

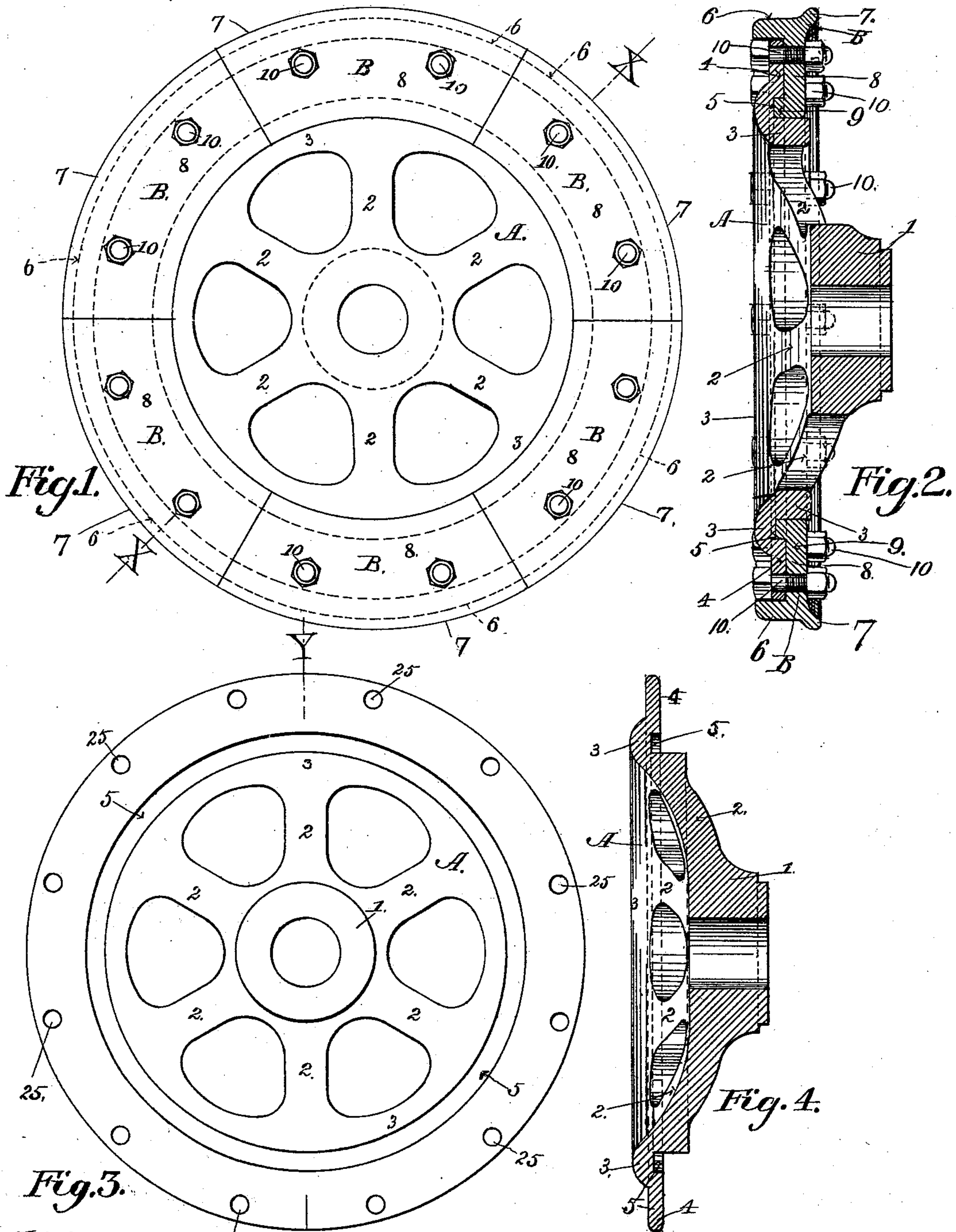
(No Model.)

2 Sheets—Sheet 1.

A. HYMAS & J. BROCKLEY.
CAR WHEEL.

No. 509,084.

Patented Nov. 21, 1893.



Witnesses:

S. B. Brewer.
Edmund Savage.

Inventors:
Alfred Hymas and
Jacob Brockley,

by William H. Low,
Attorney.

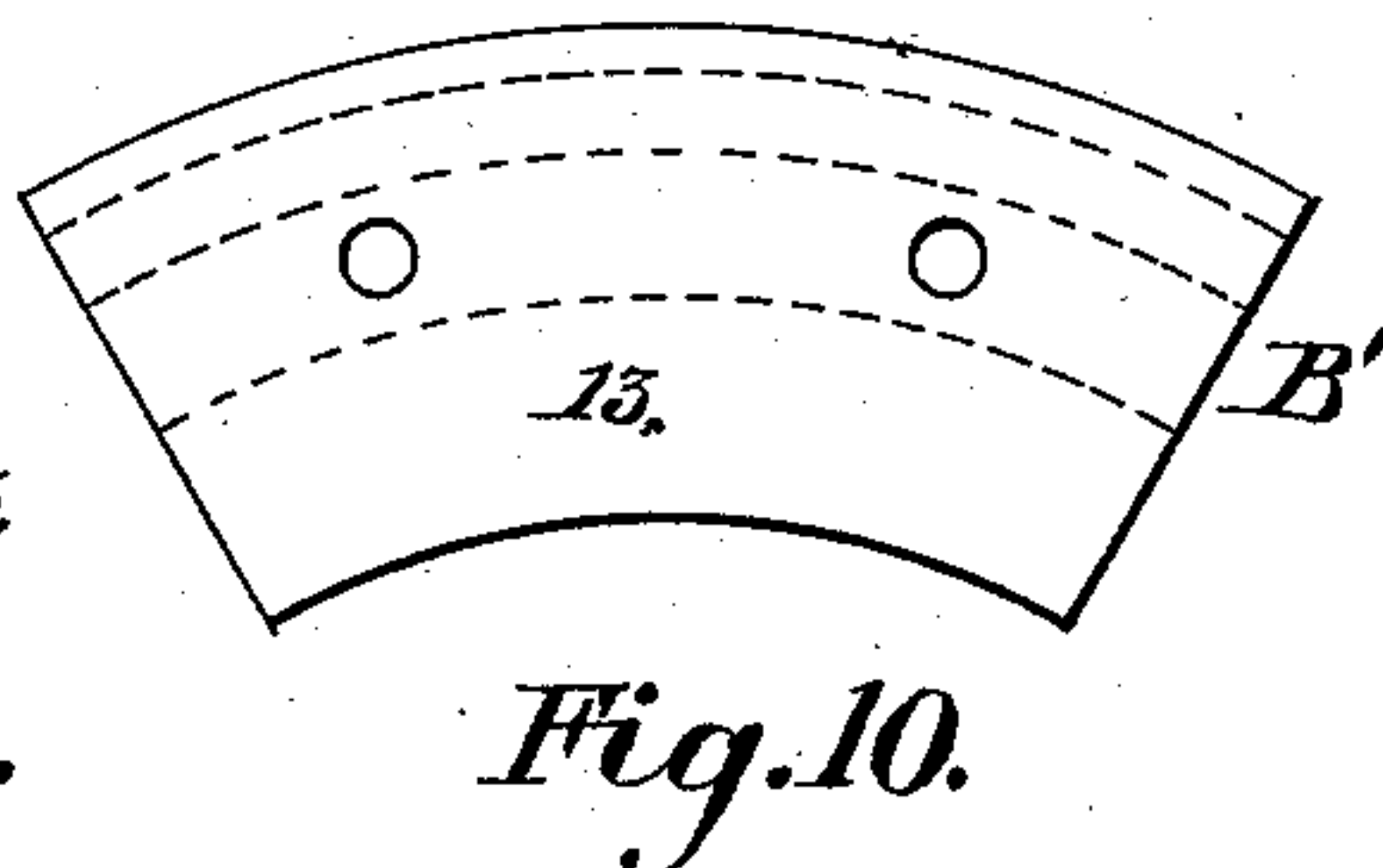
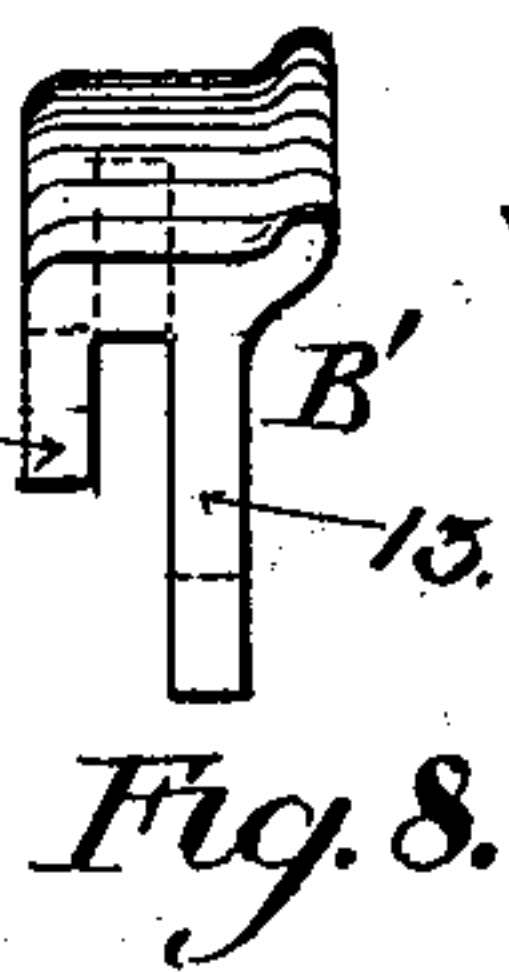
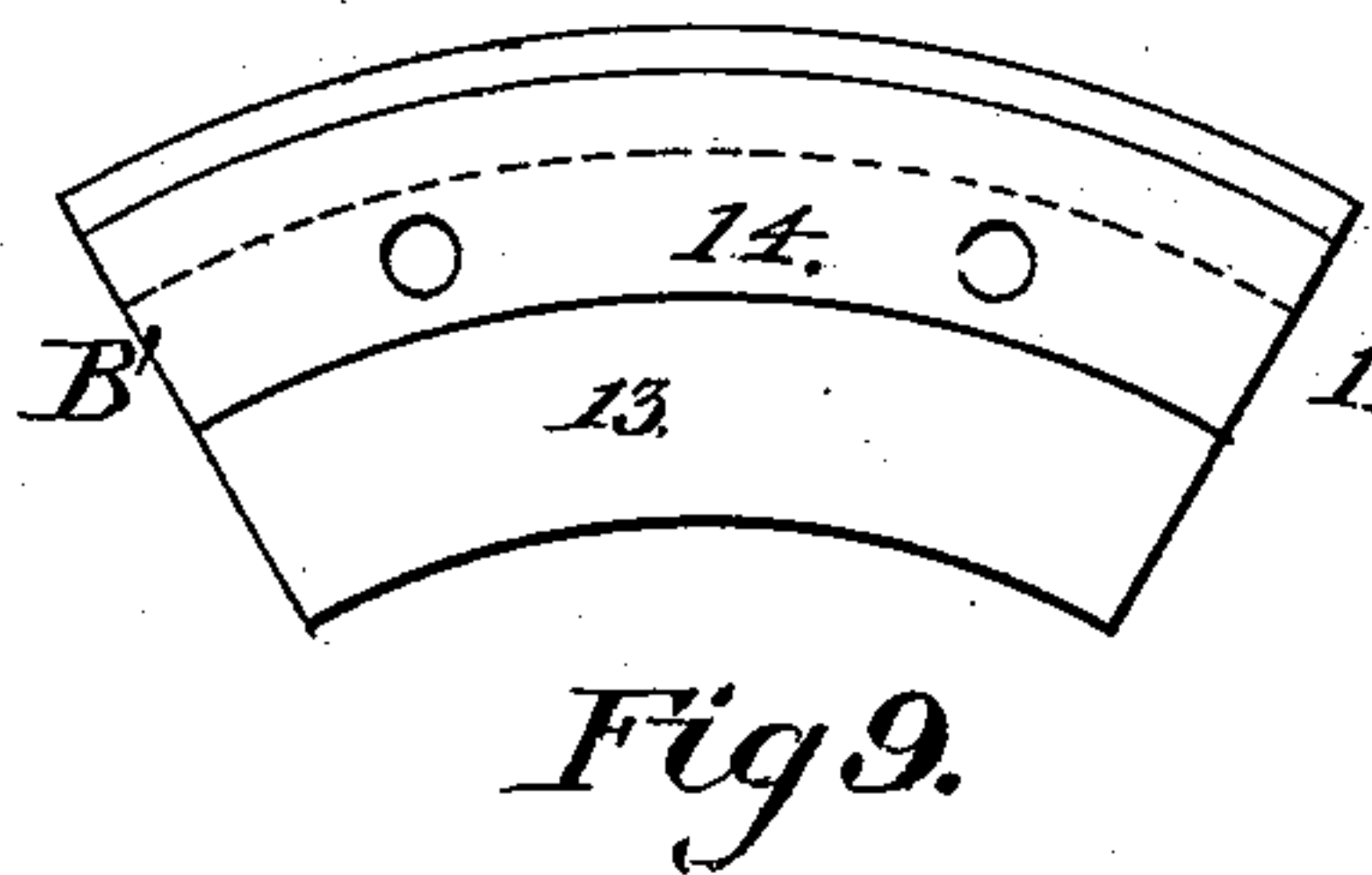
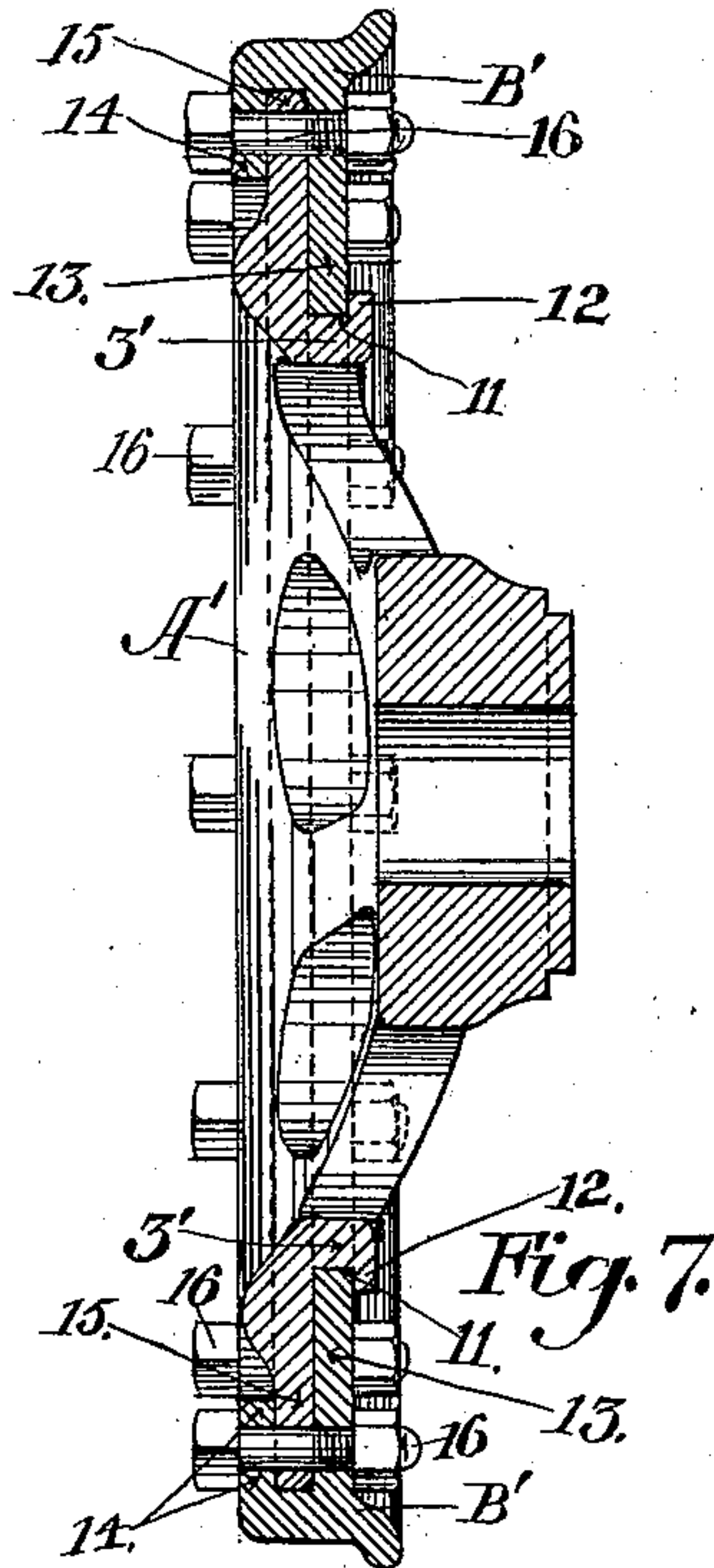
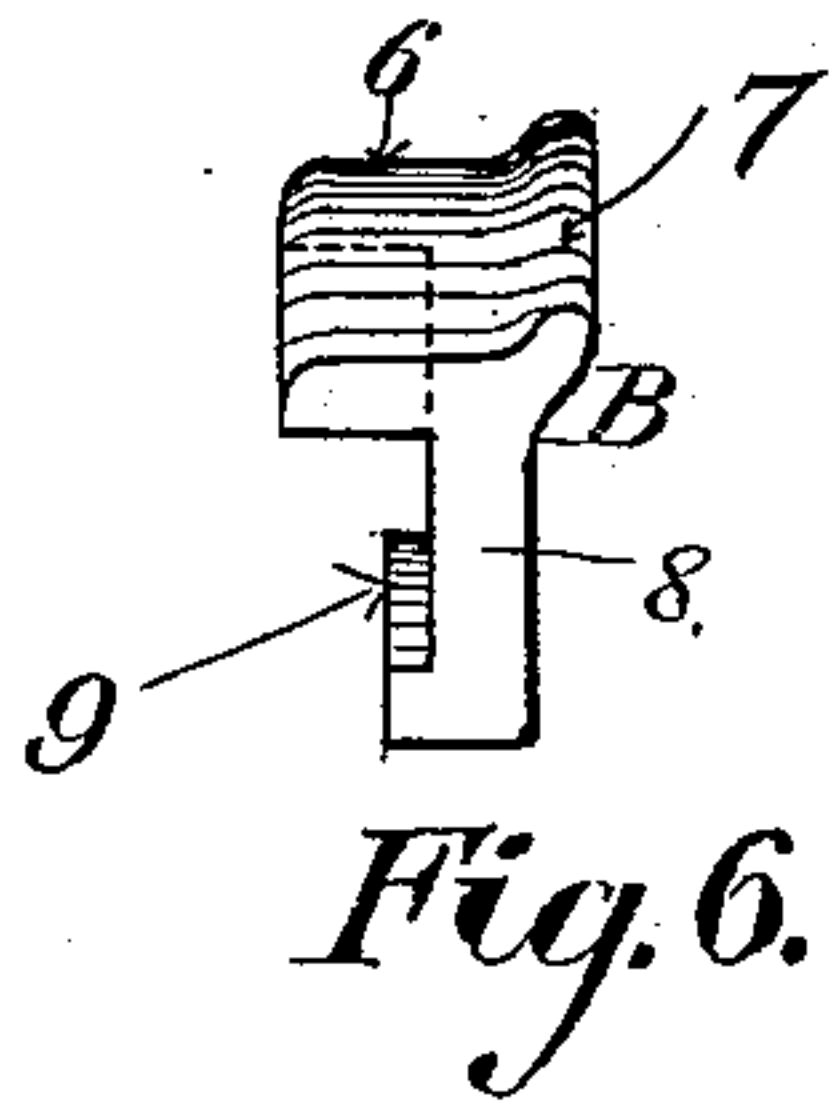
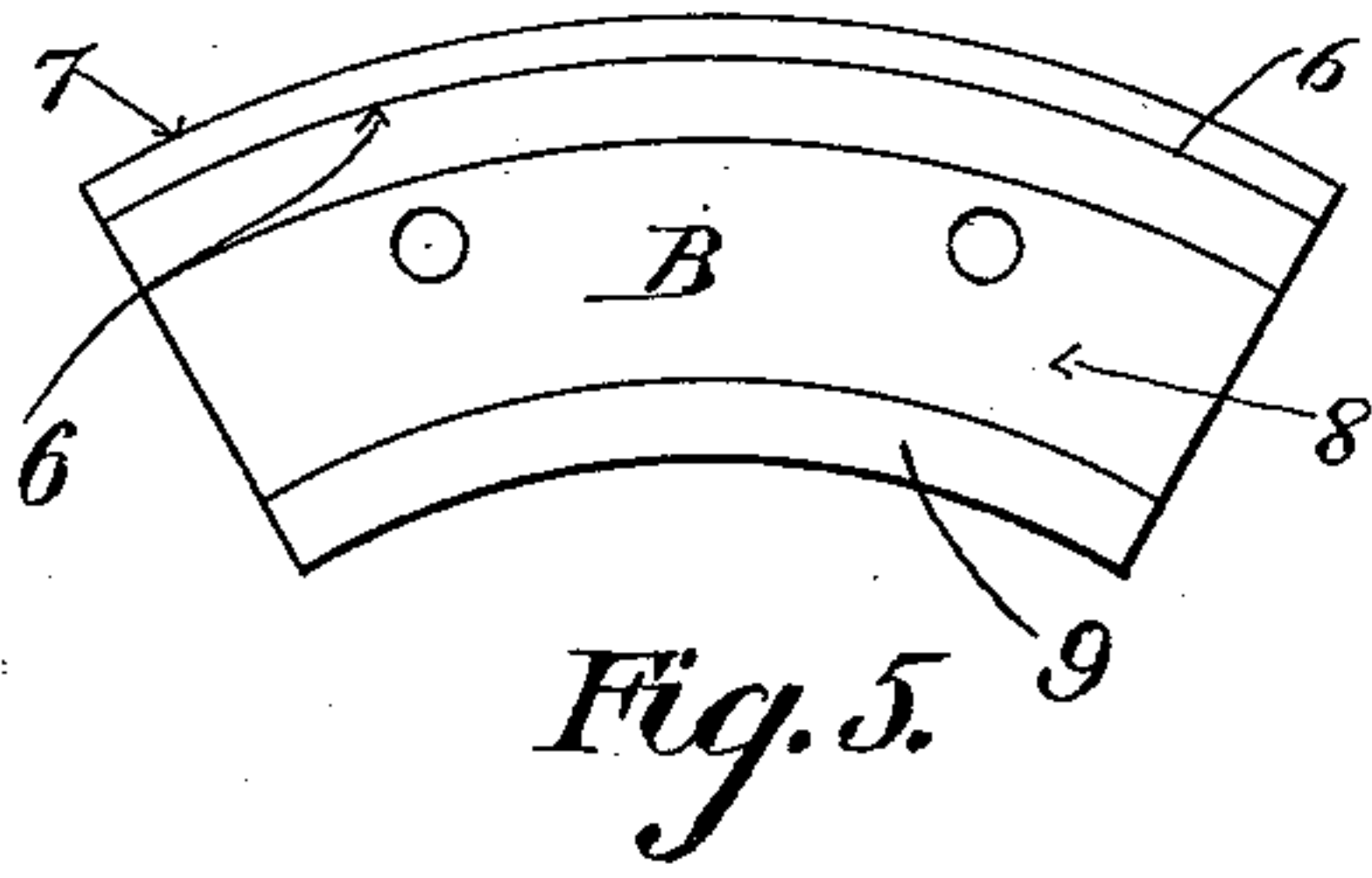
(No Model.)

2 Sheets—Sheet 2.

A. HYMAS & J. BROCKLEY.
CAR WHEEL.

No. 509,084.

Patented Nov. 21, 1893.



Witnesses:

J. B. Brewer
Edmund Savage

Inventors:
Alfred Hymas and
Jacob Brockley,

by William H. Loo
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UNITED STATES PATENT OFFICE.

ALFRED HYMAS AND JACOB BROCKLEY, OF ALBANY, NEW YORK, ASSIGNORS
TO GEORGE H. THACHER & CO., OF SAME PLACE.

CAR-WHEEL.

SPECIFICATION forming part of Letters Patent No. 509,084, dated November 21, 1893.

Application filed June 24, 1893. Serial No. 478,746. (No model.)

To all whom it may concern:

Be it known that we, ALFRED HYMAS and JACOB BROCKLEY, both of the city and county of Albany, in the State of New York, have invented new and useful Improvements in Railway-Car Wheels, of which the following is a specification.

Our invention relates to the construction of car-wheels in a sectional form, so that any portion of the tread of the wheel can be renewed when it becomes worn or broken and thereby rendered unfit for use. Said invention is designed for car-wheels to be used on street railways.

In the accompanying drawings, which are herein referred to and form a part of this specification, Figure 1 is a side elevation of our car-wheel. Fig. 2 is a section of the same at the line X X. Fig. 3 is a side elevation of the spider which forms the central portion of our car-wheel. Fig. 4 is a vertical section of the same at the line Y Y. Fig. 5 is a detached side elevation of a segment of the tread or rim of our car-wheel. Fig. 6 is an end elevation of the same. Fig. 7 is a vertical section of a modified form of our car-wheel. Fig. 8 is an end elevation of a segment of the tread or rim adapted to said modification; and Figs. 9 and 10 are side elevations of the opposite sides of the latter.

As represented in the first six figures of the drawings, our car-wheel consists of a spider or center section, and a tread or rim secured to said spider by means of screw-bolts and interlocking tongues and grooves. In said figures, A designates the spider, which consists of a central hub, 1, which is bored to fit the axle to which the wheel is to be secured; radiating from said hub there is a series of arms, 2, whose outer ends are joined to an annular rim, 3, from which there extends a circular flange, 4, which has an annular groove, 5, formed in its face, preferably at the periphery of the rim 3; said flange is provided with a series of bolt-holes, 25, for receiving the bolts by which the segmental-sections of the tread are secured to said spider. B designates the segmental-sections of the tread of the wheel; said sections each consists of a bearing portion, 6, having a flange, 7, on its

inner edge to bear against the head of a track-rail. A flat flange, 8, joins to the concave side of said tread and the inner edge of said flange is fitted to bear solidly upon the periphery of the rim 3 of the spider A. Following the concave edge of the flange 8 there is a curved tongue, 9, which is adapted to engage in the groove 5 of the spider A and thereby a perfect stability can be given to the tread of the wheel. A series of screw-bolts, 10, secure the segmental-sections B to the spider A and complete the formation of the wheel shown in Fig. 1.

In the modification shown in Figs. 7, 8, 9, and 10, A' designates the spider which does not differ materially from the one shown in Fig. 2, with the following exceptions: The rim, 3', has a peripheral groove, 11, formed therein for a purpose hereinafter explained, and a circumferential flange, 12, which forms one side of said groove. B' designates the segmental-sections of the tread of said wheel, which also do not differ materially from the segmental-sections previously described, excepting that the concave edge of the flange 13 is fitted to enter the groove 11, and that a flange, 14, is formed on the concave face of said sections to hook over the peripheral-flange, 15, of the spider A'. A series of screw-bolts, 16, is used to secure the segmental-sections B' to the spider A'.

It frequently happens that, from an inequality of the metal in the tread of a street-railway car-wheel, that a part of the wheel will be worn to render the wheel useless, while other parts will remain comparatively good and fit for service, but, by reason of the damaged portion, the entire wheel will have to be discarded, thereby involving considerable loss. Commonly the only part damaged is the tread of the wheel. Our invention provides a simple remedy for such defects, and, by retaining the spider on the car-axle in an uninjured condition, the cost of remedying the defect is reduced to a small amount.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The car-wheel herein described, consisting of a spider or center fitted to be secured to a car-axle and provided with a peripheral flange

whose outer edge is adapted to form a seat for receiving a sectional rim, and a series of removable segmental-sections comprising corresponding portions of the tread or rim, rim-
5 flange, and a flange adapted to be secured to the spider; said sections being fitted to bear solidly on the periphery of the spider and rigidly secured to the latter by means of bolts and interlocking tongues and grooves, substantially as specified.

2. The combination of a spider provided

with a rim and circular groove, a series of segmental sections fitted to form the tread of a car-wheel and to interlock into the groove of said spider, and a series of screw-bolts 15 which secure said segmental-sections to the spider, as specified.

ALFRED HYMAS.
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Witnesses:

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