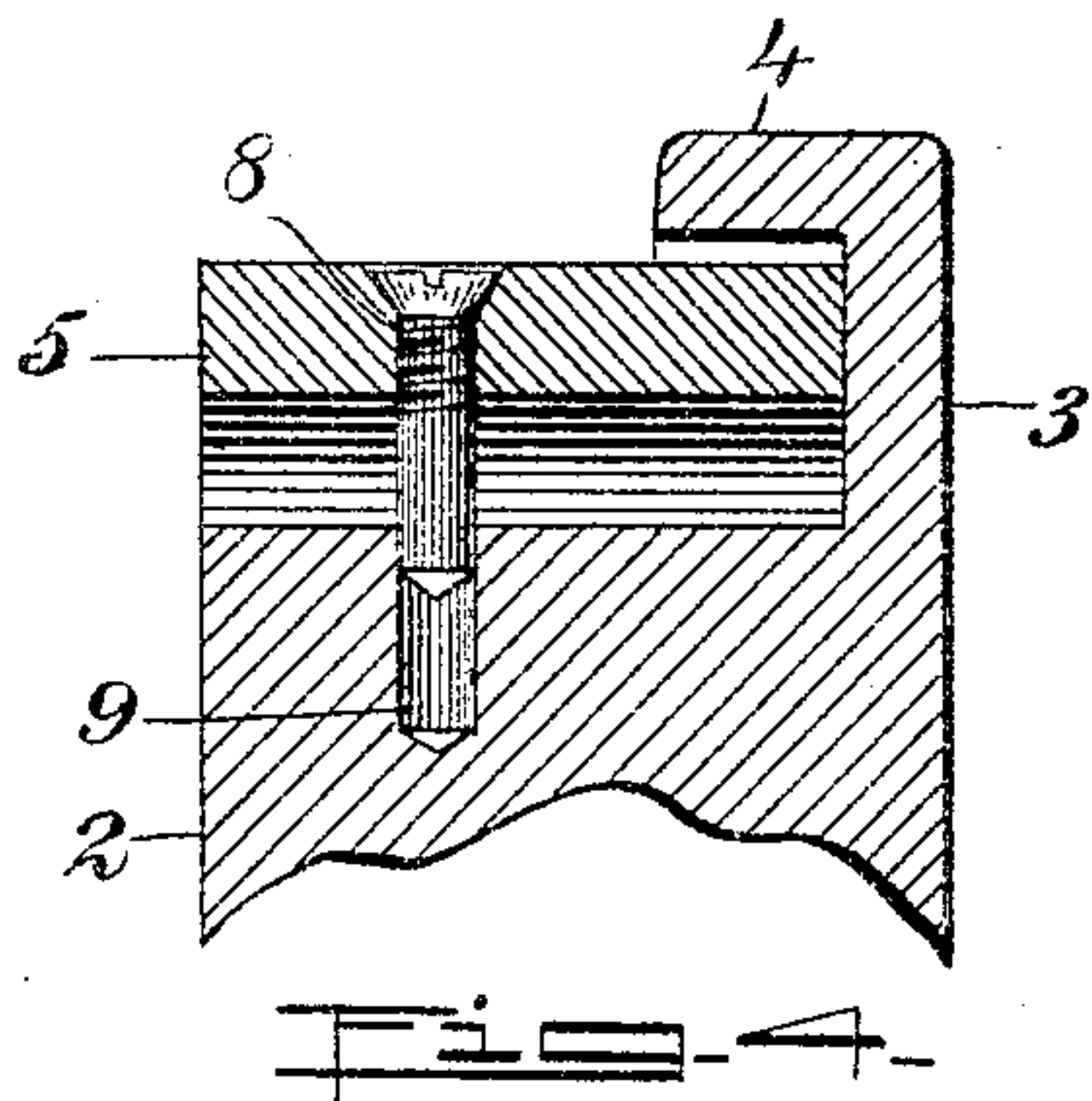
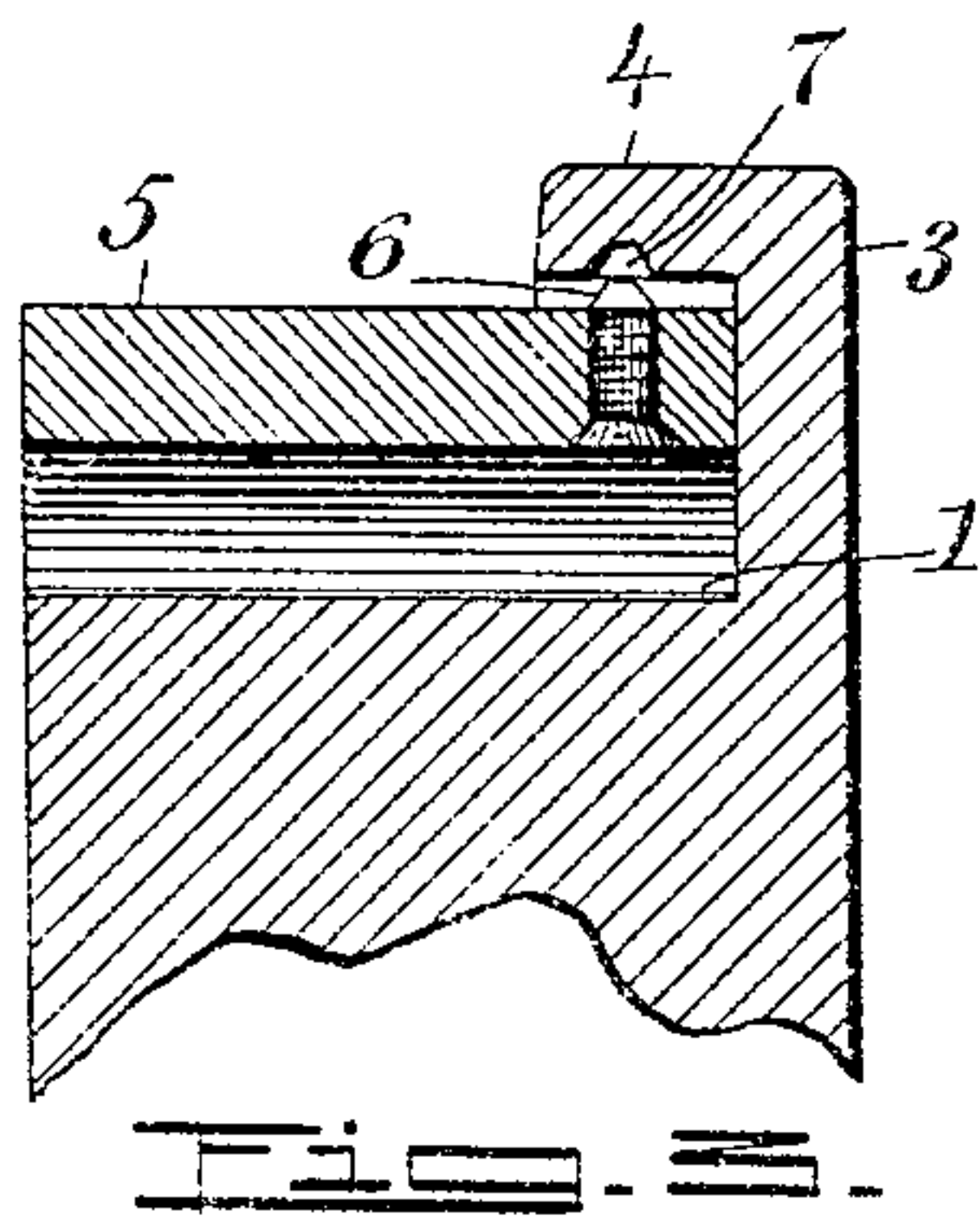
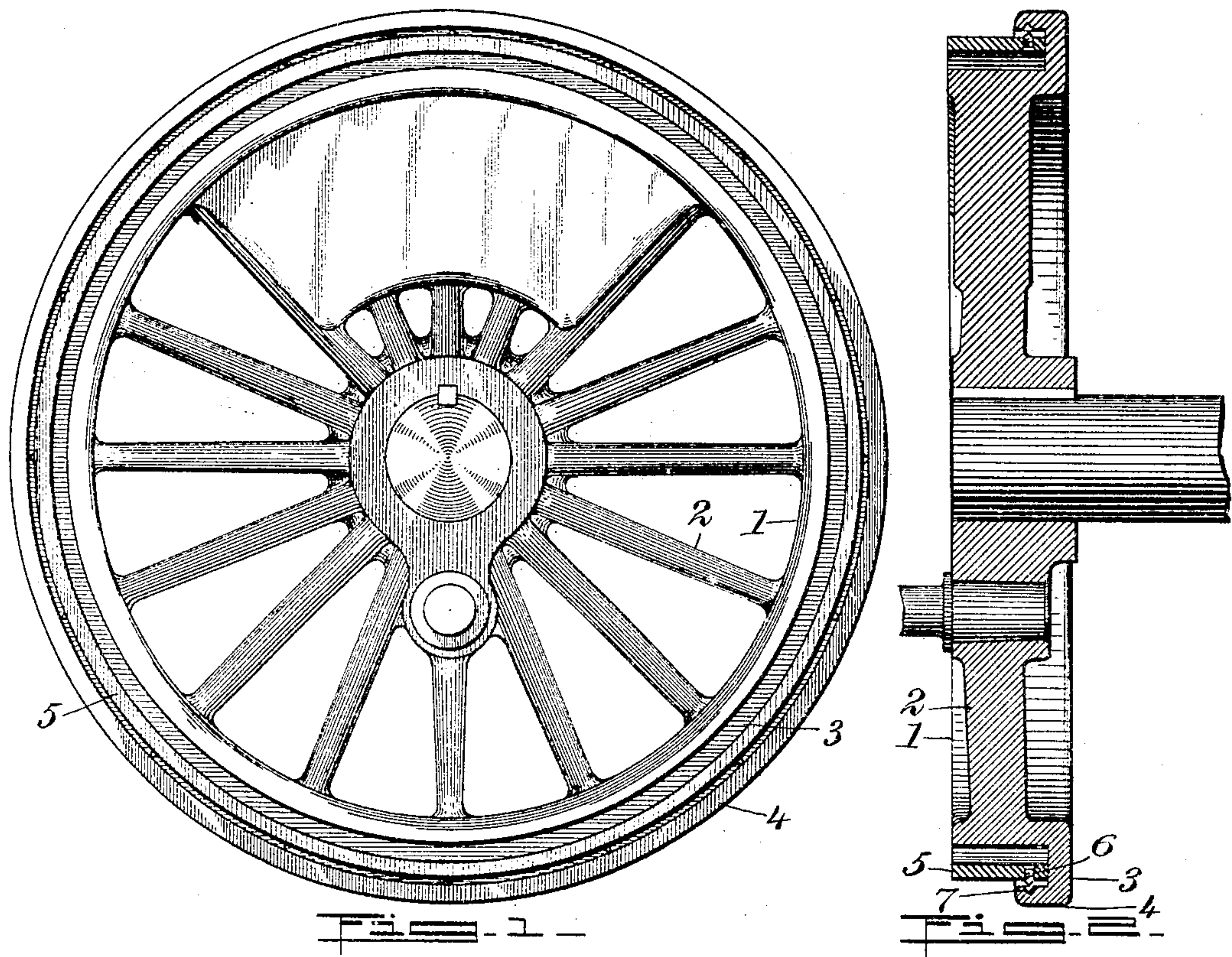


C. WIMMER.
CAR WHEEL.
APPLICATION FILED APR. 23, 1904.

2 SHEETS--SHEET 1.



WITNESSES:
C. A. Jarvis:
C. R. Ferguson

INVENTOR
Charles Wimmer
BY *Mumford*
ATTORNEYS

No. 778,766.

PATENTED DEC. 27, 1904.

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2 SHEETS—SHEET 2.

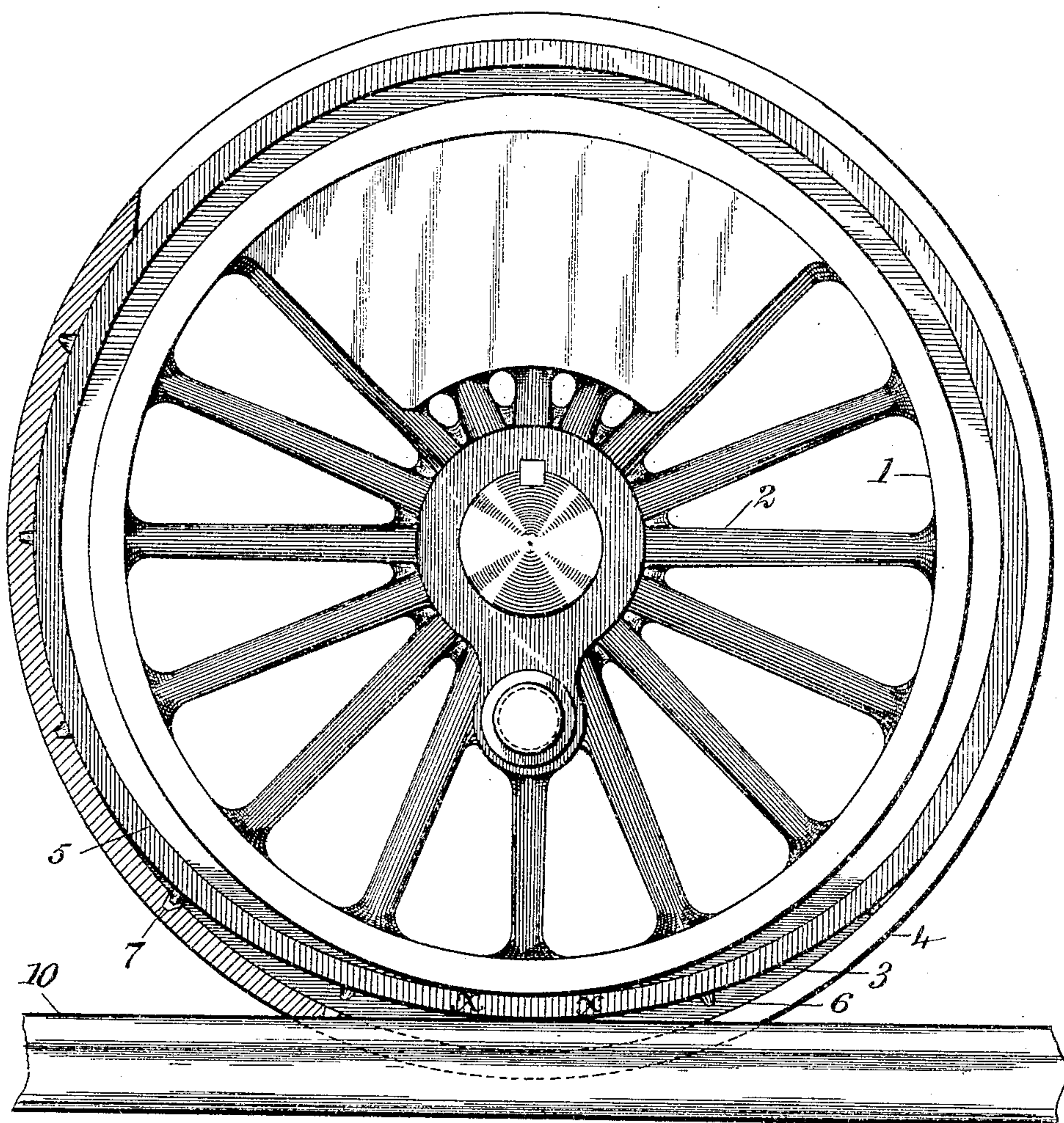


Fig. 5.

WITNESSES:
C. A. Jarvis.
C. R. Ferguson

INVENTOR
Charles Wimmer
BY *Wm. L. [Signature]*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

CHARLES WIMMER, OF HAMILTON, CANADA.

CAR-WHEEL.

SPECIFICATION forming part of Letters Patent No. 778,766, dated December 27, 1904.

Application filed April 23, 1904. Serial No. 204,560.

To all whom it may concern:

Be it known that I, CHARLES WIMMER, a citizen of the Empire of Austria-Hungary, and a resident of Hamilton, in the Province of Ontario, Dominion of Canada, have invented a new and Improved Car-Wheel, of which the following is a full, clear, and exact description.

This invention relates particularly to improvements in driving-wheels for locomotives, the object being to provide a wheel of novel construction so arranged as to have a comparatively large frictional bearing-surface lengthwise of a rail, thus reducing the danger of slipping to a minimum, and therefore causing a train to come to a quick stop upon setting the brakes and a quick and easy start.

I will describe a car-wheel embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is an outer side elevation of a wheel embodying my invention. Fig. 2 is a sectional view thereof transverse to the axis. Fig. 3 is a sectional detail drawn on an enlarged scale. Fig. 4 is a sectional detail showing a modification; and Fig. 5 is an elevation, partly in section, showing the position of parts when the wheel is in use.

The wheel comprises a rim 1, attached to spokes 2, and extending around the rim at the inner side is an outwardly-extended flange 3, and from this flange 3 a flange 4 projects in a direction widthwise of the rim 1. It will be seen that there is a considerable space between the flange 4 and the face of the rim, and in this space is arranged loosely a bearing-ring 5, consisting of steel. This ring, it will be noticed, is somewhat larger in diameter than the diameter of the rim and somewhat smaller than the interior diameter of the flange 4, and thus there is permitted some play of the ring between said parts. At suitable intervals the ring 5 is provided with projections 6, here shown in the form of screws,

and designed to engage in depressions 7, formed in the inner surface of the flange 4. This will prevent rotary movement of the ring with relation to the wheel. On the outside surface of the flanges 4 are set the brakes.

In Fig. 4 I have shown a slightly-different means for holding the ring in its proper relation to the wheel. This means consists of screw-bolts 8, which pass through the ring 5 and are designed to engage in holes 9, drilled in the ends of the spokes 2.

In the operation as the wheel is moving along the track the ring 5, at its portion engaging directly on the rail 10, will be forced upward against the rim 1 of the wheel, and the said ring will be slightly flattened lengthwise of the rail—for instance, as indicated between the characters *x x* in Fig. 5. The upper portions of the ring will be caused to bind tightly against the inner side of the flange 4, and the projections engaging in the recesses, as before mentioned, will prevent rotary movement of the ring relatively to the wheel.

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

1. In a wheel, a resilient bearing-ring placed loosely around the wheel-rim and adapted to flatten out between the wheel and the track and lengthwise of the track, and means for holding said ring in place.

2. A wheel having a flange extended around its rim at one side, a flange extended from the first-named flange transversely of the rim, and a spring-yielding bearing-ring loosely arranged between said rim and last-named flange.

3. A locomotive drive-wheel having a flange extended around its rim at one side, a flange extended from the first-named flange transversely of the wheel-rim, the inner side of said last-named flange being provided at intervals with recesses, a spring-yielding bearing-ring placed loosely between said last-named flange and the wheel-rim, and points on said ring for engaging in the recesses.

4. A locomotive drive-wheel having a flange extended around its rim at one side, a flange extended from the first-named flange trans-

versely of the wheel-rim, and spaced there-
from, a steel ring arranged loosely in the
space between the wheel-rim and the trans-
verse flange, and means for causing a locking
5 engagement between said ring and the trans-
verse flange.

In testimony whereof I have signed my name

to this specification in the presence of two sub-
scribing witnesses.

CHARLES WIMMER.

Witnesses:

W. P. SCHOEPPE,
E. WULFUEY.