

W. W. CRANE.

Self-Lubricating Pulleys.

No. 133,416.

Patented Nov. 26, 1872.

Fig. 1.

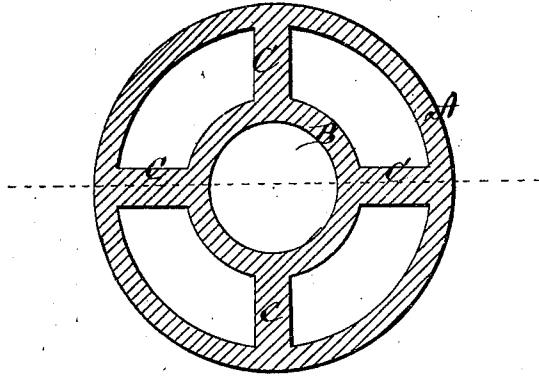
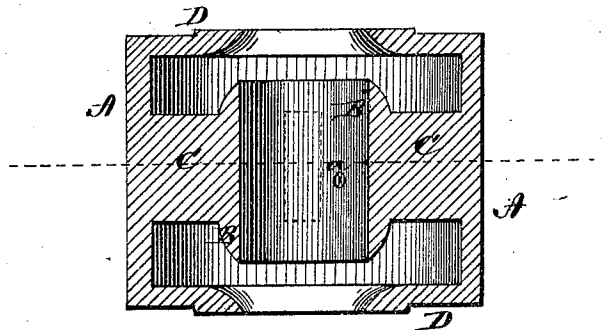


Fig. 2.



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# UNITED STATES PATENT OFFICE.

WELLSLY W. CRANE, OF AUBURN, NEW YORK.

## IMPROVEMENT IN SELF-LUBRICATING PULLEYS.

Specification forming part of Letters Patent No. **133,416**, dated November 26, 1872.

*To all whom it may concern:*

Be it known that I, WELLSLY W. CRANE, of Auburn, in the county of Cayuga, and in the State of New York, have invented certain new and useful Improvements in Self-Lubricating Loose Pulley; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

My present invention is intended as an improvement upon the self-lubricating pulley for which Letters Patent were granted to me June 4, 1867; and the nature of my invention consists in casting the external and internal hubs with the caps at the ends all in one piece, whereby the expense in the manufacture is materially reduced—in fact, so much so that a pulley of this kind may be made and sold at the same or very near the same as an ordinary pulley.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which the two figures represent sections of my improved self-lubricating pulley.

A represents the external and B the internal hub, connected by a series of arms C C, and the internal hub having one or more apertures, *a*, for the oil to pass into the shaft

from the oil-chamber, formed between the two hubs. D D represent the end pieces of the exterior hub A, corresponding with the caps in my former patent, which caps were made separate and attached by screws. In this case the whole hub with the caps or end pieces D D is cast in one piece at one time. The ends of the interior hub B as well as the inner edges of the caps or end pieces D D are feathered or beveled, for the purpose of preventing the oil from escaping around the shaft. The outer surfaces of the caps or end pieces D D are raised in the center around the aperture for the shaft, so as to present as little surface as possible for friction. By casting the entire hub in this manner in one piece the cost of manufacturing the same is very materially reduced, and the hub can be made and sold at the same or about the same price as an ordinary pulley.

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

The external hub or pulley A D with the internal hub B and arms C C, made complete in one casting, substantially as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 30th day of October, 1872.

WELLSLY W. CRANE.

A. N. MARR,  
EDM. F. BROWN.