

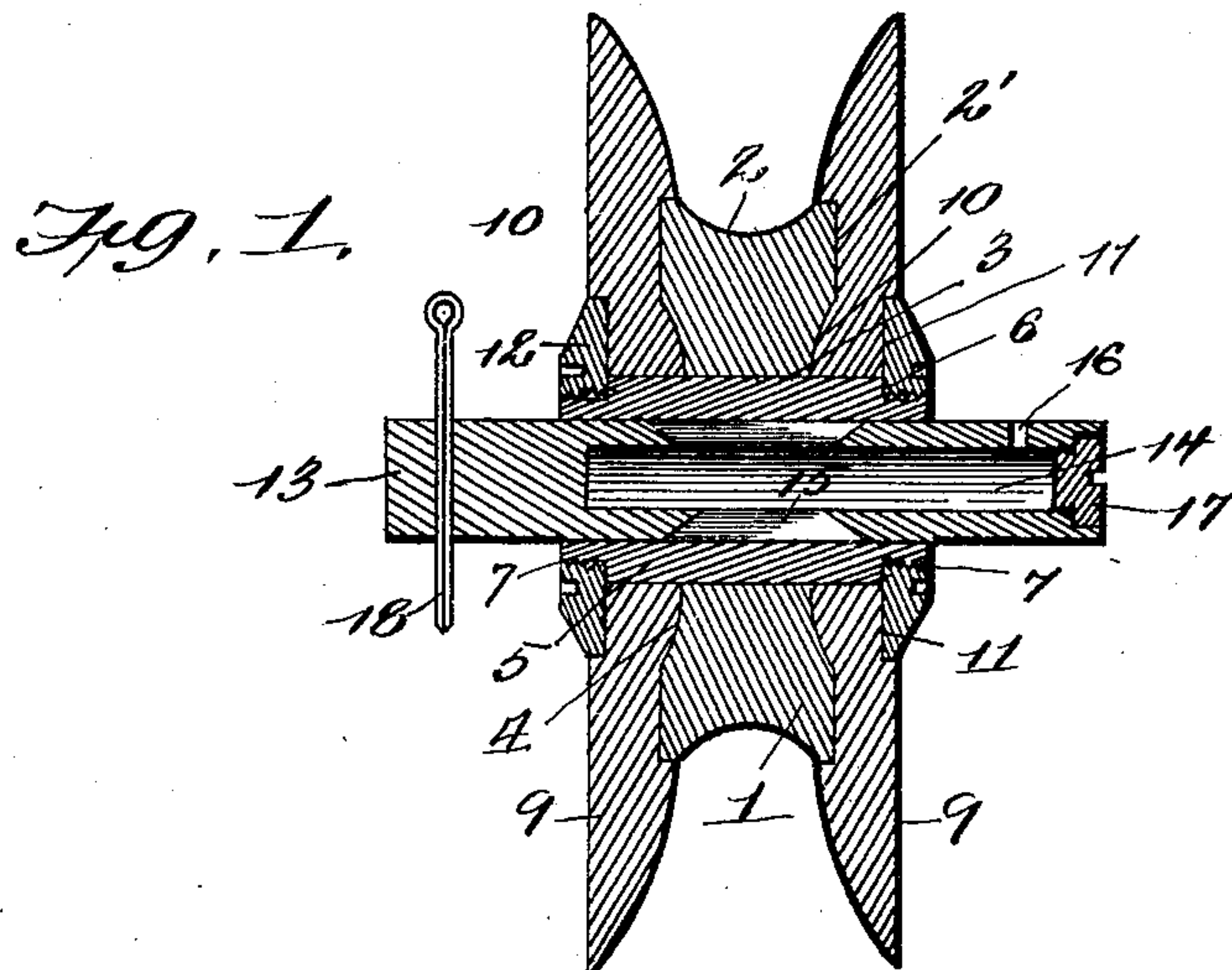
No. 698,978.

Patented Apr. 29, 1902.

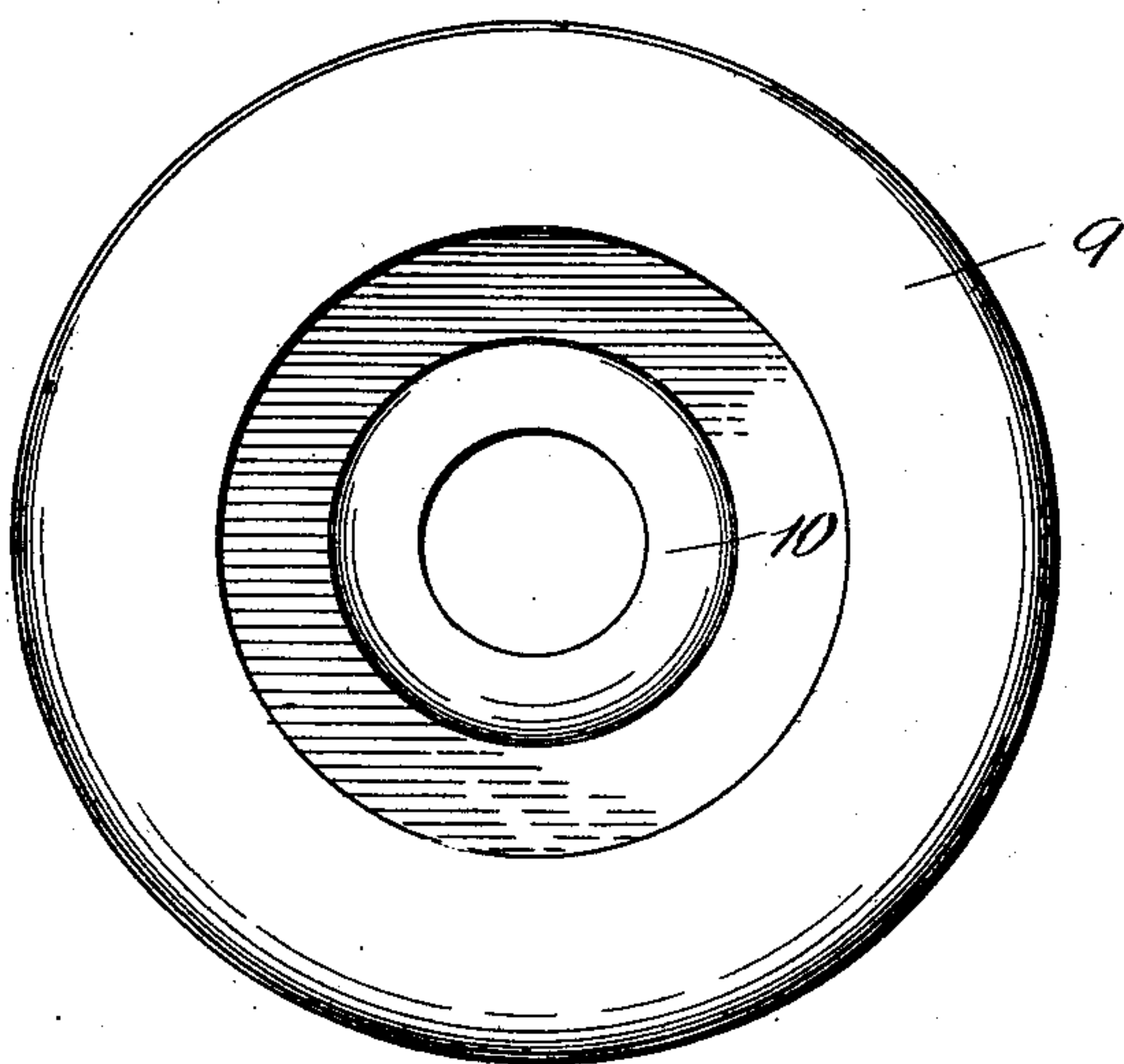
G. LOFFI.  
TROLLEY WHEEL.

(Application filed Sept. 7, 1901.)

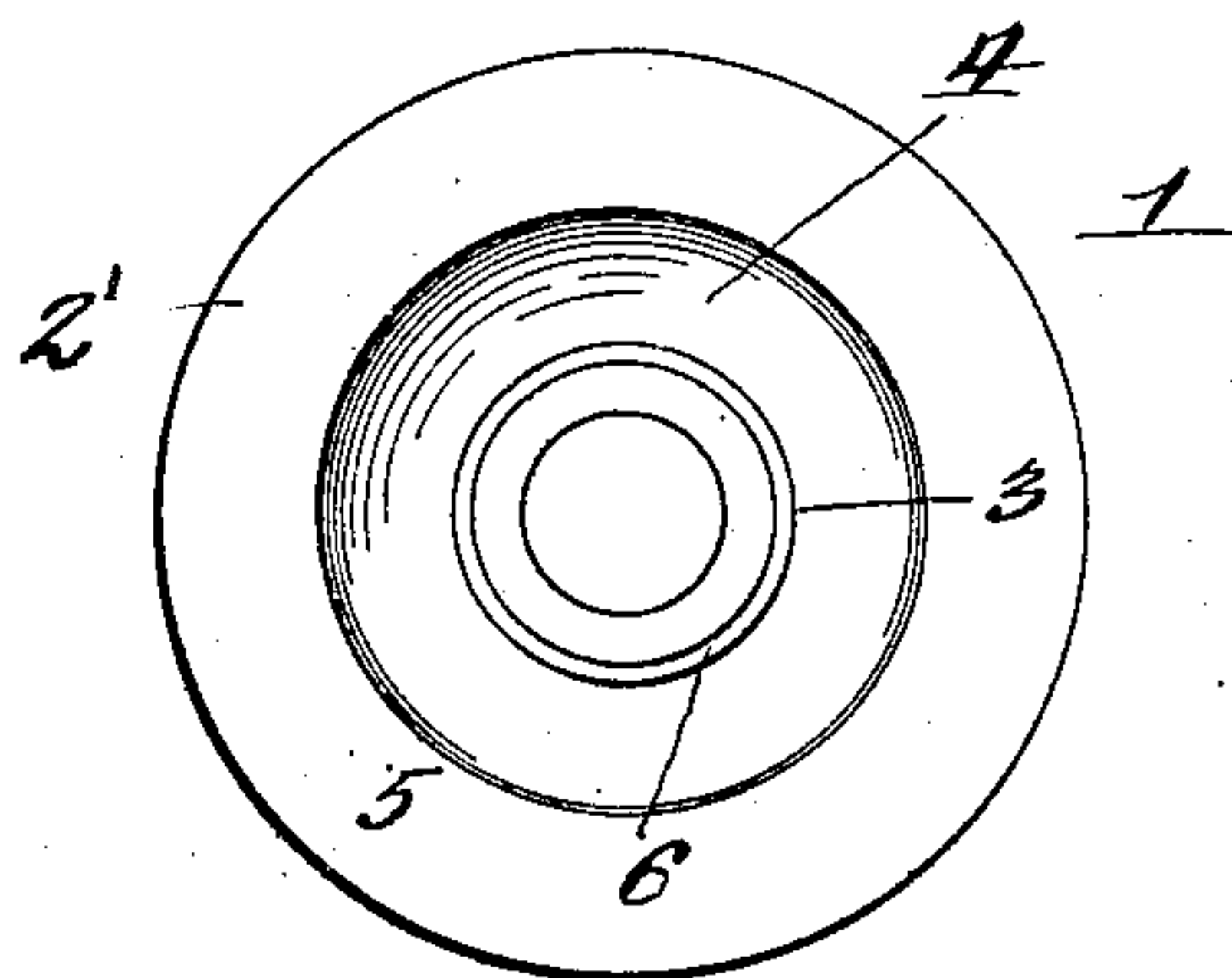
(No Model.)



*Fig. 2.*



*Fig. 3.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## TROLLEY-WHEEL.

SPECIFICATION forming part of Letters Patent No. 698,978, dated April 29, 1902.

Application filed September 7, 1901. Serial No. 74,648. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE LOFFI, residing at Norwalk, in the county of Huron and State of Ohio, have invented certain new and  
5 useful Improvements in Trolley-Wheels; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, refer-  
10 ence being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in  
15 trolley-wheels; and it has for its object the provision of a separable wheel; and it consists of a body portion, flanges, and a bushing of novel construction.

The invention consists in the novel construction, arrangement, and combination of  
20 the several parts of the device, as hereinafter described, illustrated in the drawings, and more particularly pointed out in the claims.

In the drawings, Figure 1 is a vertical central sectional view taken through the wheel.  
25 Fig. 2 is a plan view of the flange, showing the inner side. Fig. 3 is a plan view of the body portion.

Referring to the drawings, the numeral 1  
30 indicates the body portion of the wheel, which is provided with a peripheral groove 2 and the usual bore 3.

4 indicates a circular depression, seat, or  
35 recess in each side of the body portion surrounding the bore 3.

5 indicates a bushing of any suitable material, preferably case-hardened steel, and is  
40 securely seated in the bore 3 of the body portion 1. Each end of the bushing is reduced in diameter to form a circular shoulder 6, the purpose of which will be hereinafter explained. Each reduced end for a portion of  
45 its length is provided with screw-threads 7, forming a circumferential groove between said screw-threads and the shoulder 6.

The numeral 9 indicates removable flanges, each of which is provided with a central bore adapted to fit over the bushing and be seated on the shoulder 6. On the inner side of each

of these flanges, surrounding the bore there- 50  
of, is a circular projection 10, adapted to fit and set into the circular depressions 4 of the body portion. The inner side of each of these  
flanges 9 is also provided with a circular  
groove or recess adapted to fit over and upon 55  
the side edge or projection 2', formed by the periphery of said body portion, and the circular depression or recess 4, thereby affording a clear smooth joint between the body  
portion 1 and the flange 9. The outer sides of 60  
said flanges 9 are provided with circular depressions or seats 11 of such depth that when said flanges are seated on the bushing the  
bottoms thereof will be flush with the outer  
faces of the shoulders 6 for a purpose herein- 65  
after stated.

The numeral 12 indicates nuts of any suitable material adapted to fit the screw-threads  
on the end of the bushings and when turned  
up set in the circular seats or depressions 11 70  
in the flanges and hold the parts of the wheels together. It will be noticed that by reason of the shoulder 6 being flush with the bottoms of the seats or depressions 11 the nut will  
bear equally against said shoulder and the 75  
side of the flange, whereby a perfect fit will be insured and permit the flange to be loosely mounted on said bushing and turn independently of the body portion. The independence  
of movement of these flanges is of great value, 80  
particularly in passing around curves, where the wire is drawn with great strain against either of the flanges.

The numeral 13 indicates the shaft upon  
which the wheel is mounted and is provided 85  
with an oil or lubricant chamber 14.

15 15 are flared slots or channels leading  
from the chamber 14 to the inner periphery  
of the bushing 5 for the purpose of supply-  
ing oil thereto. 90

16 is a suitable oil-hole communicating with  
said chamber for the purpose of supplying  
oil thereto and is closed in any suitable man-  
ner, such as with a screw-plug, &c.

17 indicates a suitable screw-plug in one 95  
end of the shaft and permits access to the oil-chamber therein for the purpose of cleaning, &c.



18 is a lock-pin which sets in an opening which passes through the shaft and the plug 17 and holds the same in place.

Having thus described my invention, what I claim is—

1. A trolley-wheel having a body portion provided with a central bore and a peripheral groove, a bushing secured in said bore having reduced ends providing shoulders, flanges 10 having central openings mounted on said bushing over the shoulders, and nuts adapted to fit the ends of said bushing and bear against the shoulders and sides of the flanges, as set forth.

2. A trolley-wheel having a body portion provided with a central bore and a peripheral groove, seats or depressions in the sides thereof surrounding said bore, a bushing securely seated in said bore having reduced ends providing shoulders, removable flanges mounted 20 on said bushing and having projections on their inner sides adapted to be seated in the seats or depressions in the body portion, and means adapted to fit the ends of said bushing and bear against the shoulders and sides 25 of the flanges, as set forth.

3. A trolley-wheel having a body portion provided with a central bore and a peripheral

groove, and provided on each side thereof with a projection, a bushing securely seated 30 in said bore having reduced ends providing shoulders, flanges having central openings and provided on their inner sides with circular grooves adapted to receive the projections 35 on the sides of the body portion, and means adapted to fit the ends of said bushing and bear against the shoulders and sides of the flanges, as set forth.

4. A trolley-wheel having a body portion provided with a central bore and a peripheral 40 groove, circular seats or depressions in the sides thereof surrounding said bore, a bushing securely seated in said bore having reduced ends providing shoulders, removable flanges having circular projections and 45 grooves on their inner sides, circular seats or depressions on their outer sides, and means adapted to fit on the ends of said bushing and bear against the shoulders and the sides 50 of said flanges, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE LOFFI.

Witnesses:

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