(No Model.)

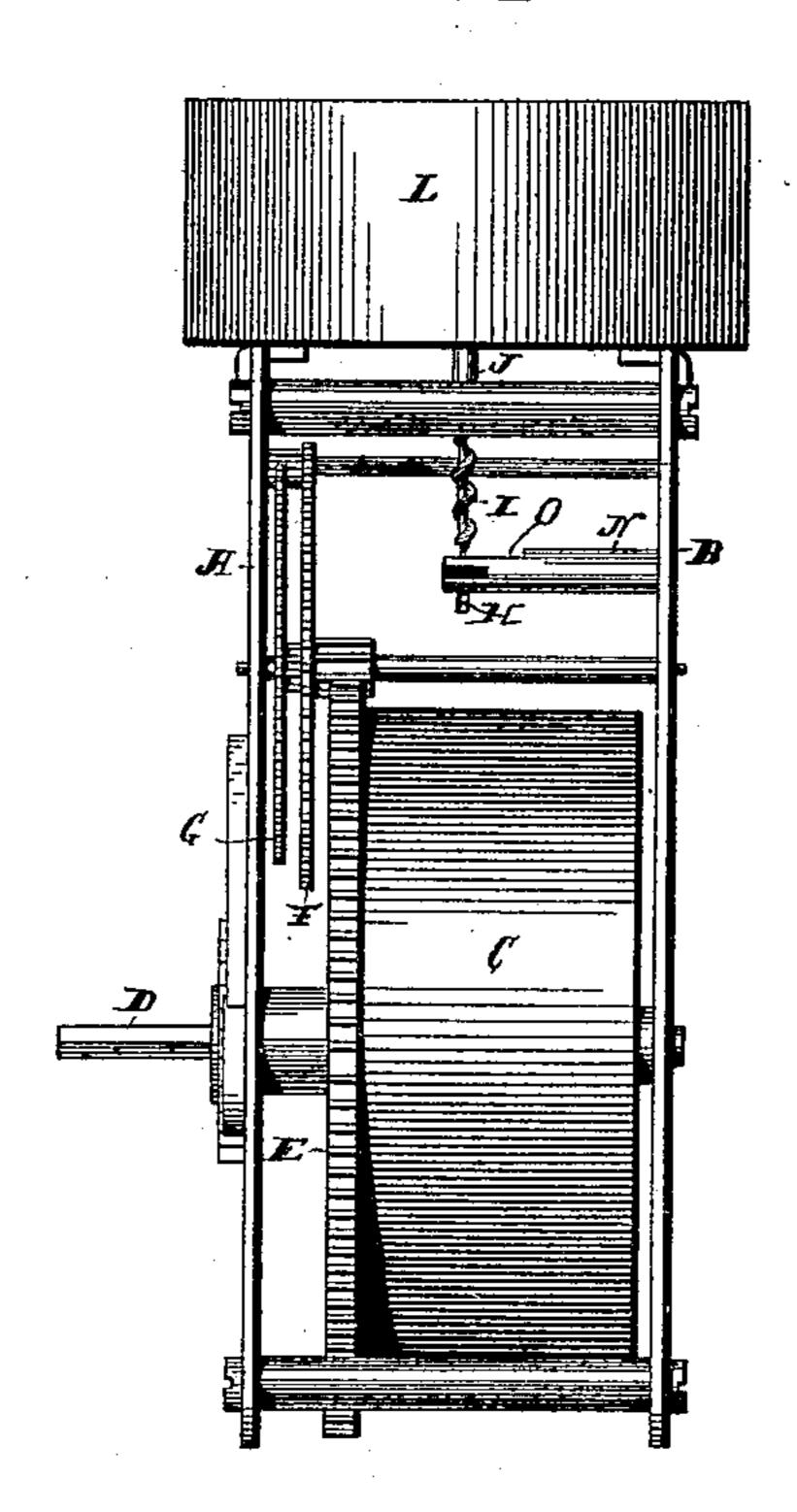
A. BANNATYNE.

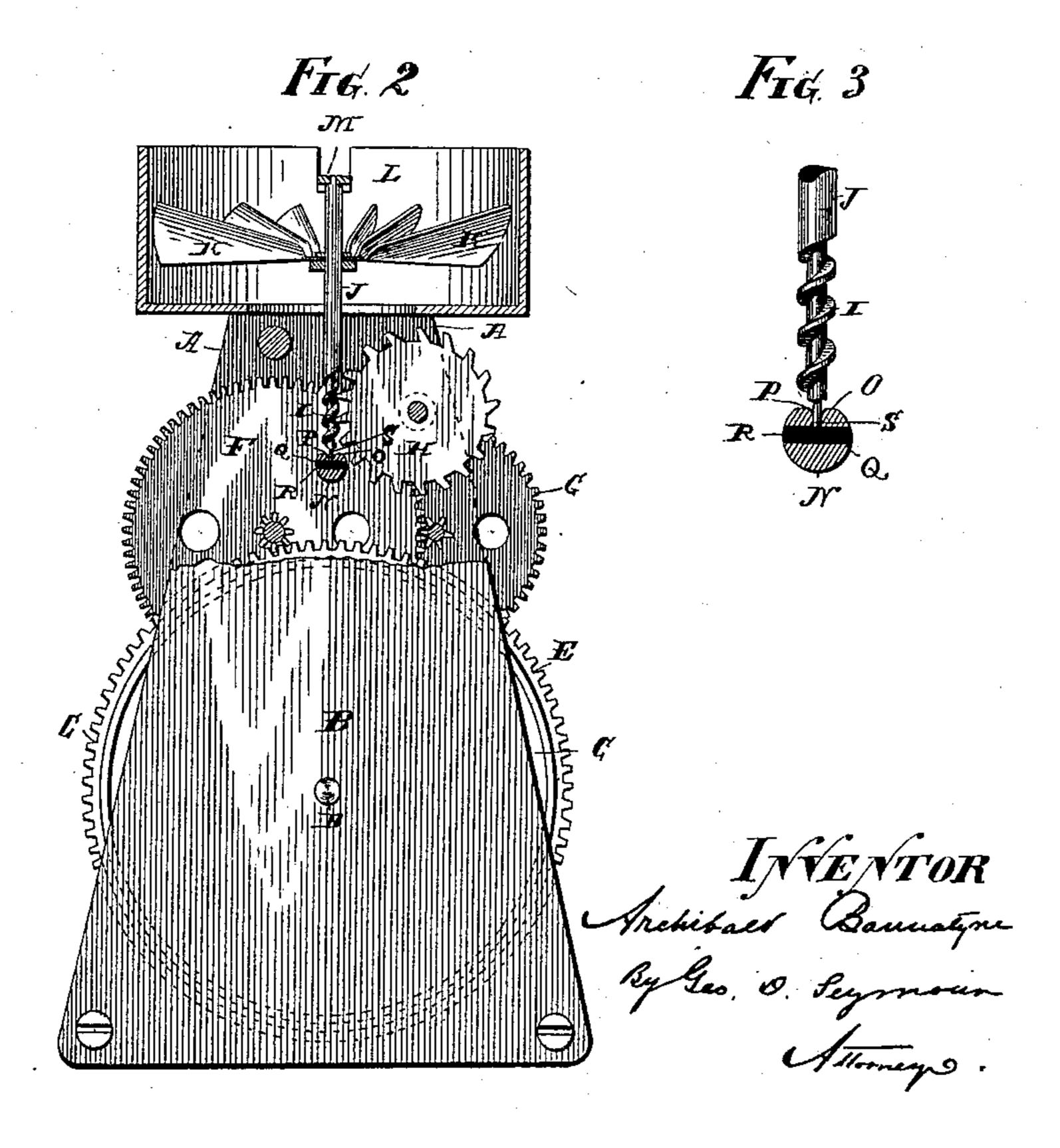
BEARING.

No. 356,521.

Patented Jan. 25, 1887.

Fig. 1





WITNESSES: 6. S. draw fr. 6. B. Shumway

United States Patent Office.

ARCHIBALD BANNATYNE, OF WATERBURY, CONNECTICUT, ASSIGNOR TO THE WATERBURY CLOCK COMPANY, OF SAME PLACE.

BEARING.

SPECIFICATION forming part of Letters Patent No. 356,521, dated January 25, 1887.

Application filed June 1, 1886. Serial No. 203,853. (No model.)

To all whom it may concern:

Be it known that I, ARCHIBALD BANNA-TYNE, residing at Waterbury, in the county of New Haven and State of Connecticut, have in-5 vented certain new and useful Improvements in Bearings; and I do declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, which form a part of this specificaro tion.

My invention relates to an improvement in pivot-bearings, the object being to provide a cheap and efficient substitute for jewels.

With these ends in view my invention con-15 sists in certain details of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in side elevation of a fan movement em-20 bodying my invention and designed for chimneyless lamps. Fig. 2 is a view thereof partly in rear elevation and partly in vertical section; and Fig. 3 is an enlarged broken view of the worm, carrier, and glass step.

The movement herein shown is provided with front and rear plates, A and B, a springbox, C, inclosing the actuating-spring, a winding-stem, D, a train consisting of wheels E, F, and G, and their respective pinions, a worm-30 wheel, H, a worm, I, a worm-staff, J, a fan, K, secured to such staff, a casing, L, for the

fan, a bearing, M, for the upper end of the said shaft, and a bearing for the lower end thereof.

The bearing for the lower end of the shaft comprises my invention, and, as herein shown, consists in part of a horizontal carrier or post, N, made from a single piece of metal, secured at its rear end to the plate B and 40 having its forward end squared off on top, as at O, drilled to form the vertical pivot-hole P, and horizontally slotted, as at Q, with a wall of metal above and another below such slot, the said pivot-hole being drilled from the

45 squared face O through the upper wall of and leading into the slot. The bearing is completed by a flat glass step, R, formed of common window or other glass, and cemented in place in the slot and supported upon the lower 50 wall thereof.

The pivot S, located at the lower end of the worm-staff, passes through the said pivot-hole |

and rests upon the flat glass step, which receives its end wear, its side wear falling upon the walls of the pivot-hole.

My improved bearing, as described, forms an efficient and cheap substitute for jewels, which are not only expensive in themselves, but require expensive mountings.

My invention is not limited, of course, to 60 lamps, but may be used wherever applicable.

I am aware that a flat-faced reversible jewel is not new. I am also aware that glass bearings having flat faces have been employed in the mechanicarts. Ido not, therefore, broadly 65 claim flat-faced jewel or glass bearings, but only the particular thing herein shown, including the bearing and mounting, not limiting myself, however, to the post, but holding myself at liberty to modify the carrier.

Having fully described my invention, what I claim as new, and desire to secure by Let-

ters Patent, is—

1. In a pivot-bearing, a carrier made of a single piece of metal, and having a horizontal 75 slot with a wall of metal above and another below the same, and a vertical pivot-hole drilled through the upper wall of and leading into the said slot, in combination with a flat glass step located in such slot and supported 80 upon the lower wall thereof and receiving the end wear of the pivot, the side wear of the same falling upon the walls of the vertical pivot-hole formed in the upper wall of the carrier, substantially as set forth.

2. In a pivot-bearing, a carrier made of a single piece of metal, and having a horizontal slot with a wall of metal above and another below the same, a vertical pivot-hole drilled through the upper wall of and leading into 90 the said slot, and a squared face at the upper end of the pivot-hole, in combination with a flat glass step located in the slot and supported upon the lower wall thereof and receiving the end wear of the pivot, the side 95 wear of the same falling upon the walls of the vertical pivot-hole, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscrib-

ing witnesses.

ARCHIBALD BANNATYNE.

Witnesses:

C. L. SWAN, Jr., EDWARD H. ROGERS.