No. 749,346. PATENTED JAN. 12, 1904.

E. C. WASHBURN.

COUPLING SUPPORT.

APPLICATION FILED SEPT. 25, 1903.

NO MODEL.

Fig. 1.

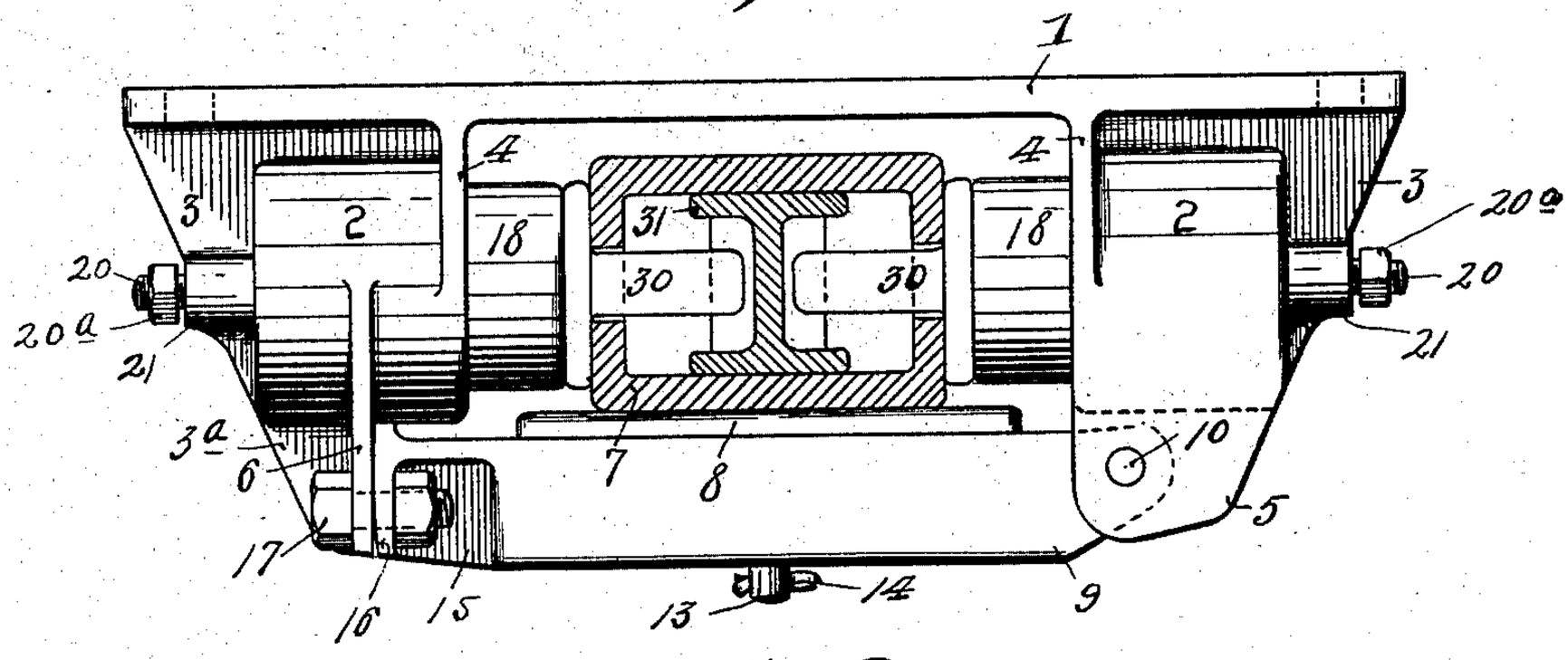


Fig. 2.

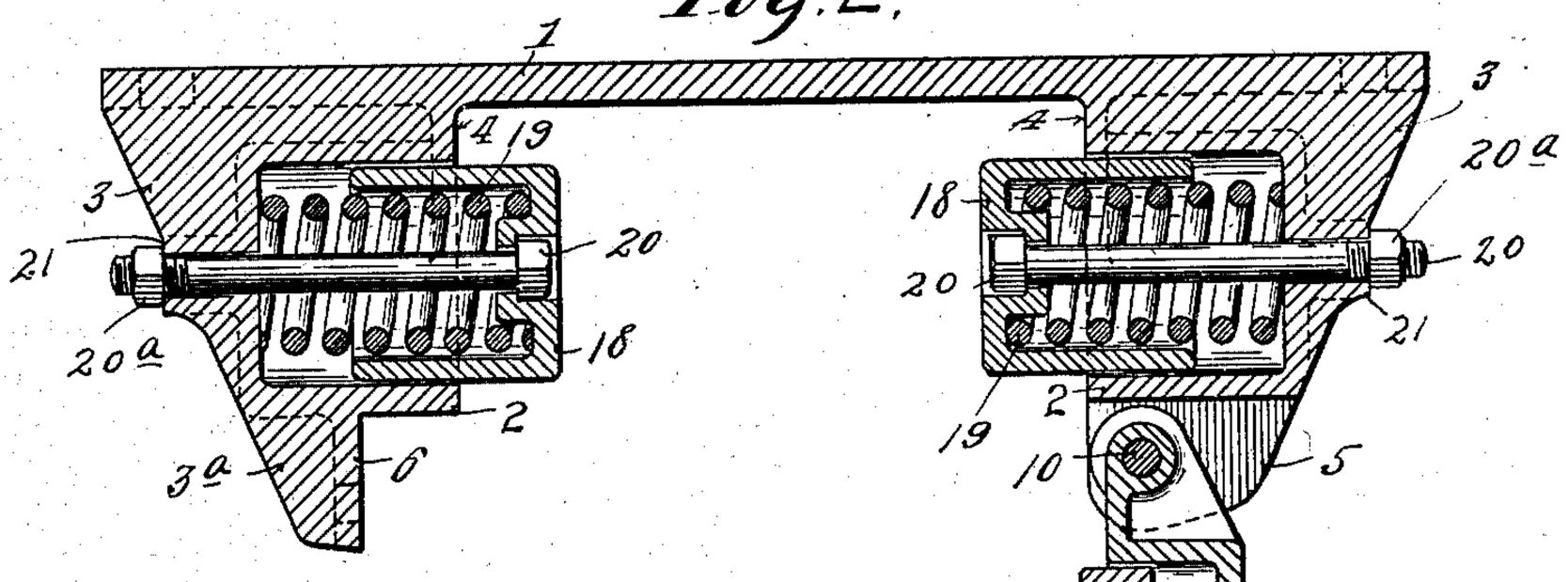


Fig. 3.

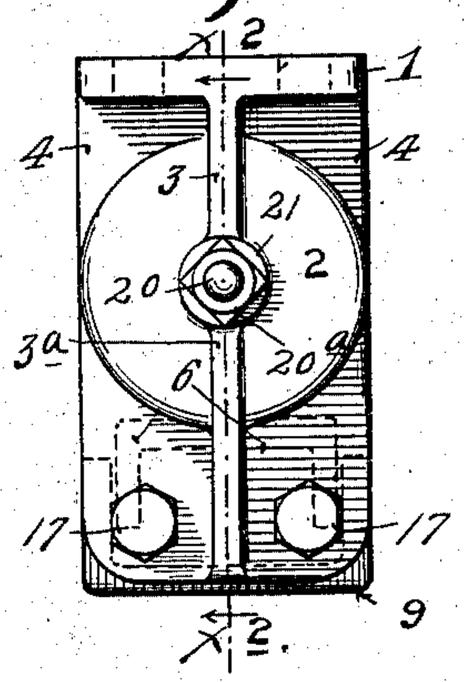
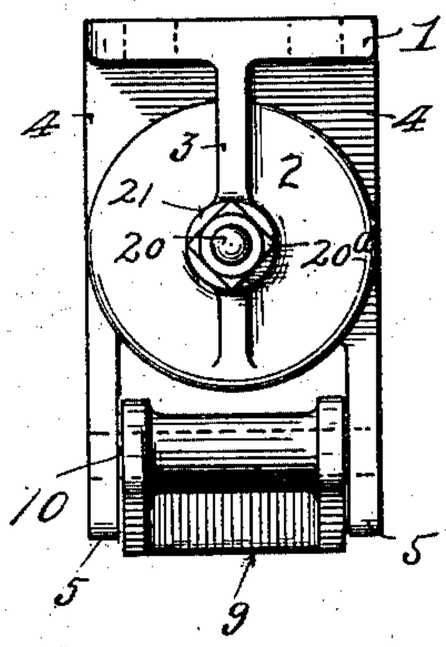


Fig. 4.



Witnesses.
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No. 749,346. Patented January 12, 1904.

UNITED STATES PATENT OFFICE.

EDWIN C. WASHBURN, OF MINNEAPOLIS, MINNESOTA.

COUPLING-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 749,346, dated January 12, 1904.

Application filed September 25, 1903. Serial No. 174,538. (No model.)

To all whom it may concern:

Be it known that I, EDWIN C. WASHBURN, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Coupler-Supports; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My present invention has for its object to provide an improved coupler-support; and to this end it consists of the novel devices and combinations of devices hereinafter described, and defined in the claims.

The invention is illustrated in the accompanying drawings, wherein like characters indicate like parts throughout the several views.

Figure 1 shows the coupler-support in front elevation and the draft-bar of the coupler in transverse section. Fig. 2 is a transverse vertical section through the coupler-support on the line x^2 x^2 of Fig. 3, the pivoted supporting-bar of the coupler-support being shown as dropped down. Fig. 3 is a left end elevation of the coupler-support, and Fig. 4 is a right end elevation of the said coupler-support.

The body portion of the coupler-support is a casting, preferably of malleable iron, but, if desired, of steel, and it comprises a top plate 1, having at its ends transversely-alined depending pockets 2, the outer ends of which are closed. The pockets 2 are united to the top plate 1, preferably by centrally-located webs 3 and side ribs or flanges 4. One of the pockets 2—as shown, the right-hand pocket—is provided with a pair of heavy depending ears 5, and the other pocket—to wit, as shown, the left-hand pocket—is provided with a depending transversely-extended web 6, which, as shown, is also cast integral with a depending portion 3^a of the left-hand web 3.

In this improved coupler-support the draft-bar 7 rests directly upon a follower-plate 8, which is carried by a supporting-bar 9, pivoted at one end to the depending ears 5 by means of a rivet or bolt 10. The follower-plate 8 is seated in a longitudinal depression 11 of the bar 9, is yieldingly pressed upward by a pair of short springs 12, compressed between said follower-plate and the bottom of said bar, and its upward movement is limited by a stop-bolt 13. The head of the stop-bolt 13 is countersunk in the top of the follower-plate, and a cotter 14, passed through the depending lower end of said bolt, serves as a stop to limit the upward movement of the follower-plate under the action of the springs 12.

The free end of the supporting-bar 9 is preferably formed segmental, so that it will closely engage the inner face of the depending transverse web 6 when the said bar is swung upward into working position, and to permit of the application of locking-bolts the the free end of said bar 9 beyond its recess 11 is hollowed inward at both sides below the upper surface thereof, so as to form a central longitudinally-extended web 15 and a transversely-extended end web 16. Short nutted bolts 17, passed through the abutting webs 6 and 16, serve to draw the said webs tightly together and to lock the supporting-bar 9 in its operative position. Furthermore, the arrangement is such that when the webs 6 and 16 are drawn together the play between the pivot-bolt 10 and the parts which it pivotally connects will be taken up, so that the said supporting-bar then becomes a rigid connection between the depending end portions of the main casting or body of the coupler-support. In other words, when the supporting-bar 9 is locked the body-casting and the said supporting-bar afford a rigid and approximately-rectangular frame completely embracing the draft-bar of the coupler.

Working telescopically within each pocket 2 is a cup-shaped follower 18, between the projecting heads of which and the bottoms of the pockets 2 are compressed coiled springs 19, tending to force the said followers toward each other. For limiting the inward movement or movements of the followers toward each other under the actions of the springs 19 nutted stop-bolts 20 are provided, the heads of which bolts are countersunk into the heads of the followers and the screw-threaded ends of which project outward through axial hub-like portions 21 of the pockets 2. The nuts 20^a of the said bolts are of course on the pro-

jecting screw-threaded ends thereof, so that they may engage as stops with the said hubs 21.

When the device above described is to be used to support a laterally-movable draft-bar having a rigid coupler-head, or where it is to be used to support a flexible head-coupler arranged as illustrated in my prior patent, No. 682,754, of date January 31, 1899, the spring-pressed followers 18 will be directly engaged with the sides of the draft-bar. When, however, the device is used to support a flexible head-coupler of the general character disclosed in my prior patent, No. 705,169, of date July 22, 1902, wherein headed centering-pins 30 are passed through the sides of the draft-bar for engagement with the tail end 31 of the pivoted coupler-head, the said followers 18 will be directly engaged with the heads of the said centering-pins, as indicated in Fig. 1.

The coupler-support above described has in practice been found strong, durable, and efficient for the purposes had in view, and, furthermore, it is a very convenient device and enables the quick application and removal of the coupler to and from working position simply by dropping the supporting-bar 9 pivotally downward into the position indicated in Fig. 2.

The device described is of course capable of modification as to some of its details of construction within the scope of my invention, as herein set forth and claimed.

What I claim, and desire to secure by Letters Patent of the United States, is as follows:

1. A coupler-support having a supporting-bar movable to and from working position and provided with a spring-pressed follower-plate for engagement with the coupler-bar.

2. A coupler-support having a pivoted supporting-bar provided with a spring-pressed follower-plate for engagement with the coupler-bar.

3. A coupler-support having a supporting-bar pivoted at one end and detachably securable at its other end, a spring-pressed follower-plate fitting a recess in said supporting-bar, and a stop-bolt limiting the movement of said follower-plate.

4. A coupler-support having a supporting-bar movable to and from working position, a spring-pressed follower-plate carried by said supporting-bar, and means for limiting the movement of said follower-plate, under the action of its spring, substantially as described.

5. A coupler-support comprising a recessed supporting-bar, movable to and from working position, a spring-pressed follower-plate mounted in the recess of said supporting-bar, and a stop-bolt having its head countersunk in the said follower-plate, with its end projecting through said supporting-bar and provided with the stop, substantially as described.

6. In a coupler-support, the combination with a bracket having the depending end portions, of a supporting-bar pivoted to one of said depending end portions, and nutted bolts detachably securing the free end of said supporting-bar to the other depending end portion of said bracket, substantially as described.

7. The combination with a body-bracket having depending end portions, of a supporting-bar independent thereof, and means for securing said supporting-bar to the depending portions of said bracket, involving nutted bolts arranged to draw said parts together by a strain in a longitudinal direction of said bar, substantially as described.

8. In a coupler-support, a body-bracket having pockets in its side portions, of cup-like followers working within said pockets, springs compressed within said followers and pockets, and stop-bolts having their heads countersunk in said followers and with their threaded ends working through hubs of said pockets and provided outward thereof with nuts, substantially as described.

9. In a coupler-support, the combination with a body-bracket having depending end portions formed with pockets, of spring-pressed followers working in said pockets, and a supporting-bar applied to the depending end portions of said body-bracket and movable to and from operating position, substantially as described.

10. In a coupler-support, the combination with a body-bracket having depending end portions formed with pockets, of spring-pressed followers mounted in said pockets, and a supporting-bar pivotally connected at one end to one of the depending end portions of said bracket, and detachably securable at its free end to the other depending end portion of said bracket, substantially as described.

11. In a coupler-support, the combination with a body-bracket having depending end portions, of a supporting-bar pivoted at one end to one of the end portions of said bracket, and having at its free end, a segmental web, for close engagement with a depending web of the other end portion of said bracket, and nutted bolts passed through the abutting webs of said bracket and supporting-bar, substantially as described.

12. In a coupler-support, the combination with a body-bracket 1 having the pockets 2, ears 5 and transverse web 6, of the spring-pressed followers working in said pockets 2, the supporting-bar 9 pivotally attached to said lugs 5 and having at its free end the web 16, and the nutted bolts 17 passed through said webs 6 and 16, for detachably connecting the free end of said bar 9 to the said bracket 1, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

EDWIN C. WASHBURN.

Witnesses:
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F. D. MERCHANT.