

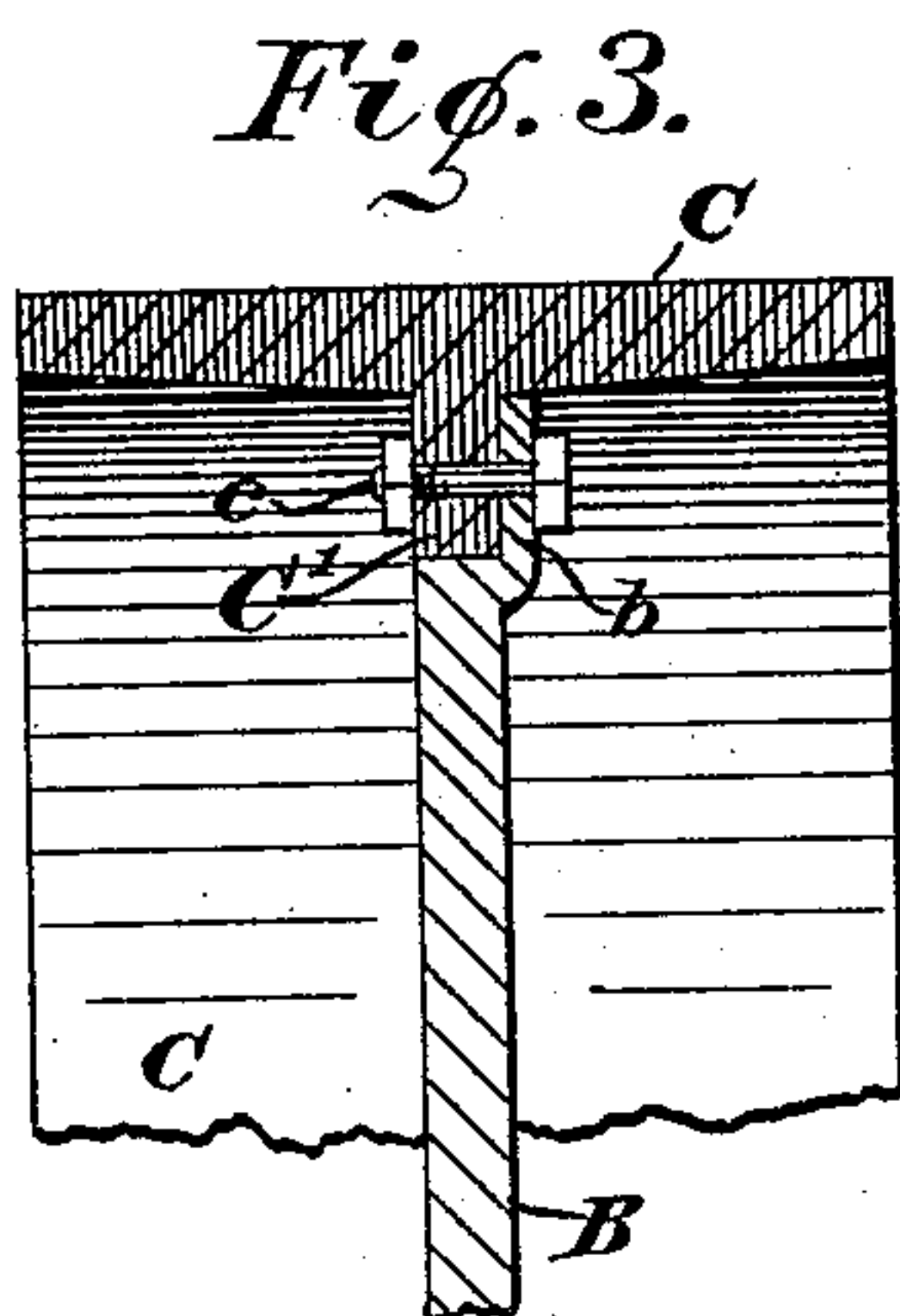
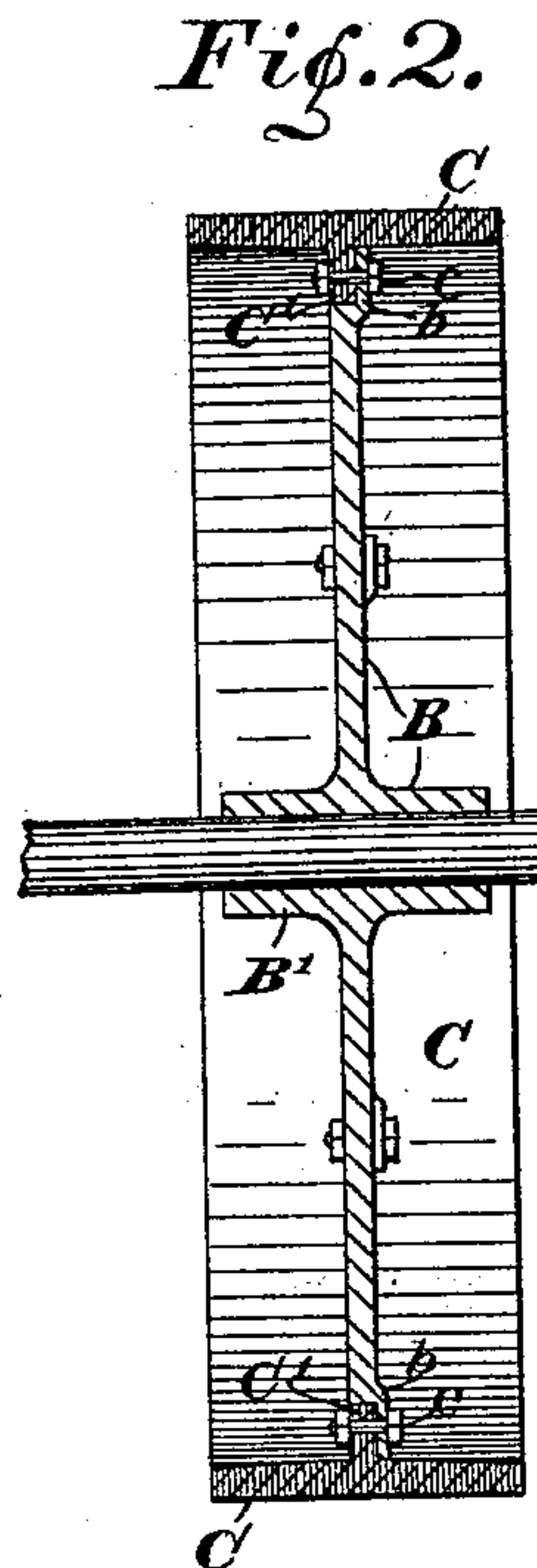
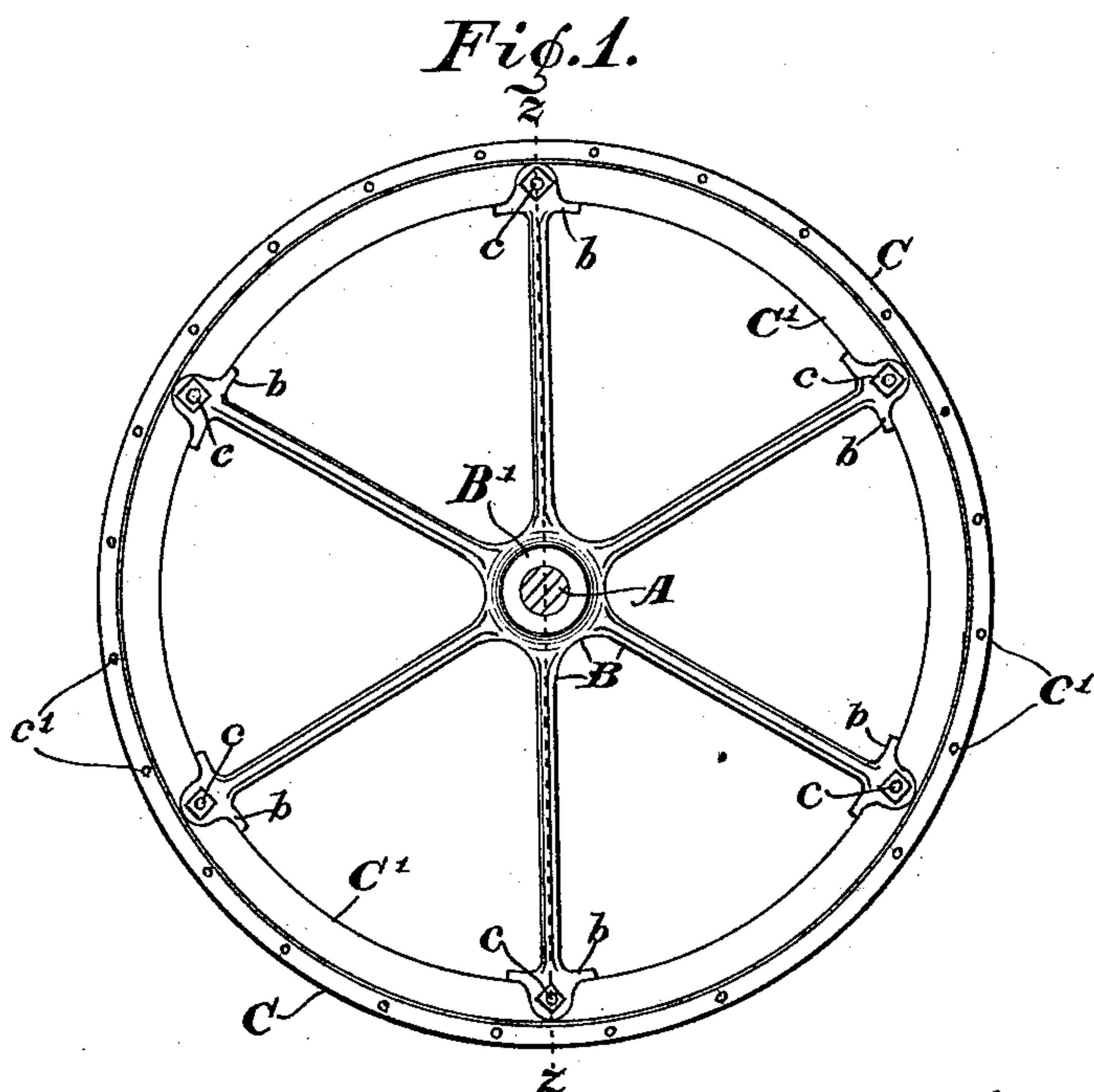
(No Model.)

H. C. NEWCOMB.

PULLEY.

No. 297,531.

Patented Apr. 22, 1884.



WITNESSES.

Cha. M. Leonard,  
E. W. Bradford.

INVENTOR.

Horatio C. Newcomb,  
PER  
C. Bradford,  
ATTORNEY.

# UNITED STATES PATENT OFFICE.

HORATIO C. NEWCOMB, OF INDIANAPOLIS, INDIANA, ASSIGNOR OF ONE-HALF TO WILLIAM E. ROCKWOOD, OF SAME PLACE.

## PULLEY.

SPECIFICATION forming part of Letters Patent No. 297,531, dated April 22, 1884.

Application filed December 18, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, HORATIO C. NEWCOMB, of the city of Indianapolis, county of Marion, and State of Indiana, have invented certain  
5 new and useful Improvements in Pulleys, of which the following is a specification.

My present invention relates to that class of devices known as "belt-pulleys;" and it consists in constructing such a pulley with a  
10 paper rim and a metal spider, instead of the web that has heretofore been used in paper pulleys, as will be hereinafter more particularly described.

Referring to the accompanying drawings,  
15 which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a side elevation of a pulley embodying my said invention; Fig. 2, a central section of the same; and Fig. 3, a detail  
20 view, on an enlarged scale, similar to a portion of Fig. 2, showing the manner of uniting the arms of the spider to the rim more plainly.

In said drawings, the portions marked A  
25 represent the shaft on which the pulley is mounted, B the metal spider, and C the paper rim. The spider B embodies or is provided with a hub, B', and is mounted on the shaft A in the ordinary manner. The ends of  
30 its arms are extended into bearing-plates *b*, which fit underneath and over one side of a rib or flange, C', on the rim C, and are secured thereto by rivets or bolts *c*. The rim C is constructed of sheets of paper or pasteboard,  
35 preferably secured together in a well-known manner, by means of an adhesive substance, and pins *c'*, extending through, as indicated, the central sheets being wider than those on the edge, so as to extend down and form the

flange or rib C', to which the arms of the spider are to be connected and the whole subjected to heavy pressure.

By the above-described means a pulley is produced embodying the strength and rigidity of the usual iron spider, while preserving the  
45 peculiar advantages of the paper rim, which holds belts from slipping much better than an iron pulley does, as has been demonstrated by numerous and varied experiments.

Having thus fully described my said invention, what I claim as new, and desire to secure  
50 by Letters Patent, is—

1. The combination, in a pulley, of a paper rim and a cast-metal spider, the ends of the arms whereof are extended to form bearings  
55 by which the rim is supported, substantially as shown and specified.

2. The combination of a metal spider, the outer ends of the arms of which are enlarged, and a paper rim having an internal rib or  
60 flange against which the said enlarged ends fit, and to which they are secured, substantially as set forth.

3. The combination of the metal spider B, having enlarged ends or bearing-plates *b* on  
65 its arms, the paper rim C, having rib or flange C', and the bolts or rivets *c*, by which said rib and said arms are secured together, the whole forming a pulley, substantially as shown and described, and for the purposes specified. 70

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 15th day of December, A. D. 1883.

HORATIO C. NEWCOMB. [L. s.]

In presence of—

C. BRADFORD,  
E. W. BRADFORD.