H. VISSERING.

ANGLE COCK HOLDER.

APPLICATION FILED AUG. 3, 1911.

1,119,904.

Patented Dec. 8, 1914.

2 SHEETS—SHEET 1.

Fig. 1.

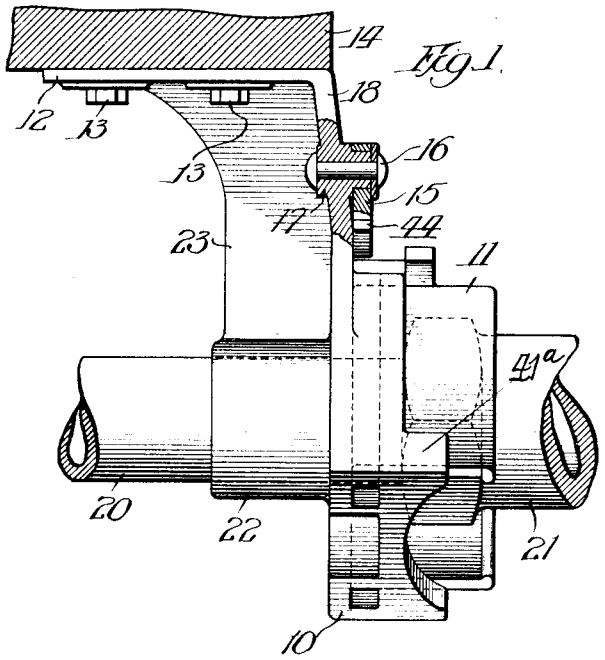


Fig. 2.

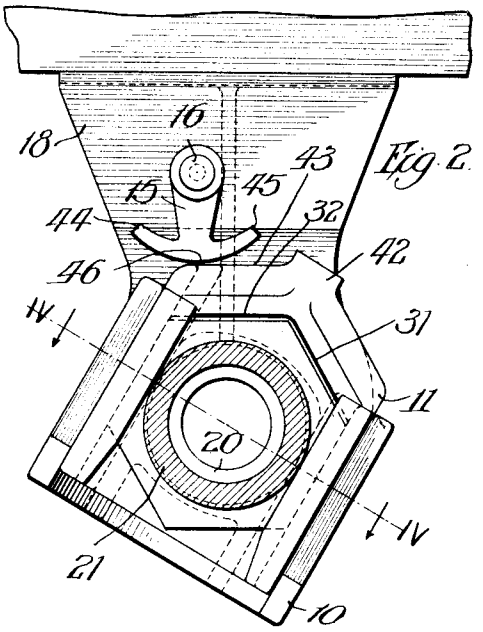


Fig. 4.

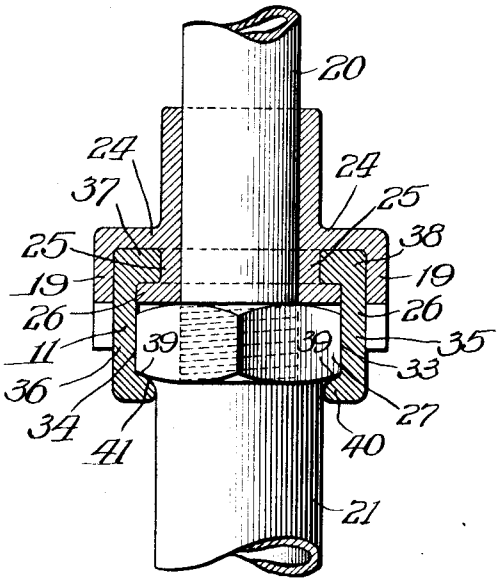
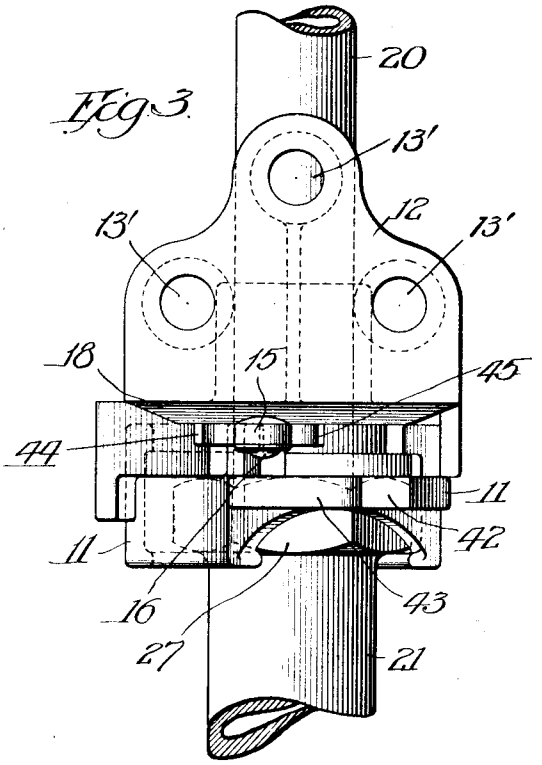


Fig. 3.



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2 SHEETS—SHEET 2.

Fig. 5

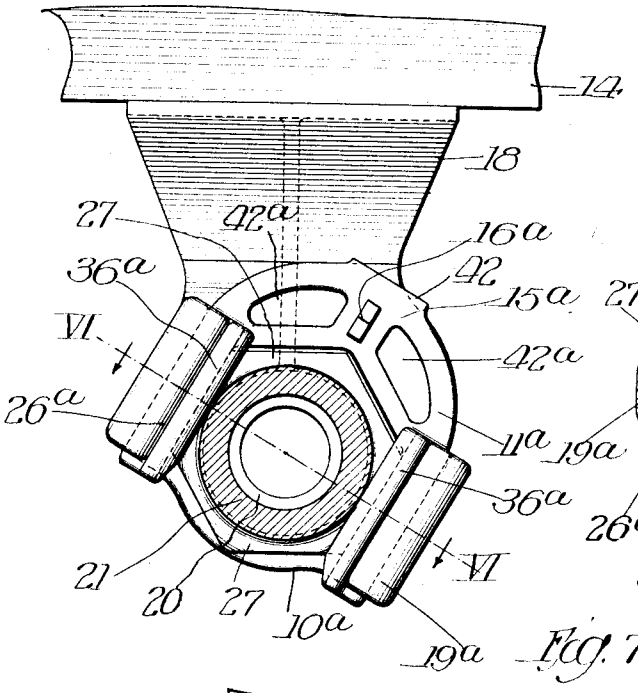


Fig 6

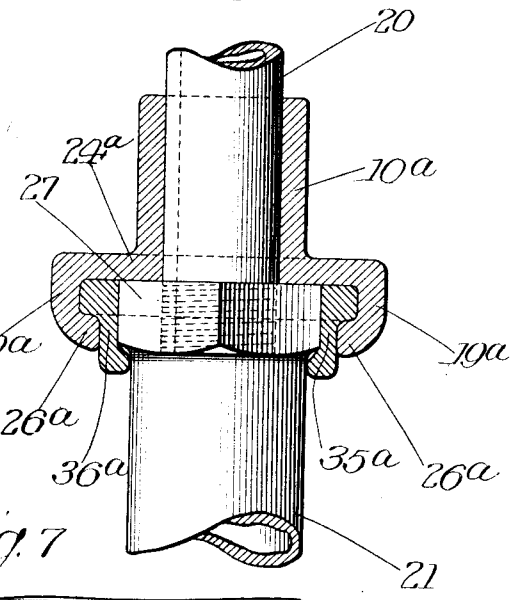
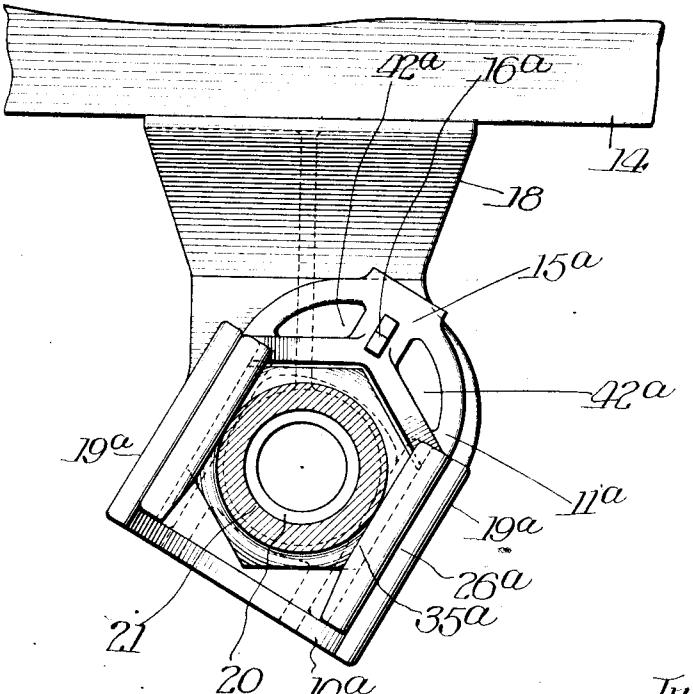


Fig. 7



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HARRY VISSERING, OF CHICAGO, ILLINOIS, ASSIGNOR TO HARRY VISSERING AND COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

ANGLE-COCK HOLDER.

1,119,904. Specification of Letters Patent. Patented Dec. 8, 1914.

Application filed August 3, 1911. Serial No. 642,207.

To all whom it may concern:

Be it known that I, HARRY VISSERING, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Angle-Cock Holders, of which the following is a specification.

My present invention relates generally to supporting brackets and more particularly to brackets for disengageably sustaining and maintaining a device in operative position, and has special reference to the provision of an improved type of holding bracket for sustaining the angle cock commonly used in the train line air pipe in railway air brake equipment.

The principal objects of my present invention are the provision of the improved means for so holding an angle cock that it will be retained at all times in its proper position and will be prevented from becoming dislocated or separated endwise or otherwise from the car or other structure with which it is used; the provision of an improved type of holder for angle cocks including clamping means leaving the "hexagon" or like part of the angle cock without interference, prior to the application of the clamping means to the end that a wrench or other tool may be used for attaching such cock to the pipe after the pipe has been placed in position in the holder and before the clamping means are applied; and generally to provide an improved, simplified, efficient and cheapened type of construction characterized as above, together with such other objects as may hereinafter appear.

In attaining the foregoing objects, together with certain further advantages to be below disclosed, I have provided the structures illustrated in the accompanying drawings, wherein—

Figure 1 is a side elevation, partly broken away, of a preferred form of device embodying my improvements; Fig. 2 is a front view of the complete device; Fig. 3 is a plan view of the device of Fig. 2; Fig. 4 is a sectional plan view, taken on the line IV—IV of Fig. 2; Fig. 5 is a front elevation illustrating a somewhat modified form of the device; Fig. 6 is a sectional view taken on the line VI—VI of Fig. 5; and Fig. 7 is a front elevational view of another embodiment of my invention.

Referring first to the device of Figs. 1 to 4, it will be noted that the device comprises essentially a sustaining member 10 and a clamping member 11, the sustaining member 10 having as means whereby it may be attached to some convenient portion, for example the end sill 14, of a car, a rearward extension 12 having devices such as bolts 13 passing through the holes 13′, and being provided with means whereby the clamping member is held in adjusted vertical position relatively to the bracket 10, here illustrated as the gravity actuated latch 15 pivoted at 16 in an enlargement 17 formed in the flange 18 of the bracket.

For the purpose of holding in predetermined position the train line air pipe 20 and the angle cock 21, the sustaining member is provided with a rearward extension 22, apertured for the insertion of the train line 20 and provided with a web 23, extending between the said rearward extensions 12 and 22 and the flange 18 on the upward extension, for strengthening the device and making it more rigid and less liable to fracture in the event of shock.

On inspection of Fig. 4 especially it will be observed that the member 10, in order to receive the clamping member 12 and thereby provide a socket for the reception of the hexagon 27 or other enlarged portion of the angle cock 21 and so prevent longitudinal or lateral movement thereof, is provided with lateral extensions 24 having forwardly projecting flanges 19 and with forward extensions 25 having marginal flanges 26 against which latter the inner surface of portion 27 of the angle cock rests, the arrangement of extensions and flanges thus forming dovetail sockets on each side of the pipe 20 for the reception of the clamping member 11 now to be described, which also serves to hold the angle cock against rotation.

On viewing Figs. 2 and 4 it will be seen that the clamping member 11 in its frontal aspect is bifurcated and shaped somewhat like an inverted U, its interior being preferably formed with substantially parallel bearing faces, 31, 32 (Fig. 2) and similar angularly disposed faces, 33, 34 (Fig. 4) complementary to and adapted to act upon the corresponding laterally disposed and angularly arranged sides of the hexagon 27, which are normally arranged parallel to the

axis of the cock, and that in cross section the legs 35 and 36 of the clamping member 11 are of a channel like form, the webs thereof bearing against sides of the hexagon, the flanges 37 and 38 bearing against the flange 26, and the flanges 40 and 41 bearing against the outer face 39 of the hexagon.

To facilitate the withdrawal of the clamping member 11 from its engagement with the sustaining member 10, a projection 42 is formed intermediate the portions 35 and 36.

To prevent accidental displacement of the clamping member, it is provided with a preferably horizontal plane surface 43 adapted to be acted upon by the contact surface 46 of the gravity actuated latch 15 when the parts are in adjusted position. In order to accommodate any slight departure from the horizontal, the latch 15 is provided with arms 44 and 45 and the contact surface 46 is preferably an arc of a circle concentric with the center of the pin 16 in order that such latch may act upon the member 11 at all times efficiently and yet without becoming wedged thereupon.

Referring now more particularly to the device of Figs. 5 and 6, it will be observed that in the embodiment of my invention here shown, for fixing the clamping member 11^a in position I utilize an extension 15^a apertured for the insertion of a cotter pin 16^a instead of the gravity actuated latch 15 and the projection 42, forming apertures at 42^a, 42^a, as finger holds to facilitate the removal of the clamping member upon the removal of the cotter-pin. As will be clearly apparent on the inspection on Fig. 6, the sustaining member 10^a is not provided with the forward extension 25 and flange 26 of the device of Fig. 4, and that in lieu of the forwardly projecting extension 19 I make use of the forwardly projecting extensions 19^a, 19^a, provided with inwardly extending flanges 26^a, 26^a, by means of which the legs 35^a and 36^a of the clamping member 11^a are restrained from longitudinal and lateral movement. In the present type of device the members 35^a and 36^a, instead of being in cross section of the genral form of a channel or U are of the general form of a Z, and when this type of device is used, the hexagon 27 rests directly against the outwardly extended flange 24^a instead of the flange 26, thus permitting a somewhat more compact form of structure.

The device of Fig. 7 is quite similar in general to that of Fig. 1, save in the arrangement of the cotter pin and withdrawing means, which is quite similar to that of the device of Figs. 5 and 6.

In view of the foregoing specification and upon due inspection of the drawings, it will be observed that before the insertion of the clamping member 11 into its seat in the sustaining member 10, the pipe 20 may readily be passed through the sustaining member 10, and that at such time the hexagon 27 on the angle cock 21 is left without interference, so that if desirable a wrench may readily be used for screwing such cock on to the pipe, and that when such cock has been properly adjusted upon the pipe with due consideration to the relative position to the sides of the hexagon 27 and the extensions 19, the clamping member 11 may be readily inserted in position, and upon such insertion and particularly if it be latched or pinned in position, the cock will be firmly held in adjusted position and that it will be impossible to detach it either endwise or otherwise from the car.

Having thus described my invention and illustrated its use, what I claim as new and desire to secure by Letters Patent is the following:

1. A device of the character described comprising, in combination, a grooved sustaining bracket adapted to receive a pipe having a cock, a bifurcated clamping member adapted to engage said cock and a groove in said bracket, and means for holding said bracket and clamping member in adjusted position.

2. A device of the character described comprising, in combination, a sustaining bracket adapted to receive a pipe having a cock, and a unitary clamping member provided with angular portions adapted to engage said bracket and cock.

3. A device of the character described comprising, in combination, a sustaining bracket adapted to receive a pipe having a cock, and a unitary clamping member provided with substantially parallel extensions adapted to engage said bracket and cock.

4. A device of the character described comprising, in combination, a sustaining bracket adapted to receive a pipe having a cock, and a clamping member provided with substantially parallel flanges adapted to engage said bracket and cock.

5. A device of the character described comprising, in combination, a sustaining bracket adapted to receive a pipe having a cock, and a clamping member having substantially parallel bifurcations adapted to engage said bracket and cock.

6. A device of the character described comprising, in combination, a sustaining bracket adapted to receive a pipe having a cock, and a substantially U-shaped clamping member adapted to engage said bracket and a major portion of the periphery of the cock.

7. A device of the character described comprising, in combination, a sustaining bracket adapted to receive a pipe having a cock, and a clamping member adapted to engage said cock and to make dovetailed en-

gagement with substantially parallel portions of said bracket.

8. A device of the character described comprising, in combination, a sustaining bracket adapted to receive a pipe having a cock, and a clamping member, said bracket and clamping member being provided with coöperating substantially parallel flanged means for holding them against relative horizontal movement.

9. A device of the character described comprising, in combination, a sustaining bracket adapted to receive a pipe having a cock, provided with a plurality of angularly disposed engaging faces and a clamping member, said bracket and clamping member being provided with coöperating flanges for holding them against relative horizontal movement, and said clamping member being adapted for contact with a major portion of the number of faces of the cock.

10. In a device of the character described, in combination with an angle cock having a pair of faces one arranged on each side of the longitudinal axis of the cock, a sustaining bracket and a unitary clamping member adapted to hold said cock, one of said members being provided with means acting upon said faces, whereby the cock is held in adjusted position.

11. In a device of the character described, in combination with an angle cock having substantially parallel faces, a sustaining bracket and a unitary clamping member adapted to hold said cock, said clamping member being provided with substantially parallel bearing faces acting upon said faces, whereby said cock is held in adjusted position.

12. In a device of the character described, in combination with an angle cock having substantially parallel faces, a sustaining member and a clamping member adapted to hold said cock, said clamping member being provided with substantially parallel bearing faces acting upon said faces and with means for dovetailed engagement with said sustaining member.

13. In a device of the character described, in combination with an angle cock having substantially parallel faces, a sustaining member and a clamping member adapted to hold said cock, said clamping member being provided with substantially parallel bearing faces acting upon said faces and with means for engagement with said sustaining member and means supported by the bracket for holding said clamping member in adjusted position.

In testimony whereof I have hereunto signed my name in the presence of the two subscribed witnesses.

HARRY VISSERING.

Witnesses:
H. H. WARD,
C. SCHUTTE.