S. A. BIGGERS.

WAGON COUPLING.

APPLICATION FILED OCT. 26, 1908.

919,684. Patanted Apr. 27, 1909.

Fig. 1.

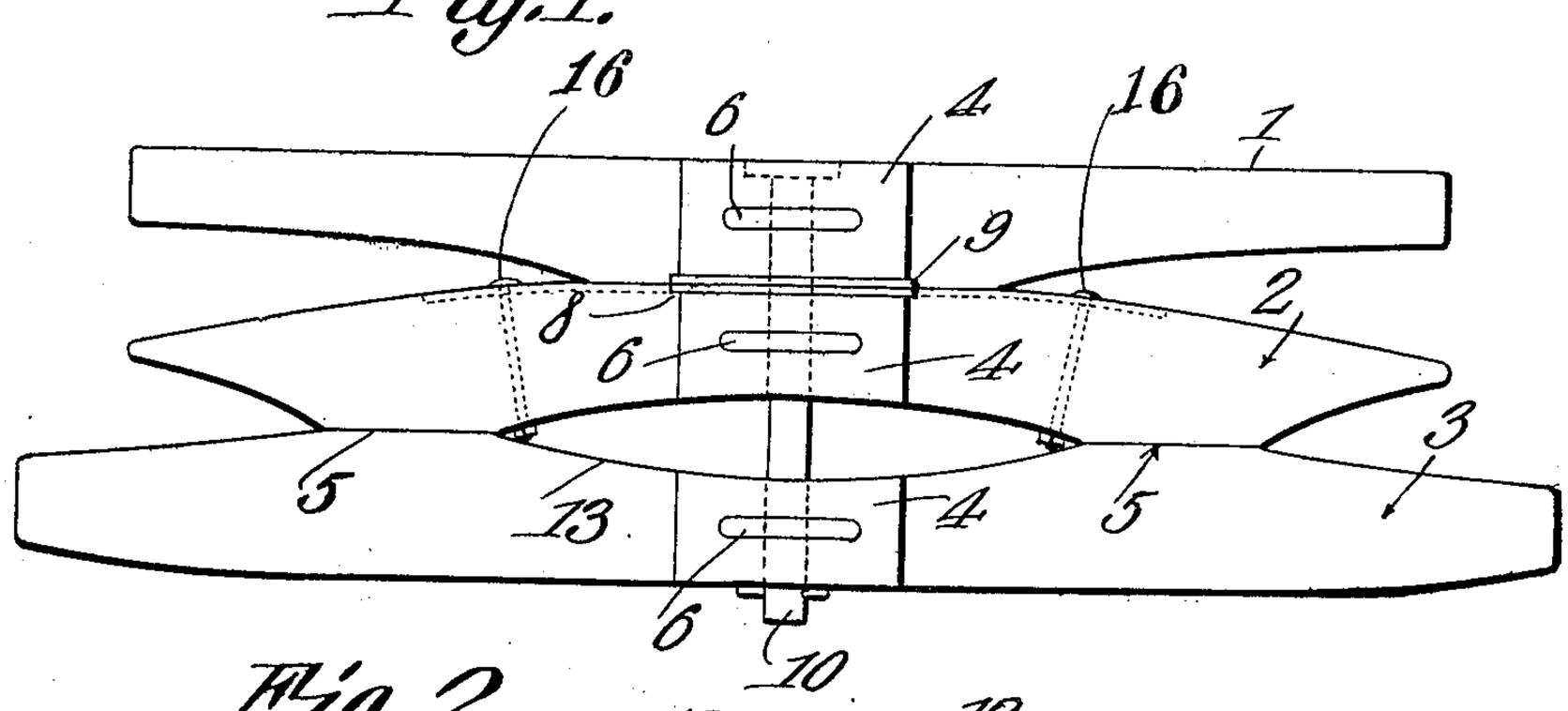


Fig. 2.

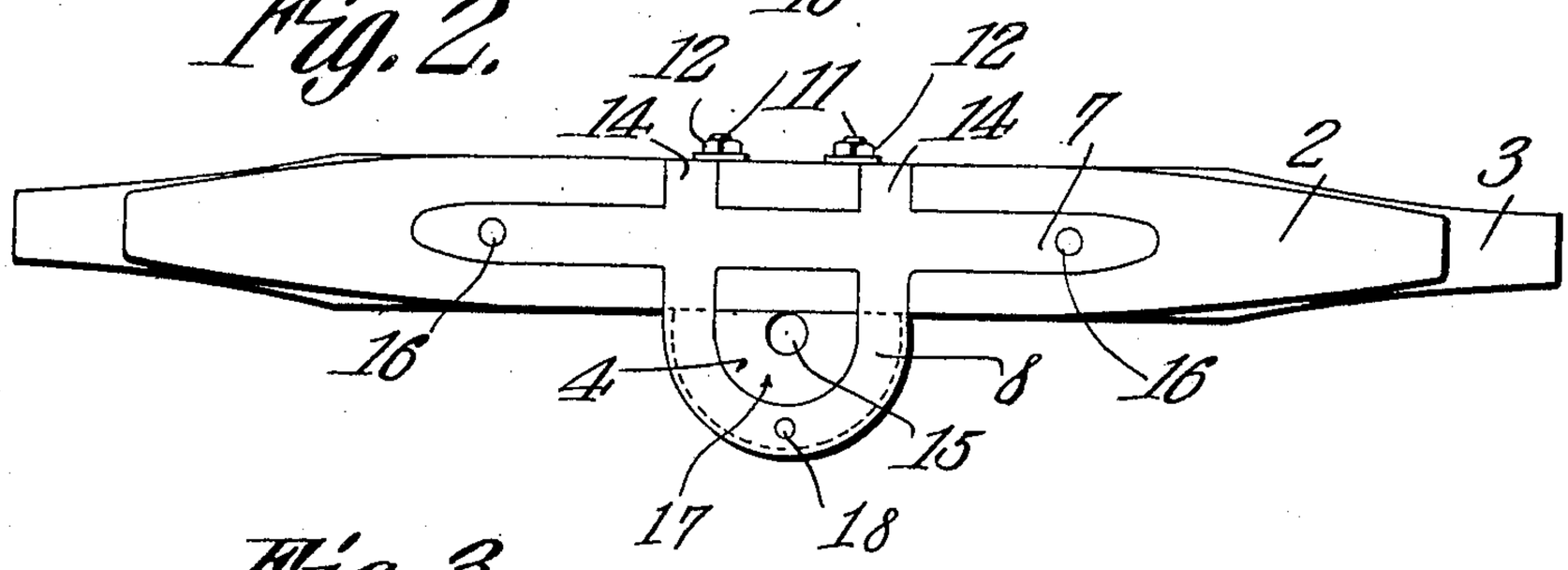
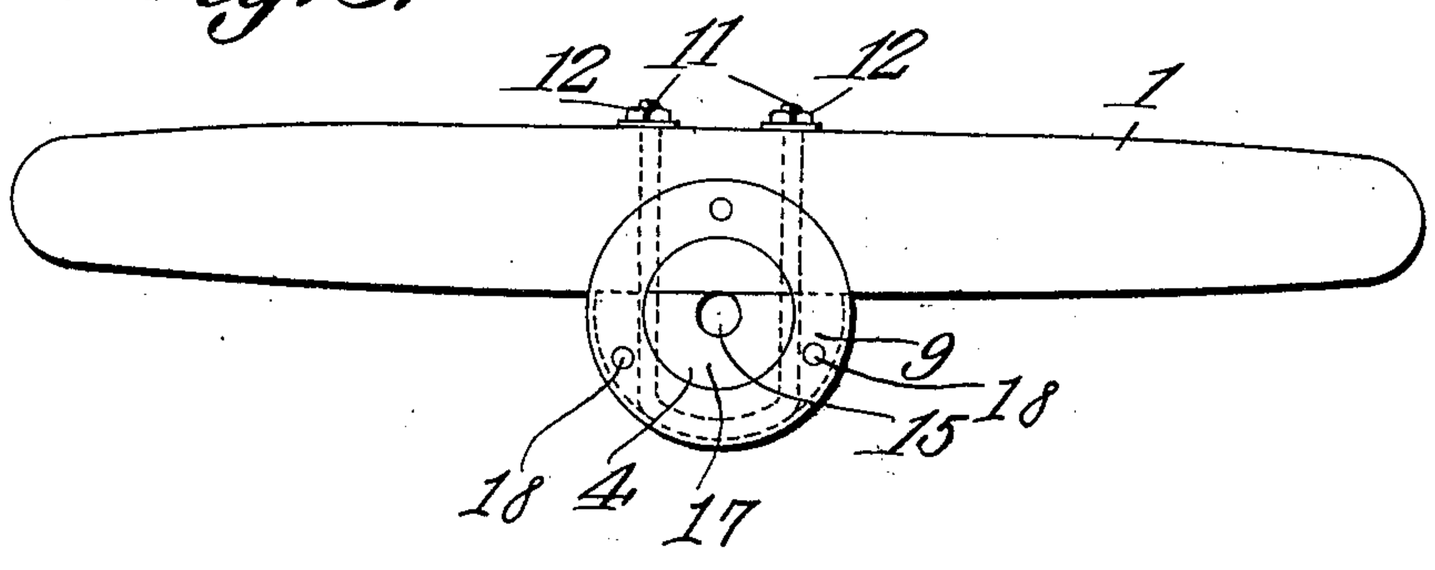


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

SAMUEL A. BIGGERS, OF McLEAN, TEXAS.

WAGON-COUPLING.

No. 919,684. Specification of Letters Patent. Patented April 27, 1909.

Application filed October 26, 1908. Serial No. 459,635.

To all whom it may concern:

Be it known that I, SAMUEL A. BIGGERS, a citizen of the United States, residing at McLean, in the county of Gray and State of Texas, have invented a new and useful Wagon-Coupling, of which the following is a specification.

The objects of the invention are, generally, the provision in a merchantable form, of a device of the above mentioned class, which shall be inexpensive to manufacture, facile in operation, and devoid of complicated parts; specifically, the provision of a bolster, head block, and axle, of novel and improved construction; the provision of novel means for uniting the said bolster, said block and axle, and for maintaining the various parts of the device in operative position under the various exigencies of traffic; other and further objects being hereinafter made manifest as the description of the invention progresses.

The invention consists in the novel construction and arrangement of parts hereinafter described, delineated in the accompanying drawings, and particularly pointed out in the appended claim, it being understood that divers changes in the form, proportions, size and minor details of the structure may be made, without departing from the spirit or sacrificing any of the advantages of the invention.

Similar numerals of reference are employed to denote corresponding parts throughout the several figures of the drawings.

In the accompanying drawings:—Figure 1 shows my invention in front elevation; Fig. 2 shows the same in top plan, the bolster 1 being removed; Fig. 3 is a bottom plan of the bolster 1.

In carrying out my invention, I provide an axle 3, which may be of any form, preferably, however, as shown, it has its middle portion 13 depressed, as shown in Fig. 1, shoulders 5 upstanding upon each side of the said depressed portion. Mounted upon the axle 3 and rigidly attached thereto at the shoulders 5, is the upwardly arched head-block 2. Superposed upon the head-block 2 is the bolster 1. Mounted upon the front faces of the bolster 1, the head-block 2 and the axle 3, are the bearing blocks 4, having alined apertures 15 arranged to receive the king bolt 10. These bearing blocks 4 are, as shown in Figs. 2 and 3, semi-circular in top plan. For the attachment of the bearing blocks 4 to the members by which they are carried, I provide U-shaped bolts, having their curved portions 6 embedded in the curved faces of the bearing blocks 4, their arms 11 being carried rearward through the bearing blocks 4, and through the members upon which those bearing blocks are mounted; the terminals of the portions 11 are arranged to receive nuts 12, which contact with the rear faces of the members upon which the bearing blocks 4 are mounted, providing a means whereby the bearing blocks 4 may be drawn into close relation with the members which carry them.

In Fig. 2 I have shown a wearing plate to be mounted upon the upper surface of the head block 2. This wearing plate comprises a straight portion, 7, longitudinally disposed upon the head block 2, and suitably secured by bolts 16 to the said head-block 2. Integral with the portion 7, is a semi-circular member 8, arranged to project outwardly from the head block 2 upon the bearing blocks 4 and extending outward beyond the periphery of the said bearing block. The ends 14 of the semi-circular portion 8 are carried to the rear of the portion 7, and terminate at the rear edge of the head block 2, as shown in Fig. 2.

In Fig. 3 I have shown a wearing plate 9, designed to be carried by the lower face of the bolster 1. This wearing plate 9 may be of any form; preferably, however, as shown, it is annular in shape and is mounted upon the bolster 1 and the bearing block 4, extending outward beyond the periphery of the said bearing block 4, after the manner of the portion 8 of the wearing-plate shown in Fig. 2.

Each of the wear plates is provided with a central opening 17, and this opening is of larger diameter than the opening 15 in the bearing block. Between the walls of the apertures 17 and 15, oil, dirt, and worn out particles of iron may accumulate between the bearing blocks, without finding their way immediately into the aperture 15, to the damage of the king-bolt which is mounted therein. Bolts 18 or like elements unite the wear plates with the bearing blocks, and the wear plates therefore serve to aid in holding the bearing blocks in their respective positions.

As hereinbefore pointed out, the bearing-blocks 4 are approximately semi-circular in

top plan, and bear upon each other throughout their entire surfaces. Referring particularly to the bearing-block which is carried by the head-block 2, it will be seen that there are no lateral projections extending from the said block along the front face of the member 2 to catch the bolster 1 as it moves upon the said member 2.

By providing the wearing-plate 9, and the wearing-plate of which the member 8 is a part, I obviate the possibility of the bolster 1 catching, in rotation, the bearing-block carried by the head-block 2, and, by extending the wearing-plates outwardly beyond the periphery of the bearing blocks 4, I provide a broad, firm base which renders impossible, tipping of the bolster 1, thereby twisting and breaking the king-bolt 10.

It frequently happens that it is desired to disconnect the axle from the head-block, and, to facilitate the operation, I have made the bearing-block carried by the axle, separate from the bearing-block carried by the head-block, that the axle and head-block may be separated without disturbing the bearing-blocks which those members carry.

Having thus described my invention, what I claim as new, and desire to protect, by Letters Patent, is:—

In a device of the class described, a head block and a bolster superposed thereon; bearing blocks outwardly projecting from the head block and the bolster and being provided with alined openings for the reception of a king-bolt; contacting wear plates attached to the adjacent faces of the head block and the bolster and being arranged to cover the bearing blocks, each wear plate being connected with a bearing block, and having a central opening of greater diameter than the opening in the bearing block.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

SAMUEL A. BIGGERS.

Witnesses:
J. T. FOSTER,
H. H. NEILL.