R. W. BURNETT.

PIPE HOLDING KEY.

APPLICATION FILED MAY 1, 1916.

1,285,023. Patented Nov. 19, 1918.

Fig. 1.

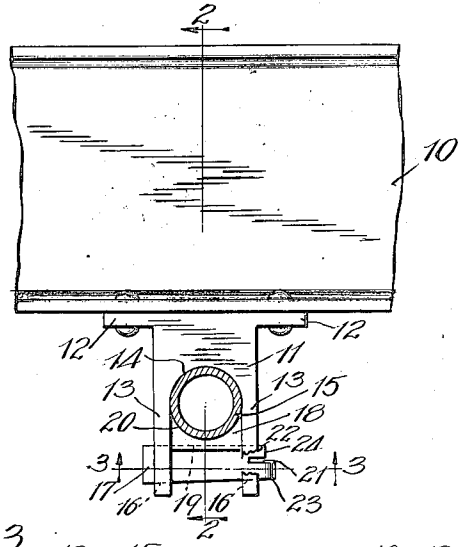


Fig. 2.

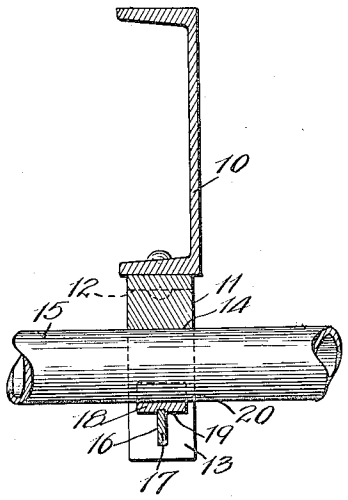


Fig. 3.

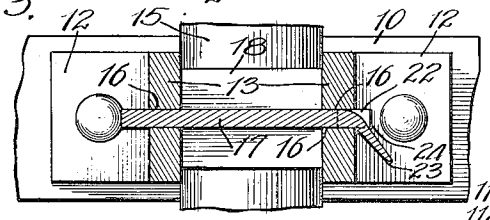


Fig. 4.

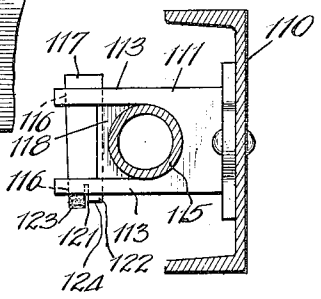


Fig. 5.

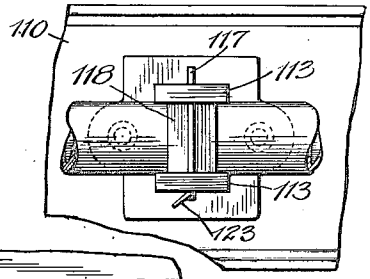


Fig. 6.

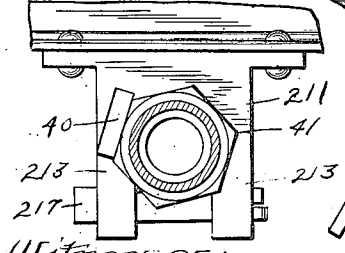
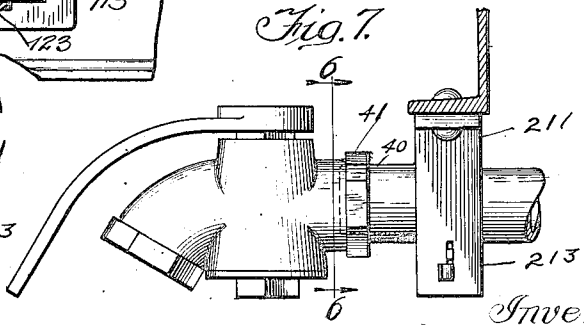


Fig. 7.



Witnesses;
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his Atty.

UNITED STATES PATENT OFFICE.

RICHARD WEBB BURNETT, OF CHICAGO, ILLINOIS.

PIPE-HOLDING KEY.

1,285,023. Specification of Letters Patent. Patented Nov. 19, 1918.

Application filed May 1, 1916. Serial No. 94,828.

To all whom it may concern:

Be it known that I, RICHARD WEBB BURNETT, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Pipe-Holding Keys, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to improvements in pipe holding keys.

The object of the invention is to provide a key for holding train pipes or other pipes in brackets, which key is so arranged and constructed as to be readily inserted in the slots usually provided therefor so that the key wedges the pipe tightly in position and the key has a bendable tongue to secure it in position and a blunt section to facilitate its removal by the use of a hammer or other suitable tool.

In the drawing forming a part of this specification, Figure 1 is an elevational view of a diaphragm or cross sill of a car showing my improvements in connection therewith for supporting a train pipe. Fig. 2 is a vertical section of the structure illustrated in Fig. 1 and taken on the line 2—2 thereof. Fig. 3 is an enlarged sectional view taken substantially on the line 3—3 of Fig. 1 and looking in the direction of the arrows shown. Fig. 4 is a vertical sectional view of another embodiment of my improvement showing the method of securing the bracket to the side of a sill of a car. Fig. 5 is a side elevation of the structure illustrated in Fig. 4, looking from left to right. Fig. 6 shows another embodiment of my invention applied to an angle cock holder and taken on the line 6—6 of Fig. 7. And Fig. 7 is a view of the structure illustrated in Fig. 6 and taken at right angles thereto.

Referring now to Figs. 1, 2 and 3, 10 denotes a diaphragm, needle beam or cross sill of a car, the same being of channel form and to which is attached my improved anchor. As shown, the pipe anchor comprises a bracket member or casting 11 having upper horizontally extending flanges 12—12 by which the bracket is riveted or otherwise secured to the lower flange of the channel 10. The bracket casting 11 is provided with a pair of depending, spaced arms 13—13 between which is formed a curved seat 14 for the train pipe 15 to be seated in. As will be apparent, the train pipe 15 can be inserted or removed after the anchor is in position. To secure the pipe in position, the depending arms 13—13 are provided near their lower ends, with alined slots or perforations 16—16 through which is extended a key 17 tapered in the direction of its length as appears most clearly from Fig. 1. In the construction shown in Figs. 1 and 2, I show a block 18 grooved on its under side as indicated at 19 to receive the key 17 and provided with a curved seat 20 on its upper face to fit the pipe 15. Said block 18 may be corrugated circumferentially of the pipe or otherwise roughened to prevent the pipe from slipping lengthwise.

Referring now more particularly to the key 17, the same is shown as provided with a slot or cut 21 at its smaller end, said cut 21 being perpendicular to the sides of the key and extended to a point within the recess or opening 16 in the adjacent arm 13, when the key is in operative position. The smaller or advance end of the key 17 is thus divided into two tongues or tangs 22 and 23. One of these tangs, 22, is left with a blunt end 24 which, as clearly appears in Figs. 1 and 3, is extended beyond the outer face of the adjacent arm 13, when the key is in operative position. The other tang 23 is tapered in thickness as appears from Fig. 3, from a point commencing at the inner end of the slot 21. The tang 23 is made preferably longer than the blunt tang 24 and is adapted to be bent around the adjacent arm 13, as appears from Fig. 3 and in this connection, it will be noted that the taper, commencing at the point indicated, facilitates this operation.

By employing a locking key of the structure above described, I have found that the same may be readily secured in place by means of a hammer, the hammer being first employed to drive the key into position and then to bend the tang 23 over the adjacent portion of the arm 13. To remove the key, a hammer or other suitable tool is employed and the key is struck on the blunt end 24. This construction is particularly useful in cars where the workmen are compelled to operate in cramped quarters, as has been proven by actual experience.

Referring now to the construction illustrated in Figs. 4 and 5, the bracket 11 is constructed so as to have the arms 113—113 thereof extend horizontally and the bracket

secured to the side or web of the channel 110. In this construction also, a block 118 is employed with a key 117 similar to the key used in the structure illustrated in Fig. 1 and heretofore described in detail.

In the construction illustrated in Figs. 6 and 7, the anchor bracket 211 is of substantially U-shape similar to the anchor bracket shown in Fig. 1 and having its arms 213—213 extended downwardly. In this construction, the anchor bracket is also adapted to serve as a holder for an angle cock and for this purpose is provided with an outwardly extended, integral lug 40 adapted to engage one face of the hexagonal nut 41 of the angle cock and when the latter is in its proper position. The train pipe is held in position by a key 217 similar to the key 17, as will be understood. As is apparent from the drawing, the lug 40 will prevent turning of the angle cock in either direction, after the pipe is placed in position and tightly secured by the key 17. The arrangement is exceedingly simple and cheap to manufacture and efficiently performs all the functions necessary for holding the angle cock in place.

From the preceding description, it will be seen that the arrangement which I have provided, permits of the easy locking in place of the key and removal thereof and reuse of the key, which will preferably be made of malleable iron.

I claim:

1. As an article of manufacture, a key adapted for use with pipe anchors and the like having alined slots to receive the key, said key being tapered in width in the direction of its length so as to adapt the key for wedging a pipe in position, said key being slotted lengthwise at its narrower end to thereby form two tangs, one of said tangs being shorter than the other and having a blunt end, the longer tang being bendable and adapted to be readily bent by striking the same with a hammer or equivalent tool where it projects beyond the blunt ended tang, the blunt ended tang being provided to facilitate removal of the key by striking a hammer or other suitable tool thereagainst.

2. As an article of manufacture, a key adapted for use with a pipe anchor bracket having slots to receive the key, said key being tapered in width in the direction of its length and formed at its narrower end with two distinct portions separated by a longitudinally extending slot in the key, said slot extending normally within the adjacent slot of the hanger bracket when the key is in place, one of said portions having a blunt end and the other portion being tapered in thickness so as to adapt it to be bent around an adjacent portion of the bracket.

In witness that I claim the foregoing I have hereunto subscribed my name this 27th day of April 1916.

RICHARD WEBB BURNETT.

Witness:

JOSEPH HARRIS.