No Model.)

H. C. HOPKINS.

MEANS FOR MOUNTING WHEELS ON THEIR SHAFTS.

No. 282,322. Patented July 31, 1883.

Fig. 1.

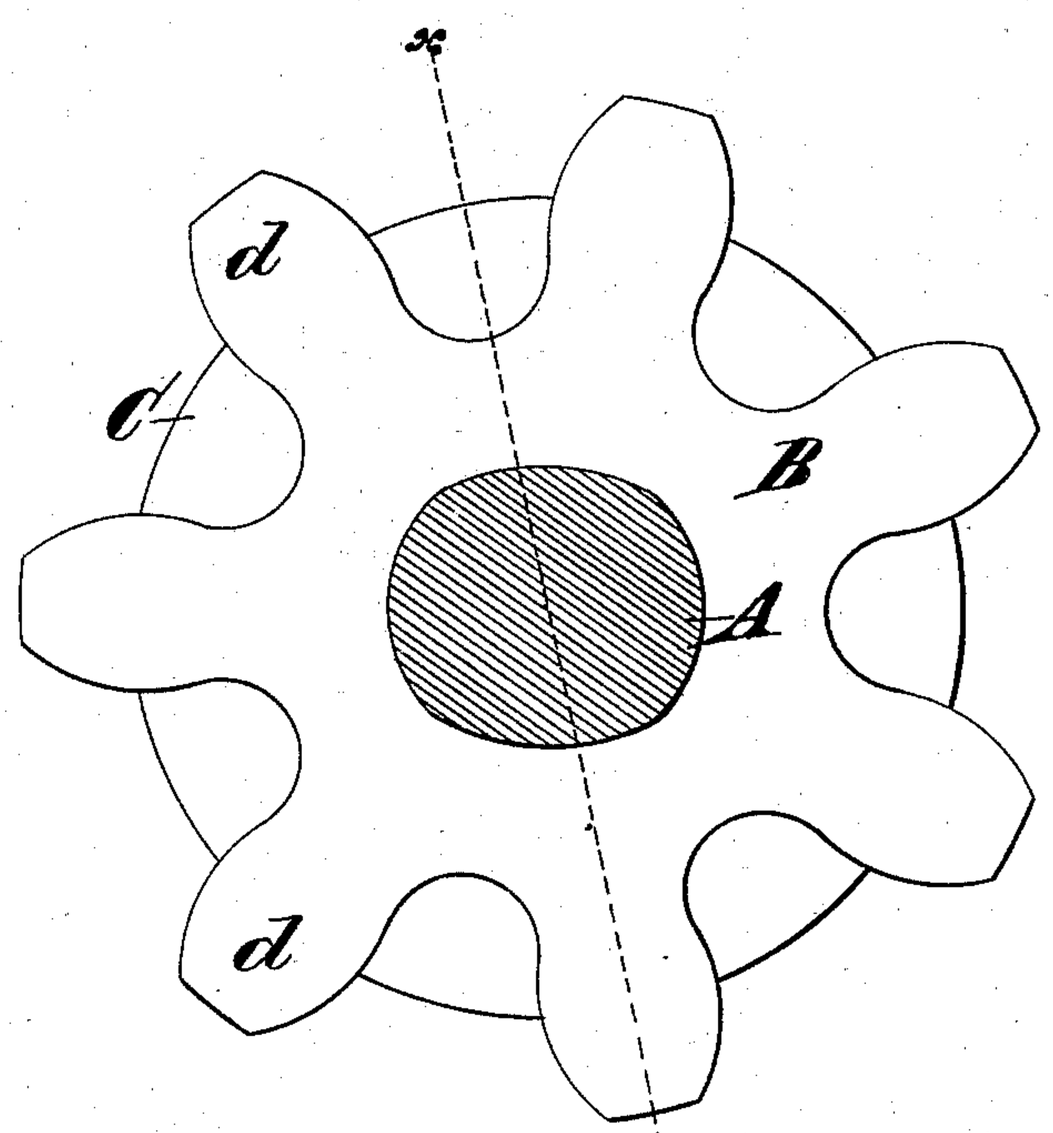


Fig. 3.

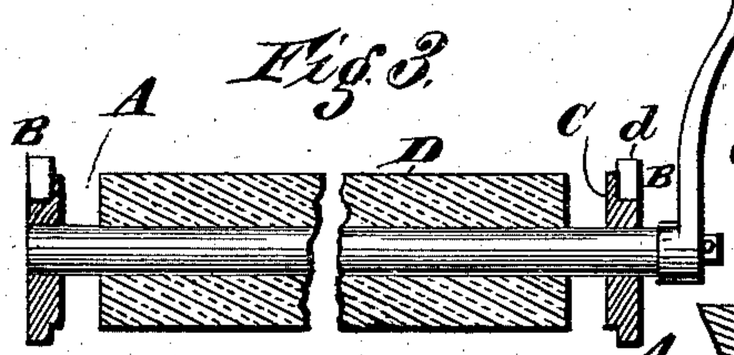
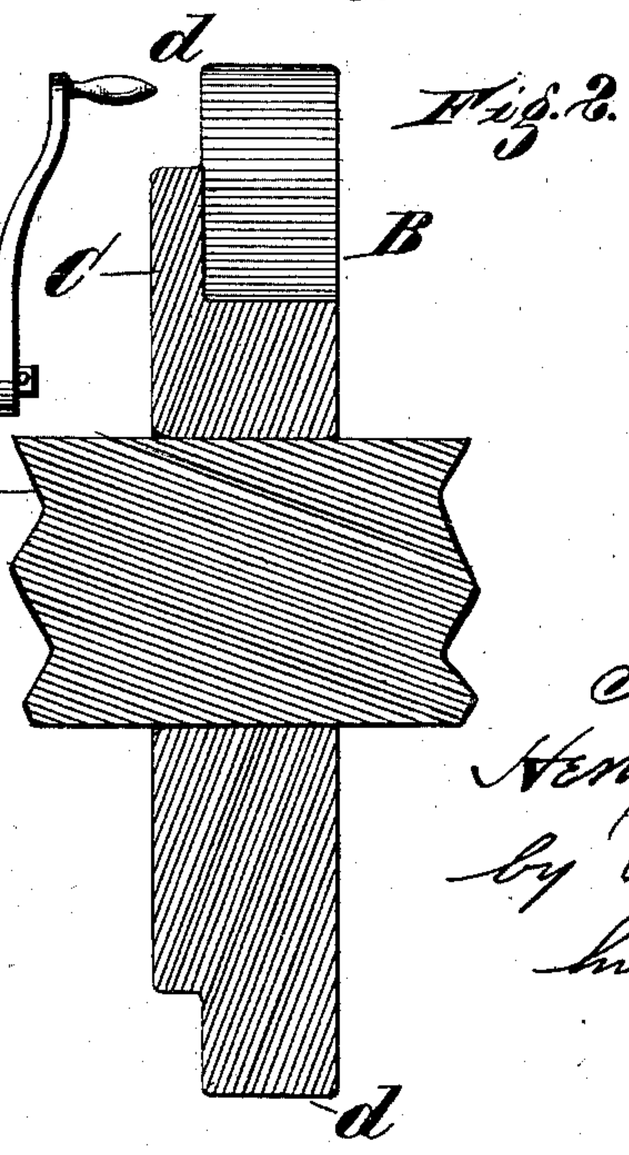


Fig. 2.



Attest
Jno. E. Giles,
A. Gluchowsky.

Inventor
Henry C. Hopkins
by Wood & Boyd
his Attorneys, &c.

UNITED STATES PATENT OFFICE.

HENRY C. HOPKINS, OF COVINGTON, KENTUCKY.

MEANS FOR MOUNTING WHEELS ON THEIR SHAFTS.

SPECIFICATION forming part of Letters Patent No. 282,322, dated July 31, 1883.

Application filed June 15, 1883. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. HOPKINS, a citizen of the United States, and a resident of Covington, in the county of Kenton and State of Kentucky, have invented certain new and useful Improvements in Wheels and Mounting Them on their Shafts, of which the following is a specification.

My invention relates to improvements in making gear-wheels and uniting them to the shafts of wringer-rolls, all of which will be more fully set forth in the description of the accompanying drawings.

Figure 1 is a front elevation of a gear-wheel attached to the shaft, which is shown in section. Fig. 2 is a section on line *x x*, Fig. 1; and Fig. 3 is a longitudinal central sectional view of a wringer-roll embodying my invention.

A represents the shaft of a wringer-roll, which is shown in the slightly-flattened state as they usually come from the rolls, and is used in this unfinished condition, cut to the proper length, and the vulcanized rubber D, which forms the surface to act on the clothes, attached in the usual manner.

I have discovered that by making the gears B of malleable iron and casting thereon the disk C, along with the cogs *d*, and coring the center, and then shaping it by means of a punch, the gear B can be placed on the shaft cold, by either screw or hydraulic pressure, and will draw to fit the shape of the rolled shaft without splitting or bursting the gears, and without the necessity of employing feathers, pins, or set-screws while providing a cheaper and better mode of securing the gear-wheels to the shaft for light work—such as is required in clothes-wringers—for which my invention is chiefly intended. If the disk C be omitted, or the gears made of cast-iron, or the shaft turned or finished, the gears cannot be properly pressed on the shaft.

After the rolls and gears are attached to the shaft it is turned or finished, if desired, to form proper journals.

I claim—

The process of making wringer-rolls by taking unfinished rolled shaft-iron and malleable gears B, having a disk, C, and gears cast thereon and then pressed cold on the unfinished shaft by suitable power-pressure, substantially as herein set forth.

In testimony whereof I have hereunto set my hand.

HENRY C. HOPKINS.

Witnesses:

JNO. E. JONES,

A. GLUCHOWSKY.