## M. A. RICHARDSON.

Sand-Pump Reels.

No. 131,706.

Patented Sep. 24, 1872.

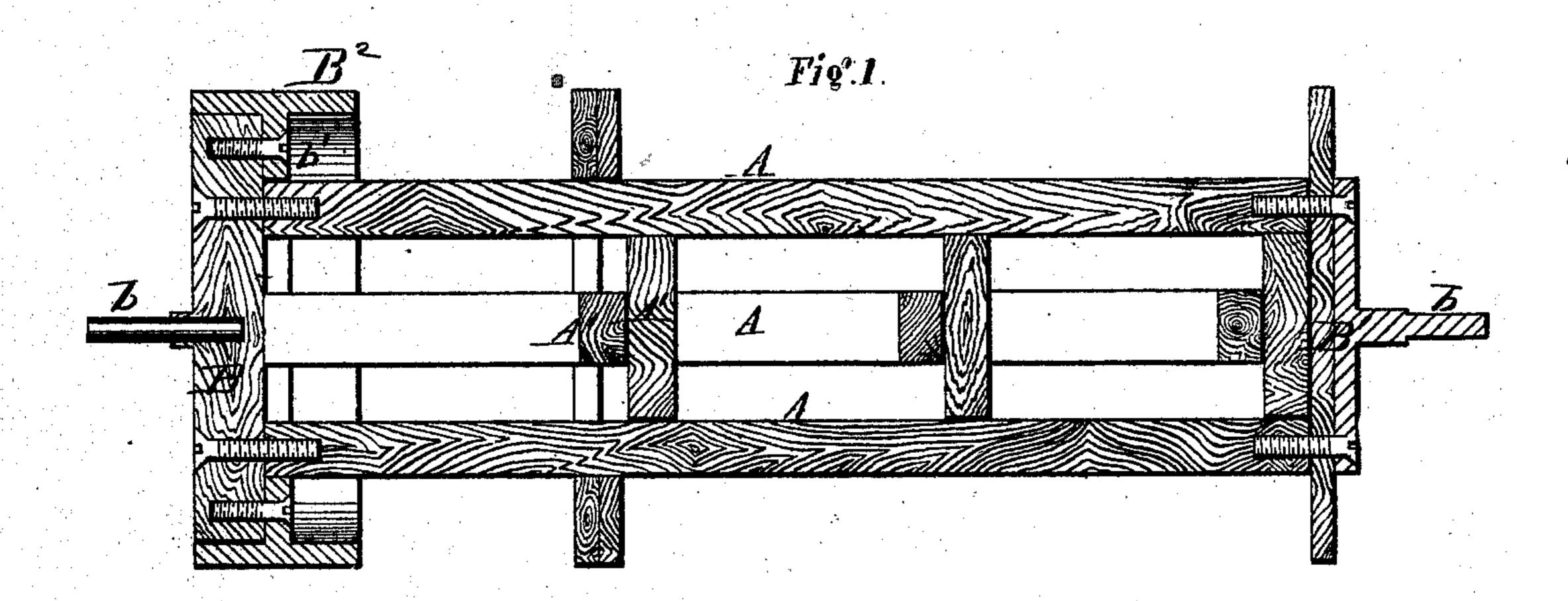
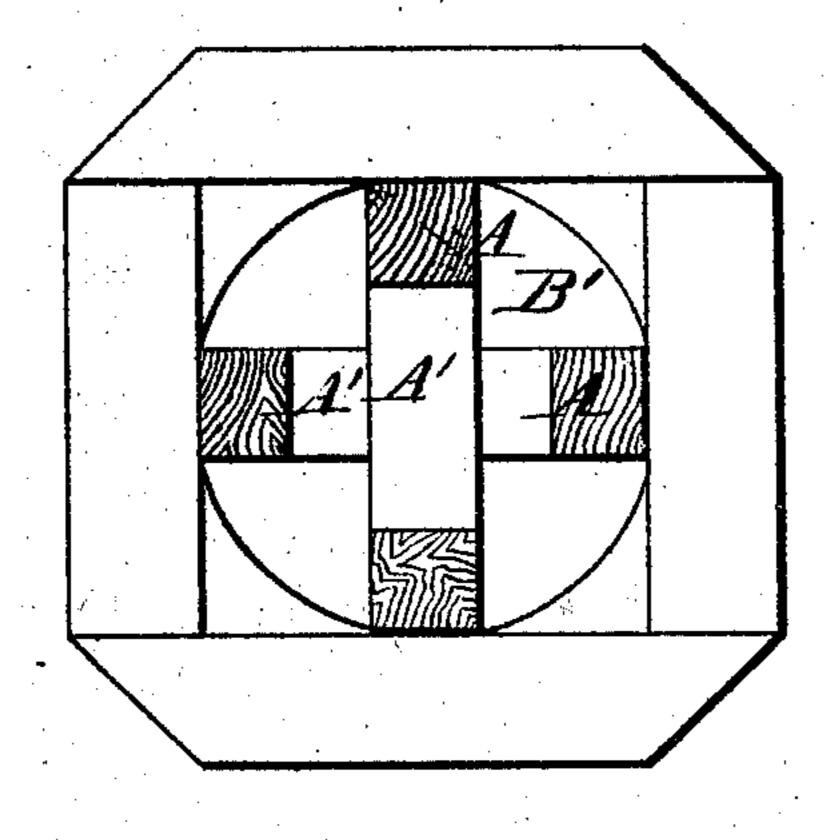


Fig. 2.



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Inventor. M. a. Richardson

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## UNITED STATES PATENT OFFICE.

MILO A. RICHARDSON, OF SHERMAN, NEW YORK.

## IMPROVEMENT IN SAND-PUMP REELS.

Specification forming part of Letters Patent No. 131,706, dated September 24, 1872.

To all whom it may concern:

Be it known that I, MILO A. RICHARDSON, of Sherman, in the county of Chautauqua and State of New York, have invented a new and valuable Improvement in Sand-Pump Reels; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of longitudinal section of my invention. Fig.

2 is a cross-section of the same.

This invention has relation to sand-pump reels; and the novelty consists in constructing a reel with an open slatted rope-drum, and in constructing the reel-head with a metallic band around its periphery, as and for the purpose hereinafter described.

Referring to the accompanying drawing, A represents the ribs or slats composing the rope-drum. They are separated to allow the air to circulate and facilitate the drying of the rope, and are made angular so as to give a better purchase to the rope in winding up. These ribs or slats are braced by transverse blocks A', are secured at each end to the reel-heads B

B¹, which are made of wood, and are furnished with the spindles b. The reel is rotated by the friction or contact of the head B with the band-wheel of the pump-engine, and hence, to prevent the rapid wear and injury of the reelhead, it is encircled by a metallic band, B<sup>2</sup>, constructed with an internal flange, b', perforated to receive the screws or fastenings securing the band to the wood. The center or hub part of the head B is made of wood, so that the expansion of the metal band caused by the heat generated by the friction will not strain or affect the security of the slats A.

I claim as my invention—

The improved sand-pump reel, having the slats of its drum A, and the metallic band B<sup>2</sup> with internal flanch b', respectively, attached by screws or bolts passing through the wooden disk B into said slats, and through the flanch b' into said wooden disk, substantially in the manner and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

MILO A. RICHARDSON.

Witnesses:

WILLIAM F. WARREN, W. R. PELTON.