No. 665,969.

Patented Jan. 15, 1901.

## I. MYSZCZYNSKI.

## PRESSED WOOD BELT PULLEY.

(Application filed Aug. 30, 1900.)

(Ne Model.)

Fig. 1.

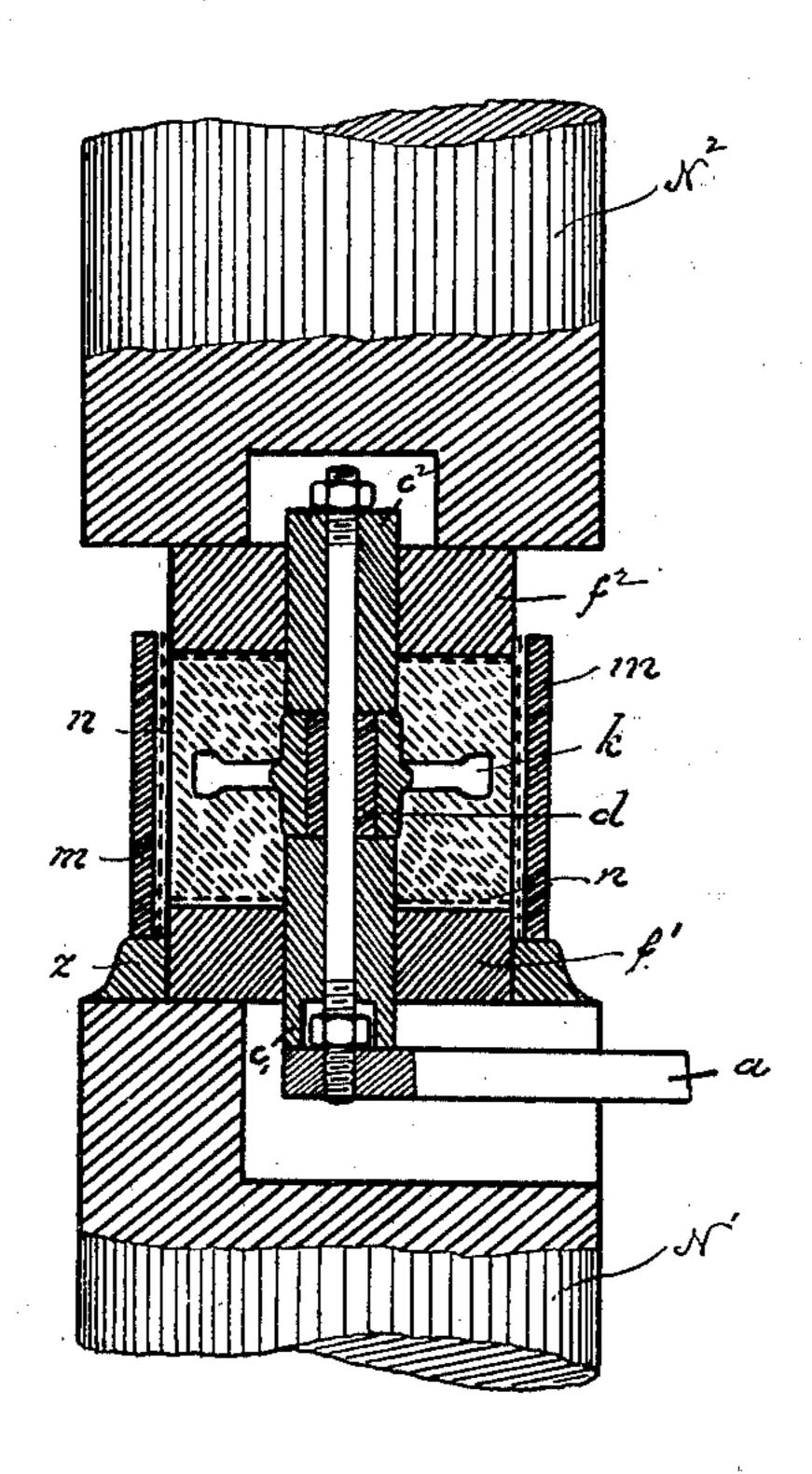


Fig. 3.

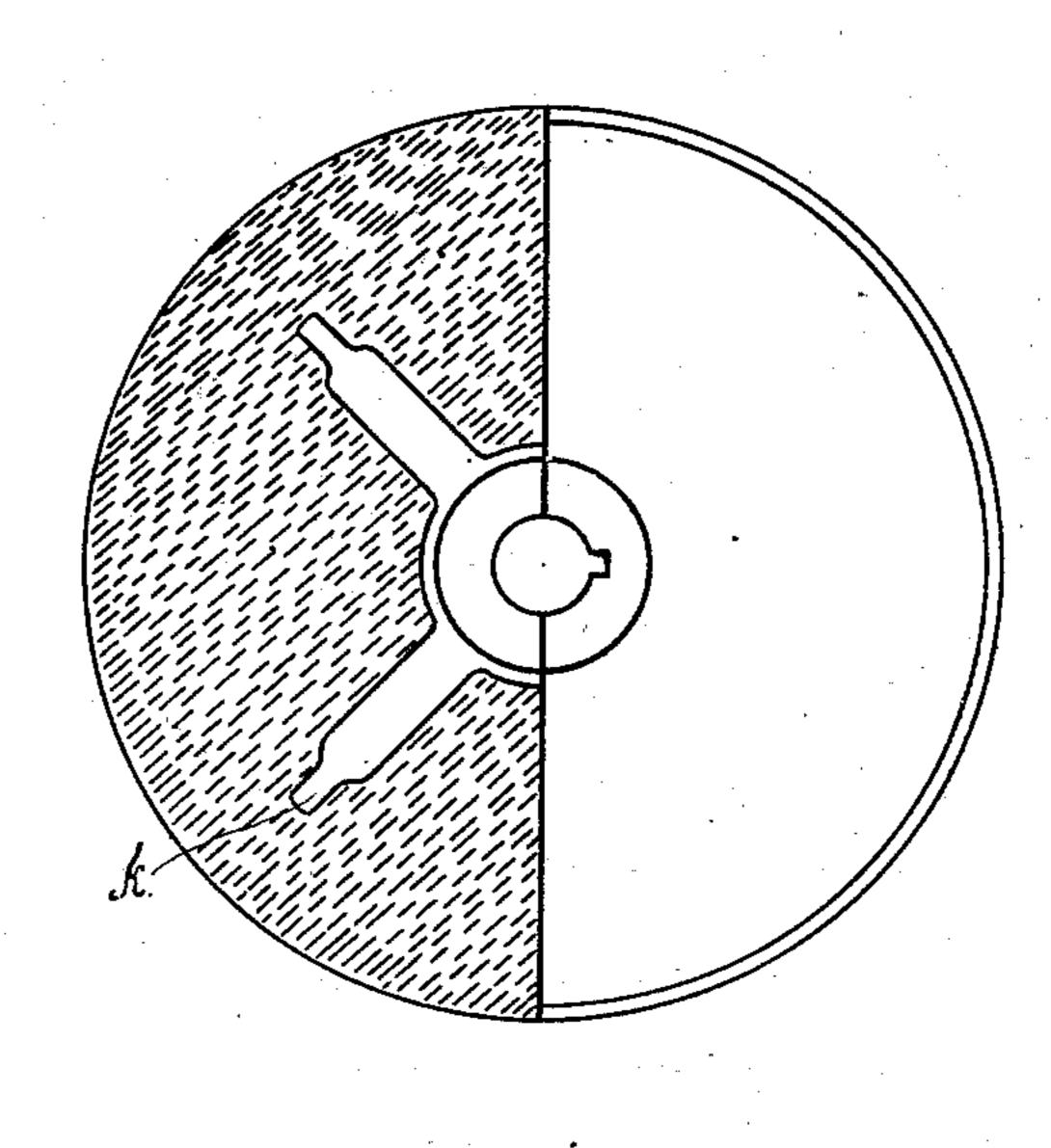


Fig. 2.

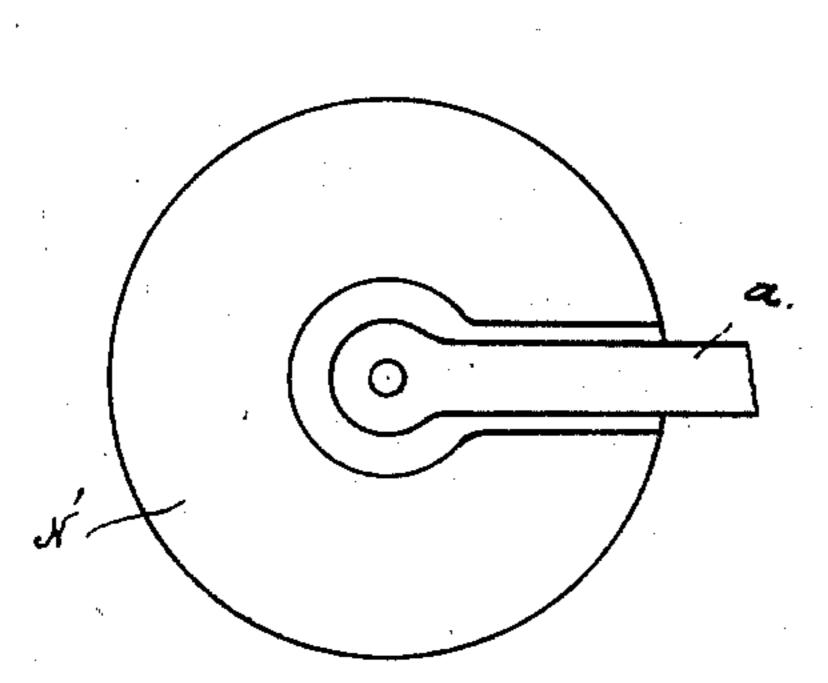
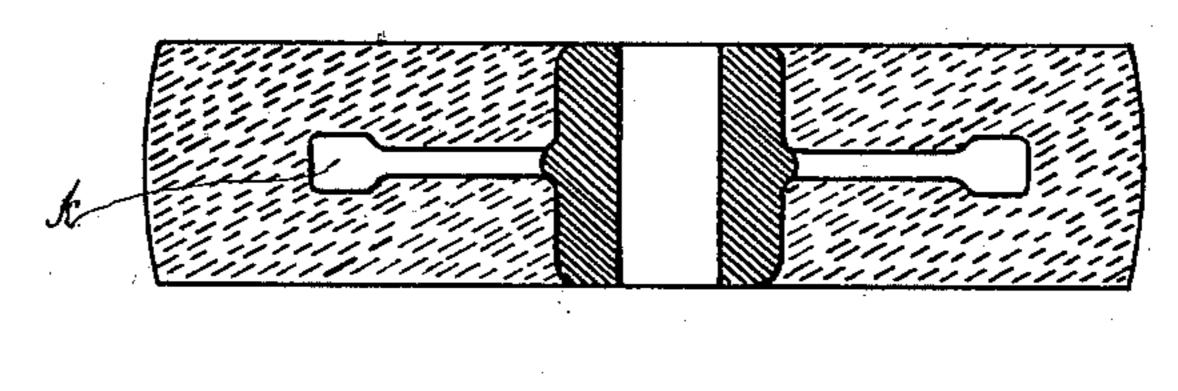


Fig. 4.



Killianssenki: Chlesanderbretzlich;

Juventor: Ancry Myssesquits

## United States Patent Office.

IGNACY MYSZCZYNSKI, OF WARSAW, RUSSIA.

## PRESSED-WOOD BELT-PULLEY.

SPECIFICATION forming part of Letters Patent No. 665,969, dated January 15, 1901.

Application filed August 30, 1900. Serial No. 28,561. (No model.)

To all whom it may concern:

Be it known that I, IGNACY MYSZCZYNSKI, a subject of the Emperor of Russia, residing at No. 58 Zielna, Warsaw, in the Empire of Russia, have invented a new and useful Improvement in Pressed-Wood Belt-Pulleys, of which the following is specification.

Wooden belt-pulleys have lately been somewhat extensively adopted on account of their lightness, and I having observed that glued wood possesses a greater degree of strength have devised the following process and apparatus for the manufacture of wooden belt-pulleys.

Clean dried-wood sawdust is mixed with thin carpenter's glue in a proportion of two-thirds into a paste, from which the belt-pulleys are formed by the application of hydraulic or mechanical pressure by means of the device described below.

The apparatus is illustrated in the accom-

panying drawings, in which-

Figure 1 shows a vertical section of the whole device. Fig. 2 is a view from above of the lower piston, and Figs. 3 and 4 are respectively vertical and transverse sections of the prepared belt-pulley.

The lower piston N' is provided in the center with a cylindrical bore and in the side with a slot with which an immovable arm a engages, to which arm is fixed, by means of bolts and guide-pieces c' and c², a metal box d, with spokes k, an annular compression - plate f', corresponding in size to the belt-pulley, having been previously placed on the lower piston. The upper surface of this plate is indented and covered with a perforated annular iron plate n. By means of supporting-rings z the special mold m is formed, the inner wall of which being likewise ribbed and provided

with a perforated and adjustable cover. The whole inner space is then filled with the aforesaid mass and covered with a second perforated iron plate n and an upper compression-plate  $f^2$ , corresponding to the lower one, when the pistons N' and N<sup>2</sup> are drawn near to one another. The excess of liquid glue is thereby pressed out through the perforations of the plates and the belt-pulley dried in the mold for a short time. Later on the pulley is taken 50 out and after thorough drying is turned true and the whole surface coated with resin in order to make the pulley impervious to atmospheric influences.

What I claim is—

1. In a belt-pulley a metallic boss and spokes, a tough plastic compound surrounding said spokes and forming the periphery of said pulley, and an outer coating impervious to moisture.

2. Improved compound belt-pulley having a metallic boss and spokes coated with compressed sawdust and glue, a periphery composed of the same compound, and an outer coating of resinous material.

3. Process for the preparation of partly-wooden belt-pulleys comprising the mixing of sawdust with glue in the proportion of two to three, pressing the mass in molds surrounding a metallic boss and spokes by mechanical 70 means, drying the product and coating it with resinous material substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

IGNACY MYSZCZYNSKI. [L. s.]

Witnesses:

K. MIODUSCRASTER, ALCELLEND C. WETZLICLEJ.