J. PALMER.

Improvement in Anti-Friction Bushes for Pulleys and the Like.

No. 129,585. Patented July 16, 1872.

Fig. 1.

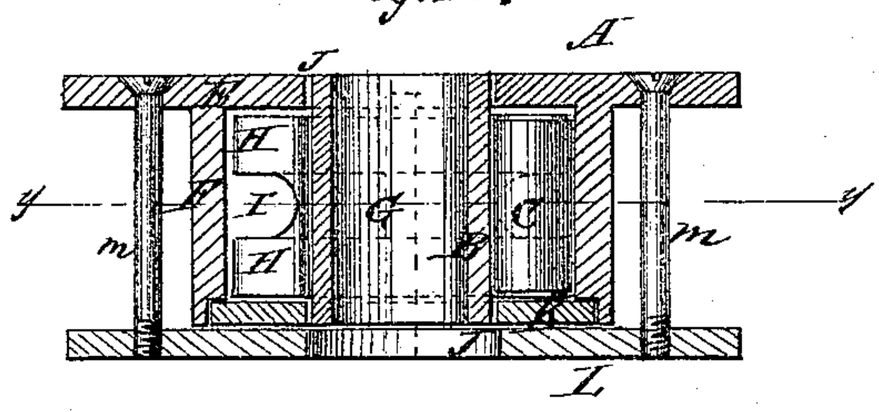


Fig. 2.

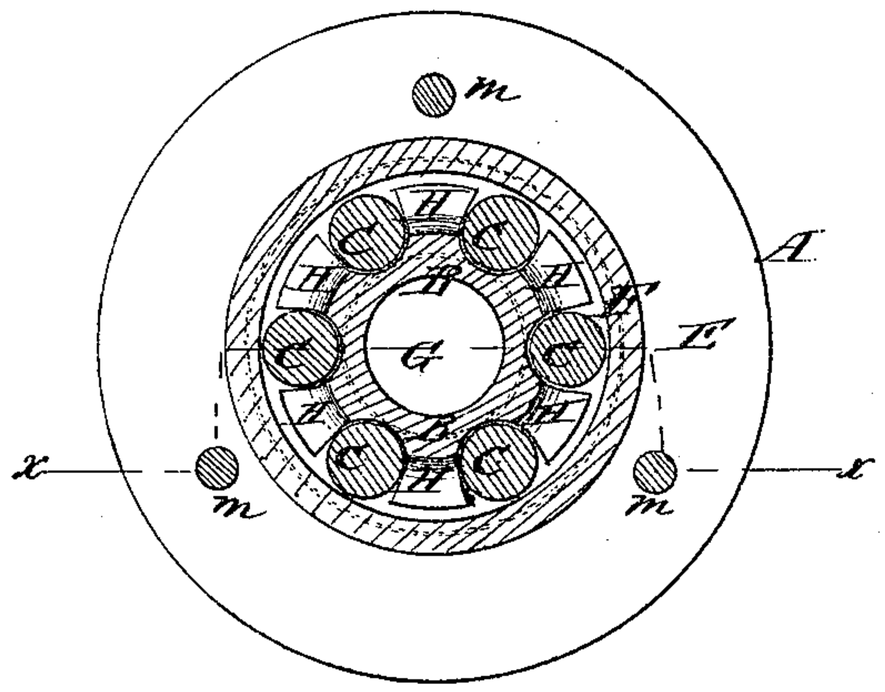
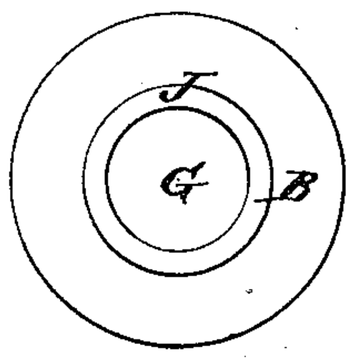


Fig. 3.



Witnesses:
P. C. Dieterich.
H. A. Graham.

Inventor:
J. Palmer.
Per Munn & Co
Attorneys.

129,585

UNITED STATES PATENT OFFICE.

JOSEPH PALMER, OF ST. CATHARINE'S, CANADA, ASSIGNOR TO HIMSELF AND H. F. LEAVENWORTH, OF SAME PLACE.

IMPROVEMENT IN ANTI-FRICTION BUSHES FOR PULLEYS AND THE LIKE.

Specification forming part of Letters Patent No. 129,585, dated July 16, 1872.

Specification describing a new and useful Improvement in Anti-Friction Bushes, invented by JOSEPH PALMER, of St. Catharine's, in the Province of Ontario and Dominion of Canada.

This invention relates to a new and useful improvement in bushes for sheaves of pulley-blocks and other purposes; and consists in the construction and arrangement of parts hereinafter described.

In the accompanying drawing, Figure 1 represents a vertical section of the bush taken on the line *x x* of Fig. 2. Fig. 2 is a cross-section of Fig. 1 on the line *y y*. Fig. 3 is an end view of a solid core, which may be used without friction-rollers.

Similar letters of reference indicate corresponding parts.

This bush consists of an outer case and a core, with friction-rollers confined in the core, or a core without friction-rollers.

A is the case. B is the core with rollers. C represents the rollers. D is the solid core.

The case A is composed of a plate, E, and a broad flange, F. Within the flange the core revolves. C is the arbor-bearing through the center of the core. This core is fluted out to receive the friction-rollers, leaving lugs H between the rollers. These lugs are separated by a deep groove, I, seen in Fig. 1. The rollers are confined to the core by the surrounding flange F, and they project outward from the lugs H sufficiently to give them a full bearing on the flange, as seen in Fig. 2. The core has a flange on each end, marked J J, one of which extends through the plate E, and the other through the plate K, which plate fits into a rabbet in the flange F. L is a plate which corresponds in diameter with the plate E. *m* represents screw-bolts, which pass through the two plates outside of the flange, by means of which the parts of the bush are confined together and the bush confined to the sheave.

This bush may be applied to various purposes, but is especially designed to be attached to the sheaves of tackle-blocks and sheaves used for similar purposes.

I do not confine myself to the precise form or arrangement of the parts herein described, as variations may be made without departing from my invention.

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

1. The case A, (composed of the plate E and flange F,) the core B, rollers C, lugs H, and plates K and L, arranged as and for the purposes described.

2. The core B, lugs H, and rollers C, in combination with the case A, as specified.

JOSEPH PALMER.

Witnesses:

JOHN BRODIGAN,

C. P. SIMPSON.