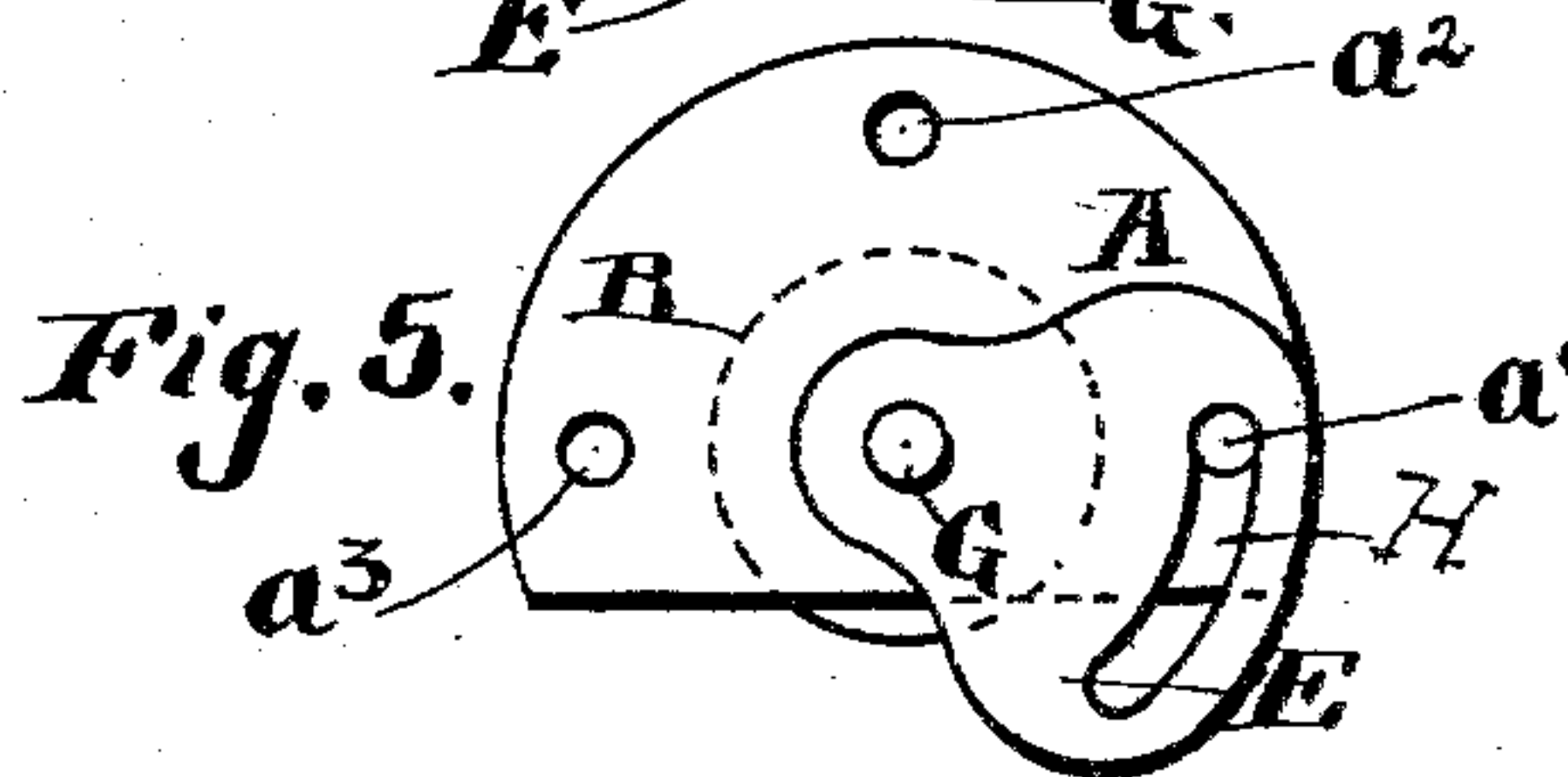
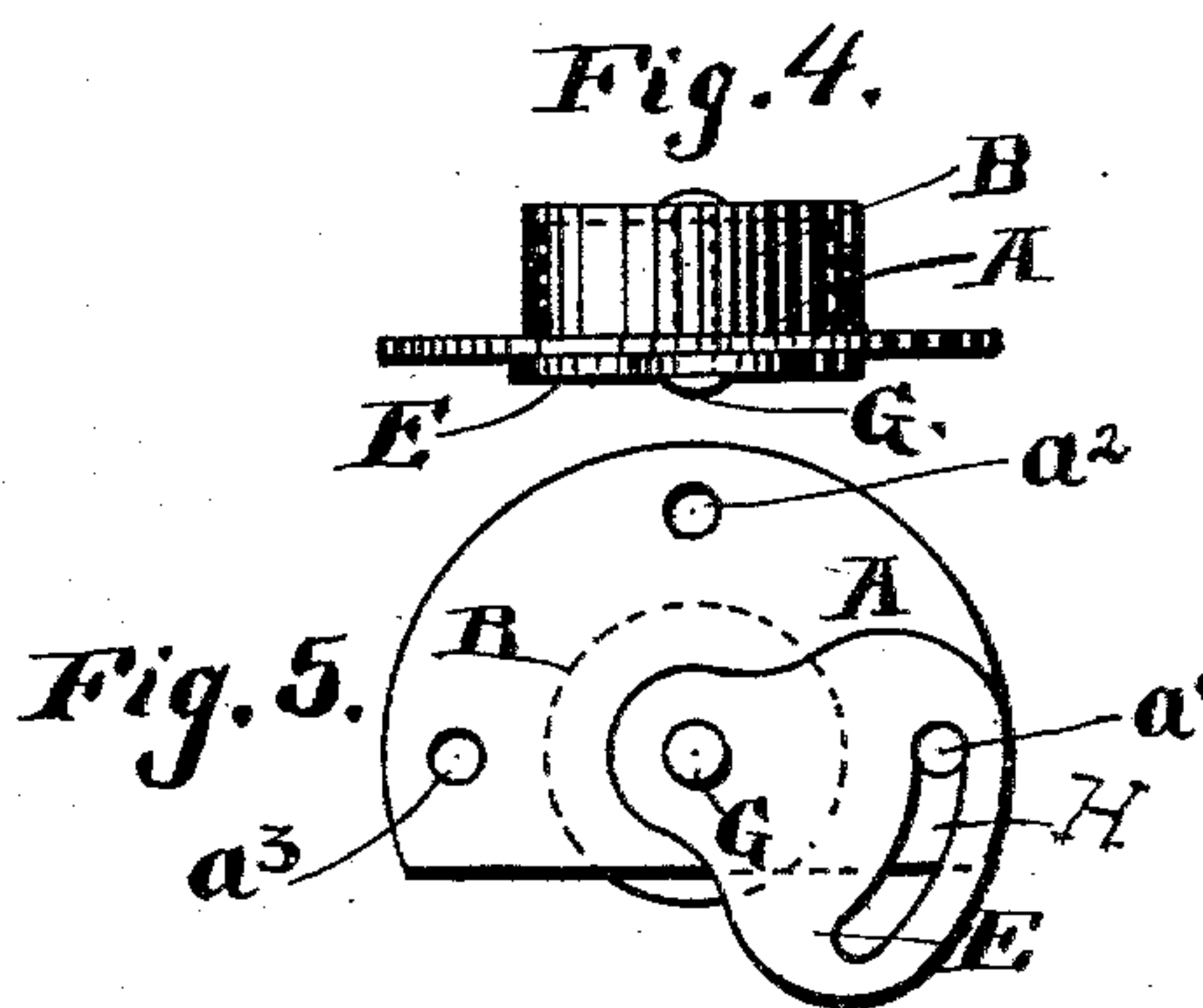
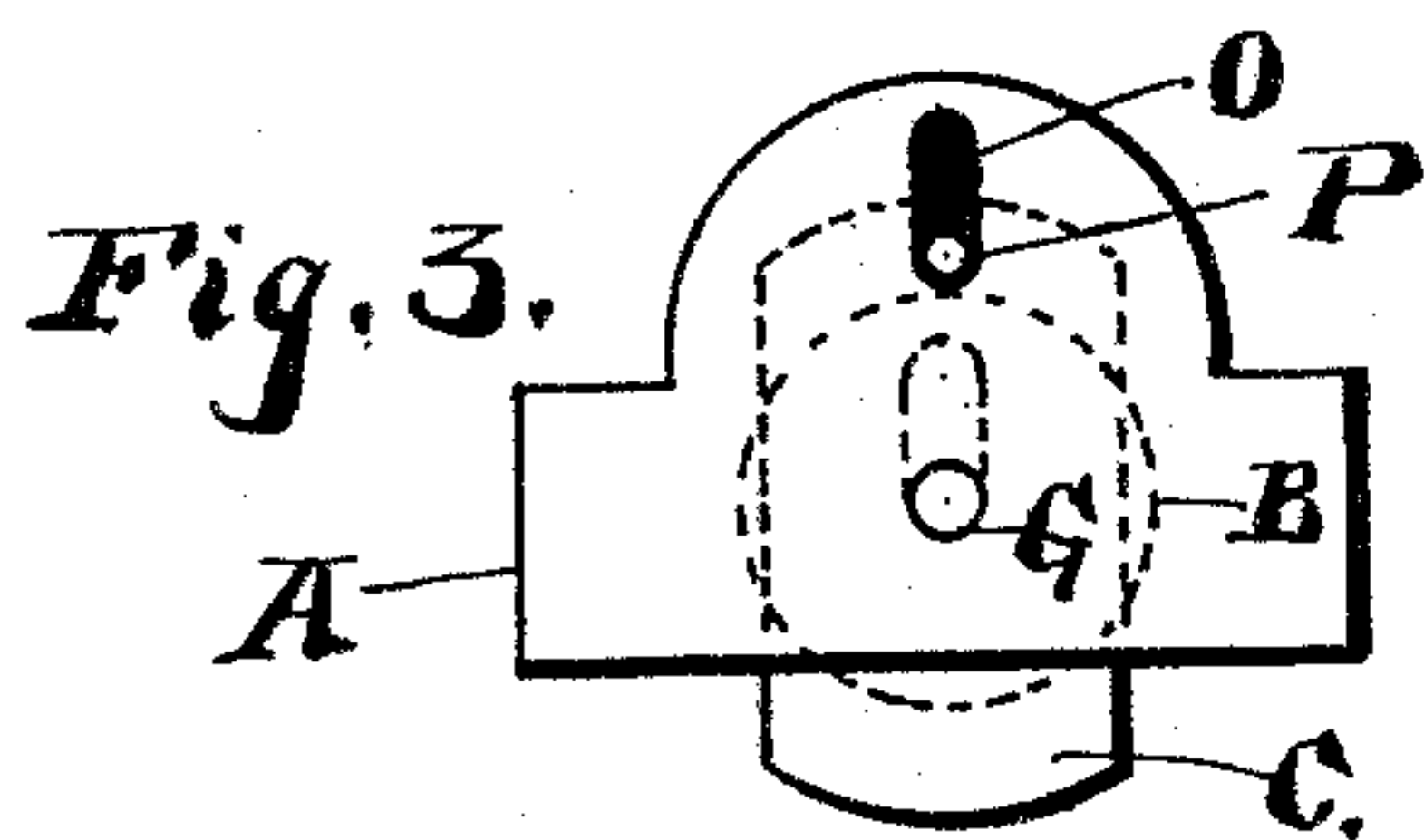
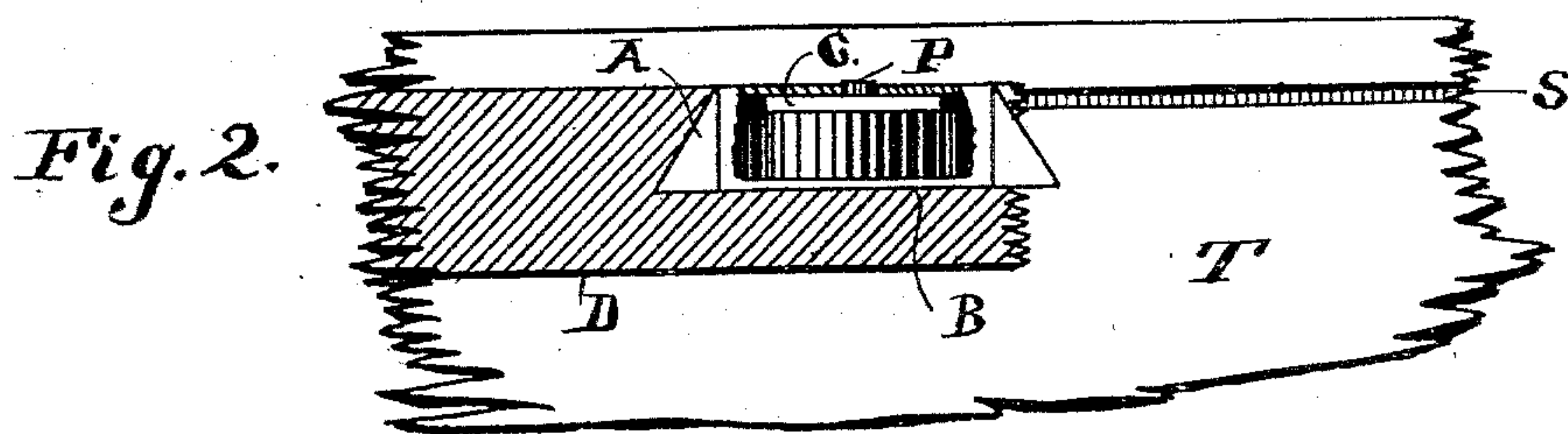
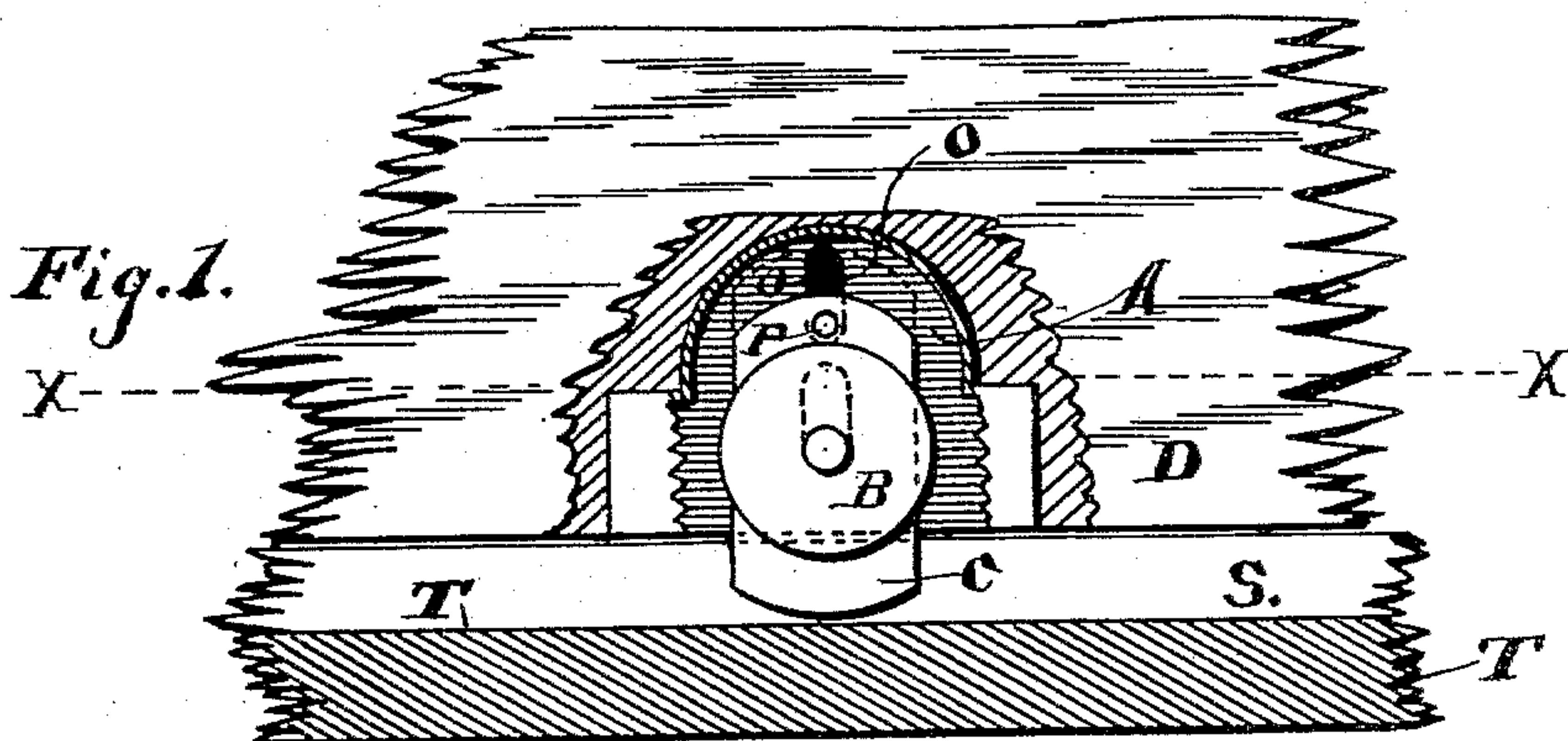


(No Model.)

D. W. TOWER.
ROLLER ATTACHMENT FOR SLIDING DOORS.

No. 597,310.

Patented Jan. 11, 1898.



Witnesses

Harry J Perkins.

Christopher Hondelink

Inventor

Daniel W Tower

By his Attorney

Edward Taggart.

UNITED STATES PATENT OFFICE.

DANIEL W. TOWER, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR TO THE
GRAND RAPIDS BRASS COMPANY, OF SAME PLACE.

ROLLER ATTACHMENT FOR SLIDING DOORS.

SPECIFICATION forming part of Letters Patent No. 597,310, dated January 11, 1898.

Application filed May 22, 1897. Serial No. 637,764. (No model.)

To all whom it may concern:

Be it known that I, DANIEL W. TOWER, a citizen of the United States, residing at the city of Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Roller Attachments for Sliding Doors, of which the following is a specification.

This invention relates to certain new and useful improvements in roller attachments for sliding doors and other analogous purposes, and is peculiarly adapted to the doors of bookcases which slide horizontally in opening and closing the case; and the invention consists in the combination, with the roller frame or case, of an adjustable guide which can be lowered into position to travel in a groove or way in the bottom of the bookcase, or, when applied to other doors, to travel in a groove in the floor; and the objects of my invention are to produce a cheap and efficient working device for doors and also to provide one with an adjustable guide which can be raised out of the groove so as to allow the door to be removed. These objects I accomplish by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is an inside elevation of a door to which my invention is applied with a section of the floor or bottom of a bookcase. Fig. 2 is a sectional view on line X X of Fig. 1, showing, in addition to the section of the door, a roller attached either to a portion of the top or the bottom of a case. Fig. 3 shows an elevation of the roller-frame and roller detached. Fig. 4 is a plan view of modified form. Fig. 5 is an elevation of the modified form with the guide lowered in position to engage with the groove in the bottom of the case.

Similar letters refer to similar parts throughout the several views.

A represents the roller-case, which in my preferred form is provided with dovetailed-shaped sides, so that the whole case may be applied to the door by cutting a dovetailed groove to receive the roller and roller-case.

B is the roller, which turns upon the journal or pin G and which extends below the bottom of the door, so as to travel either upon the upper surface of the case-bottom or upon the way provided therefor.

C is the guide, which in the example of my invention shown in Figs. 1, 2, and 3 consists of a plate having a slot cut out to accommodate it to the journal of the roller, which guide slides beneath the upper plate of the shell and is adapted to project downward so as to fit and move in the groove S. This sliding guide may be provided with a similar hole P, or, if desired, with a pin or any other suitable means for operating it.

D shows a portion of a door of a bookcase.

T shows the table or bottom of a case or floor, as the case may be, and is provided with a slot S.

O is a slot in the case made to register with the opening P.

In using my invention the shell with the roller is applied, as shown in Figs. 1 and 2, and then the slide is lowered into the position shown in Figs. 1 and 2, so that the lower end of the guide travels in the groove S. Whenever the door of the case is to be removed, the raising of the guide C will free the lower end of the door, so that it may be readily removed.

In Figs. 4 and 5 I have shown the modified form in which the movable guide is pivoted to the case, preferably upon the roller-journal G, and is adapted to turn upon G so as to leave the lower end of the guide flush with the lower end of the case when the door is to be removed and adapted to be lowered into position, as shown in Fig. 5, when the guide is to engage with the groove S. In Fig. 5 I have shown the guide by E, and the same is provided with a slot H. a' a'' a''' are screw-holes through the case, adapted to receive screws which attach the shell or case to the door of a piece of furniture to which it is to be applied. H is a slot in the pivoted guide G, and I prefer to pass one of the screws through the screw-hole a' and through the slot H, so that the pivoted guide will be held more securely and rigidly in position. By this construction the roller can readily be applied to any door which is adapted to slide horizontally, where a slot is provided for the adjustable guide, and the adjustable guide is so attached to the shell or case which supports the roller that it may be readily raised, so as to disengage it from the groove when-

ever it is desirable to remove the door from the bookcase or other piece of furniture.

Having thus described my invention, what I claim to have invented, and desire to secure by Letters Patent, is—

1. In combination with a door, a roller supported in a case, a groove in the bottom of a bookcase or other article of furniture, and an adjustable guide movably attached to the roller-case, and adapted to be lowered so as to engage with said groove and to be raised so as to be detached therefrom, substantially as described.

2. In combination with a door, a shell or case, provided with inclined sides and adapted to engage with a dovetailed groove in the door, a bookcase-bottom provided with a groove, a movable guide supported by the roller-case and adapted to be lowered into the

groove or to be raised therefrom, substantially as and for the purpose described.

3. The combination with a door-roller, of a shell or case in which said roller is journaled, and an adjustable guide consisting of a flat plate movably attached to said shell or case on one side of the roller and arranged to be projected below the periphery of the roller to engage a groove formed in the way on which the roller travels, or to be raised above the periphery to disengage from the groove, substantially as described.

In witness whereof I have hereunto set my hand and seal in the presence of two witnesses.

DANIEL W. TOWER. [L. S.]

Witnesses:

LOYAL E. KNAPPEN,

CHRISTOPHER HOUELINK.