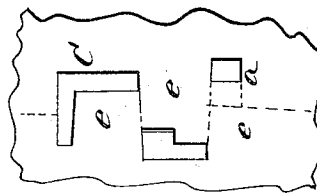
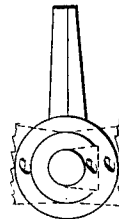
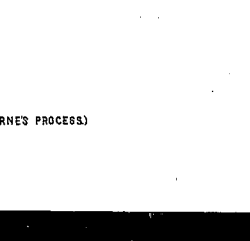
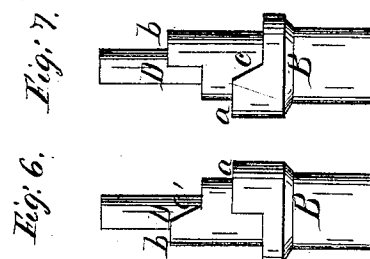
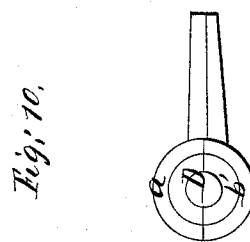
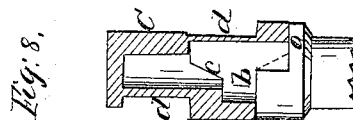
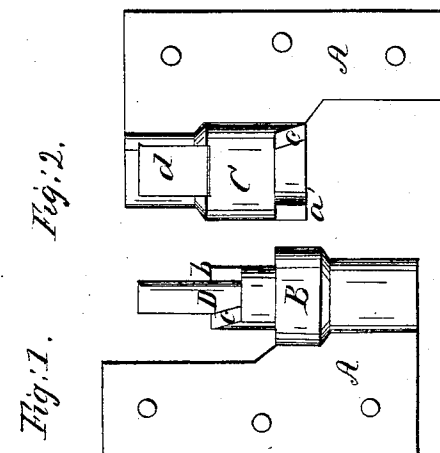
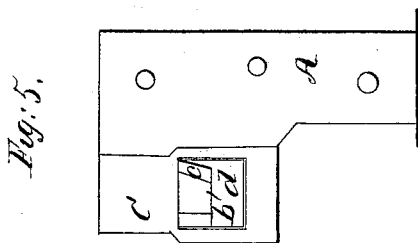
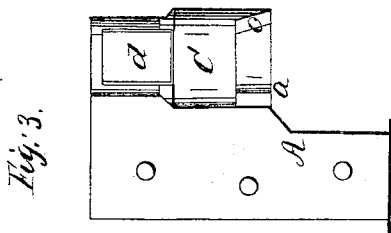
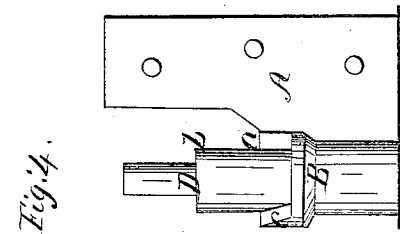


J. D. Browne,

Lock Hinge.

N^o 16,678.

Patented Feb. 24, 1857.



UNITED STATES PATENT OFFICE.

J. D. BROWNE, OF CINCINNATI, OHIO.

HINGE.

Specification of Letters Patent No. 16,678, dated February 24, 1857.

To all whom it may concern:

Be it known that I, JOHN DAVID BROWNE, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in the Construction and Making of Hinges; and I do hereby declare that the following is a full and exact description of the same, reference being had to the annexed drawings, making part of this specification, in which—

Figures 1 and 2, are elevations of the two parts of a hinge with my improvement, (gravitating when opened). Figs. 3 and 4, are also views of the two parts of a hinge, (gravitating in closing). Fig. 5 is a view of the socket part of a hinge, the reverse side of Figs. 2 and 3. Figs. 6 and 7 are side views of the spindle or pin part of a hinge. Figs. 8 and 9 are vertical sections of the socket part of a hinge. Fig. 10 is a horizontal section of the bearings of the hinges. Fig. 11 is a horizontal section of the socket part of hinge.

Similar letters of reference indicate corresponding parts in the several figures.

The nature of my invention consists in making one part of the bearing of the double inclined plane joint hinge concentric to the other part, by which means a much larger horizontal bearing is obtained.

To enable others skilled in the art to fully understand and construct my invention I will proceed to describe it.

A represents the plate of a hinge; B, the knuckle carrying the spindle or pin D.

C is the socket part fitting on spindle D.

a, a' , are the outer horizontal bearings.

b, b' , are the inner horizontal bearings.

c, c' , are the inclined planes on which the upper part of the hinge rises and gravitates.

d, d' , represent the openings in the opposite sides of the socket, C, for the purpose of forming its own core e, e, e' .

The dotted lines Fig. 9 represent where the core is parted one part of the core being formed in the drag or lower part of a flask, the other part of the core in the cope or upper part of a flask.

In Fig. 10, is shown a horizontal plan of the hinge in which a, b , are the shoulders or bearings, the part, b , being of a less diameter and within the part, a , is concentric to it, D, being the spindle or common center.

By making one part of the bearing of a less diameter than the other part, it necessarily follows that the smaller part, b , must be raised above the larger part, a , not less than the height of the inclines, c , as shown in Figs. 6 and 7. By this mode of arrangement the hinge is more durable, it having a much larger horizontal bearing surface; and when made as shown in Figs. 1 and 2 gravitating when opened. It is not so liable to wear which causes them to drop or swag in closing; and when made as shown in Figs. 3 and 4 gravitating in closing, it can be opened or turned further around.

I do not claim the inclined planes on the joints or bearings of a hinge as they are well known.

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

In making one part b , of the bearings of a hinge concentric to the other part, a , as herein described and set forth.

JOHN DAVID BROWNE.

Witnesses:

F. H. ROWEKAMP,

B. HOUSMAN.