

June 19, 1923.

1,459,652

W. G. COX

SHOCK ABSORBING FENDER

Filed March 5, 1923

2 Sheets-Sheet 1

FIG. 1.

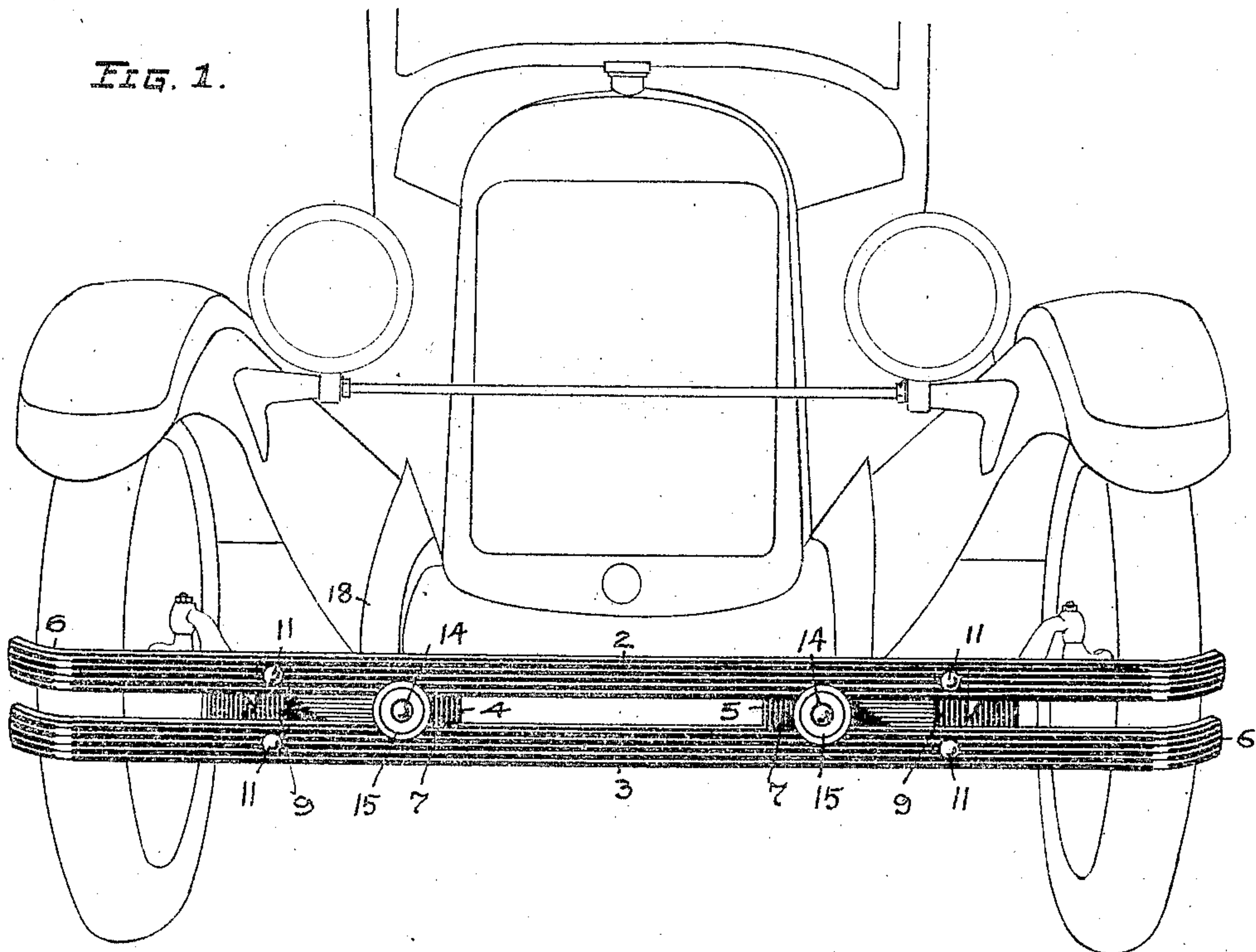


FIG. 2.

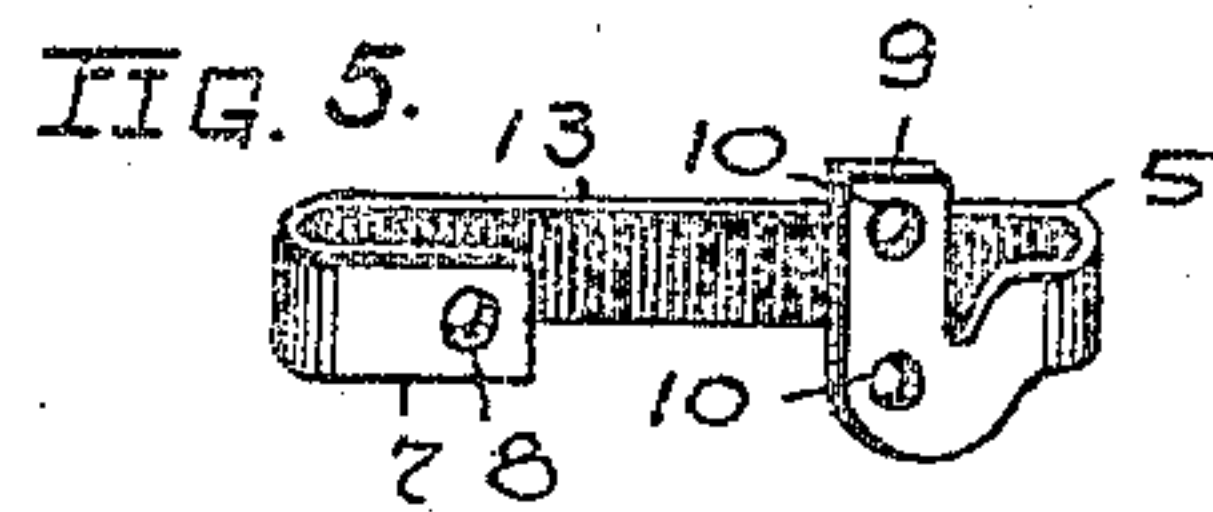
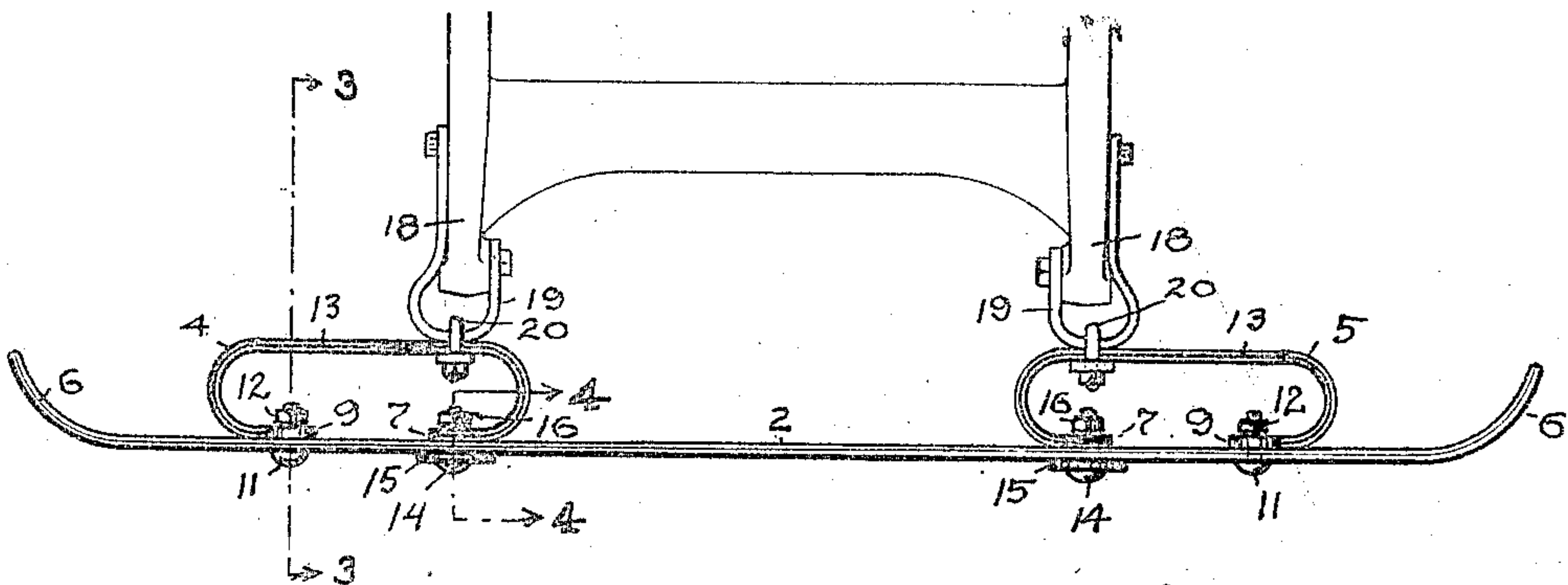


FIG. 3.

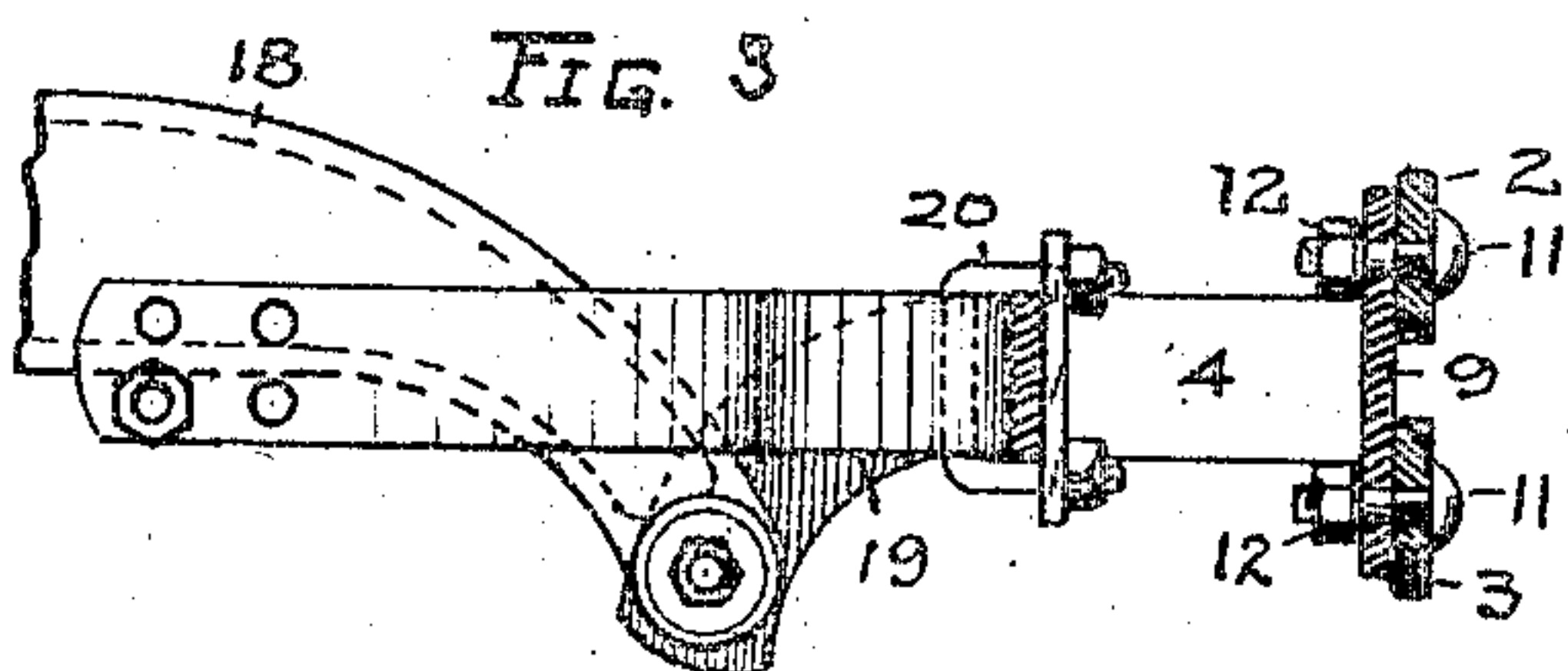
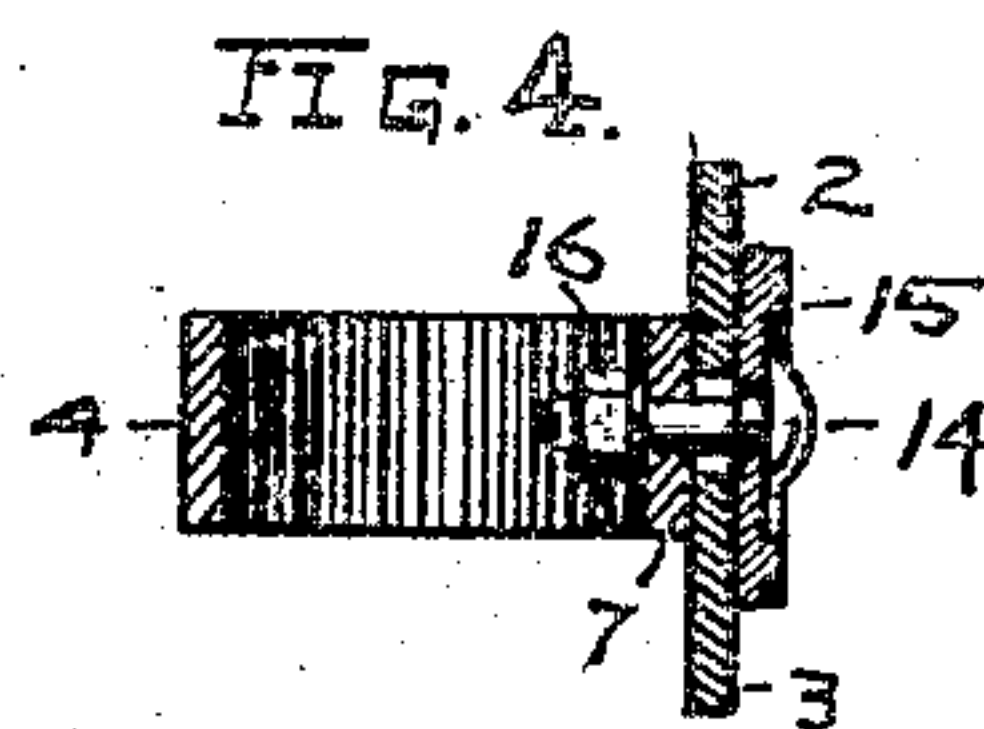


FIG. 4.



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2 Sheets-Sheet 2

FIG. 6.

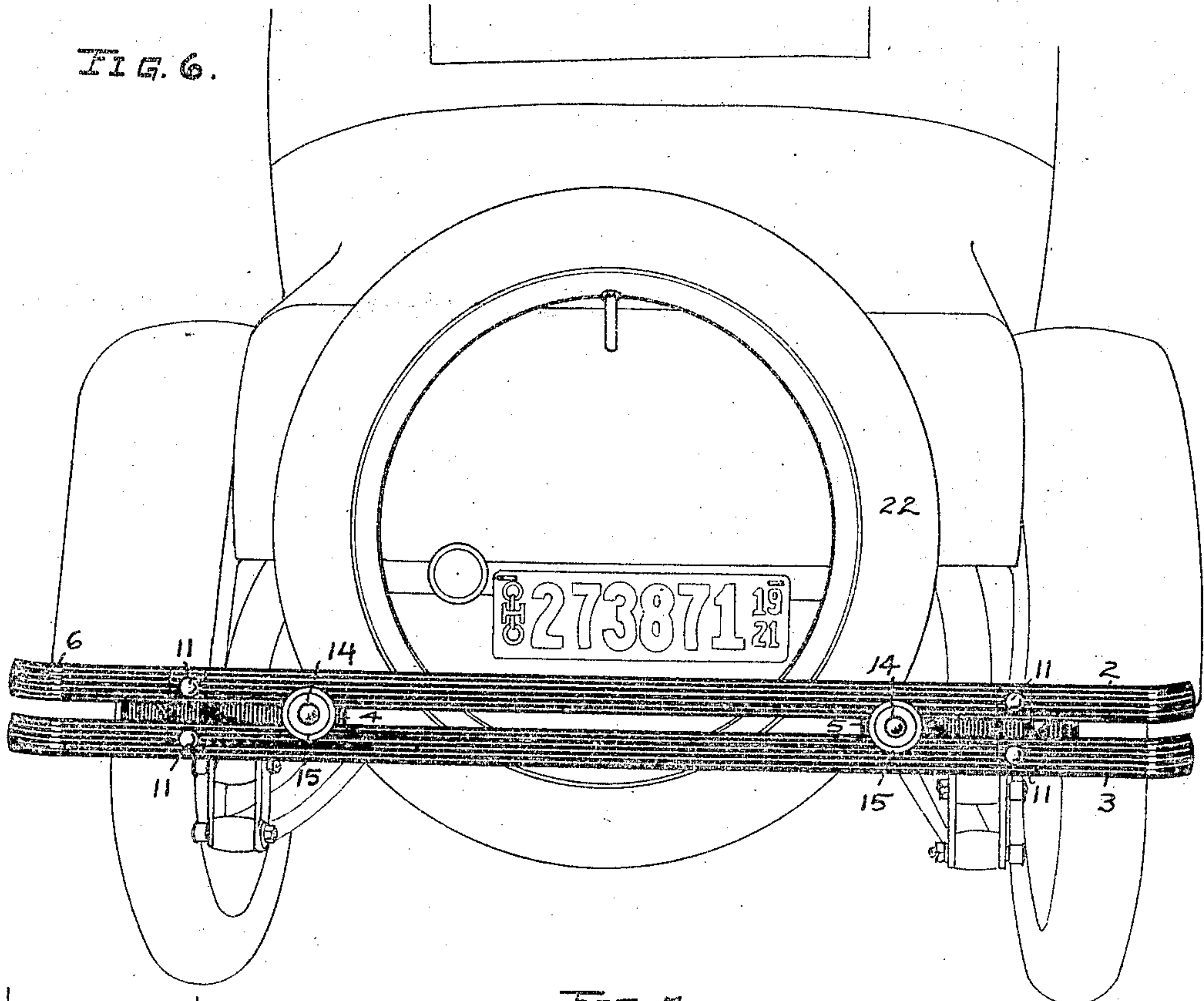


FIG. 7.

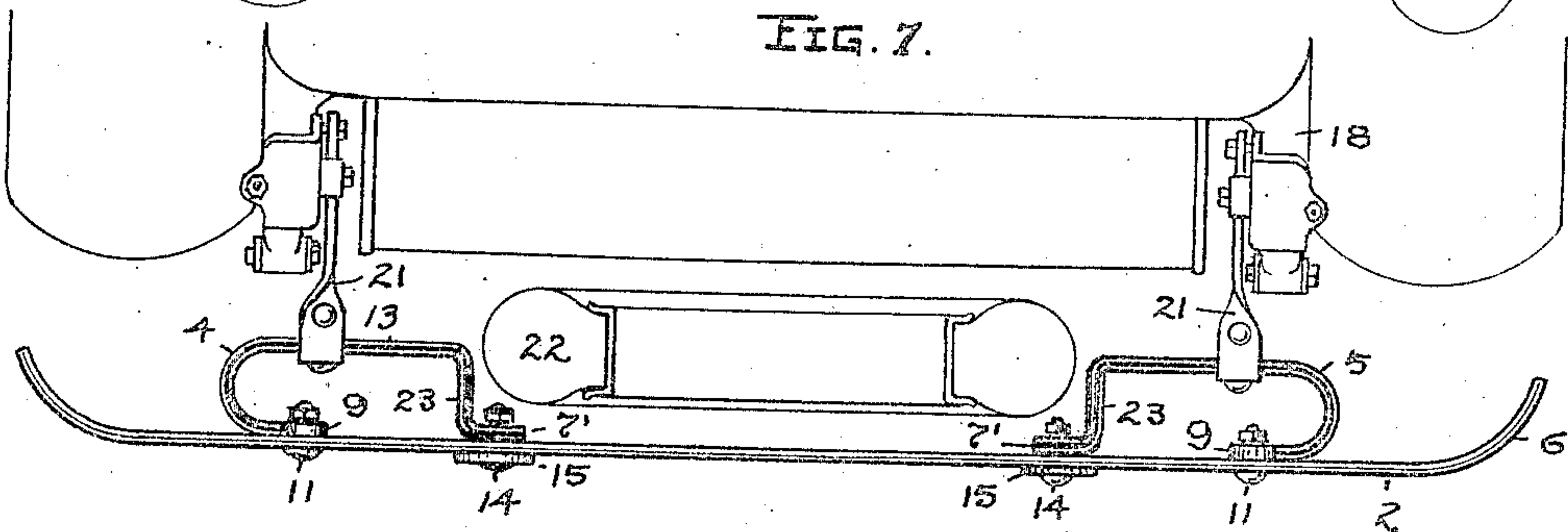
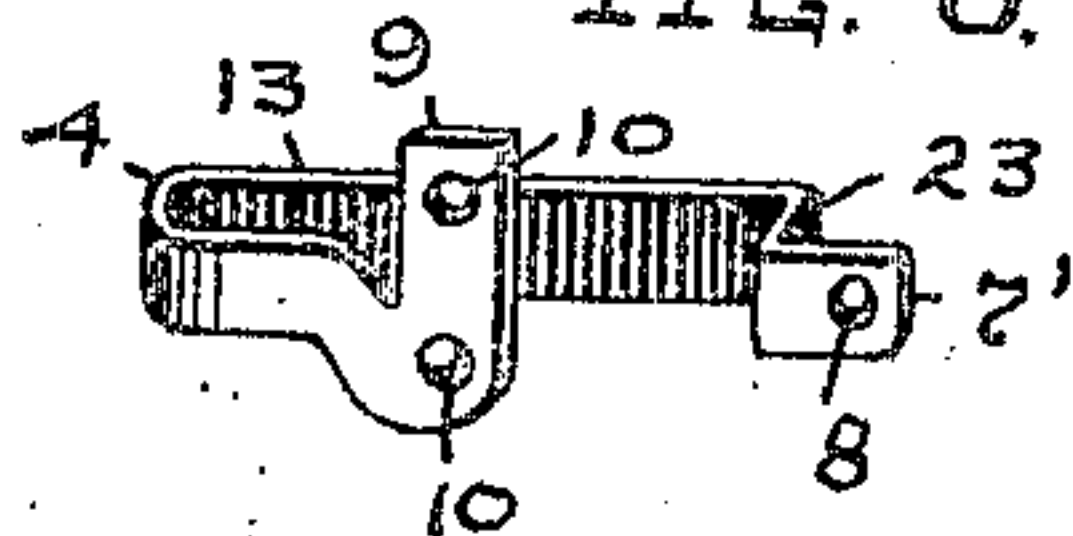


FIG. 8.



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UNITED STATES PATENT OFFICE.

WILLIAM G. COX, OF CLEVELAND, OHIO.

SHOCK-ABSORBING FENDER.

Application filed March 5, 1923. Serial No. 822,757.

To all whom it may concern:

Be it known that I, WILLIAM G. Cox, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in a Shock-Absorbing Fender, of which the following is a specification.

My invention relates to an improvement in shock-absorbing fenders or buffers for motor vehicles, the device being particularly constructed to permit convenient attachment thereof to either end of the vehicle and to frames of varying width; and as exemplified in the drawings annexed hereto, the device comprises a plurality of spring impact bars detachably affixed in a simple way to a pair of spring supporting bars in the form of elongated yokes arranged horizontally in spaced relation at the rear side of said bars. Thus, Fig. 1 is a perspective view of the front end of a motor vehicle equipped with a fender or buffer of my invention, and Fig. 2 is a top view of the same parts. Fig. 3 is a side elevation and vertical section on line 3—3 of Fig. 2, and Fig. 4 is a vertical section on line 4—4 of Fig. 2. Fig. 5 is a perspective view of a yoke member. Fig. 6 is a perspective view of the rear end of a motor vehicle equipped with the device, and Fig. 7 is a top view of the same parts corresponding to Fig. 2, but showing a slightly modified form of yoke member. Fig. 8 is a perspective view of the modified form of yoke shown in Fig. 7.

As shown, the buffing fender consists of a pair of flat spring bars 2 and 3, respectively, rigidly connected in spaced horizontal parallelism and vertical alignment by a pair of elongated yokes 4 and 5, respectively. These yokes are alike in construction and spaced apart a substantial distance from each other opposite the middle impact portion of the impact bars and also retired from the curved ends 6 of the bars. Each yoke is made of a straight bar of metal having its opposite end portions bent forwardly and thence toward each other, one extremity 7 being straight and parallel with the main body thereof and having a bolt opening 8 therein, and the other extremity being bent downwardly at its edge and thence upwardly on straight lines to provide a flat vertical extension 9 having a pair of bolt openings

10 therein at a higher and lower elevation than opening 8 in the opposite extremity 7. The two impact bars have bolt openings in their flat faces back from their curved ends adapted to receive bolts 11 which may pass through the openings 10 in vertical extensions 9 of both yokes 4 and 5, respectively, thereby permitting the two impact bars 2 and 3, respectively, to be fastened detachably to said yoke extensions by said bolts and separate nuts 12. A rigid immovable attachment of the yokes and bars is then obtained by clamping the other extremities 7 of the two yokes to the rear sides of both bars, using separate bolts 14, clamping plates or disks 15, and nuts 16. This mode of attaching the yokes is made possible because the short straight horizontal extremity 7 of each yoke is aligned directly opposite the horizontal space between the two parallel bars when the said bars are bolted at different elevations upon the vertical extensions 9 of said yokes. In fact, the main body portions of both yokes lie in the same horizontal plane rearwardly of the impact bars opposite the longitudinal space between the bars to permit them to be fastened to the vehicle frame ends 18, either by shackle bolt fittings 19 and U-bolts 20 as shown in Fig. 2, or by clamping brackets 21 such as delineated in Fig. 7. These fittings or brackets may be of any suitable kind or style but by using such devices or equivalent means I am enabled to engage the yokes at any point on the extended straight body portions 13 thereof and fasten the fender or buffer as a whole to vehicle frames of different width, or to the rear or front end of the same car inasmuch as the chassis frames of motor vehicles in general are wider at the rear than at their front.

However, to meet the common practice of mounting a spare tire 22 upon the rear end of a motor vehicle intermediate the projecting ends of the frame, the yokes may be slightly modified to increase or widen the space between them rearwardly of the impact bars so that a circular section of the spare tire may have ample room to extend downwardly therebetween. Thus, the inner end portion of each yoke may be bent forwardly at right angles to its main body on straight lines as shown at 23 in Figs. 7 and 8, and thence either toward the opposite ex-

tremity of the yoke, or in the opposite direction to provide a straight clamping extremity 7'.

What I claim, is:--

5 1. A shock-absorbing fender for a motor vehicle, comprising a plurality of parallel impact bars, spaced yokes having forwardly-projected extremities extending horizontally in engagement with the said bars, and means
10 connecting the opposite extremities of each yoke to both said bars.

2. A shock-absorbing fender for a motor vehicle, comprising a plurality of impact bars, and elongated supporting yokes hav-
15 ing bent extremities extending forwardly and affixed separately in spaced relation to the rear faces of both said bars.

3. A shock-absorbing fender for a motor vehicle, comprising a plurality of separate
20 impact bars spaced apart vertically, a pair of elongated supporting yokes affixed separately in spaced relation to the rear sides of said bars, and supporting brackets adapted to be affixed to the motor vehicle having
25 means adapted to clamp said yokes adjustably thereto.

4. A shock-absorbing fender for a motor vehicle, comprising parallel impact bars, and elongated yokes at the rear sides of said bars
30 having bent extremities extending forwardly and independently connected with both said bars.

5. A shock-absorbing fender for a motor vehicle, comprising a pair of parallel im-
35 pact bars, yokes horizontally arranged at the rear of said bars having bent extremities adapted to engage both bars, and clamping devices detachably securing the opposite extremities of each yoke independently
40 to said bars.

6. A shock-absorbing fender for a motor

vehicle, comprising parallel impact bars, a pair of yokes having bent extremities engaged with said bars, means connecting one
45 extremity of each yoke independently to each bar, and means connecting the opposite extremity of each yoke to said bars jointly.

7. A shock-absorbing fender for a motor vehicle, comprising parallel impact bars, and a pair of yokes adapted to support said
50 bars, each yoke having a vertical extremity and a horizontal extremity connected to said bars.

8. A shock absorbing fender for a motor vehicle, comprising parallel impact bars ver-
55 tically spaced apart, a pair of separate yokes having bent extremities engaged with the rear sides of said bars, and clamping means for said bars extending through the space between said bars and connecting with said
60 extremities.

9. A shock-absorbing fender for a motor vehicle, comprising parallel impact bars, supporting yokes having bent extremities
65 engaging said bars, fastening devices extending through each bar and connecting with one extremity of each yoke, and supplemental clamping devices extending between parallel bars and connecting with the oppo-
70 site extremities of each yoke.

10. A shock-absorbing fender for a motor vehicle, comprising a pair of parallel im-
75 pact bars, a pair of supporting yokes for said bars, each yoke having its opposite extremities bent at right angles in respect to each other, and separate clamping devices detachably connecting the extremities of said yokes to said bars.

In testimony whereof I affix my signature hereto.

VILLIAM G. COX.