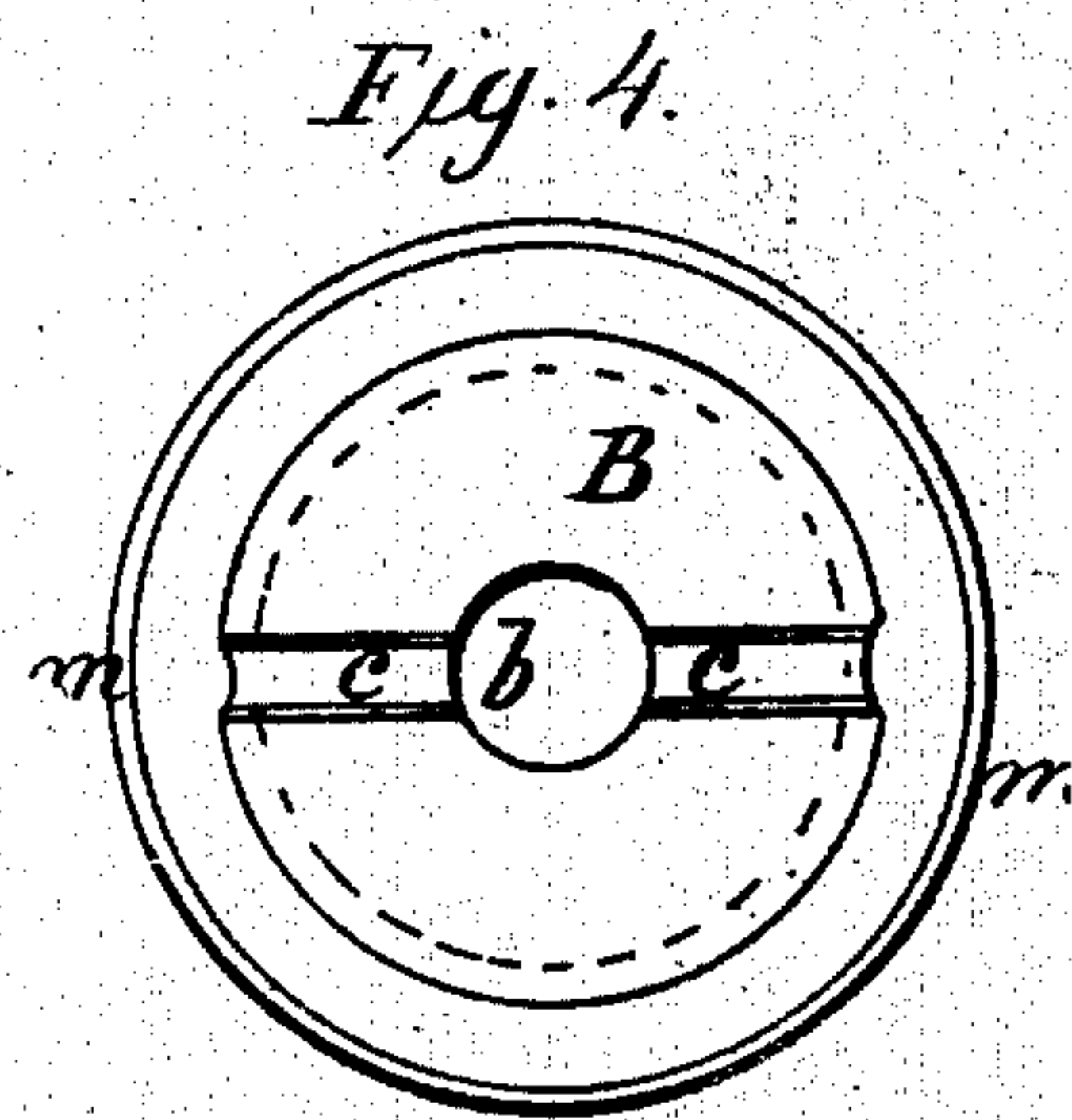
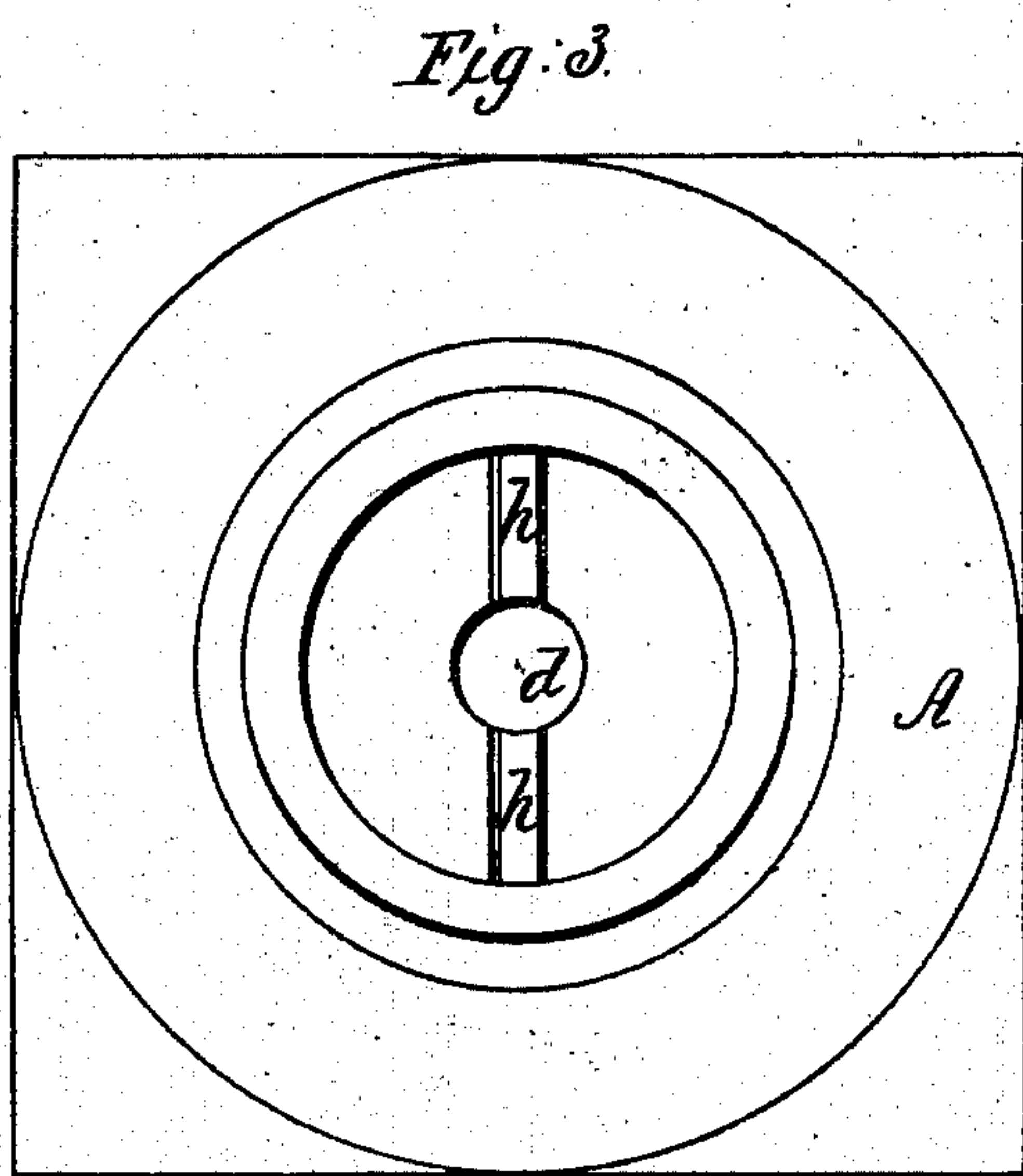
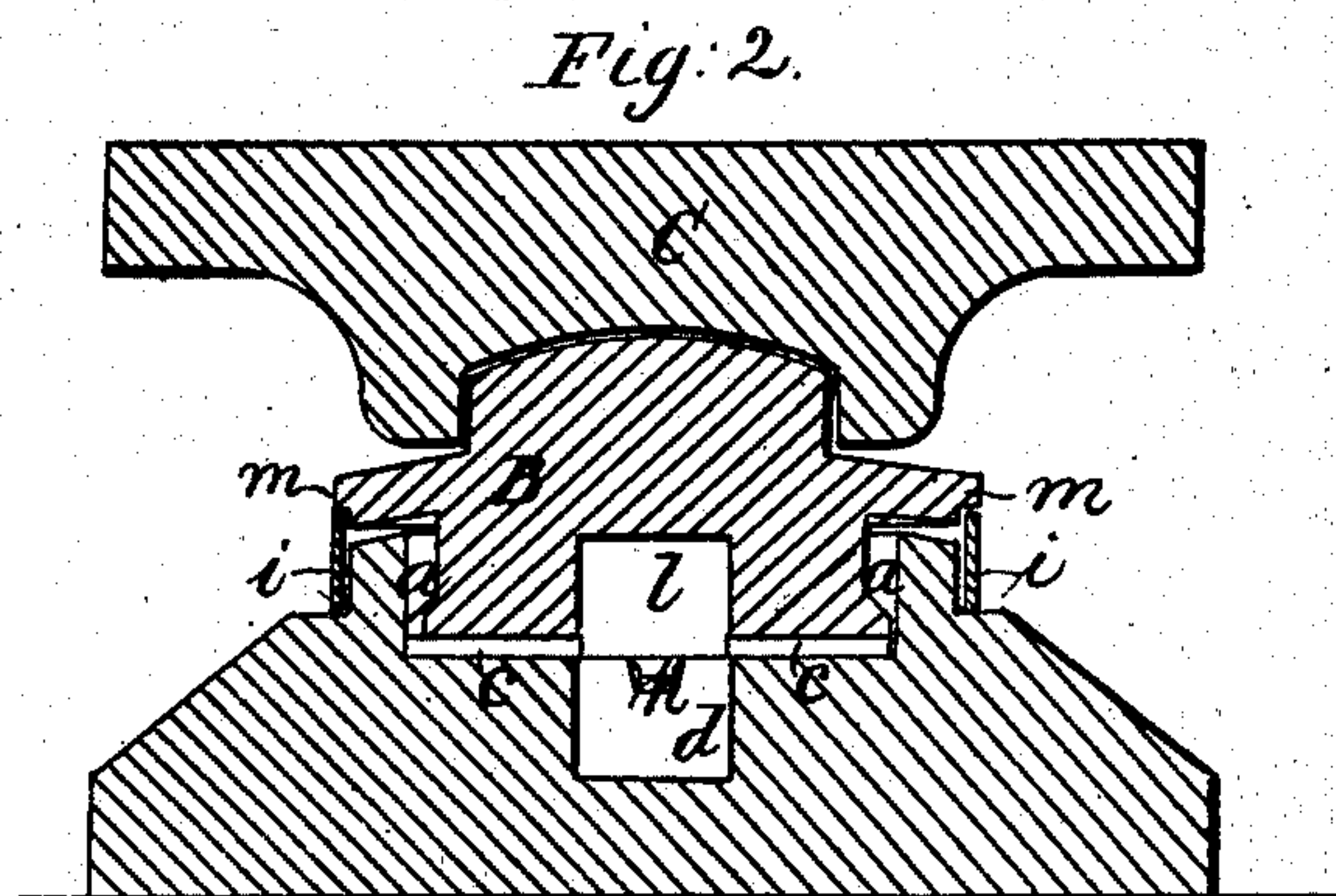
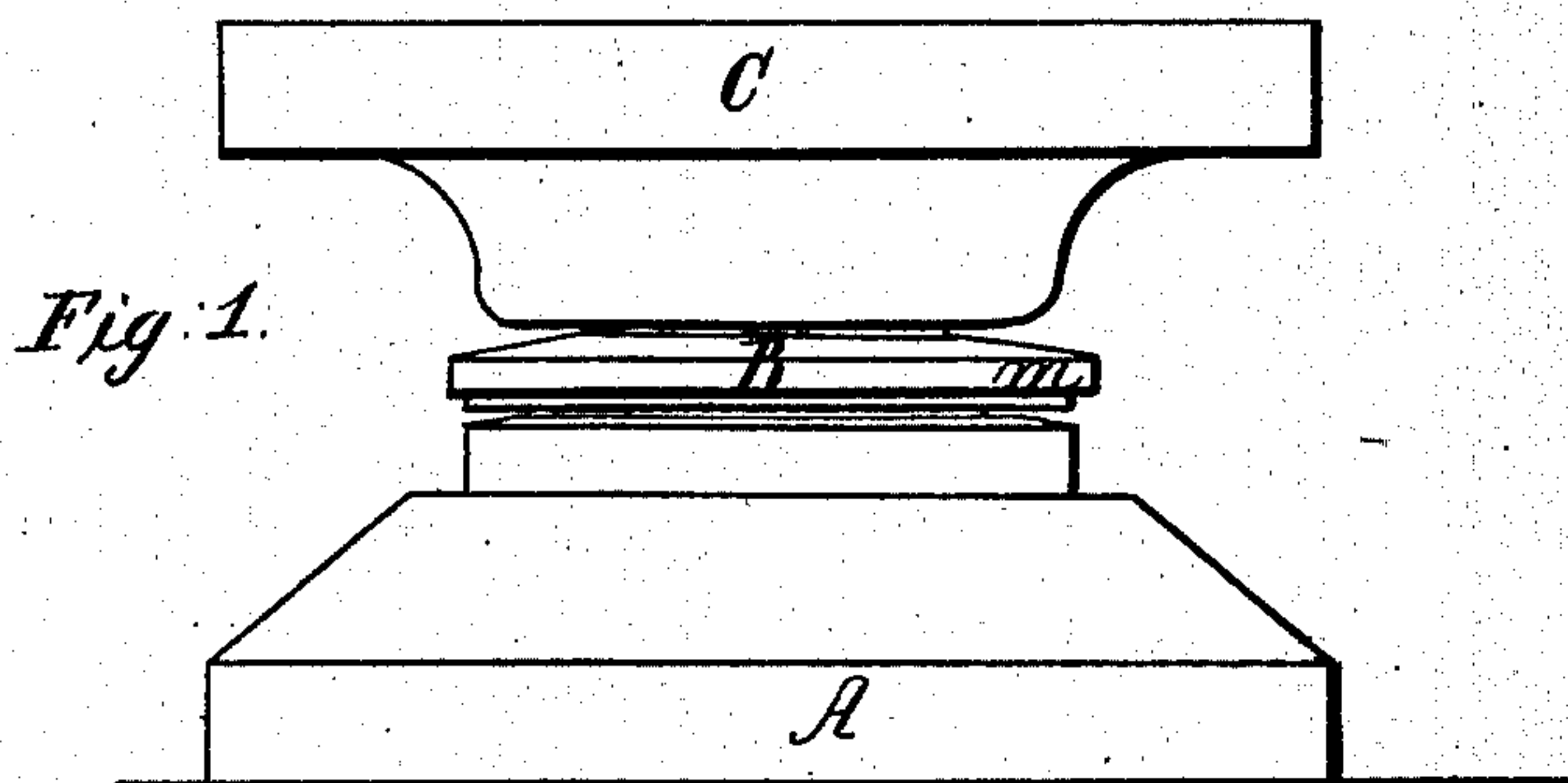


F. C. Lowthorp.
Pivot Bearing for Draw Bridge.
Nº 26,689. Patented Jan. 3, 1860.



Witnesses;
Henry Houdon
Horace See

Inventor;
F. C. Lowthorp

UNITED STATES PATENT OFFICE.

FRANCIS C. LOWTHORP, OF TRENTON, NEW JERSEY.

PIVOT-BEARING.

Specification of Letters Patent No. 26,689, dated January 3, 1860.

To all whom it may concern:

Be it known that I, FRANCIS C. LOWTHORP, of Trenton, Mercer county, New Jersey, have invented a new and Improved
5 Pivot-Bearing for Turn-Tables, &c.; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked
10 thereon.

My invention consists in interposing between a plate attached to a turntable, swing bridge or other like object, and the foundation plate for the same, a pivot constructed
15 and arranged in respect to the two plates substantially as described hereafter, so as to form a center on which the bridge or other object can roll and balance itself and so as to present in contact with the foundation
20 plate a self lubricating surface.

In order to enable others to make and use my invention I will now proceed to describe its construction and operation.

On reference to the accompanying drawing, which forms a part of this specification, Figure 1 is an exterior view of my improved
25 pivot bearing; Fig. 2, a vertical section of the same; Fig. 3, a plan of the step or socket with the pivot removed, and Fig. 4, an inverted plan view of the pivot.
30

Similar letters refer to similar parts throughout the several views.

A represents the stationary step or socket, B the pivot and C the upper socket or cap
35 of my improved pivot bearing, which is illustrated in the drawing as arranged for use under a swing bridge or turntable.

In the underside of the cap C is a concave recess which fits over the upper portion of
40 the pivot B, this portion of the pivot being somewhat smaller in diameter than the recess, and the concavity of the latter being somewhat less abrupt than the convexity of the top of the pivot. The object of this ar-
45 rangement is in order that the bridge or turn-table to which the cap C is secured may be at liberty to roll slightly and balance and adjust itself on the pivot.

The lower portion of the pivot B fits into
50 a recess in the stationary step A the bearing surface of the pivot on the bottom of the recess being level, and the pivot being so formed as to leave an annular chamber *a* within the recess of the step. This chamber
55 communicates through transverse grooves

c c in the bottom of the pivot and similar grooves *h h* on the bottom of the recess, with the central chambers *b* and *d* the former being in the pivot and the latter in the bottom of the recess of the step.

The pivot has a flange *m* situated between the cap and the step but free from contact with both, the flange serving the purpose of preventing dust and dirt from gaining access to the recess of the step. Additional
60 protection may be afforded by a band *i* of leather or other suitable material applied to the flange *m* and to the projecting portion of the step in the manner illustrated in red
65 lines Fig. 2.
70

Oil is poured into the chamber *a* so as to nearly fill the latter and the chambers *b d*, so that as the pivot turns on the step the frictional surface is always efficiently lubricated the refuse and dirt caused by the wear-
75 ing of the surface or mixed with the oil being conveyed by the transverse grooves *c* and *h* to the central chamber in which it becomes deposited at a safe distance from the bearing
80 surface.

The bearing surface of the cap on the pivot being unlubricated the pivot will of course turn with the cap, at the same time owing to the above described manner of
85 adapting the cap to the pivot the former is at liberty to roll and adjust itself on the latter.

A loose disk or disks of antifriction metal may be advantageously applied between the
90 pivot and the step.

I claim as my invention and desire to secure by Letters Patent—

Interposing between the plate C of a turntable, swing bridge or other like object, and the step or foundation plate A, a pivot B,
95 constructed and arranged in respect to the plates substantially as hereinbefore described so as to form a center on which the object connected to the plate C may roll and balance itself, and so as to present in con-
100 tact with the plate A a self lubricating surface.

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

F. C. LOWTHORP.

Witnesses:

HENRY HOWSON,
CHARLES D. FREEMAN.