

No. 763,256.

PATENTED JUNE 21, 1904.

B. F. BURTIS.
HINGE.

APPLICATION FILED NOV. 9, 1903.

NO MODEL.

Fig. 1.

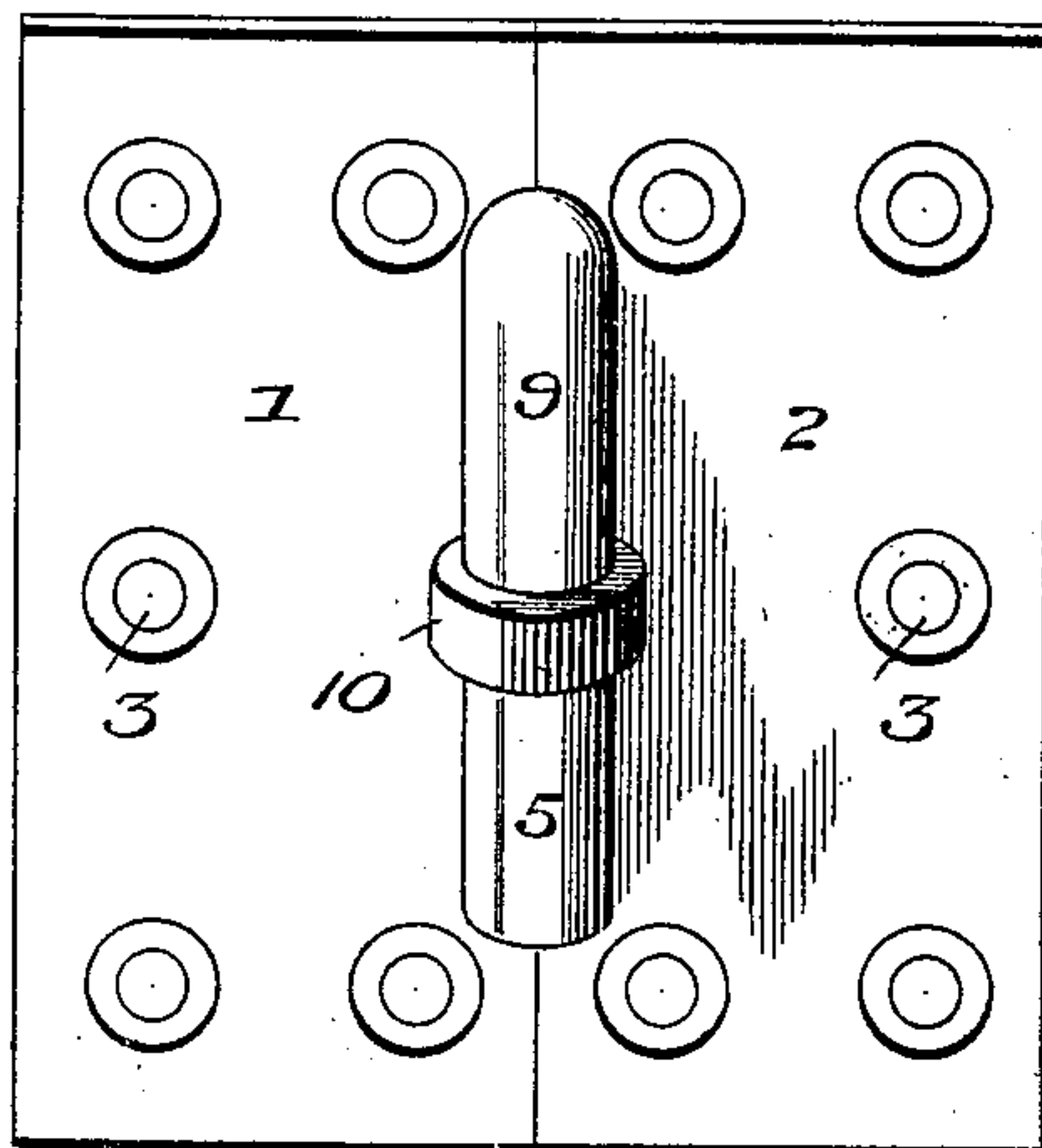


Fig. 2.

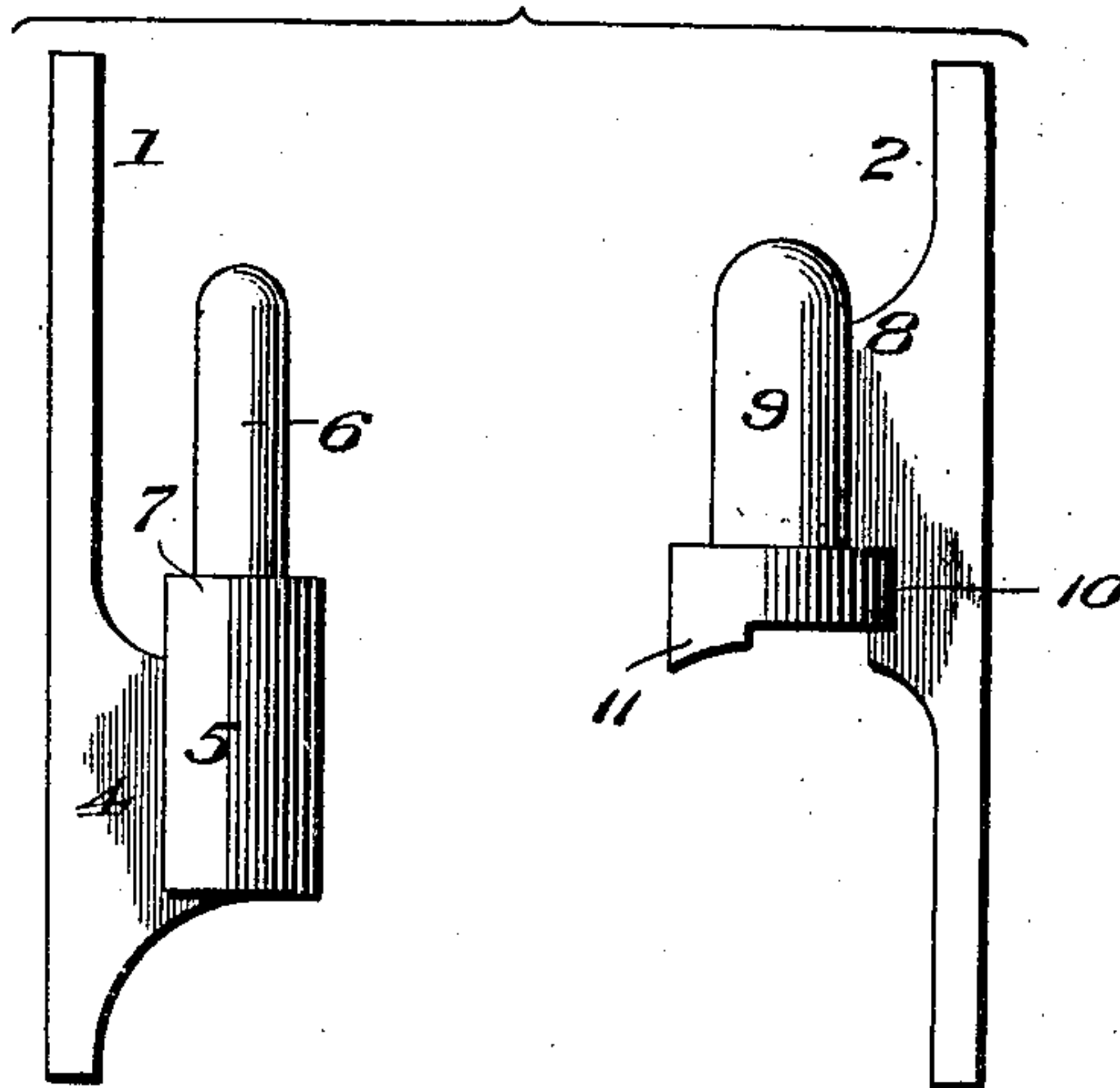


Fig. 3.

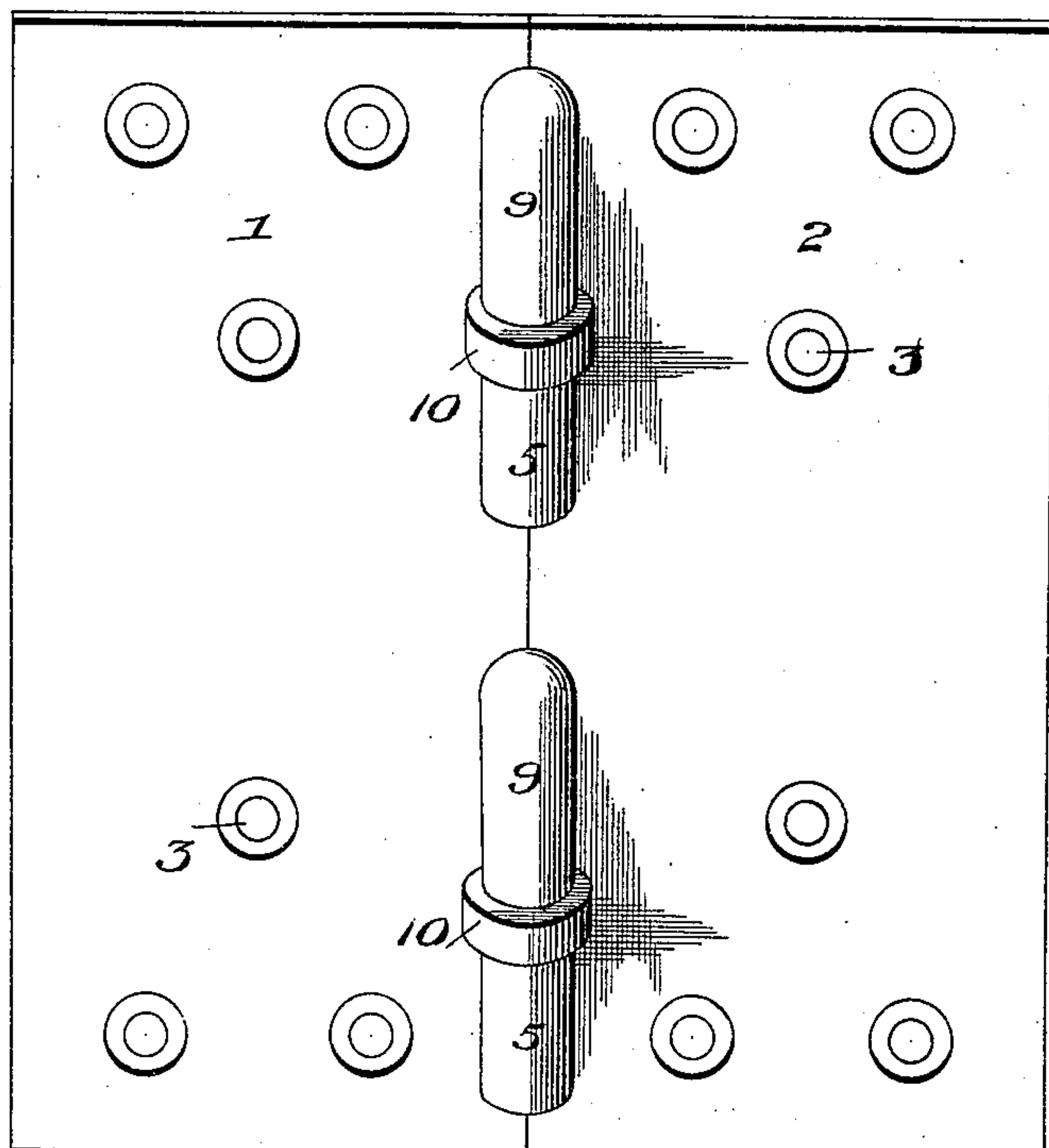
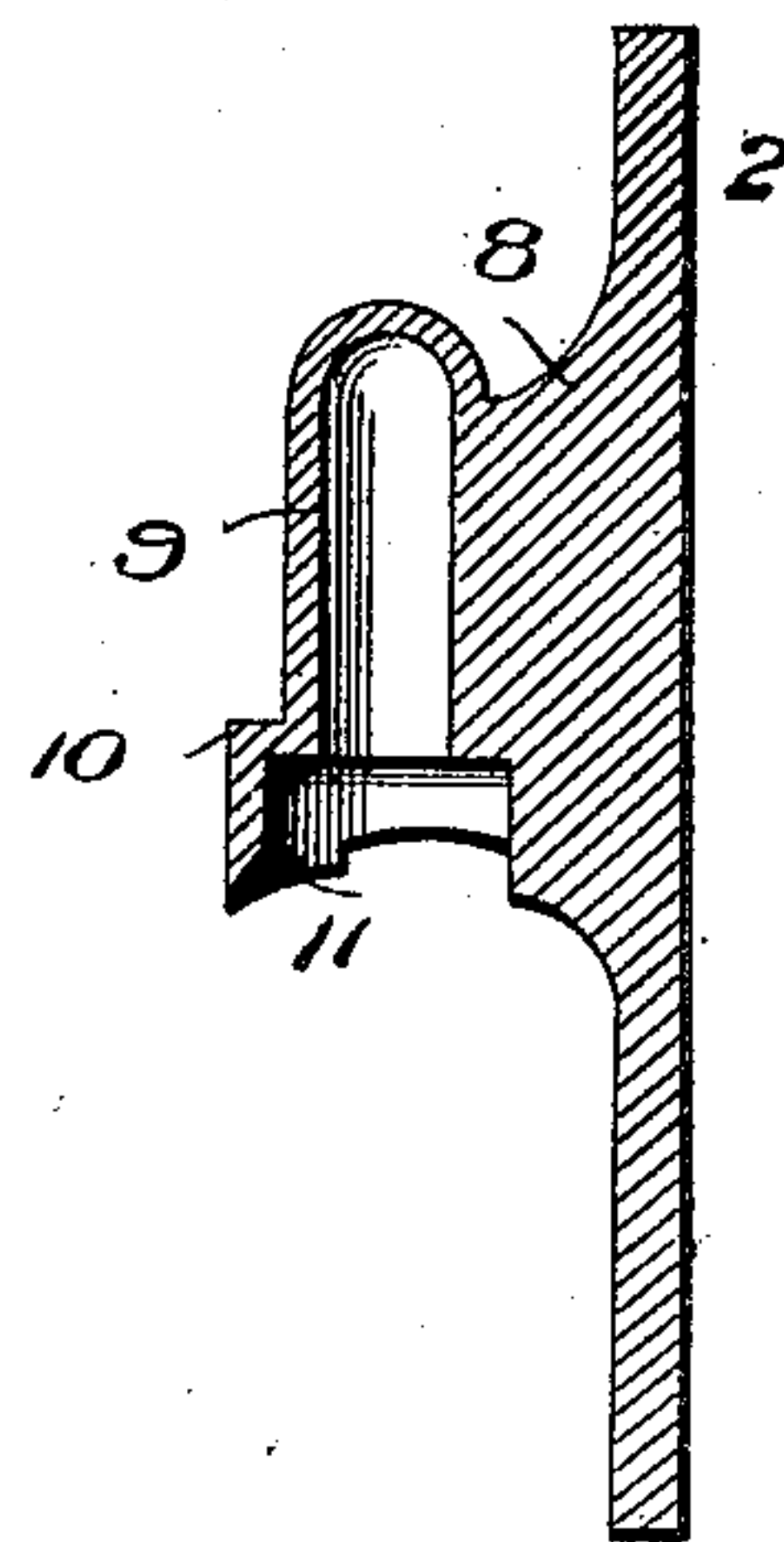


Fig. 4.



Witnesses

Wm. S. Thompson
Geo S Thompson

Inventor

Benjamin F. Burtis
By *J. W. Cleary*
Attorney

UNITED STATES PATENT OFFICE.

BENJAMIN F. BURTIS, OF GRAVESEND BEACH, NEW YORK.

HINGE.

SPECIFICATION forming part of Letters Patent No. 763,256, dated June 21, 1904.

Application filed November 9, 1903. Serial No. 180,426. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. BURTIS, a citizen of the United States, residing at Gravesend Beach, in the county of Kings and State of New York, have invented certain new and useful Improvements in Hinges, of which the following is a specification.

My invention relates to hinges adapted for general use on doors, gates, window-shutters, &c., but specially designed for outdoor use.

The primary object of the invention is to provide a hinge so constructed that the hinge members may be easily connected, thus avoiding the difficulty incident to hanging window-shutters or outside doors or gates, especially in windy weather.

A further object of the invention is to provide a hinge in which the pivot-pintle will be protected from undue strain, as well as from rust or dirt, thus affording a strong and durable hinge.

The construction of the improvement will be fully described hereinafter in connection with the accompanying drawings, which form part of this specification, and its novel features will be defined in the appended claim.

In the drawings, Figure 1 is a view in perspective of the hinge with its two members connected. Fig. 2 is a side elevation or edge view of the two hinge members disconnected. Fig. 3 is a perspective view of a modified construction, the two hinge members being connected; and Fig. 4 is a vertical section of one of the hinge members, showing more clearly the depending guiding-lug thereof.

The reference-numerals 1 and 2 designate two plates or leaves formed with screw-holes 3. The leaf 1 is formed with an integral web or shank 4, having a cylindrical enlargement or projection 5, from which projects a pintle 6, rounded at its upper end to avoid flat or projecting edges which would obstruct the cap portion of the other hinge member in fitting the two members together and to lessen friction and insure the proper centering of the cap and pintle.

The upper portion of the cylindrical projection 5 forms an annular shoulder 7, serving as a seat for the cap of the hinge member 2.

The leaf or plate 2 is formed with a web or shank 8 and a cylindrical cap 9, dome-shaped at its upper end to conform to the rounded upper end of the pintle and having at its lower end an annular depending flange 10 to overlap the upper portion of the cylindrical projection 5 of the member 1.

The lower edge of the cap 9 rests upon the annular shoulder 7 of the projection 5 of the member 1, which affords a continuous extended bearing for the cylindrical cap and effectually prevents all lateral or bending strain upon the pintle 6, greatly adding to the ease of movement of the hinge member 2 and the durability of the entire hinge.

From the lower edge of the flange 10, at one side thereof, is a depending lug 11, beveled on its inner side to present an inclined guiding-surface for the rounded end of the pintle to facilitate the connection of the hinge members.

As illustrated in Fig. 2, when the two members are connected the annular flange 10 of the cap overlaps the upper end of the cylindrical projection 5, and thus protects the pintle from rain and snow, as well as from clogging by dirt and dust.

The difficulty of alining the socket members of two hinges with the pintle members is well known, and a distinguishing feature of the present invention is the avoidance of this annoyance and loss of time by providing the beveled depending lug 11 on the cap member of the hinge to contact with the rounded upper end of the pintle and guide it into the cap or socket.

The dome-shaped upper end of the pintle not only facilitates its insertion into the cap, but also materially facilitates the turning of the cap member thereon, as the friction incident to contacting flat surfaces is avoided.

As will be apparent from the drawings, the pintle is covered and protected throughout its length and around and below its point of juncture with the projection 5, and the clogging of the hinge or its deterioration by dampness and rust are thus prevented.

The modified construction illustrated in Fig. 3 shows a double hinge, one member having two pintles and the other two caps co-

acting with the pintles. This form of hinge is desirable for heavy gates and shutters.

I claim—

5 A hinge, comprising two members, one consisting of a leaf having a web projecting therefrom, a cylindrical projection from said web, the upper end of which forms an annular shoulder, and a pintle extending upward from said projection and rounded at its upper end;
10 and the other member consisting of a leaf having a projecting web, a dome-shaped cap projecting from the web and having a depending annular flange bearing on said shoulder,

and a beveled lug depending from said cap to guide the pintle into the cap, said lug being offset from, and extending below the lower edge or bearing surface of the flange of the cap, and overlapping the cylindrical projection of the pintle member. 15

In testimony whereof I affix my signature in presence of two witnesses. 20

BENJAMIN F. BURTIS.

Witnesses:

FRANK D. KENNA,
FREDERICK SNYDER.