

(No Model.)

E. W. PHILBROOK.
FRICTION HINGE.

No. 544,071.

Patented Aug. 6, 1895.

Fig. 1.

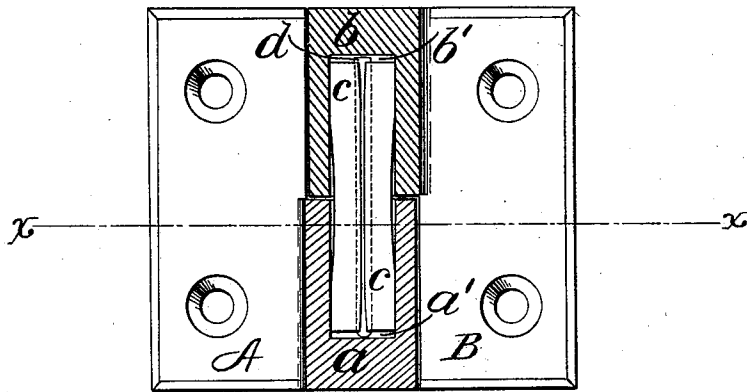


Fig. 2.

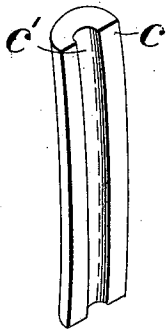
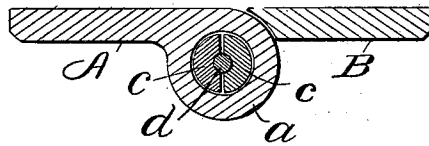


Fig. 4.

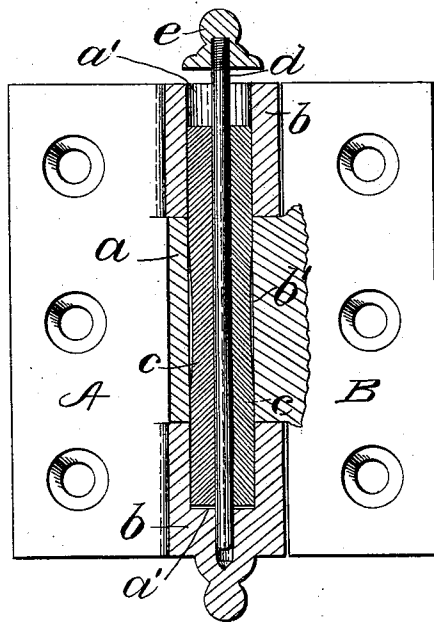


Fig. 3.

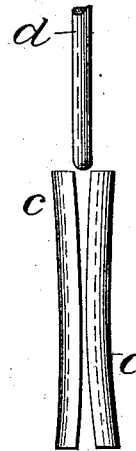


Fig. 5.

Witnesses,
W. Ross Edelen,
J. W. Lewis.

Inventor,
Emeline W. Philbrook,
by J. S. Adams,
her attorney.

UNITED STATES PATENT OFFICE.

EMMELINE W. PHILBROOK, OF BOSTON, MASSACHUSETTS.

FRICTION-HINGE.

SPECIFICATION forming part of Letters Patent No. 544,071, dated August 6, 1895.

Application filed January 31, 1895. Serial No. 536,864. (No model.)

To all whom it may concern:

Be it known that I, EMMELINE W. PHILBROOK, of Boston, Massachusetts, have invented a new and useful Improvement in Friction-Hinges, which improvement is fully set forth in the following specification.

The present invention relates to friction-hinges, and particularly to those wherein the friction is produced by a split pin or pintle which presses against the inner walls of the sockets in the knuckles thereof.

The object of this invention is to increase the friction ordinarily attained in such devices, whereby heavier objects may be supported, and also to produce other advantageous results, which will be apparent from the following description. This I accomplish by forming the pivot-pin or pintle of the hinge in two semicylindrical parts, each bowed or curved inwardly at the middle thereof and preferably having a corresponding groove along its flat face, in which is located a small rod or wire. When the pivot-pin is placed in position in the sockets formed in the knuckles, this small rod acts as a wedge to force the inwardly-bowed portions of the semicylindrical parts into contact with the wall of the sockets, thereby increasing the friction-surface over that attained where only the ends of the pin make such contact.

Other features of the invention will be seen by reference to the accompanying drawings, wherein—

Figure 1 is a vertical sectional view through a friction-hinge constructed in accordance with my invention. Fig. 2 is a horizontal section on line *x x* of Fig. 1. Fig. 3 is a view similar to Fig. 1 of a different style of hinge, showing the manner of putting the pin or pintle in place. Fig. 4 is a detail of one of the semicylindrical parts of the pin or pintle, and Fig. 5 is a detail of the complete pivot-pin before it is forced into place in the sockets.

Referring to the drawings, A and B represent the leaves of the hinge; *a b*, the knuckles, and *a' b'* the sockets therein. *c c* are the semicylindrical parts constituting the pivot pin or pintle, bowed toward each other at the

middle and each having a corresponding longitudinal groove *c'* along the flat face thereof. A small rod or pin *d* lies in said grooves *c' c'* and serves when the parts are in position to force the bowed portions of the parts *c c* outwardly, increasing the contact-surface between the same and the walls of sockets *a' b'* and also the friction.

The parts of the hinge, as above described, may be assembled in any suitable manner with the assistance of suitable apparatus.

In Fig. 3, I have illustrated a style of hinge wherein the knuckles have interlocking portions. In order to facilitate the introduction of the semicylindrical parts *c c* of the pivot-pin and the rod *d* into the sockets *a' b'*, I preferably extend the former entirely through its knuckle *b*, and after having put the parts *c c* in proper position drive the rod *d* to its place. Of course the pin can be applied to other styles of hinge in this manner. An ornamental knob or button *e* can be screwed onto the end of rod *d*, which may be left projecting above knuckle *a*.

What I claim is—

1. In a friction hinge, the combination with the leaves, of a pin or pintle therefor comprising two semi-cylindrical parts having their flat faces adjacent, and correspondingly bowed or bent toward each other, and a rod between said parts for forcing them apart, substantially as described.

2. In a friction hinge, the combination with the leaves, of a pin or pintle for connecting the same, comprising two semi-cylindrical parts having their flat faces adjacent, each having a longitudinal groove along said faces and being correspondingly bowed or bent in opposite directions, and a rod or pin in said groove, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

EMMELINE W. PHILBROOK.

Witnesses:

H. G. ALLEN,
NORMAN M. NYE.