

(No Model.)

F. CORBETT.
ANTI FRICTION BEARING.

No. 384,023.

Patented June 5, 1888.

Fig. 2.

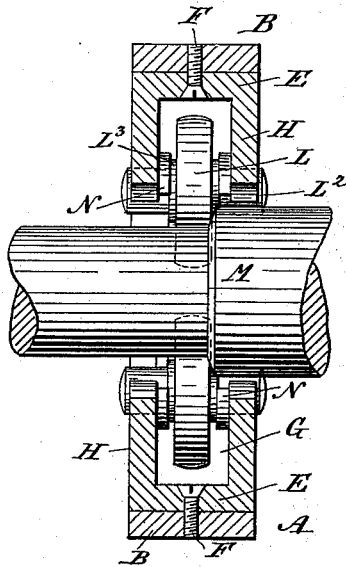


Fig. 1.

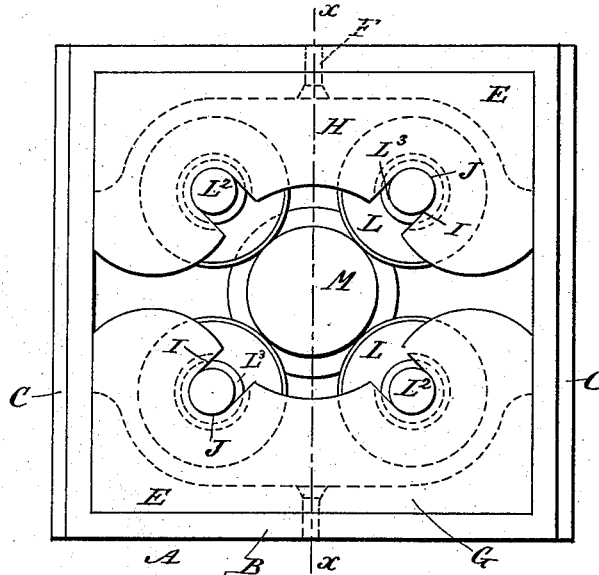


Fig. 4.

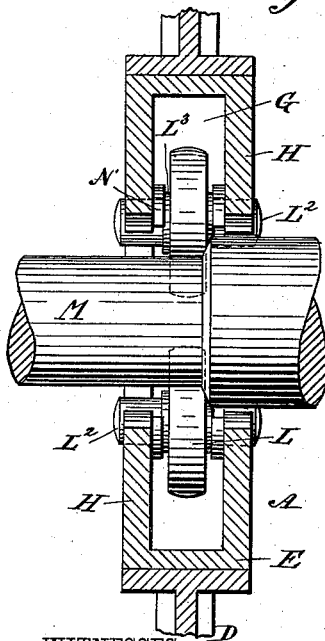
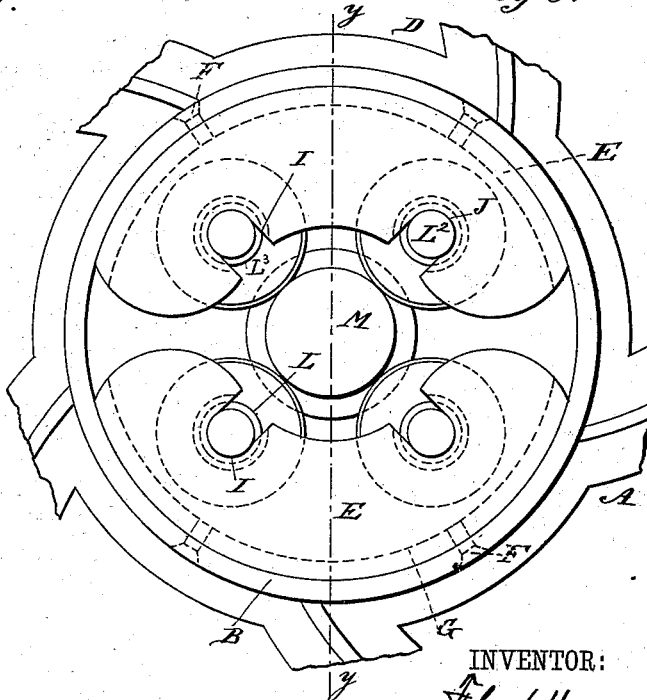


Fig. 3.



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ANTI-FRICTION BEARING.

SPECIFICATION forming part of Letters Patent No. 384,023, dated June 5, 1888.

Application filed January 28, 1888. Serial No. 262,248. (No model.)

To all whom it may concern:

Be it known that I, FRANK CORBETT, of the city, county, and State of New York, have invented a new and useful Improvement in Anti-Friction Bearings, of which the following is a full, clear, and exact description.

This invention relates to an improvement in anti-friction bearings in which a nest of bearing-rollers are mounted to revolve in a chambered box.

The objects of my improvement are to provide for the ready introduction of the rollers into and their removal from the box, to increase the anti-friction qualities of the bearing, and to secure greater strength, simplicity, and durability than has been heretofore attained.

The invention consists of certain novel combinations of parts and details of construction, hereinafter fully described, and distinctly pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference designate corresponding parts in all the figures.

Figure 1 is a front elevation of an anti-friction bearing embodying my improvement. Fig. 2 is a cross-sectional elevation of the same on the line *x x*, Fig. 1. Fig. 3 is a front elevation of a modified form of bearing; and Fig. 4 is a cross-sectional elevation of the same on the line *y y*, Fig. 3.

The box A of the bearing is composed of an outer rigid band-like frame, B, which may be rectangular and provided with guide-ribs C for a bearing, which is to be mounted adjustably, as that shown in Figs. 1 and 2, or circular and cast integrally with a supporting-frame, D, when the bearing is to be stationary, as shown in Figs. 3 and 4, and a number of (in this case two) blocks, E, cast or formed separate from the frame B and fitted to opposite sides of the interior thereof. The blocks E are secured detachably in place in the band-like frame B by screws F, and have central longitudinal recesses, G, extending from the inner side and forming opposite side walls, H, and said side walls are formed with short slots I, all radiating from the center of the bearing, opening inward, and forming semicircular secondary bearings J at their outer ends.

Friction-rollers, each formed of a disk, L, having a transversely-convex peripheral bearing surface opposite gudgeons L² and projecting hubs L³, have said gudgeons mounted to turn in the opposite slot-bearings J in the blocks E, the inner parts of the disks L being received within the recesses G, but their outer parts projecting therefrom to form bearings for the journal M, to be mounted therein.

The journal M may be that of an ironing or other roller subject to heating or excessive pressure, and when in place automatically holds the several friction-rollers to their respective bearings. The blocks E are preferably formed with inwardly-projecting flanges N, coinciding with the inner bearing ends of the slots I, to increase the bearing-surface for the friction-roller gudgeons L².

This anti-friction bearing is particularly adapted for ironing-machines where the ironing-rollers are hollow for heating them by steam, and their hollow journals hence subjected to great heat.

It is evident that on removing the journal M from the bearing the different parts thereof may be readily detached and removed for inspection, repairs, or renewal.

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

1. An improved anti-friction bearing consisting of a band-like frame, centrally-recessed blocks fitted to opposite sides of the interior of the band-like frame, and having their walls provided with radial slots forming semicircular bearings, and friction-rollers provided with gudgeons mounted on the said bearings, substantially as herein shown and described.

2. In an anti-friction bearing, the combination, with the band-like frame B, of the blocks E, detachably secured within the frame and provided with the recesses G, the radial slots I, forming semicircular bearings J and inwardly-projecting flanges N, and the friction-rollers L, provided with the gudgeons L² and the projecting hubs L³, substantially as herein shown and described.

FRANK CORBETT.

Witnesses:

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