(No Model.)

G. A. WEBER.

ROLLER AND ROLLER BEARING.

No. 487,884. Patented Dec. 13, 1892.

Fig. 1.

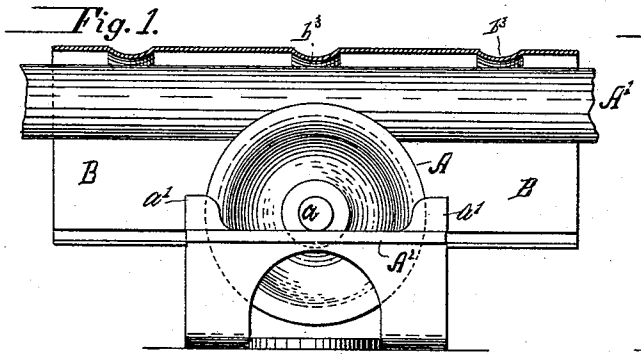


Fig. 2.

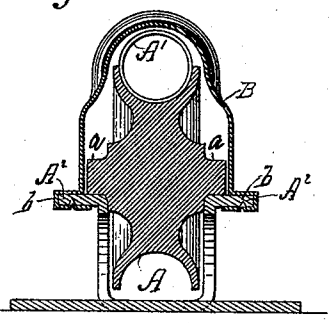


Fig. 3.

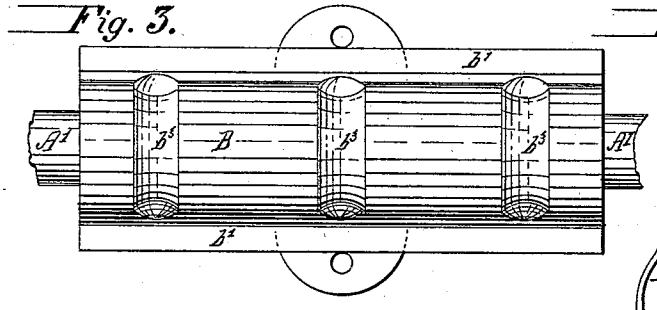


Fig. 4.

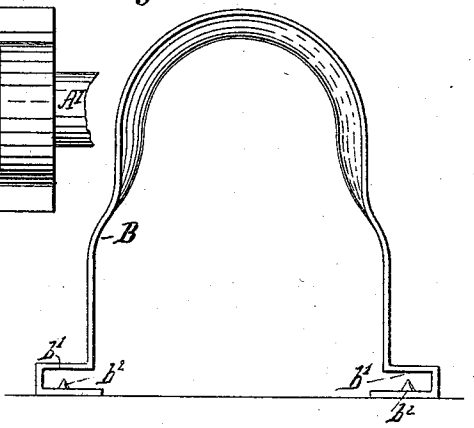
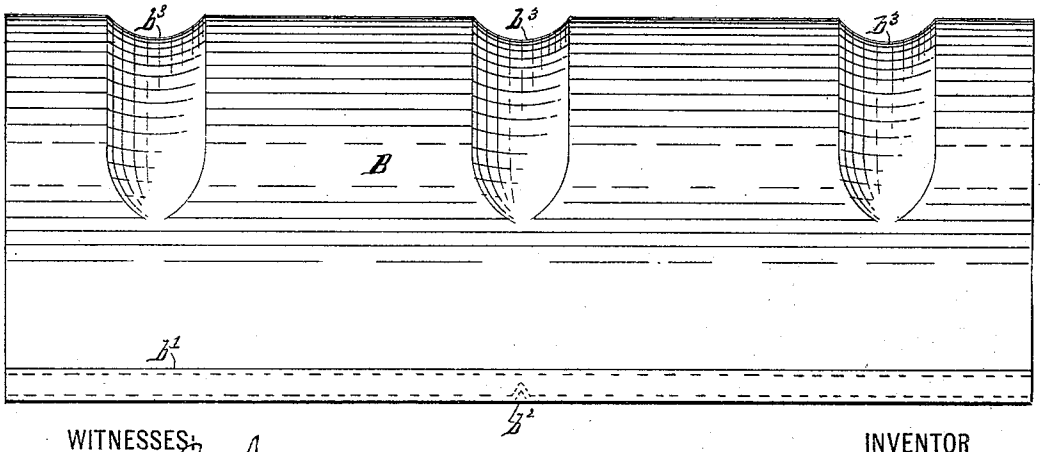


Fig. 5.



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UNITED STATES PATENT OFFICE.

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ROLLER AND ROLLER-BEARING.

SPECIFICATION forming part of Letters Patent No. 487,884, dated December 13, 1892.

Application filed February 18, 1892. Serial No. 421,971. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. WEBER, of New York, county of New York, and State of New York, have invented a new and useful Improvement in Protectors for Rollers and Roller-Bearings, of which the following is a specification.

This invention relates to devices for protecting rollers and roller-bearings from the weather and to serve as a guard to prevent the detachment of an operating-rod from the roller.

This improvement is designed more particularly for use in connection with rollers and an operating-rod movable longitudinally over the rollers for operating a semaphore or similar railway-signals.

In the accompanying drawings, Figure 1 is a longitudinal vertical section of a device embodying my improvement. Fig. 2 is a transverse vertical section. Fig. 3 is a top view. Fig. 4 is an end view on an enlarged scale. Fig. 5 is a side view on an enlarged scale.

Referring by letter to the drawings, A designates a grooved roller, and A′ is an operating-rod resting and movable in the groove of the roller. In practice there are a number of these rollers A arranged at desired distances apart between a signal-station and the signal. The roller has its trunnions a supported on and movable along bearing-tracks A^2, having stops a' at the ends to limit the movement of the roller longitudinally of the tracks.

B designates a guard or cover extending from the bearings A^2 over the operating-rod A′ and the roller. This guard or cover is shown as rounded in cross-section at its top and having its bottom edges engaged with lateral projections b of the bearing-rails. This guard or cover is preferably of pressed steel, and I have shown it as connected to the projections b by having its lower edges formed into loops b', which engage around the said projections, as shown, and having portions b^2 punched into depressions in the projections b.

The guard or cover B has one or more transverse inwardly-extending ribs b^3 in its upper portion. The ribs extend nearly to the upper surface of the operating-rod A′ and form a reduced surface, against which the bar A′ may bear when said rod is operated. In operating the rod it is inclined to bounce upward away from the roller; but the ribs b^3 are sufficiently close to prevent the rod from moving beyond the flanges of the roller. The ribs also strengthen the guard or cover.

Having described my invention, what I claim is—

1. In combination with the roller, the roller-bearing, and means extending over the roller for operating a signal, the guard or cover supported by the bearing and extending over said roller, and signal-operating means, substantially as specified.

2. The combination, with a roller, the bearings therefor, and the operating-rod, of the guard or cover secured to lateral projections of the bearings and extended over the roller and operating-rod, substantially as specified.

3. The combination, with a roller, the bearings therefor, and the operating-rod, of the guard or cover having the transverse inwardly-projecting rib or ribs, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEO. A. WEBER.

Witnesses:
ANTHONY GREF,
WM. A. POLLOCK.