

No. 826,664.

PATENTED JULY 24, 1906.

J. P. KANE.
LIFE GUARD FENDER FOR WHEELS.
APPLICATION FILED MAY 12, 1906.

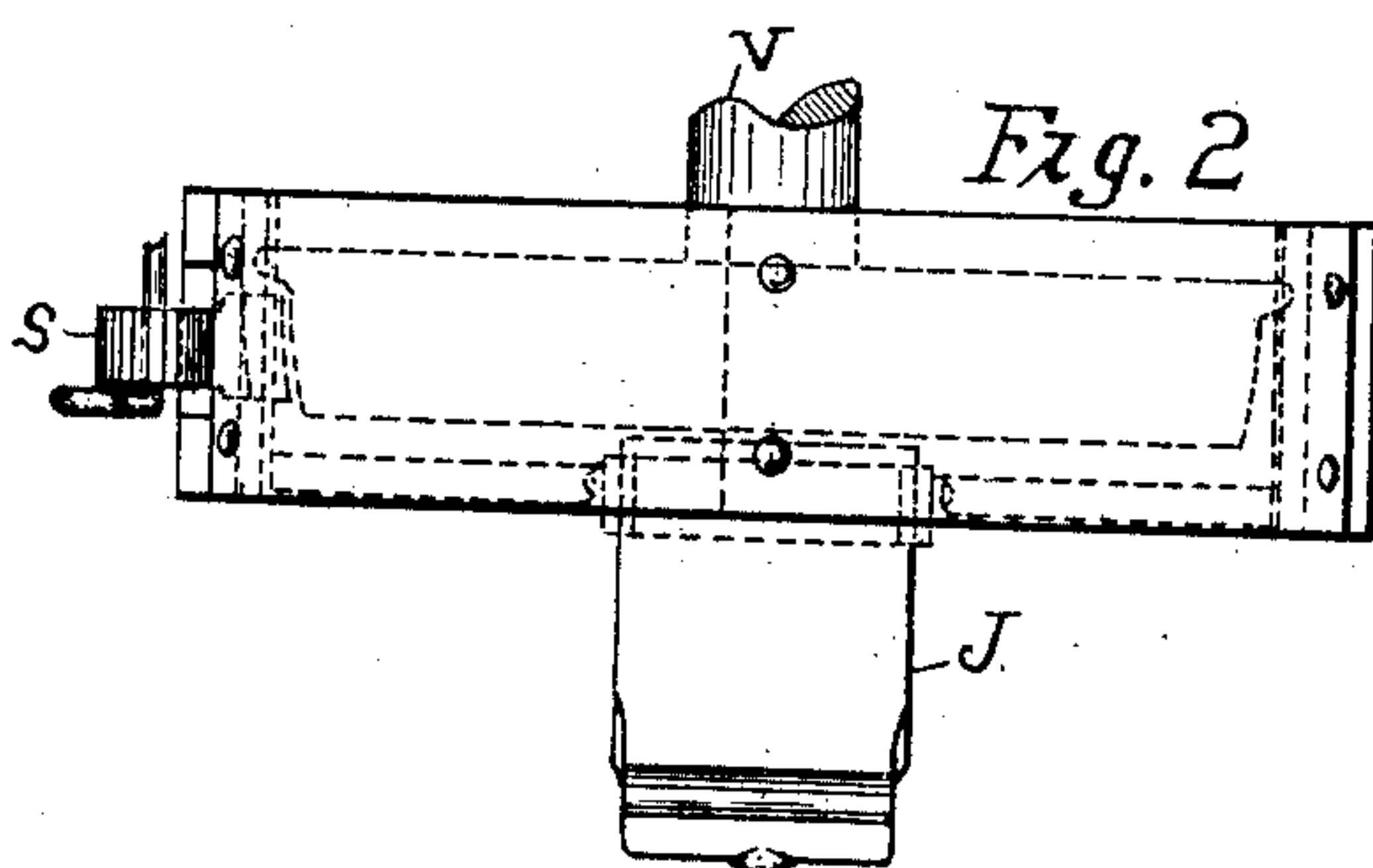
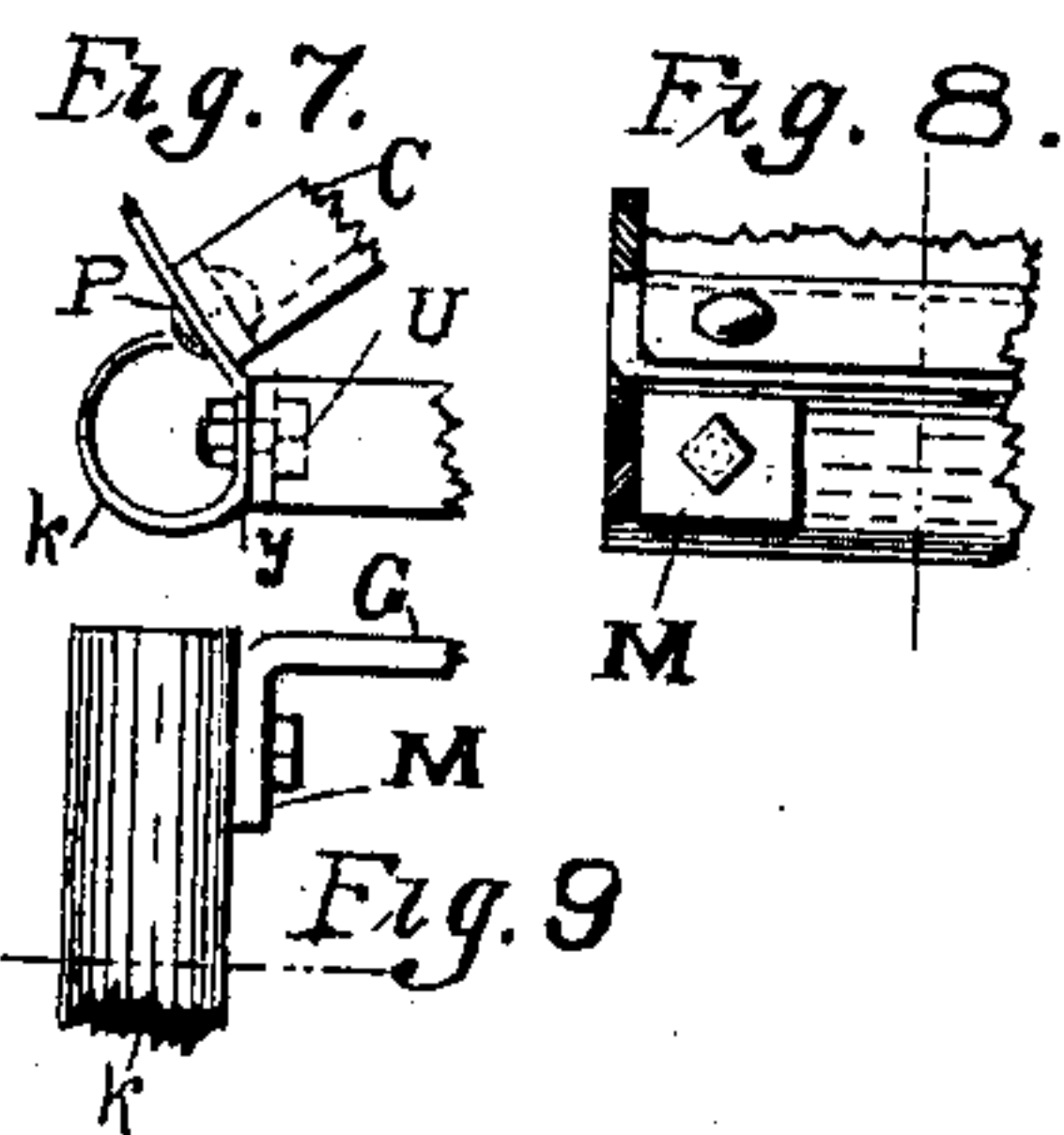
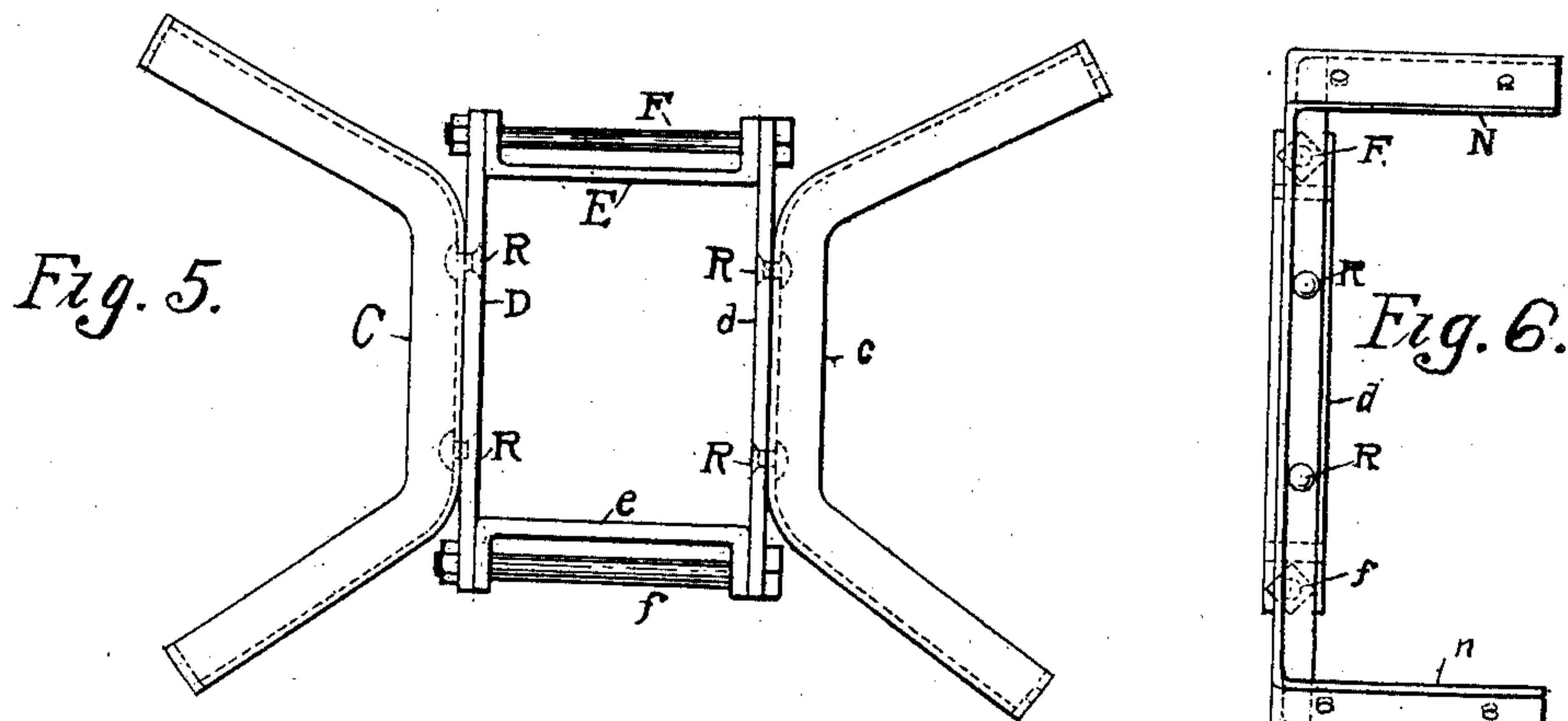


Fig. 3.

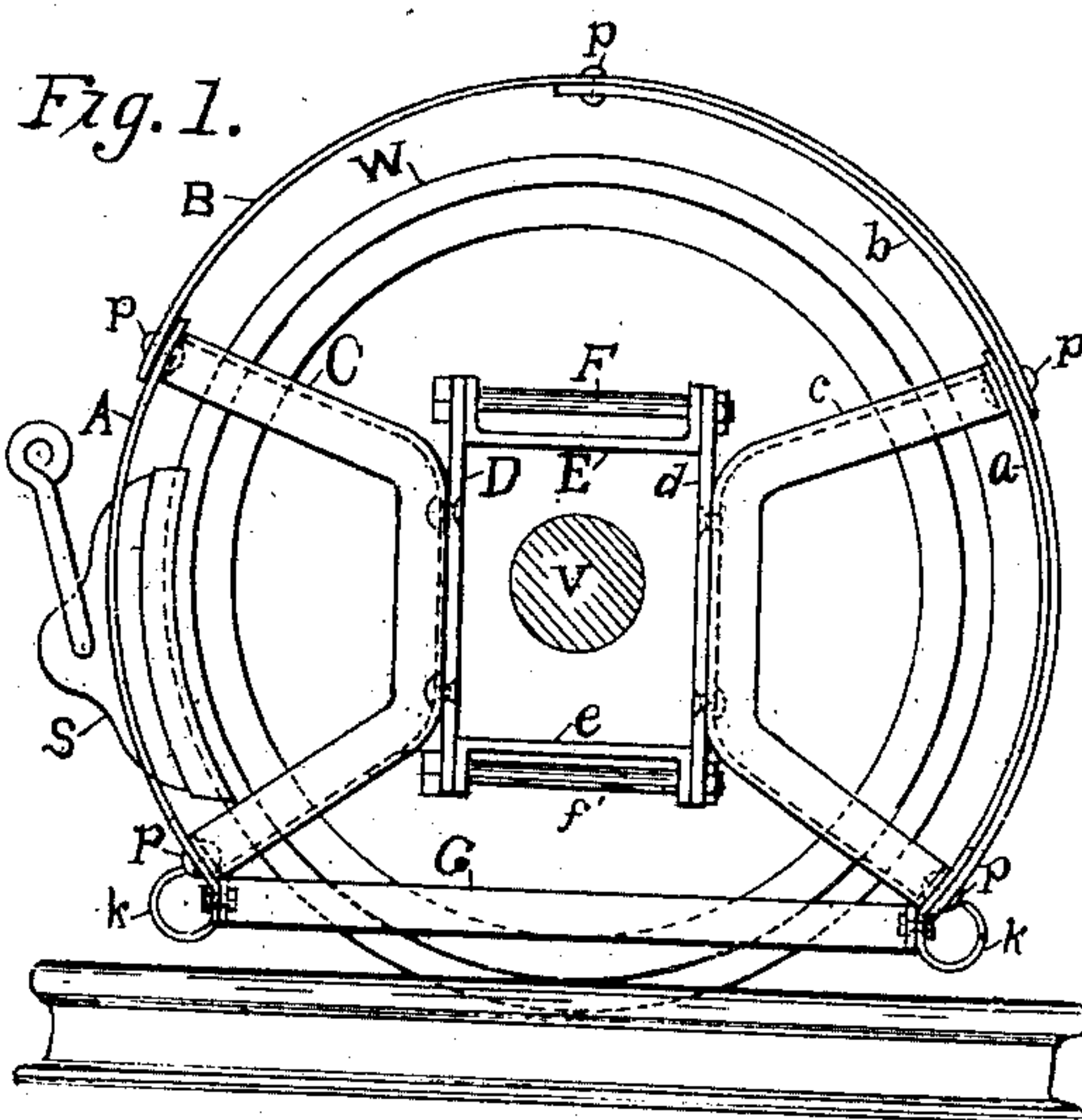
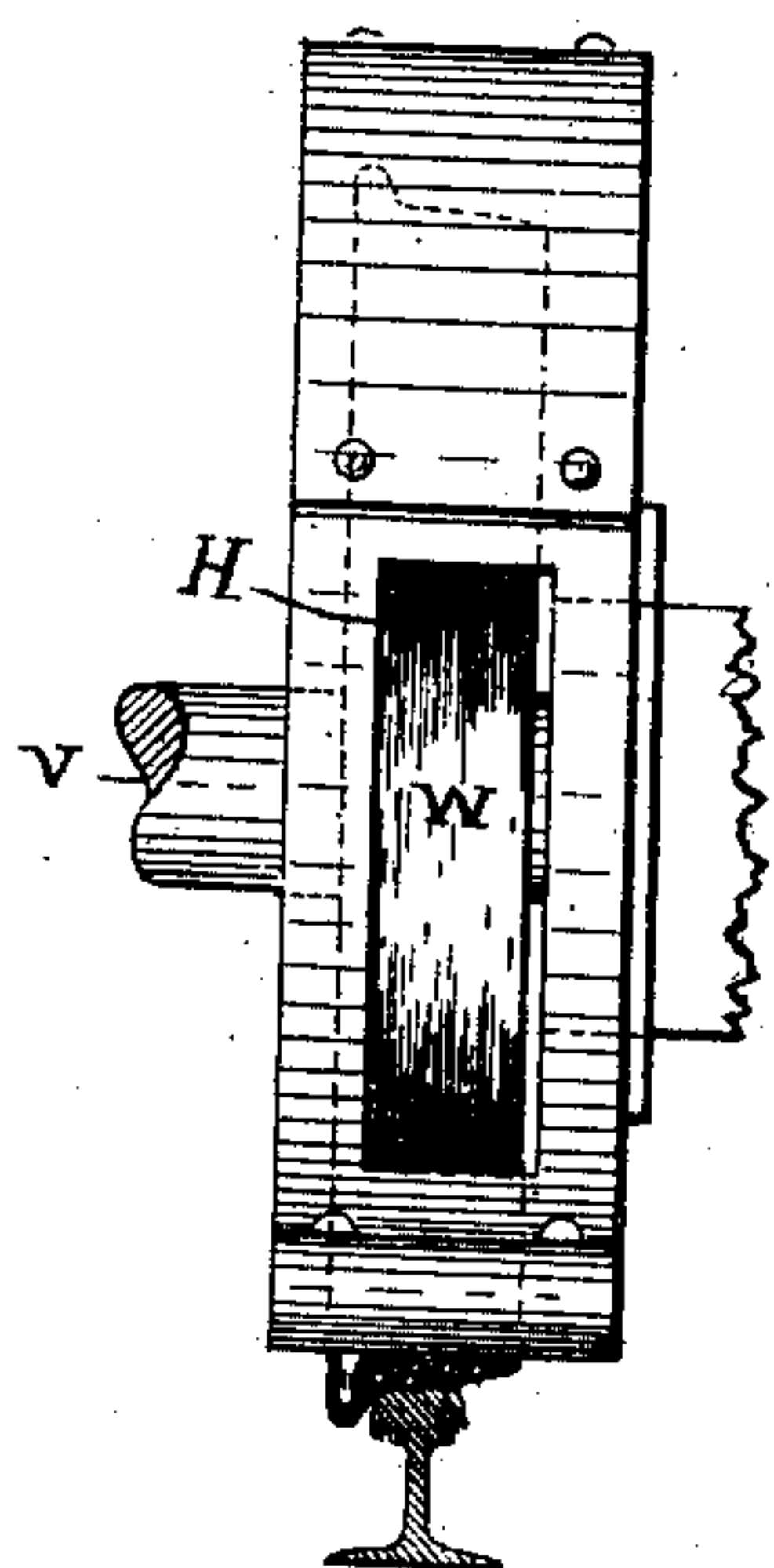
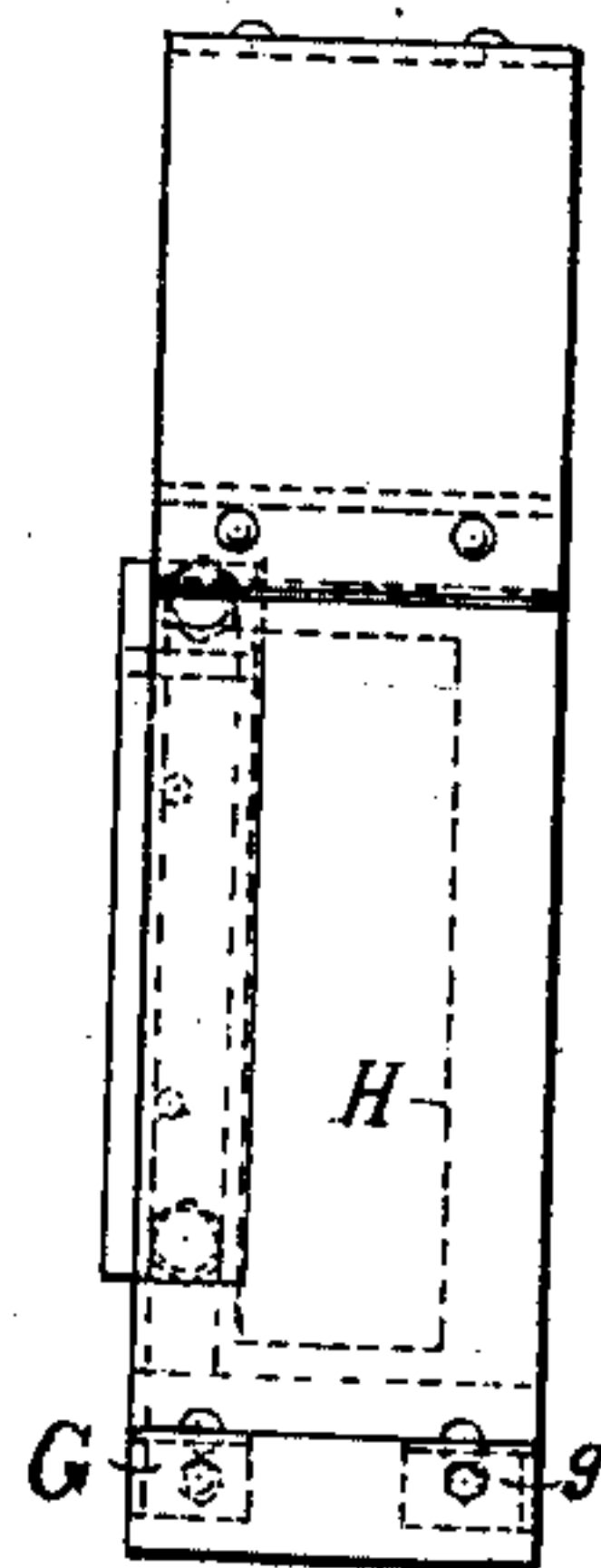


Fig. 4.



Witnesses
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JOSEPH PATRICK KANE, OF RENOVO, PENNSYLVANIA.

LIFE-GUARD FENDER FOR WHEELS.

No. 826,664.

Specification of Letters Patent.

Patented July 24, 1906.

Application filed May 12, 1906. Serial No. 316,533.

To all whom it may concern:

Be it known that I, JOSEPH PATRICK KANE, a citizen of the United States, residing at Renovo, in the county of Clinton and State of Pennsylvania, have invented a new and Improved Life-Guard Fender for Wheels, of which the following is a specification.

My invention relates to a life-guard fender for wheels consisting of adjustable sheets of metal nearly encircling the wheel; and the objects of my invention are, first, to provide a guard for wheels that will successfully prevent the loss of life and limb of man and animals; second, to afford facilities by which the four sheets of which the guard is constructed may be adjusted to accommodate brake-shoes which must pass through the guard on either or both sides, or in case no brake-shoe is to be accommodated both openings in the guard may be closed by so adjusting the sheets before being bolted or riveted; third, to support the said guard at four points by braces which are attached to plates, said plates being bolted to the journal-box of the axle at a convenient point, and, fourth, to so construct a guard that it may be adjusted to the wheels without removing cars from their trucks. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a front view of the entire guard, showing it in position nearly encircling a wheel; Fig. 2, a top view showing the location of the guard on the journal-box; Fig. 3, a side view showing the opening in the guard with the brake-shoe removed and its relative position to the wheel and rail; Fig. 4, a side view showing position of braces and plates. Fig. 5 is a detail front view of braces and plates which support the guard; Fig. 6, a detail side view of Fig. 5; Fig. 7, a detail front view of the circular extremity of the guard, showing adjustment of the braces at that point; Fig. 8, a detail side view of Fig. 7; Fig. 9, a detail bottom view of Fig. 7.

Similar letters refer to similar parts throughout the several views.

The four sheets A a B b constitute the guard, A a being stationary parts and having openings H (see Figs. 3 and 4) to admit brake-shoe S on either or both sides of the wheel, as the case may be, these sheets having holes at points P for bolts or rivets located equidistantly, so that there are five sets of holes in the arc described by the guard

when complete, sheets being bolted or riveted after adjustment is made.

Fig. 1 shows a brake-shoe protruding through an opening H in the sheet A and opening in the sheet a being closed by sheet b covering it. The object in having five sets of holes at points P is to facilitate the closing of opening H in sheet A by sliding B forward, when it will close the opening H in sheet A, and its bolt or rivet holes will then engage corresponding holes, which will permit re-bolting or reriveting. Sheet b may also be advanced in the same manner, which exposes opening H in sheet a, or sheets B b may be so adjusted as to leave both openings exposed or closed, as desired.

The width of the guard is sufficient to extend beyond the edge of the wheel about two and one-half inches on each side.

The guard nearly encircles the wheel and clears it at every point by about one and one-half inches, its ends being circular and about three inches in diameter and terminating about one inch above the top of the rail.

The guard is supported and maintained in this position by two metal braces C c, having a cross-section in the shape of a right angle, being so bent and cut at the ends N n, Fig. 6, that they engage the guard at the points P, Fig. 1, and extend entirely across the width of the guard and are then riveted or bolted to the guard through the holes in the sheets at point of contact. These braces are riveted or bolted to two straight metal plates D d at R, (see Fig. 5,) said plates being fastened to the journal-box J of axle V by a top plate E and a bottom plate e, being bolted to them when the guard is adjusted to said journal-box, which is about one-half inch from the inside face. The metal plates D d are made so that their broad surface has the same width as the side of the journal-box at the point of contact, so that they fit snugly in place.

The metal plates E e are bent at the ends so as to engage the ends of plates D d and be held securely in place by bolts F f, these plates also having the width of top and bottom of journal-box at points of contact, thereby insuring a firm hold on said journal-box.

The circular terminals K are prevented from coming together or separating by two additional braces G g, (see Figs. 1 and 4,) adjusted to the flattened surface Y (see Fig. 7)

of the circular terminals K, the braces G g being bent at the ends M, Fig. 9, in order to engage the terminals K and permit a bolt U, Fig. 7, fastening them in place.

5 I claim—

1. A metal life-guard fender for wheels consisting of a sheet-metal guard in four parts nearly encircling the wheel with a clearance of about one and one-half inches at every
10 point and width necessary to extend two and one-half inches beyond the edge of the wheel on each side and terminating about one inch from top of rail, as substantially set forth.

2. A metal life-guard fender having a sheet-
15 metal guard consisting of four parts; two parts being stationary having openings to admit brake-shoe; the lower ends of which being in the form of a circle about three inches in diameter being about an inch from
20 the top of the rail, the circular part being slightly flattened on the inside to permit the bolting or riveting of two braces which connect the above-mentioned points; said braces being bent at both ends to engage flattened
25 terminals on either side of the guard, all as substantially described.

3. A metal life-guard fender having a sheet-metal guard consisting of four parts; two parts being stationary having openings to
30 admit brake-shoes and so riveted or bolted at various points that the remaining two parts can be adjusted so as to close the opening on one side, leaving the opposite part open to admit the brake-shoe or by further adjust-
35 ment of movable parts, both openings can remain open for the admission of brake-shoes on either side, all as substantially shown.

4. A metal life-guard fender having a sheet-metal guard, nearly encircling the wheel, con-
40 sisting of four parts; two parts being stationary containing openings for the admission of brake-shoes, the remaining two being adjust-

able, all being supported by two metal braces, riveted or bolted to metal plates which are adjustable to the journal-box of
45 the axle, all as substantially explained.

5. A metal life-guard fender having a sheet-metal guard supported by two metal braces, each being bent so that the ends engage the
50 guard at four points and extend entirely across the width of the guard, they being bolted or riveted; and the central part of the brace being bolted or riveted to metal plates which are adjustable to the journal-box of
55 the axle, as substantially shown.

6. A metal life-guard fender having a sheet-metal guard supported by two braces, the central parts of which are bolted or riveted to two metal plates which are adjustable to the
60 sides of the journal-box; these plates having the contour of the sides of the box at that point of adjustment, all as substantially described.

7. A metal life-guard fender having a sheet-metal guard supported by two braces the
65 central parts of which are bolted or riveted to two metal plates which are adjustable to the sides of the journal-box; these in turn being fastened to said box by two metal plates, one located at the top of the journal-box and the
70 other at the bottom of said box, each being bent at the ends so as to engage the ends of side plates and to which they are securely fastened by bolts extending through the ends of side plates and the bent ends of both top
75 and bottom plates respectively, top and bottom plates also having the contour of top and bottom respectively of the journal-box at the point of contact, as substantially set forth.

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