No. 780,136. PATENTED JAN. 17, 1905.

I. E. SLOAN.

HINGE.

APPLICATION FILED FEB. 29, 1904.

Fig. 1.

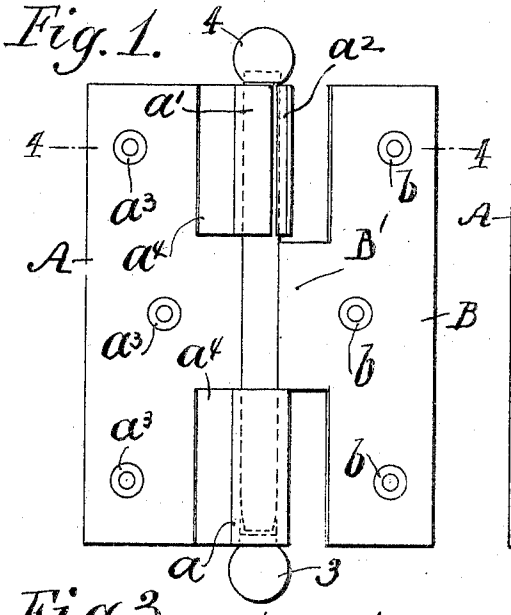


Fig. 2.

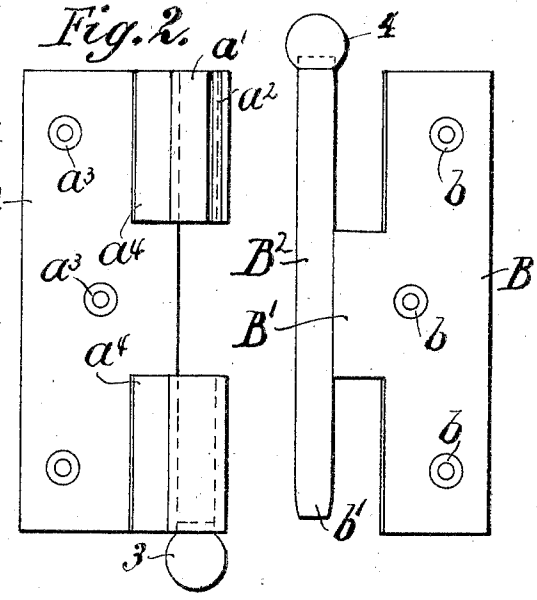


Fig. 3.

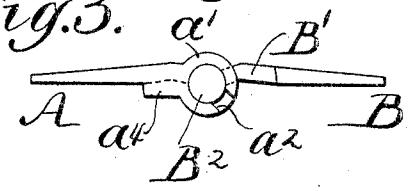


Fig. 5.

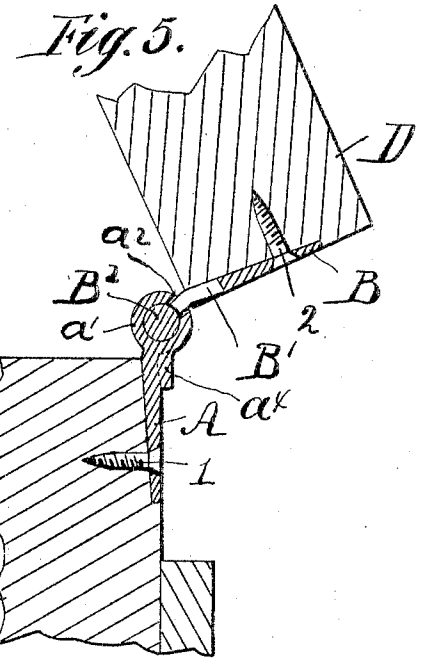
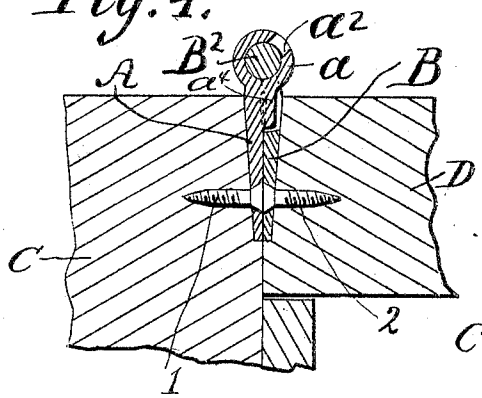


Fig. 4.



WITNESSES:

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No. 780,136. Patented January 17, 1905.

UNITED STATES PATENT OFFICE.

IRA EDUND SLOAN, OF JOHNSTOWN, PENNSYLVANIA.

HINGE.

SPECIFICATION forming part of Letters Patent No. 780,136, dated January 17, 1905.

Application filed February 29, 1904. Serial No. 195,722.

To all whom it may concern:

Be it known that I, IRA EDUND SLOAN, a citizen of the United States, and a resident of Johnstown, county of Cambria, and State of Pennsylvania, have invented certain new and useful Improvements in Hinges, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar characters of reference indicate corresponding parts.

This invention relates to hinges, the object thereof being to provide a device of this character which embodies separable parts in slidable and swinging connection with each other, whereby one part may be in permanent connection with a door-frame and the other with a door, in such a manner that the door may be alternately hung and removed without detaching any part of the hinge, respectively, from its frame or door.

In carrying out my invention I employ a hinge embodying two leaves, one having a socket and bearing formed integral for engaging the spindle and the other having an integrally-formed spindle, whereby when the two leaves are disconnected all liability of mislaying the spindle is obviated.

The invention will be hereinafter fully described and specifically set forth in the annexed claim.

In the accompanying drawings, forming part of this specification, Figure 1 is an inside face view of my improved hinge, showing the two leaves connected; Fig. 2, a similar view showing the leaves disconnected. Fig. 3 is a plan view. Fig. 4 is a sectional plan view of the hinge, taken on the line 4 4 of Fig. 1 and showing the same in connection with a door and frame, the door being closed; and Fig. 5 is a sectional plan view showing the door swung open in position for removal.

In the practice of my invention I employ two metallic leaves or plates A B. Forming an integral part of the plate A is a cylindrical bearing embodying the vertically-alined parts a a', the upper part a' having a central cylindrical channel extending through its whole length, open at each end and having a slot a^2 therein reaching through its whole length and extending into said channel, which is arranged at an angle to the plate A. The part a is bored with a central channel which extends through its whole length and is alined with the channel in the part a'. The plate A is also provided with countersunk openings a^3 for receiving fastening-screws 1. The plate B is provided with a tongue B′, having the spindle B^2 formed integral thereon, and countersunk openings b for engaging the screws 2. The spindle B^2 has a tapered lower end b' to facilitate the operation of connecting the parts. Each plate A B is tapered in cross-sectional elevation, the plate A having raised shoulders a^4, which strengthen the general structure and form bearings for the tongue B′.

The lower end part a of the bearing forming part of the plate A is preferably closed by means of a plug embodying ornamentation or finish for the hinge, as the sphere 3, and the upper end of the spindle B^2 is similarly ornamented by the sphere 4, or other more elaborate ornamental devices may be provided, if desirable.

In the operation and use of the invention the plate A is countersunk into and secured to the door-frame, as C, by means of the screws 1, and the plate B is secured to the door, as D, by the screws 2. Then to hang the door it is simply necessary to place the two parts of the hinge (the part B over the part A) in relative arrangement, as shown by Fig. 5 of the drawings, and allow the spindle to slide down within its bearings, the tongue B′ passing through the slot a^2 until it bears upon the upper end of the lower section a, forming part of the bearing. Then the door can be swung into closed position, as shown by Fig. 4 of the drawings, or any other desirable position. To remove the door, the same operation is necessary in a reverse direction—that is, after the tongue B′ is placed in alinement with the slot a^2 the door is lifted until the spindle B^2 is free from its bearings.

I do not confine myself to the specific contour nor proportions of the device as hereinbefore described, as it is obvious that under the scope of my invention I am entitled to structural variations.

Having now described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

A hinge comprising two separable leaves one having a bearing embodying an upper shoulder and cylindrical section which is open at each end and has a slot extended through its entire length, and a lower cylindrical section having a shoulder and a central channel which is closed at its lower end, the other having a central tongue and a spindle thereon, said spindle engaging the two said bearing-sections, and said tongue operating between them, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 14th day of February, 1904.

IRA EDUND SLOAN.

Witnesses:
MACK DEATER,
EDWARD E. LEVERGOOD.