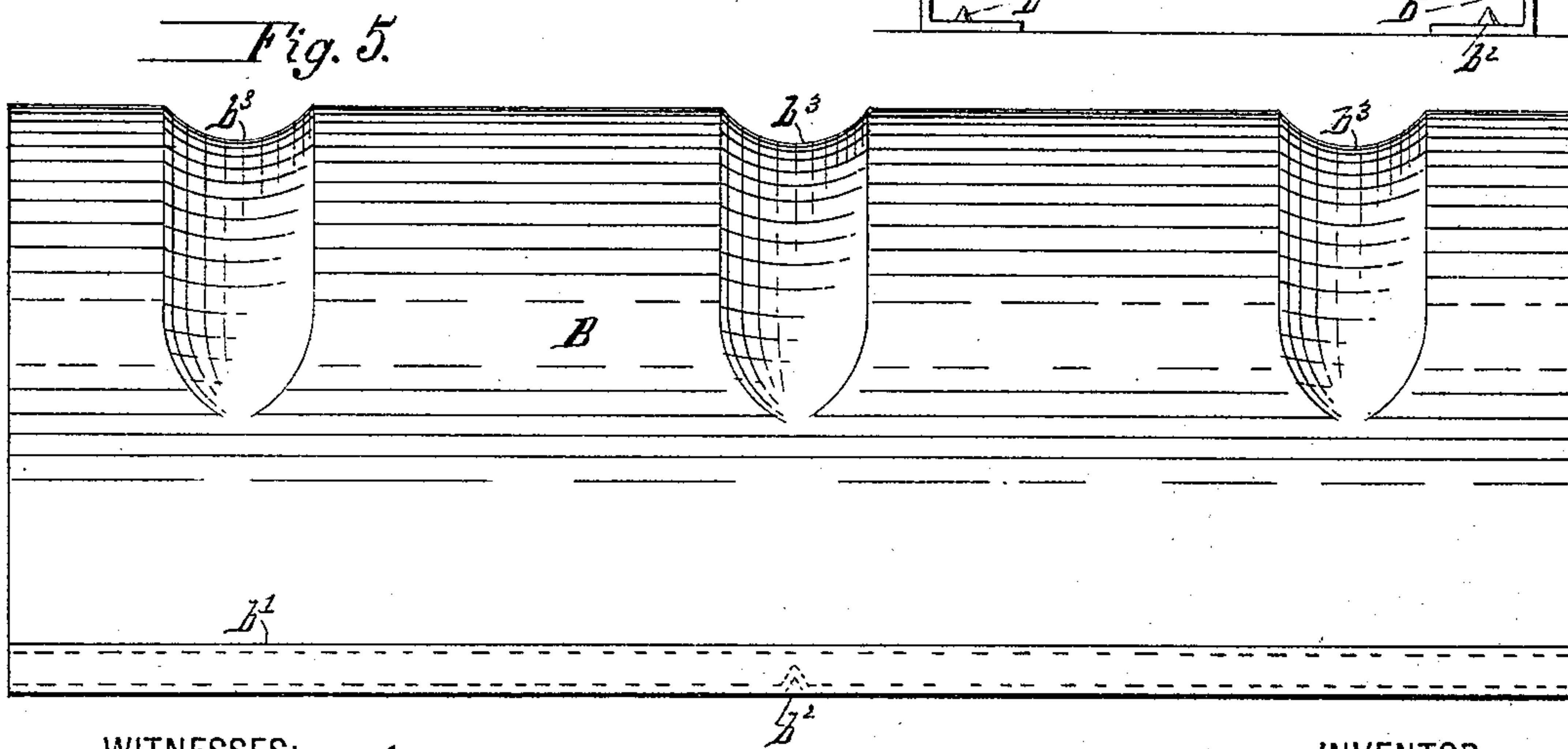
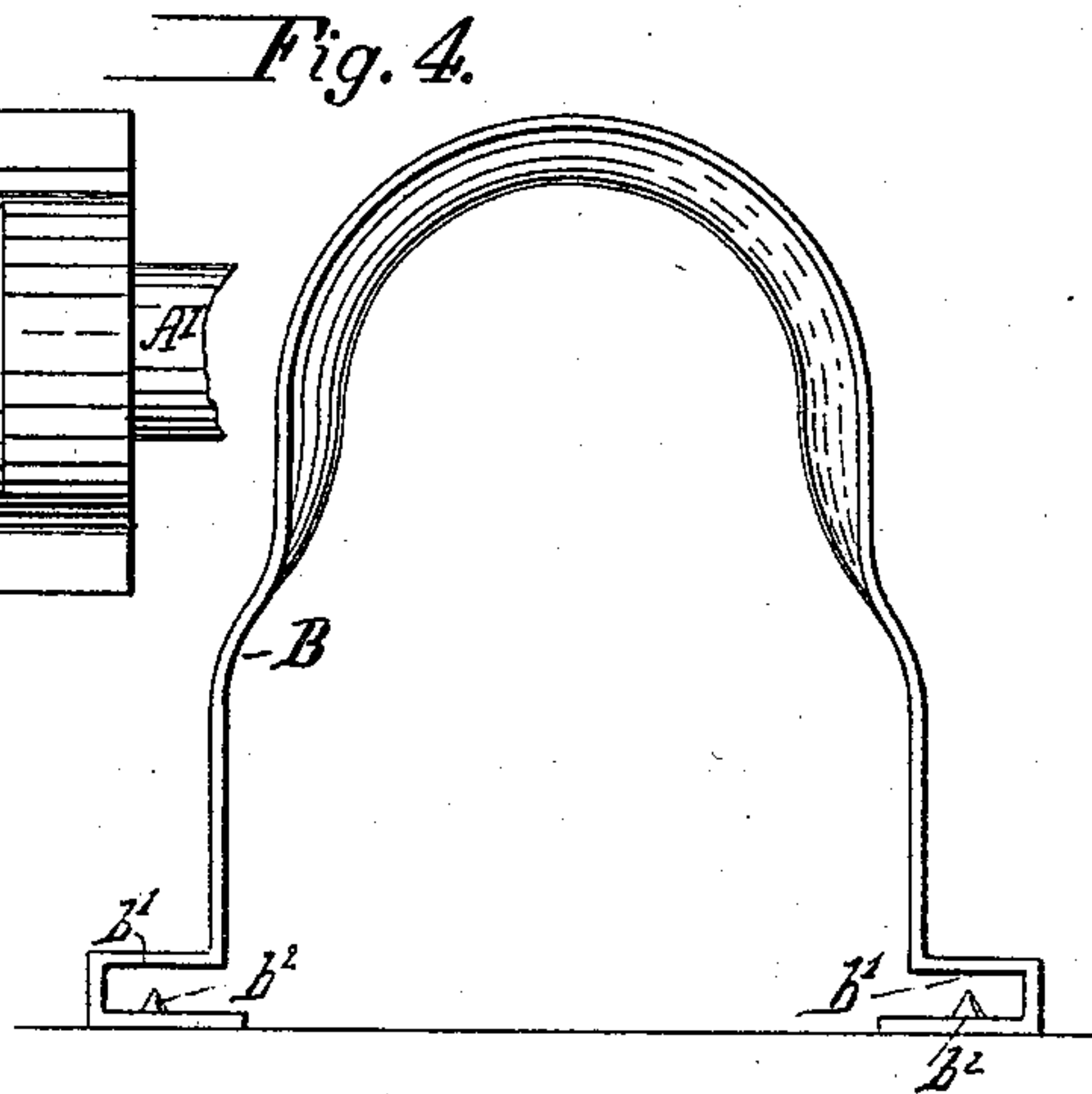
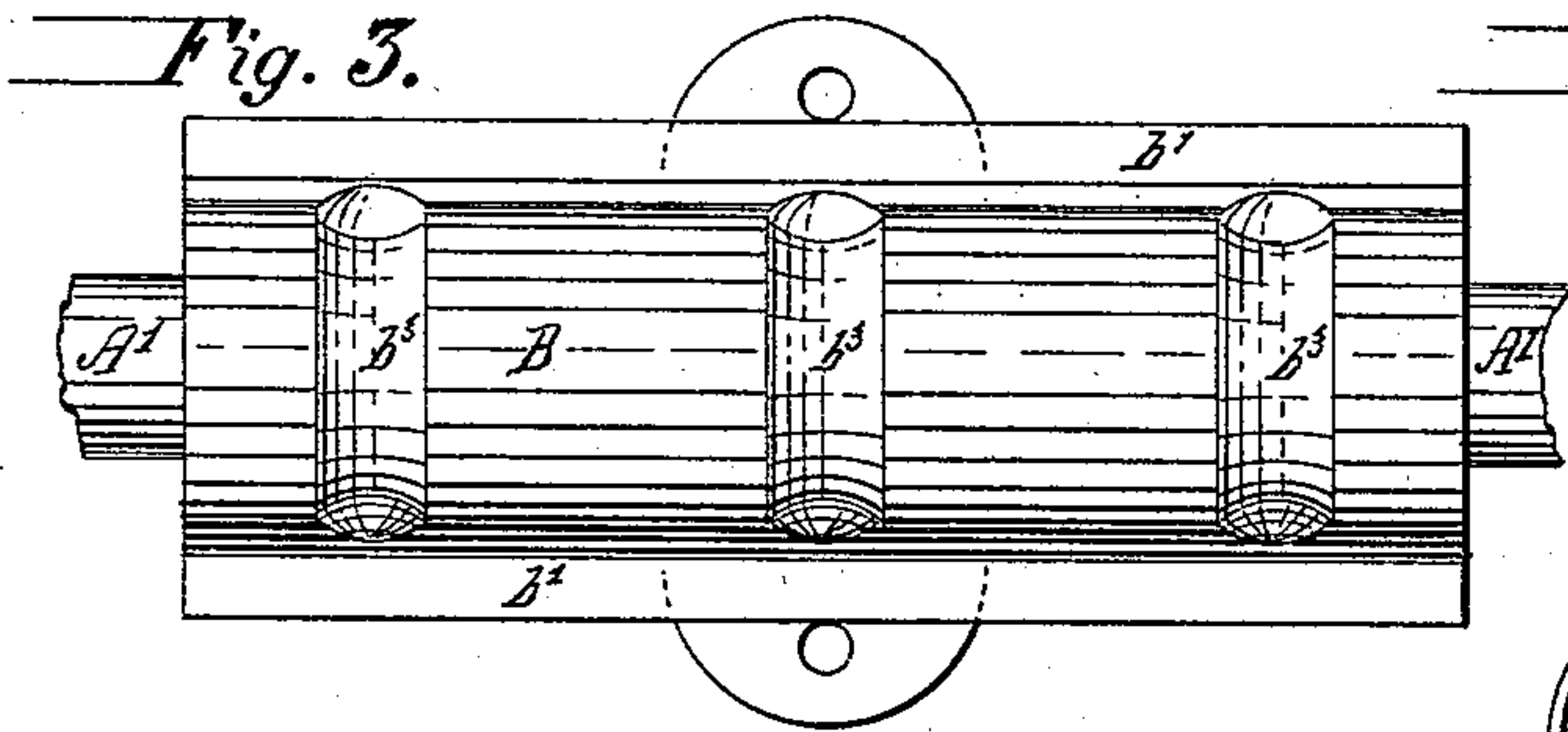
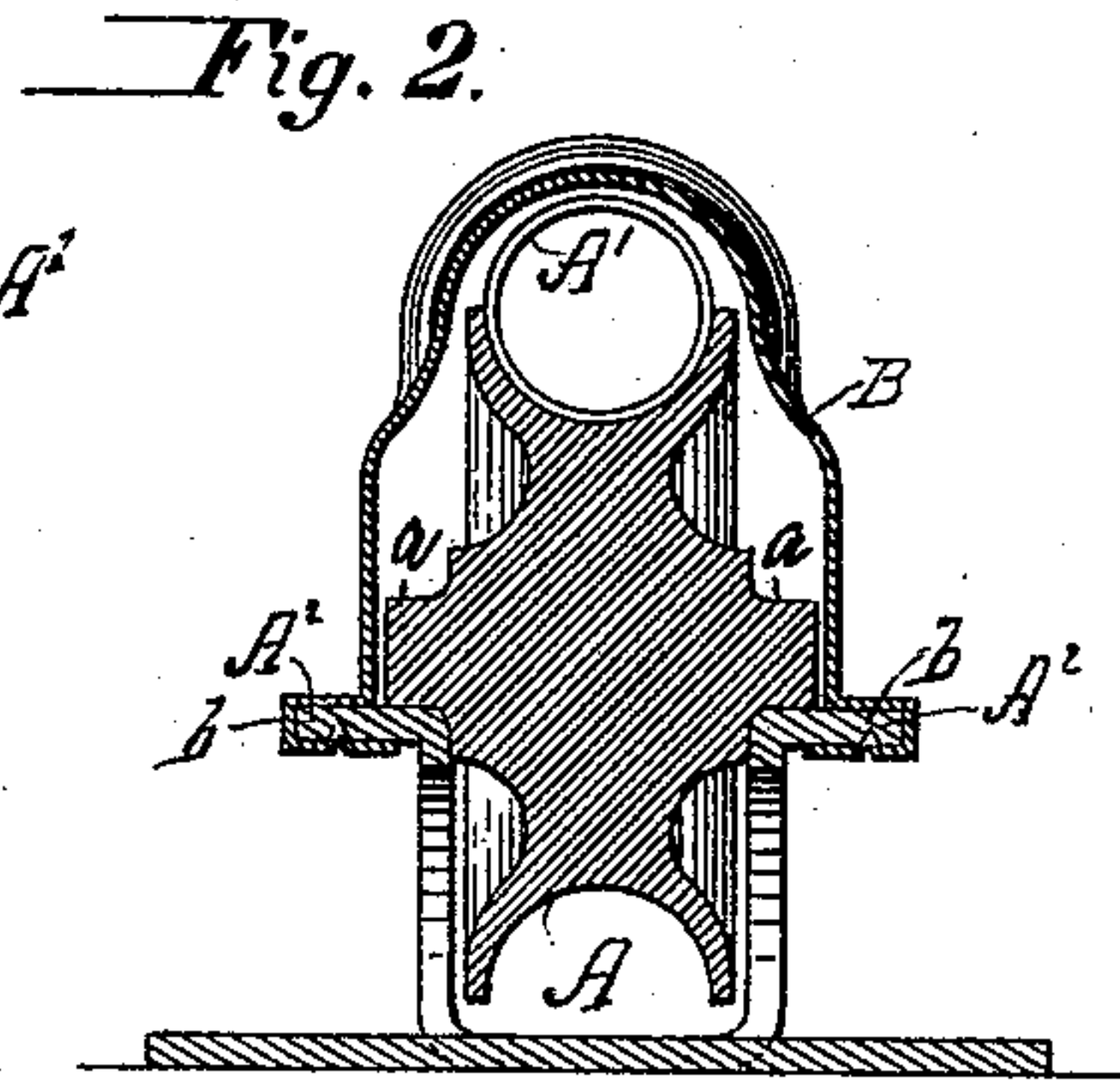
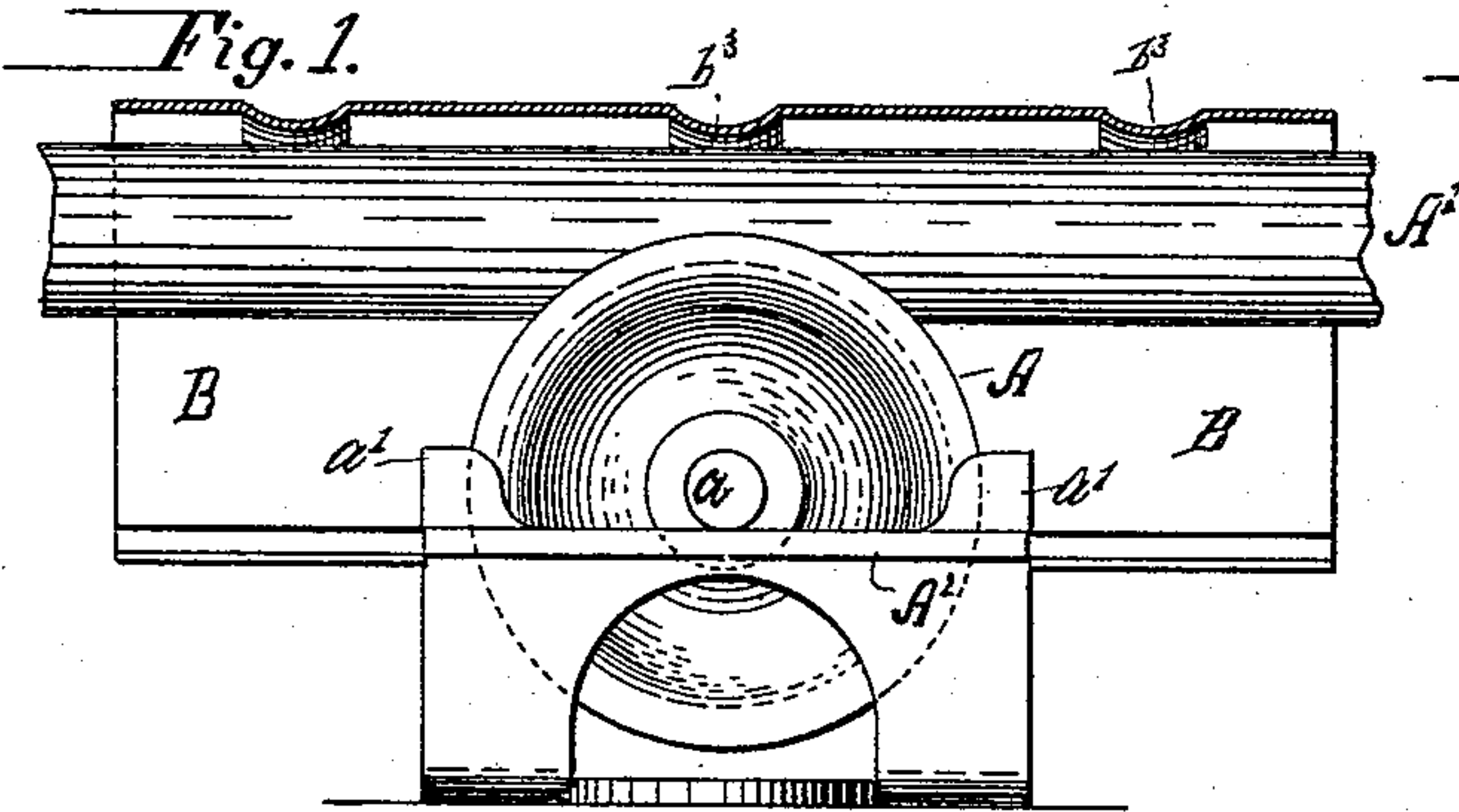


(No Model.)

G. A. WEBER.
ROLLER AND ROLLER BEARING.

No. 487,884.

Patented Dec. 13, 1892.



WITNESSES:

Anthony Gref
Wm. A. Pallock

INVENTOR

Geo. A. Weber.

BY Edwin H. Brown

HIS ATTORNEY

UNITED STATES PATENT OFFICE.

GEORGE A. WEBER, OF NEW YORK, N. Y., ASSIGNOR TO ANNIE H. WEBER,
OF SAME PLACE.

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
5 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
10 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
15 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
30 on and movable along bearing-tracks A², having stops *a'* at the ends to limit the movement of the roller longitudinally of the tracks.

B designates a guard or cover extending
35 from the bearings A² 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.
40 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*. 45

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' 50 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 55 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 60 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. 65

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. 70

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

GEO. A. WEBER.

Witnesses:

ANTHONY GREF,
WM. A. POLLOCK.