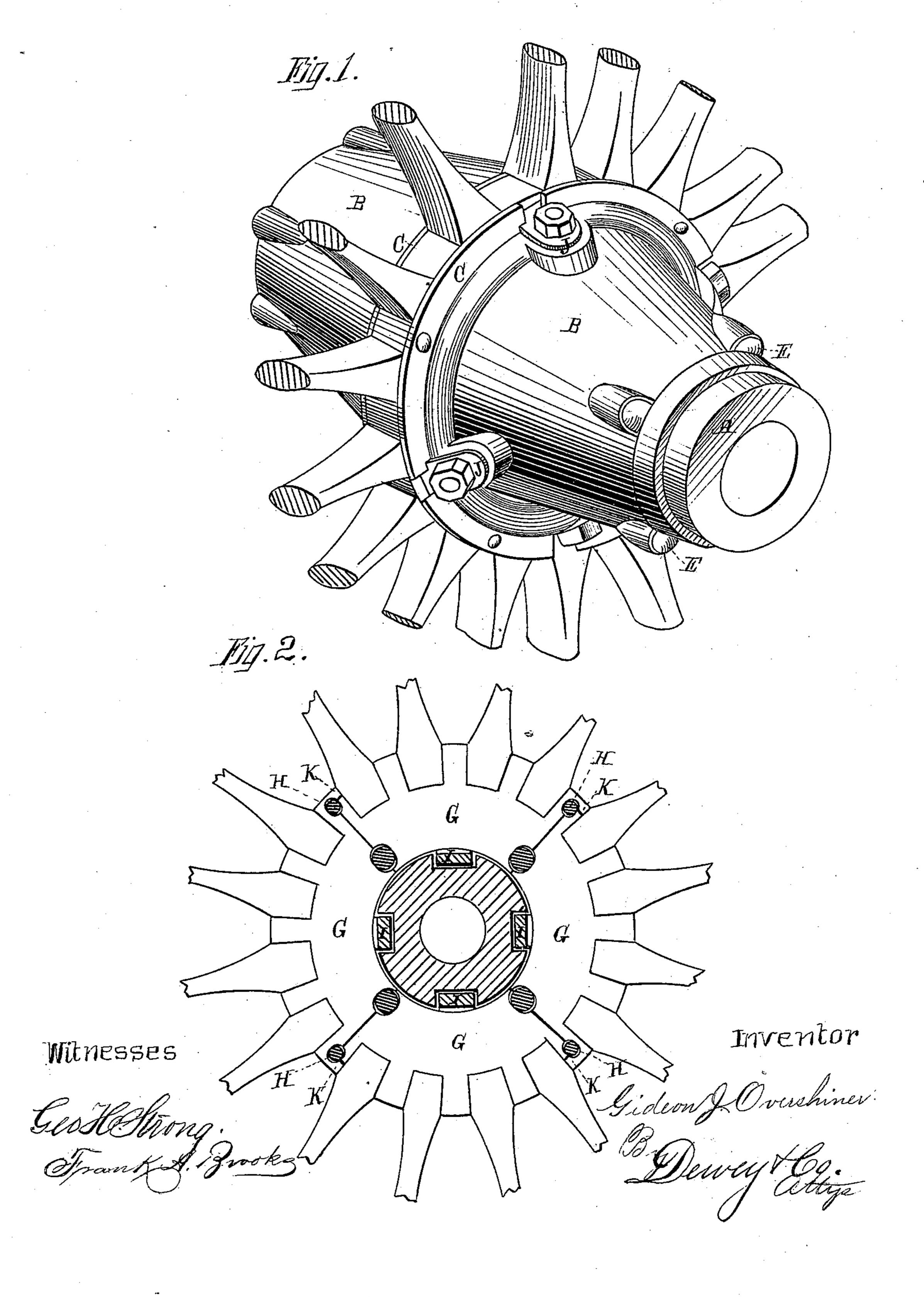
(No Model.)

G. J. OVERSHINER. Wheel Hub.

No. 235,007.

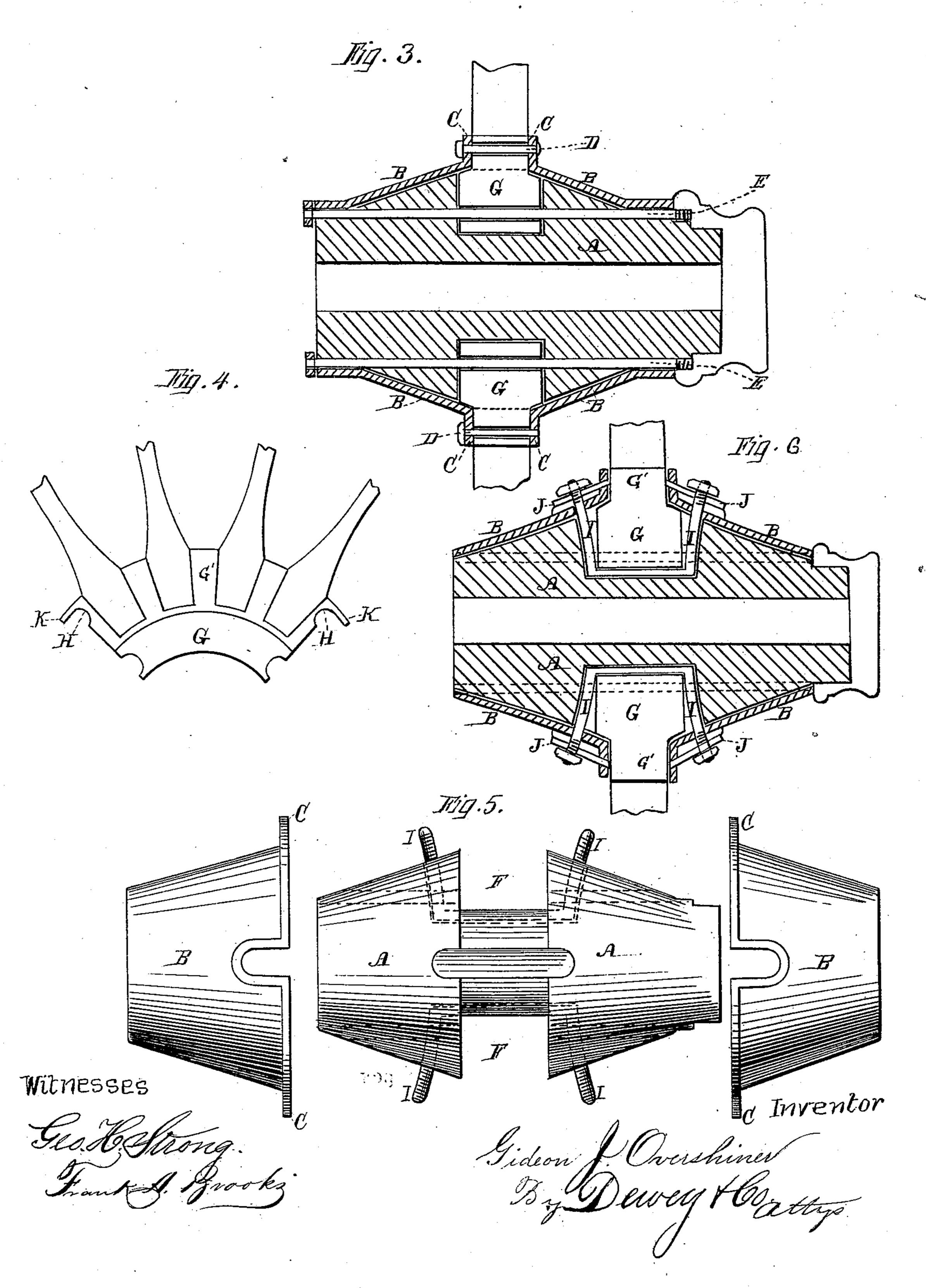
Patented Nov. 30, 1880.



G. J. OVERSHINER. Wheel Hub.

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United States Patent Office.

GIDEON J. OVERSHINER, OF SAN JOSÉ, CALIFORNIA.

WHEEL-HUB.

SPECIFICATION forming part of Letters Patent No. 235,007, dated November 30, 1880.

Application filed September 7, 1880. (No model.)

To all whom it may concern:

Be it known that I, GIDEON J. OVERSHINER, of San José, county of Santa Clara, and State of California, have invented an Improved Wagon-Wheel Hub; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to certain improvements in the construction of wheel-hubs for venicles; and it consists in the peculiar formation of an inner hub of wood, with exterior inclosing-shells and flanges, and in a means for securing the spokes in sections, which are held in the hub by bolts, so that said sections may be moved outwardly to set the tires when they become loose.

It further consists in a means for moving these sections independently of each other by means of links having screw-threads and nuts, which may be turned from the outside, so that any or all of the sections may be adjusted at will.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a perspective view of my wheel-hub. Fig. 2 is a section taken transversely through the hub. Fig. 3 is a longitudinal section. Fig. 4 is a separate view of one of the sections with the spokes in place. Fig. 5 is a separate view of the inner part of the hub. Fig. 6 is a longitudinal section.

A is the body of my hub, which is formed of wood, and has conical ends, as shown, to receive the inclosing-shells B. These shells have flanges C, which fit against the sections into which the spokes are driven, and are secured in place by bolts or rivets D, which pass through elongated holes between the sections.

The shells and flanges are held in place by bolts E, which are preferably made to pass through the hub from end to end, these bolts passing through openings made at the proper point in the spoke-holding sections at their meeting edges, as shown. These openings should be elongated, so as to permit the sections to move outward without interfering with the bolts E. The flange which is fitted to the outer end of the hub is formed with lugs upon its inner end, and the bolts E screw into these lugs, thus holding the flange firmly

in place, and at the same time concealing the ends of the bolts, so that a fine finish is given.

The hub A has a deep groove, F, formed around its center, and adapted to receive the spoke-holding sections G. These sections are 55 made of metal, and I use as many as may be desired. In the present case I have shown four. These sections are made to fit the groove F in the hub and are quadrant-shaped. They have a rim or thick flange, G', on their periph- 60 ery, which flange is formed with the ordinary sockets for receiving the tenons of the spokes.

The meeting faces of the sections have grooves H, which form complete elongated holes when the sections are in place, and the 65 bolts D and E pass through these spaces and permit the sections to move in and out on the bolts, as before described.

In order to adjust the spoke-sections and move them outward to set the tires when the 70 latter become loose, I employ adjusting-straps 1. These are bent, as shown, into the form of a staple, having two parallel legs united by a cross or connecting bar. These are set into the groove F in the hub, so that while the side 75 bars or legs project radially outward on each side of the groove the cross-bar lies lengthwise of the hub and at the bottom of the groove. One of these devices is fitted for each of the spoke-sections G, and the inner part of 80 each section is grooved to admit the cross-bar of the adjuster. The ends of the legs project up through the shells B at each side of the spokesections and through peculiar-shaped washers J and have nuts upon their outer ends. 85 These nuts may be turned on the legs, and will then draw the adjusters outward, thus forcing the spoke-sections outward also until the tire is as tight as desired. The washers J have ends which project through slots in the flanges 90 of the shells B, so as to rest against the sides of the stacke-sections G. By this means they serve to steady the sections when the nuts are screwed down to move the sections outward.

Two of the sections which stand opposite 95 each other have projecting lips or edges K, which overlap the other two sections where they meet between the spokes, and thus keep the opening of the joint closed when the sections are moved outward. The sections may 100

be moved outward as far as the bolts permit, and when this limit is reached they may be let down and the tires reset.

By this construction I am enabled to make a strong serviceable wheel, with a means for keeping the tire tight without continual resetting.

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

10 Patent, is—

1. A wheel-hub provided with a central peripheral groove and sections G, adapted to each other and to the groove, in combination with the spokes, the inclosing-shells, and devices for forcing the sections outwardly, substantially as described.

2. The grooved hub, the sections, shells, and spokes, in combination with the adjusters I and their nuts, substantially as described.

- 3. The grooved hub, the sections carrying 20 the spokes, and having grooves in their meeting faces, in combination with the adjusters and connecting bolts, substantially as described.
- 4. The grooved hub, in combination with 25 the adjustable sections, the shells B, and flanges C, and with the bolts, substantially as described.
- 5. In connection with the described hub, the adjustable sections provided with the flanges 30 or lips K, substantially as described.

In witness whereof I have hereunto set my hand.

GIDEON JACKSON OVERSHINER.

Witnesses:

WM. H. McGraw, John Carfield.