

R. & W. C. BLAKISTON.  
MACHINE FOR WAXING AND TARRING SOFT CORDING, ROPE-  
YARNS, &c.

No. 176,269.

Patented April 18, 1876.

Fig 1

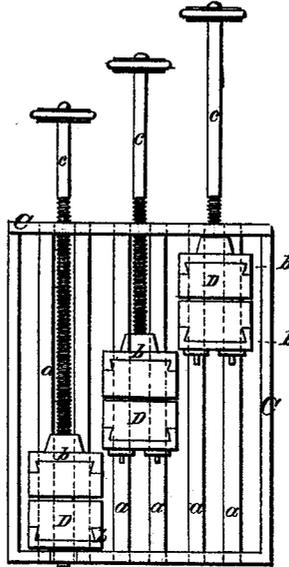
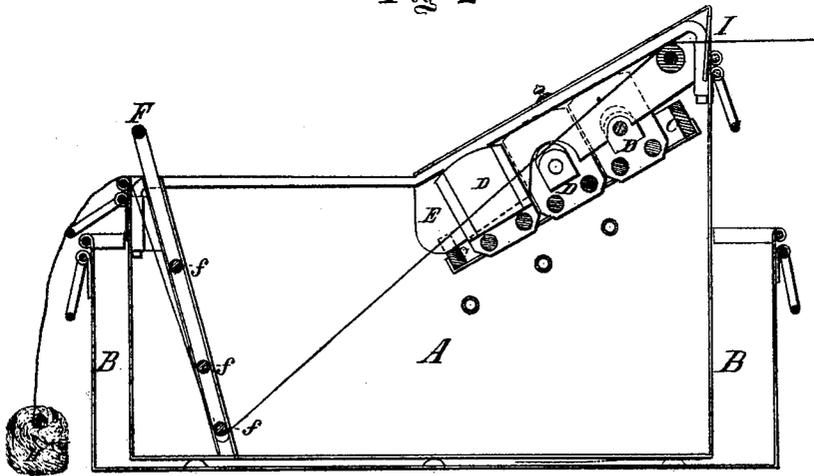


Fig 2



Witnesses.

*R. G. Murphy*  
*M. Cream*

Inventors.

*Ray Blackiston*  
*W. C. Blackiston*

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Fig 3

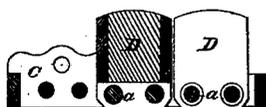


Fig 4

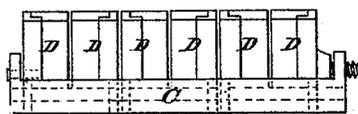


Fig 5

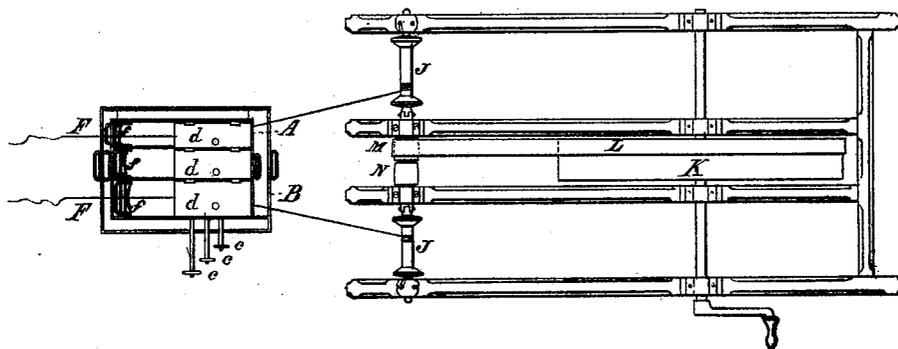
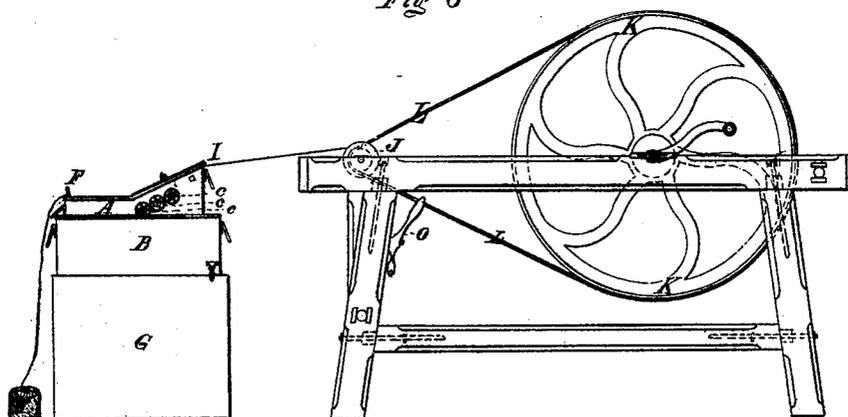


Fig 6



Witnesses.

*R. C. Murphy*  
*A. C. Carr*

Inventors.

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# UNITED STATES PATENT OFFICE.

RAYMOND BLAKISTON AND WILLIAM C. BLAKISTON, OF QUEBEC, CANADA.

IMPROVEMENT IN MACHINES FOR WAXING AND TARRING SOFT CORDING, ROPE-YARNS, &c.

Specification forming part of Letters Patent No. **176,269**, dated April 18, 1876; application filed September 28, 1875.

*To all whom it may concern :*

Be it known that we, RAYMOND BLAKISTON and WILLIAM COMPTON BLAKISTON, both of the city of Quebec, in the Dominion of Canada, sail-makers, have invented a new and useful Improvement on Machines for Waxing and Tarring Soft Cording, Rope-Yarns, and all kinds of Twines made from Jute, Flax, or Cotton, which improvement is set forth in the following specification, reference being had to the accompanying drawings.

The object of the invention is to wax and tar soft cording, rope-yarns, and all kinds of twines made from jute, flax, or cotton more thoroughly and evenly, and with a greater saving of time and waxing material, than by any other process now in use in sail-makers' lofts or in factories where twines and threads are either made or used.

The machine consists of a box, A, higher at one end than at the other, the increase of height extending from the center to upper rim. This box is placed in an outer case, B, but larger, leaving a space of a couple of inches between the two. At the highest end of inside box a frame or grating, C, is placed at an angle and parallel to the slope of the box at that end, whose bars, *a a a*, support three wringers, D D D, made of cork held in iron clamps, one of each set being movable. By turning the handles *c c c*, the wringers are opened or closed to the required pressure or degree. Each wringer is in a separate compartment, divided from the other by a movable partition, E, (Fig. 2,) and each compartment is provided with a separate cover, *d*. (See Fig. 5.) At the lowest end of inside box three guides, F F F, enter the box at an angle of about twenty-three degrees, each guide being furnished with three bars, *f*, presenting the appearance of a small ladder.

When the machine is to be used, it is placed on an ordinary flat-topped stove or furnace, G, in which a fire is to be lighted. The outer case B is almost filled with warm water, and into the inner box A is poured the waxing or tarring material, previously melted and prepared from certain ingredients. The

warm water in the outer case keeps this material at an even temperature and prevents it from boiling over the inner case. The ball of twine H to be waxed is placed on the floor, (twines in skeins must be placed on ordinary spindles or reels.) The inner end of the ball is taken and passed into the machine at F, under that one of the guide-bars *f* which keeps it at the required depth in the waxing material; then it is carried through the cork wringer D, which takes off the surplus material and at the same time presses the waxing material into the fibers of the twine, the wringer being put at the required pressure by turning handle *c*; finally, it passes out at the high end of box A at I over rollers placed there to prevent friction, and then is rolled up on bobbins J, as specially shown in plan view in Fig. 5.

The driving-wheel K, with belt L, may be worked by hand or attached to machinery in factories, and when not required to wind the bobbins the belt may be shifted from "live" pulley M to "dead" pulley N by means of a belt-shifter O. (See Fig. 6.)

In the machine hereinbefore specified there are three compartments and three wringers, so that three twines may be waxed at the same time, and either one may be stopped or be prepared without interfering with the working of the others. Of course, in a larger machine the number of compartments and wringers could be increased.

By the use of this machine there is a saving of time and labor, especially in large sail-makers' lofts where there are a number of men employed who have to wax their twine and thread by hand.

In factories where twines and cords are made it could be used to advantage, and the twines, lines, &c., could be sent out from thence waxed or tarred and ready to be worked up. Twines, yarns, cording, &c., waxed or tarred in the manner described are more durable, more thoroughly imbued or saturated with the material, easier to work up, and will last longer in the material sewed.

We claim as our invention—

1. The combination, as hereinbefore de-

scribed, of the wax-box A, (higher at one end than at the other,) the grating C, arranged at an angle and provided with elastic wringers D, and a warm-water vessel, B, substantially as and for the purpose set forth.

2. The combination, substantially as herein before described, of the wax-box A, inclined guide F, grating C, provided with elastic wring-

ers D, and a warm-water vessel, B, substantially as described.

RAY. BLAKISTON.  
WM. C. BLAKISTON.

Witnesses:

P. C. MURPHY,  
M. CREAN.