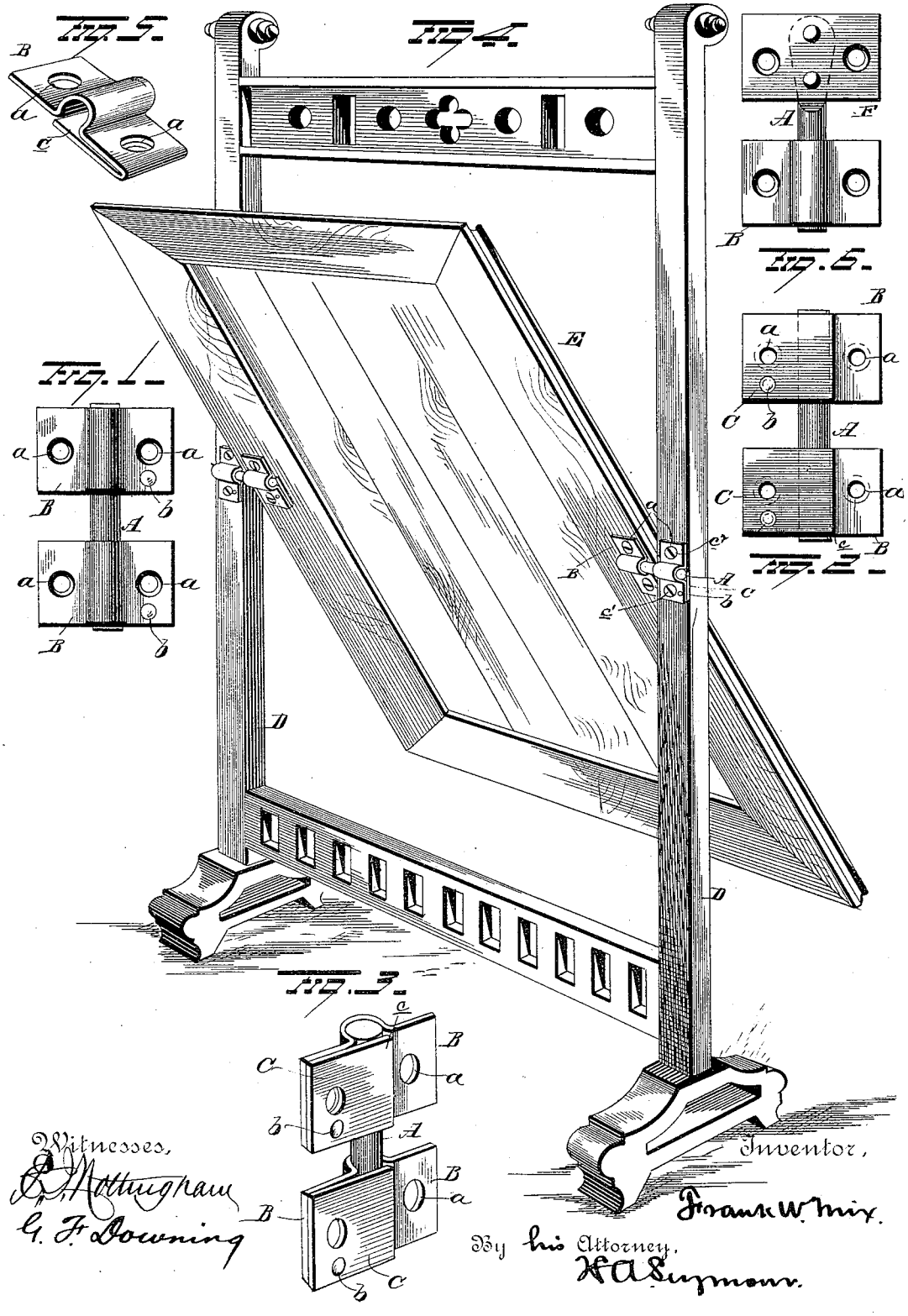
(No Model.)

F. W. MIX.

FRICTION HINGE.

No. 379,901. Patented Mar. 20, 1888.



N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

FRANK W. MIX, OF NEW BRITAIN, CONNECTICUT.

FRICTION-HINGE.

SPECIFICATION forming part of Letters Patent No. 379,901, dated March 20, 1888.

Application filed September 10, 1887. Serial No. 249,337. (No model.)

To all whom it may concern:

Be it known that I, FRANK W. MIX, of New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Friction-Hinges; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in friction-hinges, the object being to provide a hinge which shall be simple and economical in its construction, and in which the frictional contact between the leaves and the pintle shall be sufficient to retain the movable portion to which the hinge is secured at any desired angle of inclination.

With these ends in view the invention consists in certain features of construction and combinations of parts in a friction-hinge, and will hereinafter be described, and pointed out in the claim.

In the accompanying drawings, Figure 1 is a plan view of the upper side of my improved hinge. Fig. 2 is a similar view of the under side. Fig. 3 is a perspective view. Fig. 4 is a view in perspective of the hinge applied to the standard and swinging frame of a mirror, and Figs. 5 and 6 are modifications.

A represents the pintle, and B B the hinge-leaves. Each leaf B is provided with screw-holes *a a*—two or more in number—and located on opposite sides of the pintle, thereby enabling the hinge to be firmly secured in place. On the under side of each leaf, and near the outer end thereof, is secured the outer end of a friction-plate, C, by a rivet, *b;* or instead of forming the friction-plate separately and riveting it to the hinge-leaf it may be made part of the latter and turned underneath, as illustrated in Fig. 5. The inner and free end, *c*, of the friction-plate bears in snug frictional contact against the under side of the pintle, so that the leaf will be retained by its frictional contact with the pintle in any angular adjustment to which it may be turned.

Fig. 4 represents the improved hinge applied to the standard D and swinging frame E of a mirror. It will be observed that each leaf is secured to its support by screws located on opposite sides of the pintle, and hence a strong and reliable fastening is insured. Again, as each leaf projects but slightly outward from the surface of the article to which it is attached, the hinge presents a neat and finished appearance when applied for use. By mortising the wood very slightly the hinge may be let into the wood flush with its surface. The friction-plate constitutes a firm and extended bearing for the hinge and its pintle, and by means of screw *c'* that portion of the leaf provided with the friction-plate is fastened solidly to the article to which the hinge is applied. The other half of the leaf is separated from its bearing only by the thickness of the friction-plate, so that by tightening or loosening the screw *c'* any desired degree of friction between the friction-plate and pintle may be secured.

The friction-plate not only serves to impart a frictional bearing on the pintle, but also affords an extended bearing for the hinge, and further serves as a keeper for the pintle, and prevents its displacement both before and after the hinge is applied.

When applied as illustrated in Fig. 4, the swinging frame E will be retained in place at any angle to which it may be turned.

Instead of employing two leaves B B, one may be dispensed with in some cases, and the hinge be constructed as illustrated in Fig. 6, wherein a plate, F, is rigidly secured to one end of the pintle to enable the latter to be rigidly fastened in placed.

As it is evident that slight changes in the construction and relative arrangement of parts of my improved hinge might be resorted to without departing from the spirit and scope of my invention, I would have it understood that I do not restrict myself to the particular construction and arrangement of parts shown and described; but,

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

A friction-hinge consisting, essentially, of a pintle and a leaf, the latter having a con-

cave bearing for one end of the pintle, and a friction-plate free at one end and secured at its other end to the leaf, the said friction-plate bearing on the pintle and preventing the latter by its frictional contact therewith from accidentally turning, substantially as set forth.

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

FRANK W. MIX.

Witnesses:
FRANK K. WETMORE,
OLIVER STANLEY.