

No. 815,371.

PATENTED MAR. 20, 1906.

P. A. MYERS.
DOOR HANGER.

APPLICATION FILED APR. 14, 1904.

2 SHEETS—SHEET 1

Fig. 1.

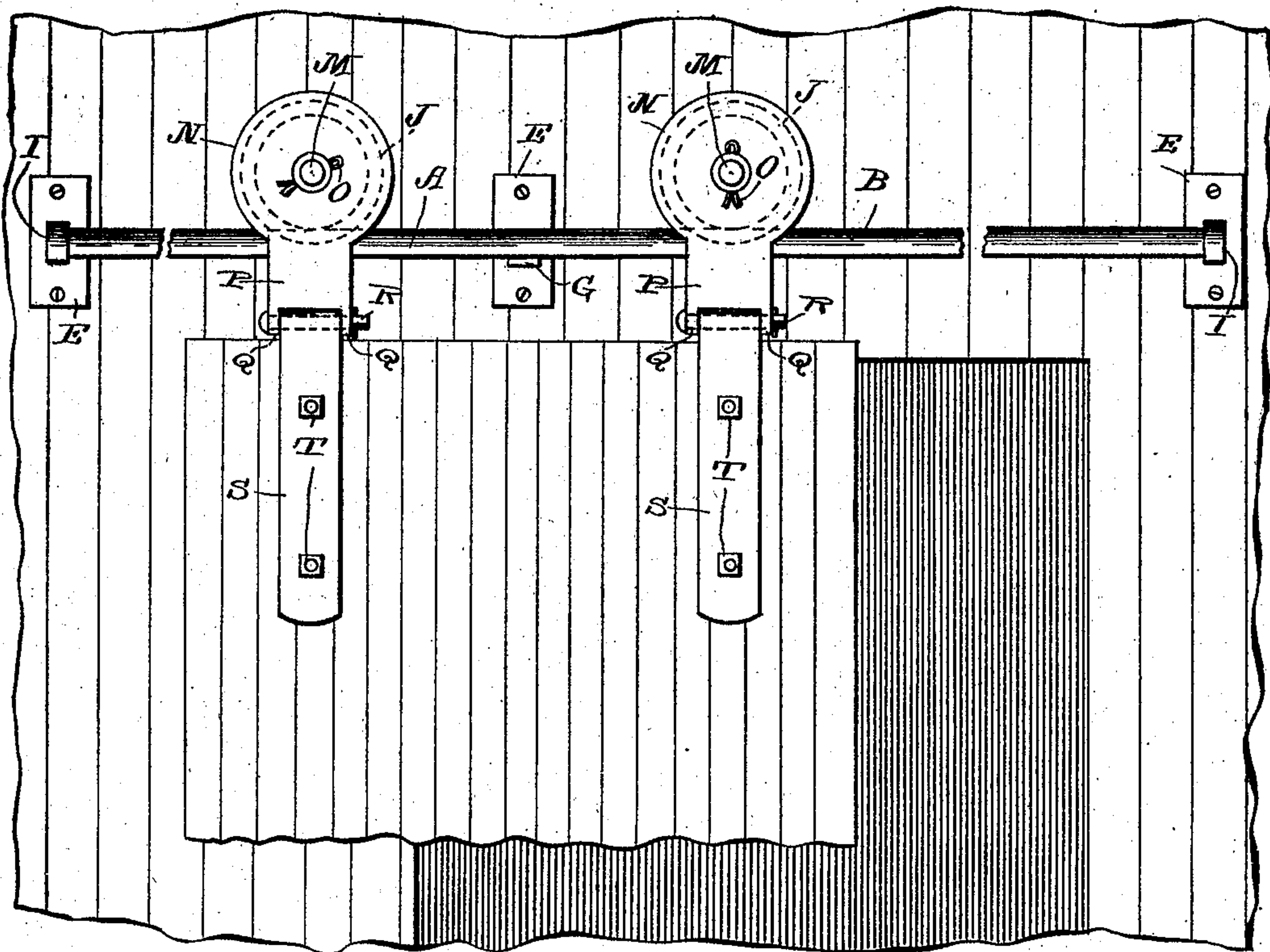
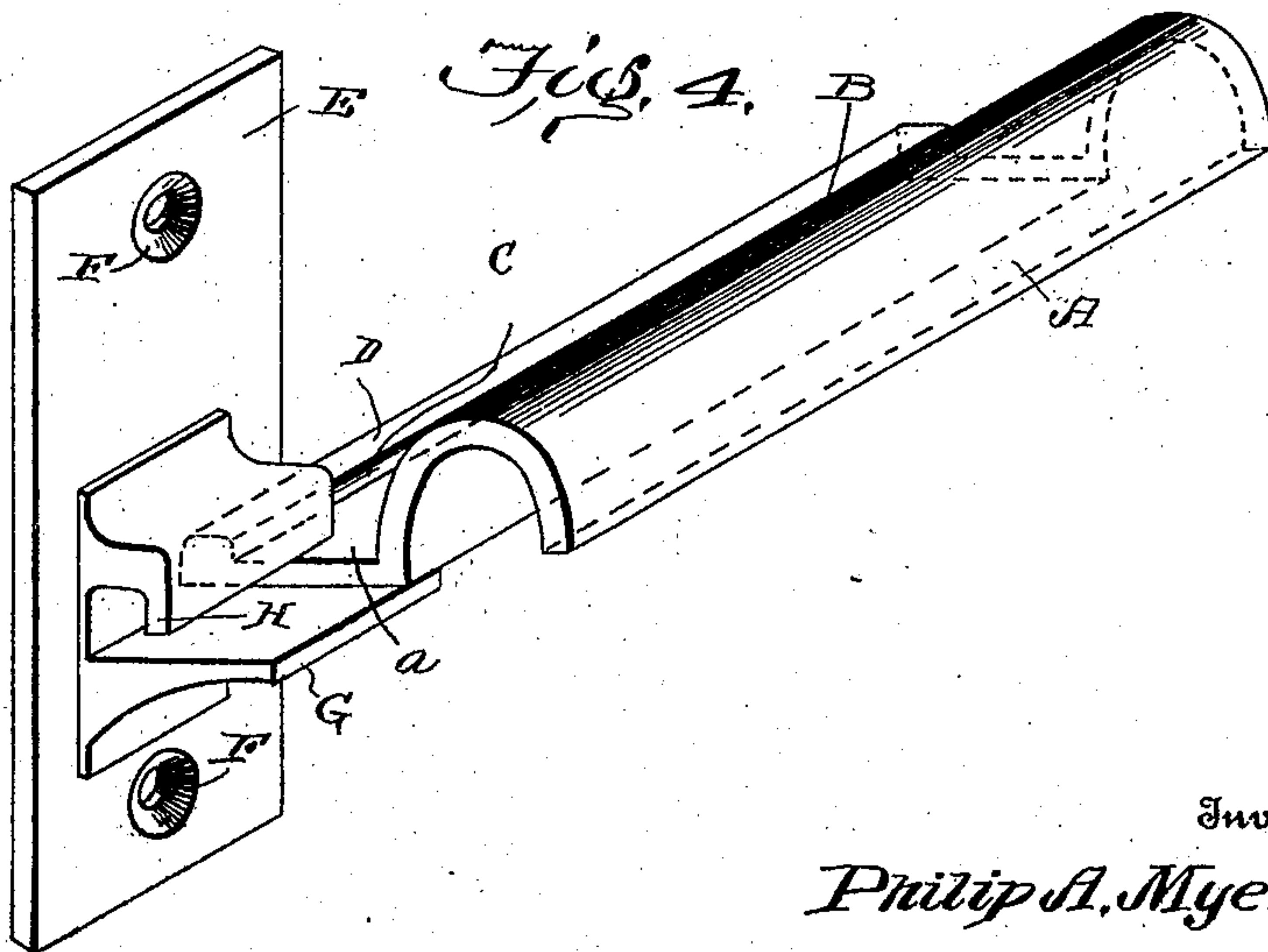


Fig. 4.



Witnesses

G. Howard Walmsley.
F. W. Schaefer.

Inventor

Philip A. Myers,

By

H. A. Tordella,

Attorney

No. 815,371.

PATENTED MAR. 20, 1906.

P. A. MYERS.
DOOR HANGER.

APPLICATION FILED APR. 14, 1904.

2 SHEETS—SHEET 2.

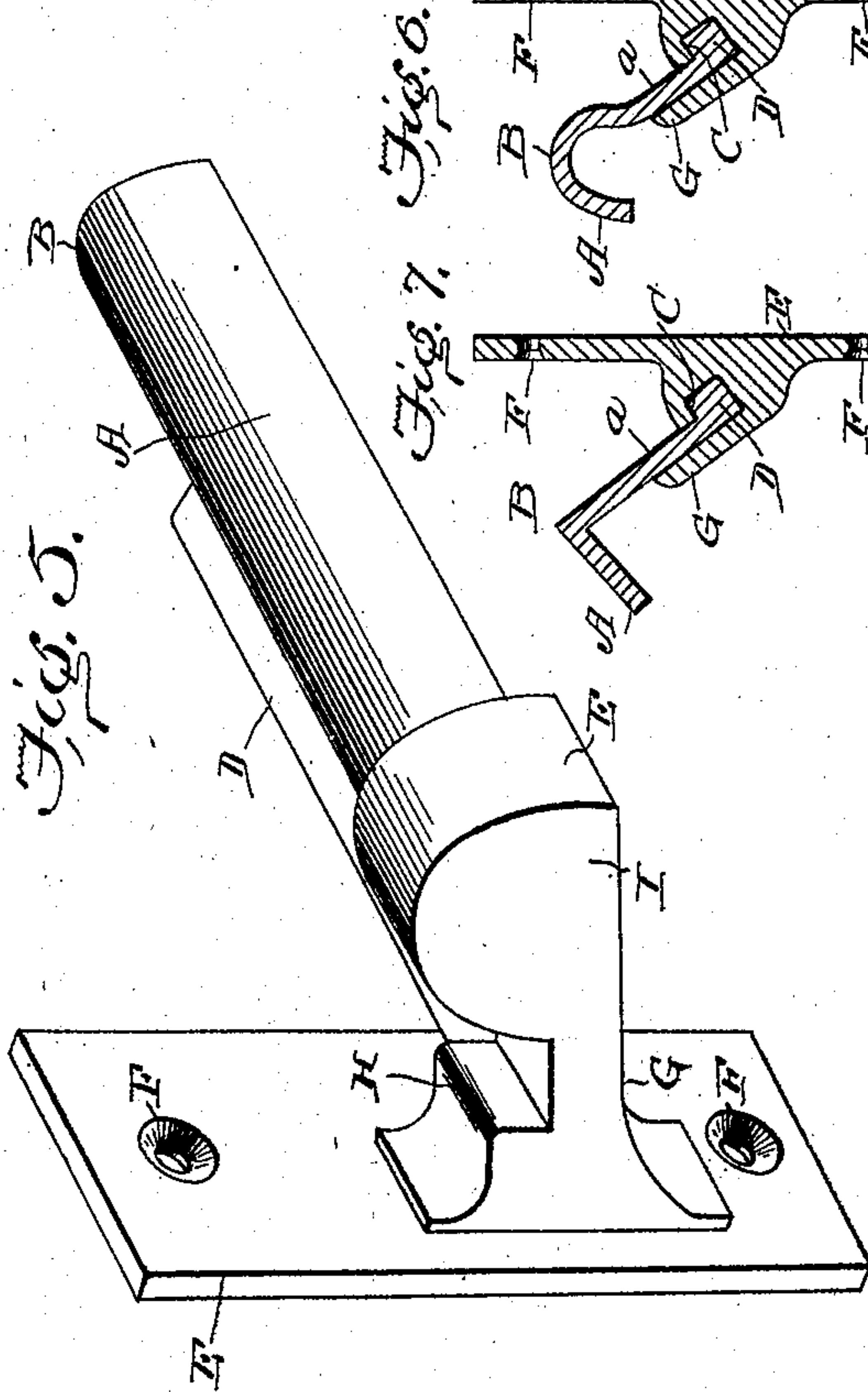
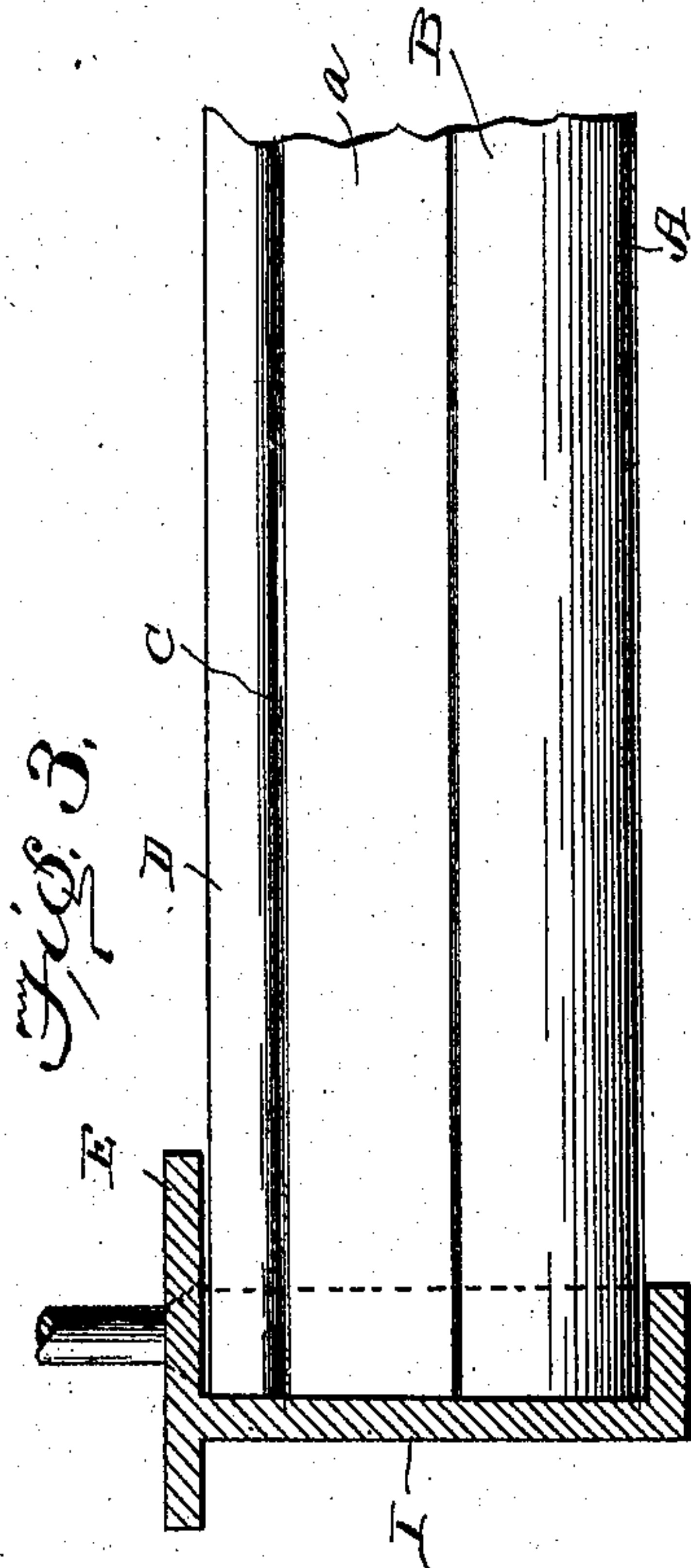


Fig. 6.

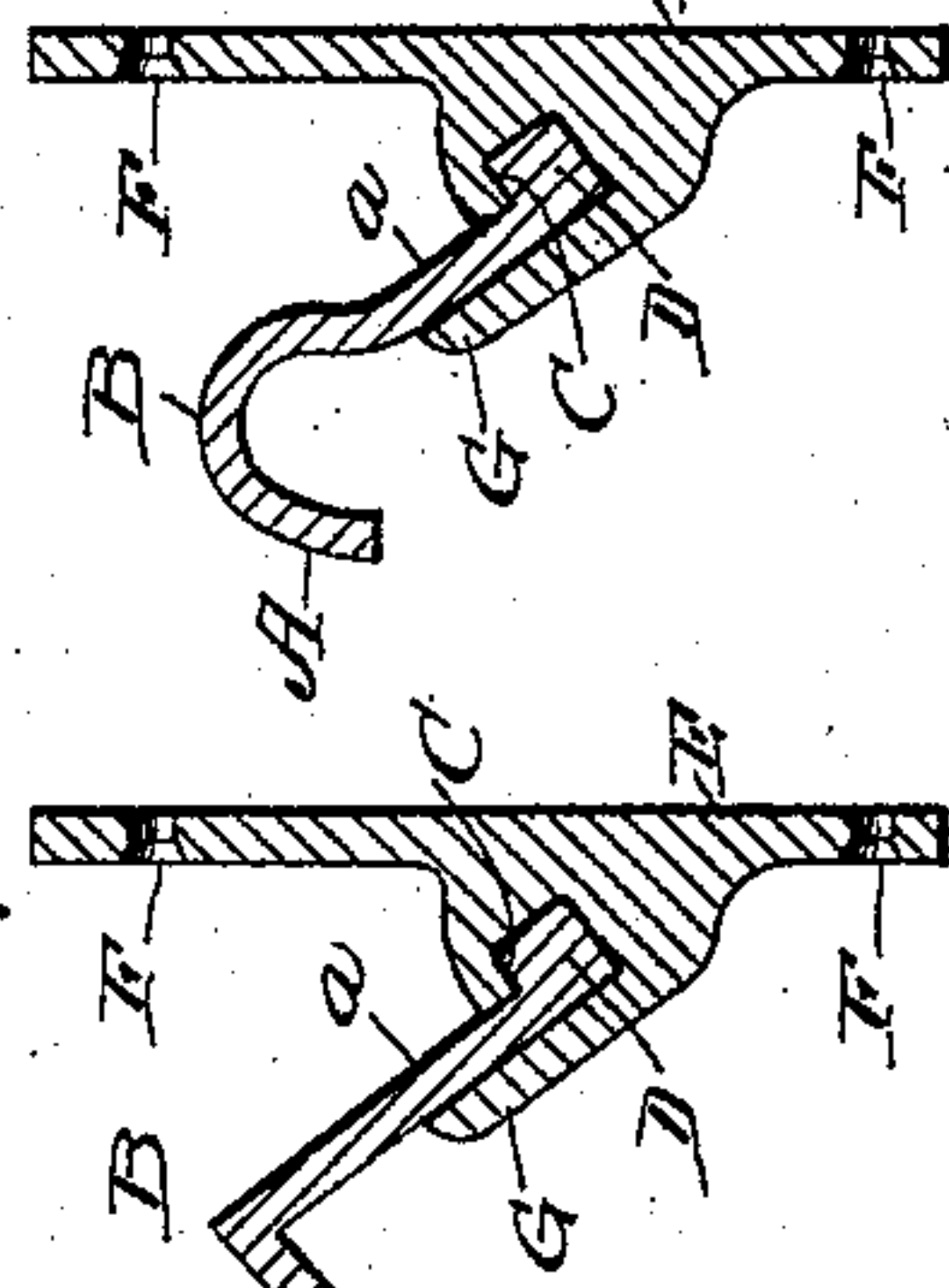
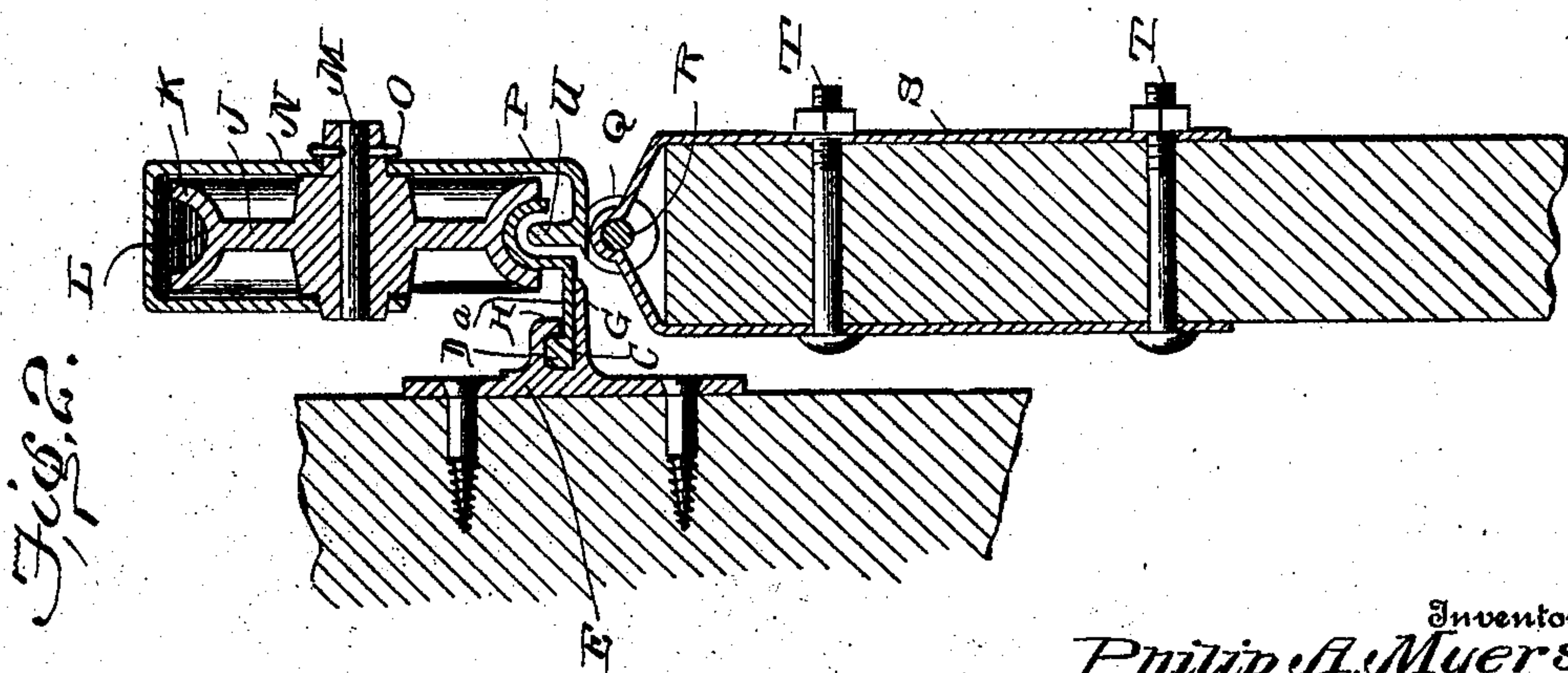
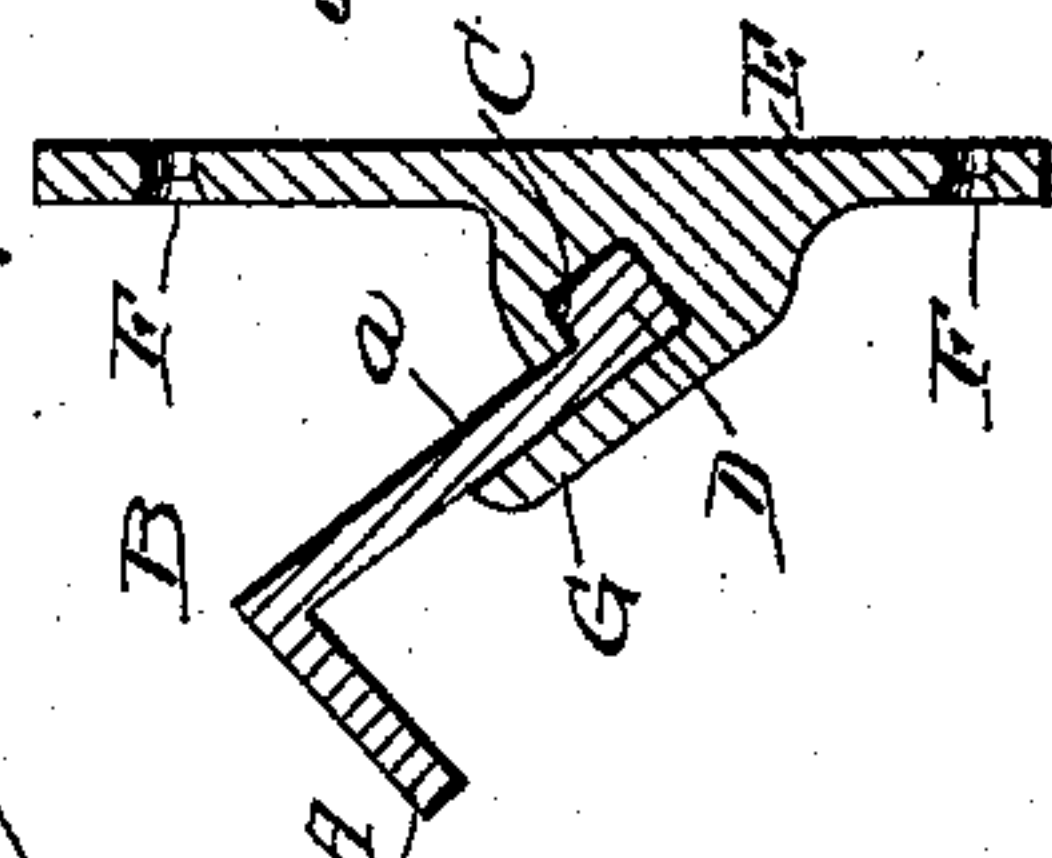


Fig. 7.



Witnesses

G. Howard Walmsley.
F. W. Schaefer.

Inventor
Philip A. Myers,

By *H. A. Paulsen*
Attorney

UNITED STATES PATENT OFFICE.

PHILIP A. MYERS, OF ASHLAND, OHIO, ASSIGNOR TO F. E. MYERS & BRO.,
OF ASHLAND, OHIO, A COPARTNERSHIP.

DOOR-HANGER.

No. 815,371.

Specification of Letters Patent.

Patented March 20, 1906.

Application filed April 14, 1904. Serial No. 203,076.

To all whom it may concern:

Be it known that I, PHILIP A. MYERS, a citizen of the United States, residing at Ashland, in the county of Ashland and State of Ohio, have invented certain new and useful Improvements in Door-Hangers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to door-hangers specially designed for use in connection with barn-doors.

The invention has for its object to provide a track which may be readily constructed by the rolling process, which shall combine in itself a large and ample tread-surface for the wheel, means for cooperating with a suitable "stay-on" device to prevent the wheel from leaving the track, and means for engaging the supporting-brackets in such a way as to hold the track in place without any connecting bolts, rivets, or similar fastening means, the track, whether in one piece or in a plurality of sections, being firmly held in place by the brackets.

To these ends the invention consists in the instrumentalities hereinafter described, and particularly pointed out in the claims, and which in their preferred form are illustrated in the attached drawings.

In the drawings which form a part of this specification, and on which like reference-letters indicate corresponding parts, Figure 1 is a side elevation of my improved door-hanger; Fig. 2, a view thereof in vertical section; Fig. 3, a detail plan view, partly in section, of a part of the track and of one of the end brackets; Fig. 4, a detail perspective view of a part of a section of the track and of one of the brackets, showing the same applied where a joint will come in the rail; Fig. 5, a detail perspective view of the end bracket; Fig. 6 and Fig. 7, detail sectional views showing modified forms of the track and bracket.

The letter A designates my improved track, the peculiarity of which is twofold, having, first, a tread portion B formed by bending, rolling, or otherwise shaping the track into an arch, the upper surface of which constitutes the tread proper and within which is constituted a space for the reception and location of a stay-on device to be presently referred to and having a shoulder C, consisting of a raised portion or bead D, which may be rolled or otherwise formed on or applied to the

track A. This shoulder may be continuous or otherwise, but by preference is continuous, and constitutes a member to interlock with the supporting-brackets. The track thus formed can be readily and cheaply made and needs no machine-work other than what it receives in the rolling-mills in the process of producing it.

The supporting-brackets are composed of plates E, preferably of malleable iron, with openings for screws or other fastening devices to secure them to barns or similar structures where the track is to be mounted. These plates are provided with arms G and hooks H, the former supporting the track and the latter interlocking or engaging with the shoulder or interlocking member of the track. These brackets also need no machine-work, unless it be some slight manipulation to insure their being perfectly flat and straight, which is preferred. It is also preferred that one or both of the parts G and H be made integral with the body of the bracket. The brackets may be strung upon the track at such intervals as the particular occasion may require or according to the length of the track-sections, since there will always be a bracket located at the abutting ends of the two sections of the track, as suggested in Fig. 4, so that such adjoining sections may not only be supported, but may be held and kept in proper alinement. The end brackets are constructed in the same way as the intermediate brackets, except that they each have an end wall I, which walls close the ends of the track and prevent longitudinal movement of the track-sections, said brackets also inclosing and projecting above the track, so as to serve as stops for the hanger-pulleys.

Referring to the pulley itself, which is designated at J, it will be seen that it is composed of a hub and web, the latter terminating in a tread portion K, forming a groove L, which fits upon the tread of the track. This wheel is mounted on a shaft M, carried by a housing N, and is held by a cotter-pin O. This housing on one side extends down just below the shaft M, and on the other it covers the entire face of the wheel and has a wing or extension P, which extends in front of and down below the track, and is formed with eyes Q for the reception of the pivot-pin R, which passes through these eyes and through or under the door bail or strap S,

which is bolted to the door, as by bolts T. The wing or flange P is cut out between the eyes Q, as shown in Fig. 1, for the reception of the bail or strap S. Viewing Fig. 2, it will be seen that the position of the pin R is centrally under and in line with the track, and therefore centrally under the wheel, which is the preferred position. It will also be seen that the upper or inner surface of the flange or wing P is provided with a lug or stay-on device U, which extends up into the arch under the track and just far enough from the under surface of the track to allow space for this lug to shift from side to side when the wheel J is tipped laterally on the track, as will more or less occur; but the location of the lug U so close to the tread portion of the track enables me to enlarge the diameter of the wheel J about one inch as compared with the diameter of door-hanger wheels now generally on the market, yet without increasing the length or depth of the housing. In ordinary barn-door hangers, where the track is composed of a flat strip or bar standing edgewise or with its flat side in the vertical, the stay-on device must needs be as far from the tread of the track as is the depth of the track or the width of the strip from which it is made. Not so with this improved track.

Referring to Figs. 6 and 7, it will be seen that I have shown modified forms of the track and corresponding modifications in the arm and hook of the bracket. The main point sought to be illustrated in these modifications is the position of the track in that portion which extends from the tread to the bead D, as shown at *a*, which in the modified forms is shown to be on an inclination. The purpose is to cause the track to shed water and snow from this portion of the track, as well as from the outer portion of the tread, to prevent the formation of ice. These modified forms will be specially useful in that part of the country where the climate is severe enough to cause freezing. In Fig. 7 the tread of the track is developed into an angle rather than a curved formation.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a door-hanger, a track structure comprising a relatively broad tread portion of arched form, and a continuous flat supporting-flange extending laterally therefrom, in combination with supporting-brackets, each comprising two parallel arms adapted to receive and hold between them the flat support-

ing-flange of the track structure, one of said arms being provided with a projection to engage the track structure and prevent its lateral separation from the bracket, substantially as described.

2. In a door-hanger, a track comprising a relatively broad tread portion or track proper, and a continuous flat portion or supporting-flange extending laterally therefrom and provided with a bead on its upper surface at the margin thereof, in combination with supporting-brackets, each comprising a flat arm extending under the supporting-flange of the track and a hooked arm engaging the bead thereof, substantially as described.

3. In a door-hanger, a track composed of a plurality of sections, each having a tread portion or track proper and a lateral engaging portion, said sections being alined so that their meeting ends abut, in combination with supporting-brackets located at the ends of the track and at the meeting ends of the sections, each supporting-bracket being provided with means for engaging the lateral engaging portion of the track, so as to prevent lateral movement thereof, and the end brackets being provided with end walls to prevent separation of the track-sections by longitudinal movement, the track-sections and brackets being free from fastening or connecting devices so as to be readily separable when the brackets are disconnected from their support, substantially as described.

4. In a door-hanger, a track composed of a plurality of sections, each having a tread portion and a flat lateral extension or supporting-flange, in combination with a supporting-bracket comprising two parallel arms adapted to receive and hold between them the flat supporting-flange of the track proper, one of said arms being provided with a projection to engage the track structure and prevent its lateral separation from the bracket, and end brackets similarly engaging the ends of the track-sections and provided with end walls to close the ends of the track and prevent separation by longitudinal movement of the track-sections, said end brackets also serving as stops for the hanger-pulleys, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

PHILIP A. MYERS.

Witnesses:

R. McD. TUBBS,
F. B. KELLOGG.