R. W. BURNETT.

TRAIN PIPE ANCHOR.

APPLICATION FILED MAY 31, 1913.

1,108,328. Patented Aug. 25, 1914.

Fig. 1.

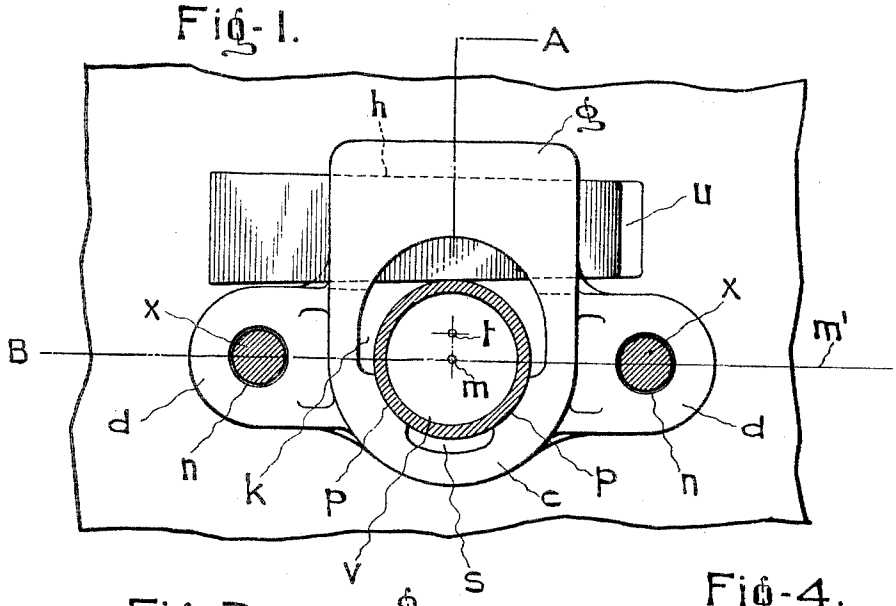


Fig. 2.

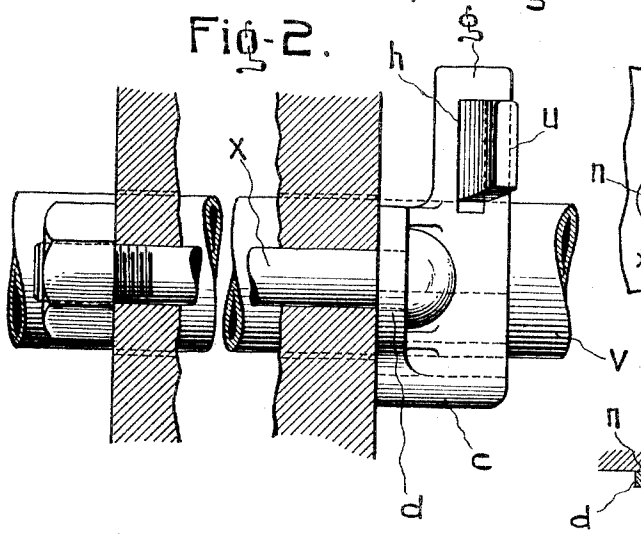


Fig. 4.

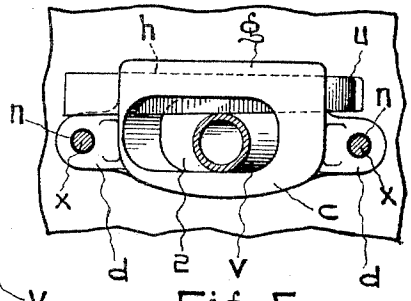


Fig. 5.

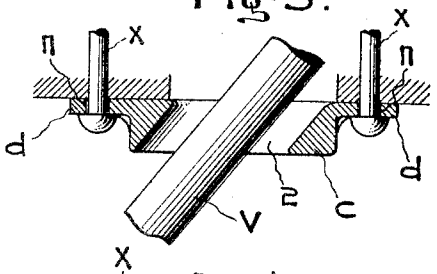
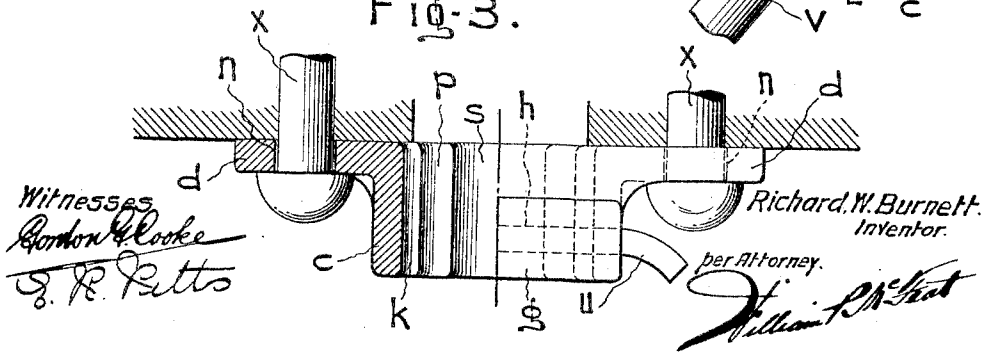


Fig. 3.



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TRAIN-PIPE ANCHOR.

1,108,328. Specification of Letters Patent. Patented Aug. 25, 1914.

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To all whom it may concern:

Be it known that I, RICHARD WEBB BURNETT, a citizen of the United States, residing at the city of Montreal, Province of Quebec, Dominion of Canada, have invented certain new and useful Improvements in Train-Pipe Anchors; and I do hereby declare that the following is a full, clear, and exact description of the same.

This invention relates particularly to train pipe anchors adapted to be rigidly secured to a member of the substructure and have the train pipe located therein. Heretofore with devices of this nature it has not been possible to lock the pipe without the necessity of operating first at one side of the member and then at the other side thereof, or in instances where the center sill is used as a member for attachment the lock could not be got at readily after it was driven.

The object of the present invention is to overcome these difficulties and provide a train pipe anchor which may be rigidly connected to a member of the substructure of the car and contain a locking device capable of having the pipe locked therein and at the same time keep the locking device exposed under all conditions; a further object being to provide an anchor which will more rigidly lock the pipe against displacement therein.

The invention may be said to consist particularly of the construction, particular arrangement, and combination of parts 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 face view of my improved train pipe anchor the train pipe being illustrated in transverse sectional view; Fig. 2 is a side elevation thereof; Fig. 3 is a vertical sectional view taken on line A B Fig. 1; Fig. 4 is a face view of a modified form drawn to a smaller scale; and Fig. 5 is a similar view to Fig. 3 of the modification.

According to my invention the anchor member is preferably made of malleable iron and consists of a horizontal boss *c* through which the train pipe passes, a pair of perforated lugs *d* extending laterally from one end of such boss and a key guide and hold *g* extending vertically therefrom, the way *h* of the guide intersecting the upper portion of the pipe-opening *k* through the boss. In order to take care of pipes passing at substantially right angles through a substructure member, a needle beam for instance, where the pipe is subjected to direct thrust the anchor is caused to bite and consequently more rigidly hold the pipe. This is effected by the lower half of the opening *k* being formed concentrically with the boss, the center *m* in the embodiment illustrated being on a line *m'* with the attachment holes *n* through the lugs although the attachment portions of the anchor may be formed to extend to any point above or below or to one side or the other of the points of attachment shown. In this embodiment of the invention the lower half of the wall of the opening is formed with a pair of spaced concentric inward extensions *p p* separated by a pipe clearance space *s;* the upper half of the opening being of the same radius as the space *s* and its center *t* is placed a short distance above the center *m*, thus providing ample clearance for the upper half of the pipe.

The key indicated at *u* is tapered and of greater length than the key-way.

The pipe indicated at *v* bears on the rests *p p* and when the key is driven into the guide it slides against the upper wall of the guide and bites into the upper surface of the pipe. In order to anchor a pipe to the center sill through which it is the custom to pass it obliquely, the anchor is constructed with a horizontally elongated opening 2 sufficiently greater in length than the diameter of the pipe to permit of considerable lateral play during the initial fitting of the anchor to the sill. In this form the spaced pipe rests *p p* are dispensed with, but the vertical measurement of the opening is still made greater than the diameter of the pipe, and the clearance is taken up by the key.

It will be observed particularly in Fig. 2 that the key-guide is offset outwardly from the attachment lugs, which has the advantage of facilitating the driving of the key and keeping both protruding ends exposed after it has been driven, thus enabling the small end or both ends to be bent for locking purposes. A further advantage of this construction is that as the key lies transversely to the pipe the bearing point is reduced to a minimum and the biting action

is more effective whether the rests *p p* are employed or not. In the case of the needle beam anchor the key is caused to bear in the same transverse plane as the rests *p p* thereby securing an effective coaction of these parts in rigidly securing the pipe against the direct end thrust to which it is subjected and as the anchor is firmly clamped in place by bolts *x* or the like, the anchoring of the pipe is secure and durable.

What I claim is as follows:—

1. A train pipe anchor comprising a member having a train pipe opening therethrough, a vertical extension at the forward end of the member and having a horizontal key-way therethrough disposed at right angles to the opening, attachment means for the member and a tapered key of greater length than the key-way for the purpose of having its smaller end bent to lock such key against displacement in the key-way.

2. A train pipe anchor comprising a member having a train pipe opening therethrough, a vertical extension at the forward end of the member and having a horizontal key-way therethrough disposed at right angles to the opening, a pair of alined horizontal attachment lugs upon the rear end of the member and a tapered key of greater length than the key-way for the purpose of having its smaller end bent to lock such key against displacement in the key-way.

3. A train pipe anchor comprising a member having a train pipe-opening therethrough and a key-way at right angles to the opening such opening having a pair of spaced pipe rests in the same transverse plane as the key-way; and a key passed through the key-way and intersecting the opening through the anchor.

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

RICHARD WEBB BURNETT.

Witnesses:
GORDON G. COOKE,
E. R. PITTS.

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