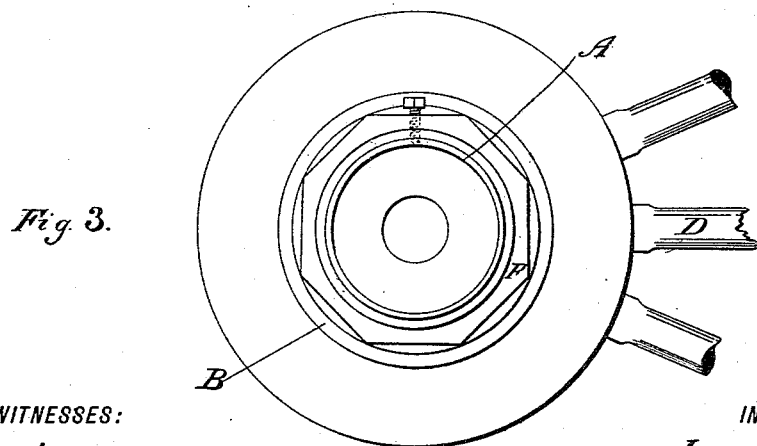
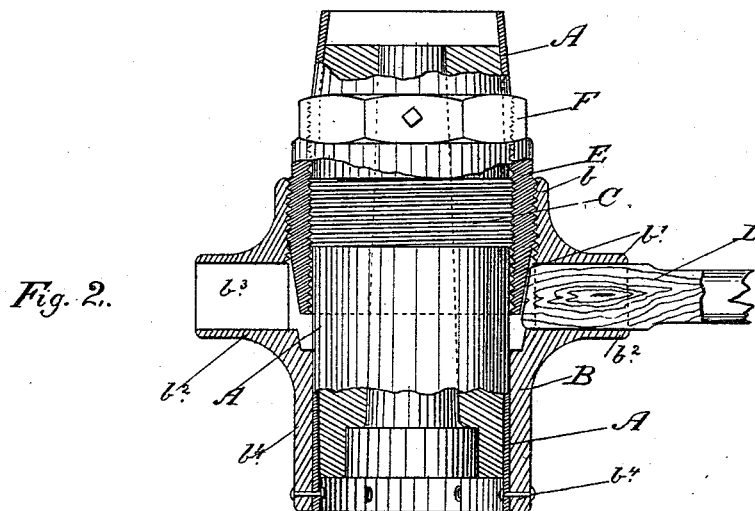
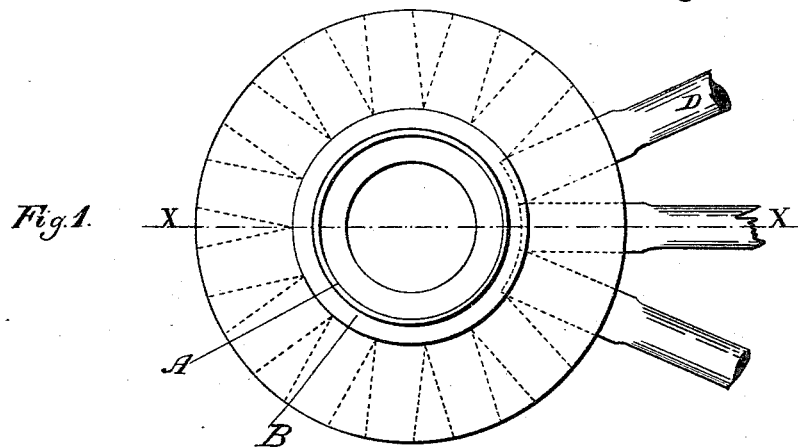


(No Model.)

J. PLUCK.  
WHEEL.

No. 457,668.

Patented Aug. 11, 1891.



WITNESSES:

*A. W. Coleman*  
*J. E. Crane*

INVENTOR

*James Pluck*

BY

*Emil Behrens*  
his ATTORNEY

# UNITED STATES PATENT OFFICE.

JAMES PLUCK, OF UTOPIA, TEXAS.

## WHEEL.

SPECIFICATION forming part of Letters Patent No. 457,668, dated August 11, 1891.

Application filed March 30, 1891. Serial No. 386,989. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES PLUCK, a citizen of the United States, residing at Utopia, in the county of Uvalde and State of Texas, have invented a new and useful Improvement in Wheel-Tightening Arrangements, of which the following is a specification.

My invention relates to improvements in wheel-tightening arrangements in which a cylinder with a conical-formed end works by means of a thread inside the hub, for the purpose of forcing the spokes to the outside and to tighten by these means the whole wheel, when the wooden parts of the wheel are shrunk together. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is an end view of the hub. Fig. 2 is a vertical section on the line XX of Fig. 1, and Fig. 3 is the front view of the hub.

Similar letters refer to similar parts throughout the several views.

A is the cylinder, of iron or any suitable material, about seven inches in length, riveted with its end to inner side of the hub B, and bearing on its outside a thread C, about an inch in length, under the front ring of the hub.

The hub B, of cast-iron or other suitable material, consists of a front ring *b*, about one inch in length and three-eighths to one-half inch wider than the cylinder A, bearing inside a thread, and furthermore of two flanges *b'* *b''*, separated by means of partitions *b'''*,

and leaving square compartments for the spokes D, and of an end ring *b<sup>4</sup>*, to which the cylinder A is riveted.

E is a cylinder, of brass or other suitable material, about three inches in length. Its inside thread fits over the cylinder A and its partial thread on the outside into the hub-ring *b*, leaving on the end an octagon F, for the wrench, and the other conical end which passes under the spokes acts in such a manner that when the cylinder E is screwed tighter the spokes are forced to the outside, thus tightening up the whole wheel.

Having now fully described my invention, what I do claim as my invention, and desire to secure by Letters Patent, is—

In an iron hub, the combination of a cylinder A, bearing a thread on the outside and with its one end riveted to the inside of the end ring of the iron hub, leaving a space between the front ring and the spoke-compartments, and the cylinder A, into which is screwed another cylinder E, its conical front part passing under the spokes, whereby the same are forced to the outside, substantially as described.

In testimony that I claim the above I have hereunto set my hand in the presence of two witnesses.

JAMES PLUCK.

Witnesses:

A. W. COLEMAN,  
J. E. CRANE.