

No. 606,794.

Patented July 5, 1898.

C. ROCHOLL.
GROOVED PULLEY.

(Application filed Aug. 21, 1897.)

(No Model.)

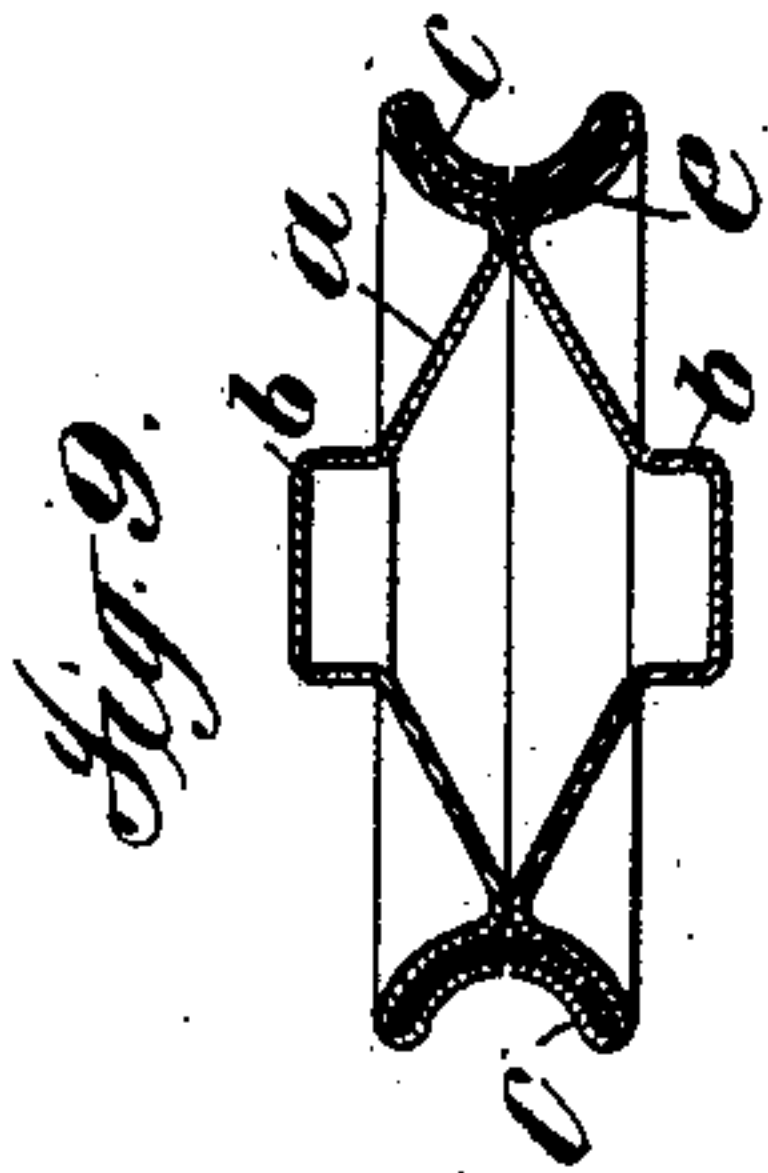


Fig. 10.

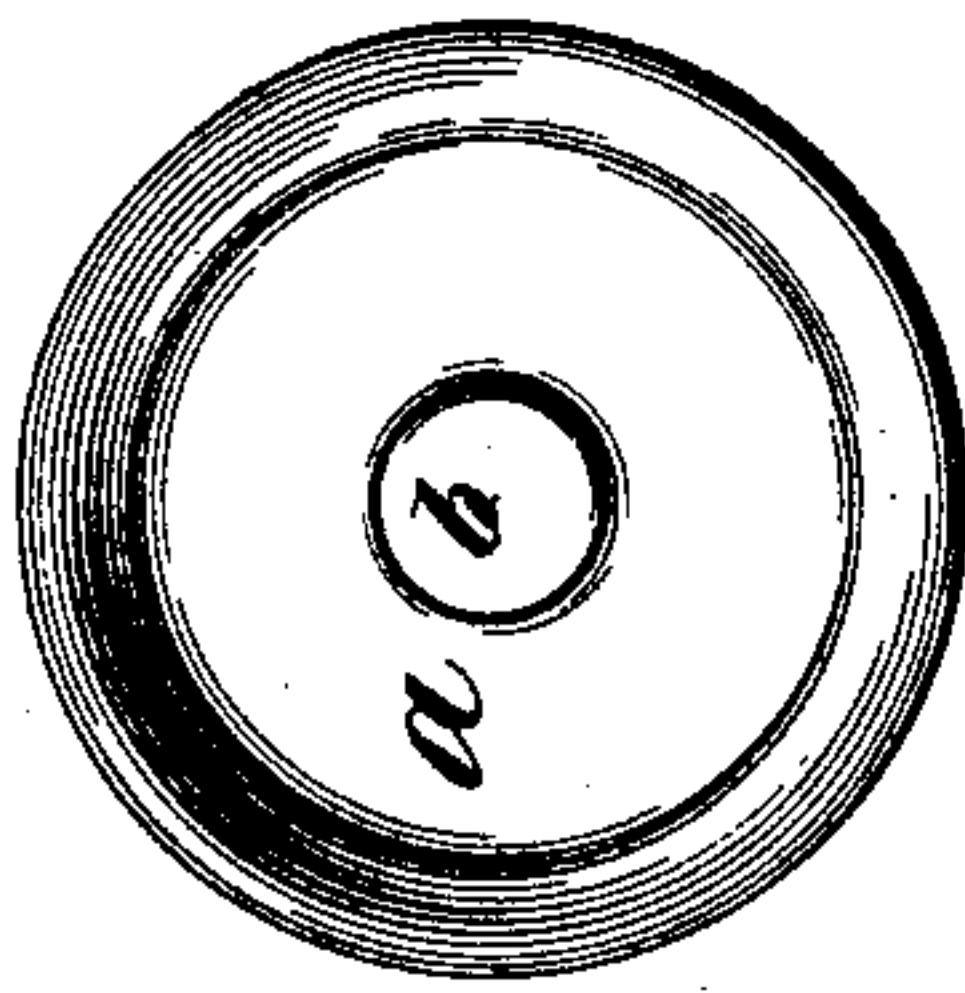


Fig. 11.

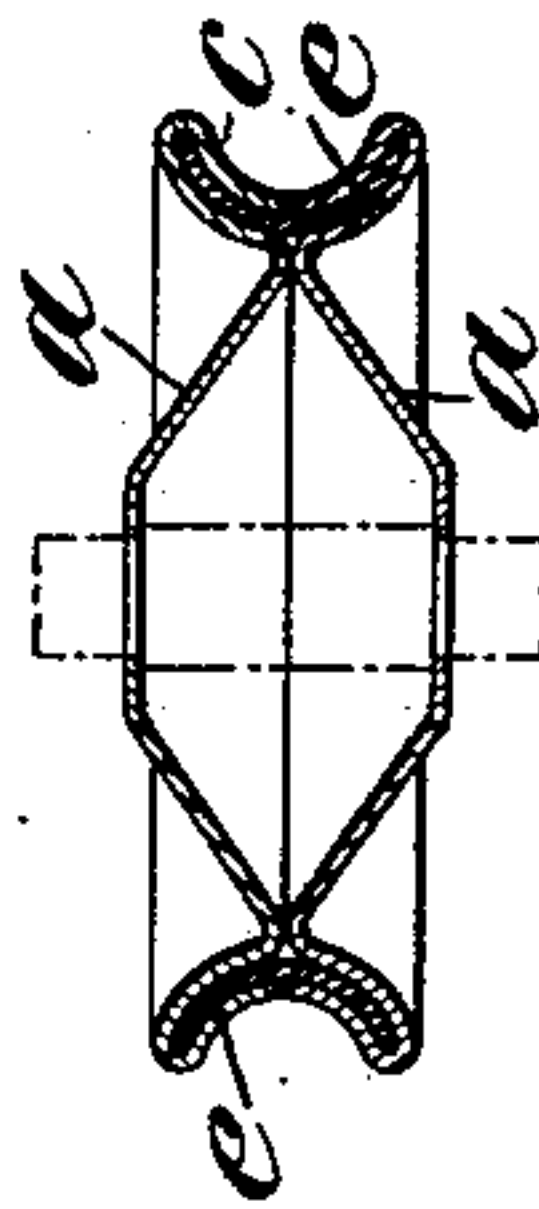


Fig. 5.

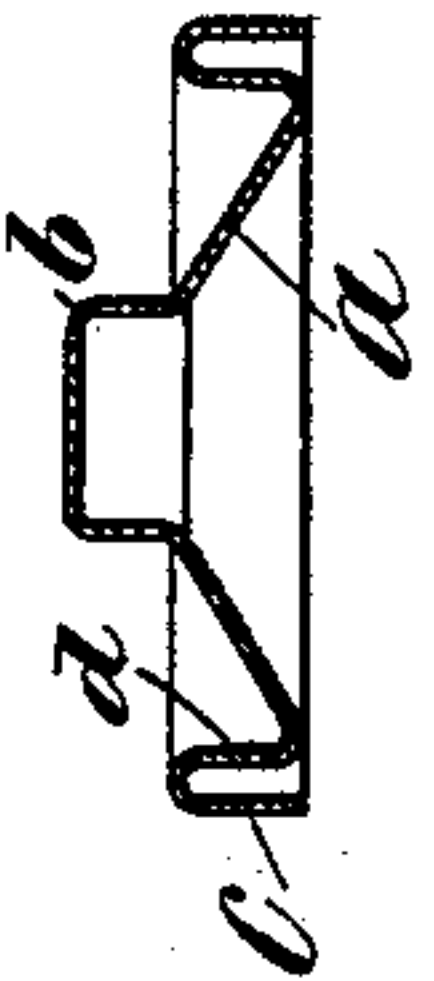


Fig. 6.

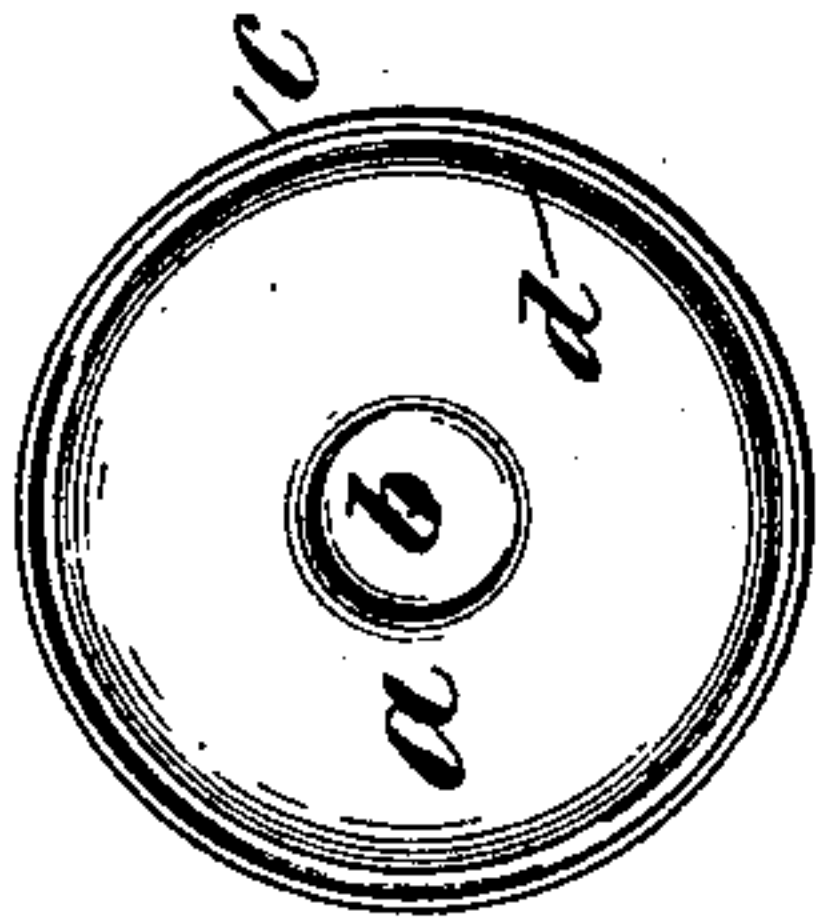


Fig. 8.

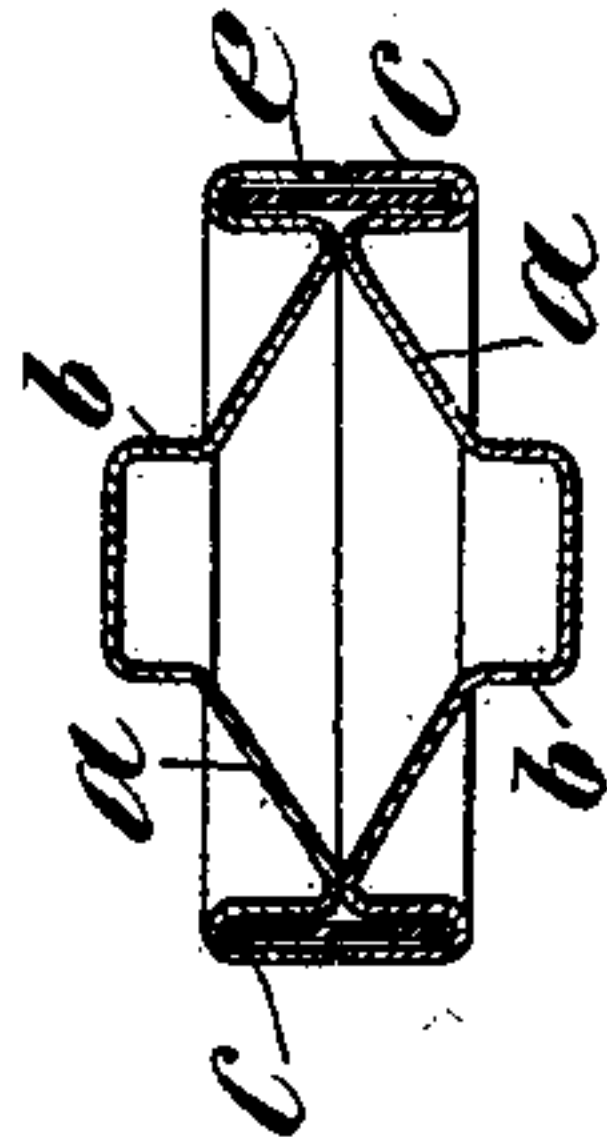


Fig. 7.

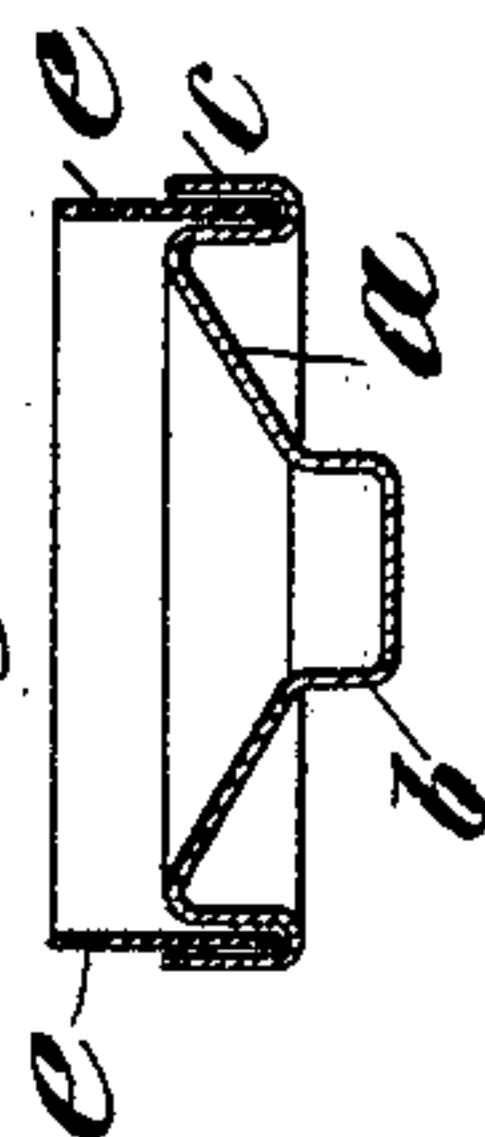


Fig. 1.



Fig. 2.

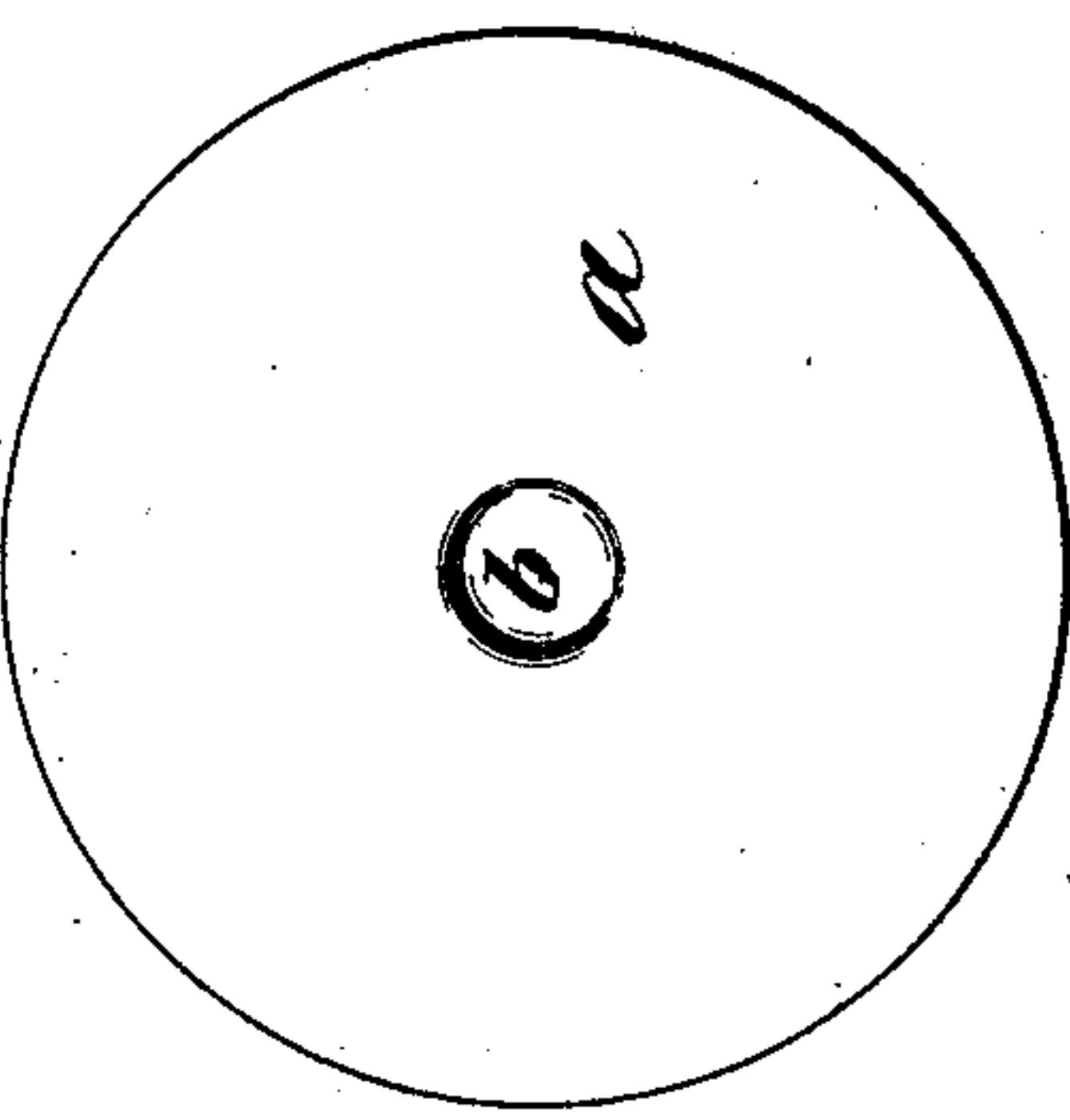


Fig. 3.

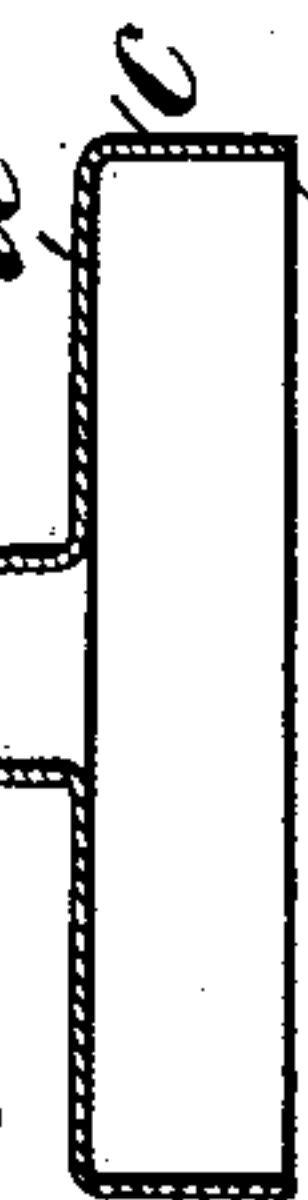
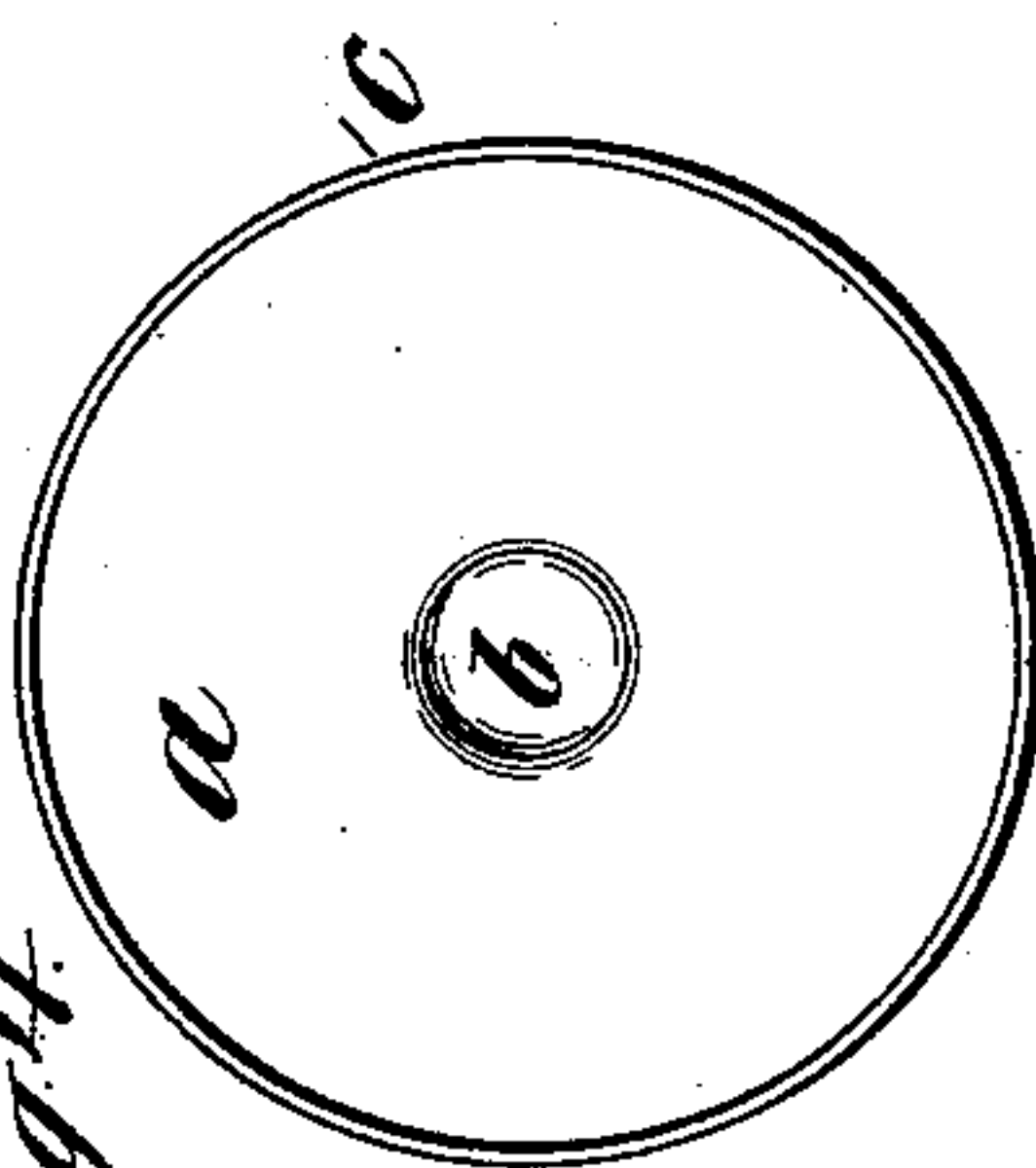


Fig. 4.



Attest:

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UNITED STATES PATENT OFFICE.

CHARLES ROCHOLL, OF LONDON, ENGLAND, ASSIGNOR TO THE WESTMINSTER MANUFACTURING COMPANY, LIMITED, OF SAME PLACE.

GROOVED PULLEY.

SPECIFICATION forming part of Letters Patent No. 606,794, dated July 5, 1898.

Application filed August 21, 1897. Serial No. 649,047. (No model.)

To all whom it may concern:

Be it known that I, CHARLES ROCHOLL, of 29^a Gillingham street, Pimlico, London, England, have invented certain new and useful
5 Improvements in the Manufacture of Grooved Pulleys or Wheels, of which the following is a specification.

The object of this invention is to produce
10 grooved pulleys or wheels in a simple and economical manner from sheet metal.

In the accompanying drawings the various stages through which the metal passes are illustrated in sectional views and plan views, which will be more particularly referred to
15 hereinafter.

A disk-blank *a* is first cut from the metal sheet and is subjected to the action of a series of dies, by which the boss *b*, Figures 1 and 2, is formed. This boss *b* is intended to serve
20 as one end of the axle of the pulley. This disk is next submitted to the action of dies, by which the edge is turned down to form the flange *c*, as seen in Figs. 3 and 4. The next operation is shown at Figs. 5 and 6, in which
25 the flange as previously produced is recessed to form a hollow flange *d*, the boss *b* extending beyond the plane of the edge of the flange. The parts to form the pulley are then put together, as illustrated in Figs. 7 and 8—that
30 is to say, one part (see Fig. 5) is taken and a loose ring or strip of metal *e* is inserted inside the hollow flange. (See Fig. 7.) Another part (see Fig. 5) is then placed over the ring, as seen in Fig. 8. The assembled parts, Fig.
35 8, are next placed in suitably-shaped dies and pressure is applied, by which means the hollow flanges *d*, with the ring *e* inside, are curved outward, as seen in Figs. 9 and 10, thus at the same time producing a grooved pulley or
40 wheel and locking the two halves, Fig. 5, together by the ring *e*.

By the above-described construction an immensely strong pulley is produced from sheet metal of much less weight than the ordinary cast pulley of commerce.
45

It will be obvious that the bosses *b* may, if desired, be dispensed with and a separate axle, as indicated at Fig. 11, or an ordinary bush for a pin-axle may be inserted without departing from the nature of this invention, 50 but for many purposes in the arts the boss-axle *b* will be preferred.

I claim—

1. As a new article of manufacture, a grooved pulley or wheel formed of two parts 55 having opposed hollow flanges forming the periphery of the wheel and a locking-strip extending into said flanges, said flanges and inclosed locking-strip being bent to form the groove of the pulley and so that the edges of 60 the outer walls of the flanges extend within the groove below the edges of the locking-strip, substantially as described.

2. As a new article of manufacture, a grooved pulley or wheel formed of two parts 65 having opposed hollow flanges forming the periphery of the wheel, and a locking-ring extending into said flanges, said flanges and inclosed locking-ring being bent to form the groove of the pulley and so that the outer 70 walls of the flanges extend within the groove below the edges of the locking-ring, substantially as described.

3. As a new article of manufacture, a grooved pulley formed of two parts having 75 opposed hollow flanges forming the periphery of the wheel and having each a central boss *b*, and a locking-strip extending into said flanges, said flanges and inclosed locking-strip being bent to form the groove of the pulley 80 and so that the outer walls of the flanges extend within the groove below the edges of the locking-strip, substantially as described.

London, July 29, 1897.

CHARLES ROCHOLL.

Witnesses:

H. K. WHITE,
FRED C. HARRIS.