

J. J. McCORMICK.
ROLLERS OR PULLEYS.

No. 177,864.

Patented May 23, 1876.

Fig. 1.

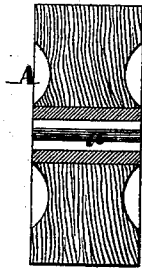


Fig. 2.

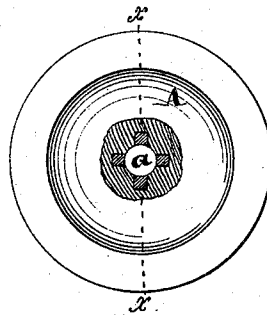


Fig. 3.

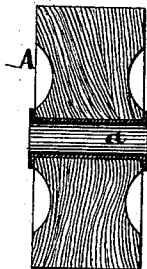


Fig. 4.

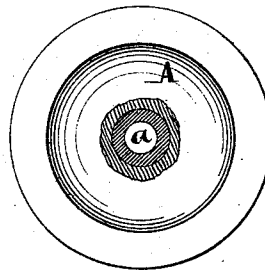
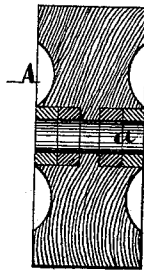


Fig. 5.



Witnesses.

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UNITED STATES PATENT OFFICE.

JAMES J. McCORMICK, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN ROLLERS OR PULLEYS.

Specification forming part of Letters Patent No. **177,864**, dated May 23, 1876; application filed April 27, 1876.

To all whom it may concern:

Be it known that I, JAMES J. McCORMICK, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Rollers or Pulleys, which improvement is fully set forth in the following specification, reference being had to the accompanying drawing, in which—

Figure 1 represents a transverse section in the plane *x x*, Fig. 2. Fig. 2 is a sectional face view. Fig. 3 is a transverse section of a modification of the same. Fig. 4 is a sectional face view of another modification. Fig. 5 is a transverse section of another modification. Similar letters indicate corresponding parts.

This invention consists in a wooden roller having its bearing-surface formed of a dry lubricator inserted therein, either by bushing out the whole of the roller, or by recessing said hole and filling the recesses with the lubricator, thereby producing a wooden pulley which requires no oil or other moist lubricating material, the action of which is detrimental to the durability of the wood.

In the drawing, the letter A designates a wooden roller or pulley, which is intended to revolve on a pin or arbor, and which is provided with a central hole, *a*, to receive said arbor. If a roller or pulley of this description is revolved with more or less speed, the bearing-surfaces have to be kept lubricated with oil or other equivalent material, and as such lubricating material penetrates the fibers of the wood, the roller or pulley soon becomes useless. In order to avoid this difficulty, I protect the bearing-surfaces of my wooden roller by some dry lubricator—such as plumbago mixed with sulphur or other equivalent material.

In order to apply this dry lubricator, I provide the hole *a* of the roller with recesses or cells for the reception of the compound, and I form these recesses in such a manner that the bearing-surfaces on the sides of the roller are also protected by the compound, as shown in Fig. 1; or, instead of this, the lubricating compound may be spread on cloth or other suitable fabric, which is fastened to the roller, and also at its sides, as shown in Fig. 3; or the lubricating compound may be applied in any other desirable manner in the interior of the hole of the roller.

I have also used sectional bushings, the alternate sections being made of plumbago and sulphur, and the others of rawhide, as shown in Fig. 5.

I am aware that a lubricating compound composed of mineral oil, plumbago, flowers of sulphur, and soap-stone is not new; and I am also aware that a journal-box having its bearing-surface provided with a lubricating compound is not new; but such is not my invention, and is hereby disclaimed.

What I claim as new, and desire to secure by Letters Patent, is—

As a new article of manufacture, a roller or pulley provided with a central opening, having its bearing-surface formed of a dry lubricator, inserted therein substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 24th day of April, 1876.

J. J. McCORMICK. [L. S.]

Witnesses:

W. HAUFF,
E. F. KASTENHUBER.