being furnished with integral flanges to fit opposite sides of the hexagonal portion of the cock, and thus provide for any necessary longitudinal movement of the angle cock, while at the same time securely holding it from any change in its angular position. The train pipe to which the angle cock is connected is itself securely anchored to the car, preferably near its middle and thus prevented from longitudinal movement.

In the accompanying drawing forming a part of this specification, Figure 1 is a front elevation of an angle cock hanger for railway car brake pipes embodying my invention, the car coupler being shown in section. Fig. 2 is a side view, the end sill of the car being shown in section. Fig. 3 is a perspective view of my improved hanger.

In the drawing, 1 represents the end sill of a railway car, 2 the car coupler, 3 the coupler striking plate, 4 the angle cock of the air brake pipe and 5 the brake pipe. 6 is my angle cock hanger or holder. The pipe 5 is securely anchored to the needle beam or other member of the car frame, preferably at or near its middle portion, and thus prevented from longitudinal movement. All these parts are or may be of any suitable or customary construction, and need no further description.

My angle cock hanger or holder 6 is of a one piece construction, preferably of pressed steel plate or malleable iron, and comprises an attaching member 7, preferably horizontally extending and secured by bolts 8 to the lower flange of the end sill of the car and an integral inwardly inclined holder member 9 furnished with a hexagonal opening 10 to receive the hexagonal portion 11 of the angle cock, and provided with integral longitudinally extending flanges 12 to give the hanger an extended longitudinal bearing against the hexagonal portion of the angle cock. The holder member 9 of the hanger

is preferably inwardly inclined at an angle of about fifteen degrees toward the center of the car to bring the hose 13 naturally toward the corresponding hose on the opposite side of the next car without kinking. The hanger 6 may preferably have a forwardly inclined portion 14 connecting its attaching member 7 with its holder member 9, and this forwardly inclined connecting member 14 is preferably furnished with stiffening corrugations 15 to give greater strength to the hanger.

The hexagonal portion of the angle cock fitting in the hexagonal opening of the hanger 6 effectually prevents all possibility of the angle cock turning from its proper fifteen degree inward inclination, and this adds greatly to the durability of the hose and the tightness of the connections and the efficiency of the brake mechanism. At the same time, the hexagonal portion of the angle cock fits loosely in the hexagonal opening of the hanger and thus provides for any necessary end movement of the angle cock in respect to the hanger when the car rebounds or straightens out after severe shocks.

I claim:—

1. An air brake pipe angle cock hanger for railway cars comprising an attaching member and an inwardly inclined holding member furnished with a hexagonal opening to receive the hexagonal portion of the angle cock to hold the angle cock securely from turning while permitting a limited

free longitudinal movement of the angle cock, substantially as specified.

2. An air brake pipe angle cock hanger for railway cars comprising an attaching member and an inwardly inclined holding member furnished with a hexagonal opening to receive the hexagonal portion of the angle cock to hold the angle cock securely from turning while permitting a limited free longitudinal movement of the angle cock, said holding member having integral flanges fitting opposite faces of the hexagonal portion of the angle cock to give said portion of the angle cock an extended bearing longitudinally, substantially as specified.

3. A one piece angle cock holder comprising an attaching portion 7 and a holder portion 9 having an opening therein fitting a non circular portion of the angle cock to prevent the angle cock from turning while permitting it a limited free end movement, substantially as specified.

4. A one piece angle cock holder comprising an attaching portion 7 and a holder portion 9 having an opening therein fitting a non circular portion of the angle cock to prevent the angle cock from turning while permitting it a limited free end movement, said holding member of the hanger having integral flanges 12, 12, substantially as specified.

RICHARD WEBB BURNETT.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."