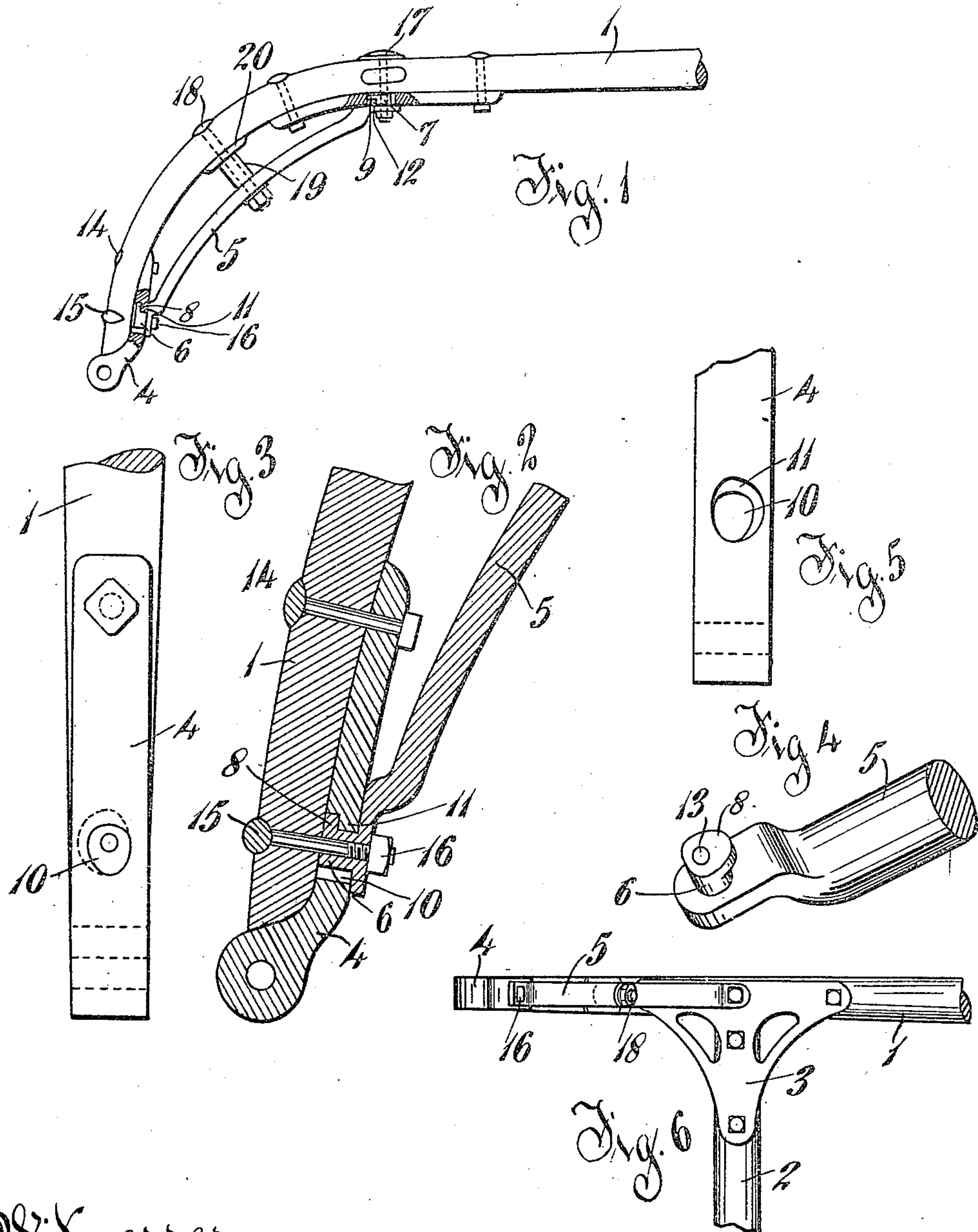


A. R. FRIEDMANN.
SHAFT BRACE.
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Patented Mar. 8, 1910.



Witnesses
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UNITED STATES PATENT OFFICE.

ANTON R. FRIEDMANN, OF PIQUA, OHIO.

SHAFT-BRACE.

951,780.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ANTON R. FRIEDMANN, a citizen of the United States, residing in Piqua, in the county of Miami and State of Ohio, have invented certain new and useful Improvements in Shaft-Braces, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to devices for strengthening vehicle shafts to take the strain off of the curved portion of the shaft, and the object of the invention is to provide a brace which can be readily and easily locked to the shaft irons at either end so that in the event that the usual retaining nuts should become loose or drop off, the brace will remain securely locked in place.

In the drawings Figure 1 is a side elevation of a vehicle shaft with my improvements attached. Fig. 2 is a detail longitudinal section of the heel of the shaft and lower end of the strengthening brace. Fig. 3 is a front elevation of the part shown in Fig. 2 with the brace removed. Fig. 4 is a detail perspective view of the lower end of the brace. Fig. 5 is an inside view of the thill eye-plate. Fig. 6 is a bottom plan view of the shaft as shown in Fig. 1.

1 is the shaft and 2 the ordinary cross bar to which the whiffle tree is pivoted.

3 is the ordinary T-plate for strengthening the cross brace, and 4 is the thill eye plate for coupling the shafts to the vehicle.

5 is the heel brace flattened at each end and provided at each end with a locking lug 6, 7, preferably integral therewith. These lugs are undercut on the inside to form overhanging flanges 8, 9, and the thill eye plate at the heel and the T-plate at the cross brace, are provided with sockets 10 to receive these locking lugs, the sockets having an overhanging portion 11, 12 to receive the flanges 8 and 9 on the retaining locking lugs of the brace. A bolt aperture 13 is formed through the lug end of the brace 5, through the lug and a similar aperture through the lug 7 at the other end of the brace.

In assembling the parts the heel brace is mounted before the thill eye is secured to the heel of the shaft. By turning the brace the locking lug may be inserted into the socket in the T-plate, and the thill eye is then turned and the lower end of the heel brace locked thereto, and the thill eye is then secured in place by the bolt 14 and T-headed bolt 15, the bolt 15 passing through the locking lug, and the parts are secured together by the nut 16, while the bolt 17 secures the upper end of the heel brace to the T-plate. 18 is a strut bolt provided with the sleeve 19, and wear-plate 20. This bolt extends from the heel brace to the middle portion of the band of the shaft to give additional strength and rigidity to the construction.

It will be evident from the foregoing description that the brace will be securely locked in position even in the event that the nuts for the bolts 15 and 17 should become loosened and drop off.

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

1. In a shaft for vehicles, the combination with the curved portion thereof, of a brace extending across said curved portion, shaft irons to which said brace is secured, one of said parts being provided with lugs having overhanging flanges, and the other with corresponding sockets with undercut portions to receive the lugs and to lock the brace in position without the use of bolts and nuts.

2. In a shaft for vehicles, the combination with the curved portion thereof, of a brace extending across said curved portion, said brace being provided with locking lugs with overhanging flanges, and shaft irons having sockets with undercut portions to receive said lugs and to lock the brace thereto at either end.

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Witnesses:

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