(No Model.)

F. L. SCHEIDEMANN & F. W. BENDER.

HINGE.

No. 373,611. Patented Nov. 22, 1887.

Fig: 1.

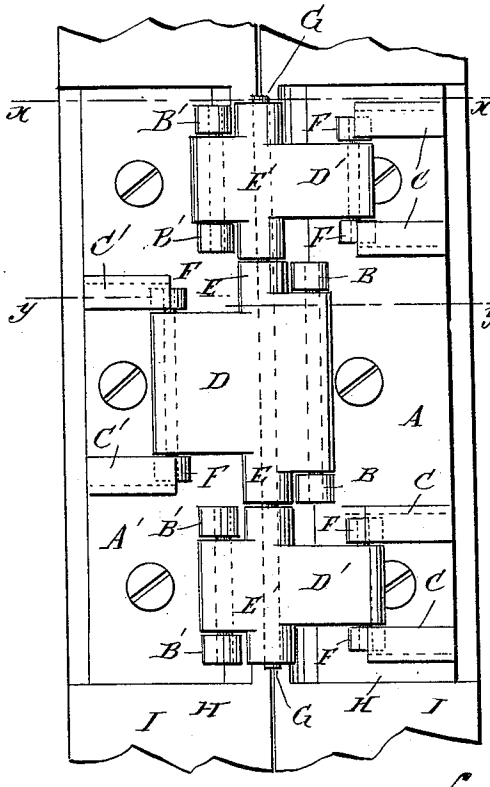


Fig: 2.

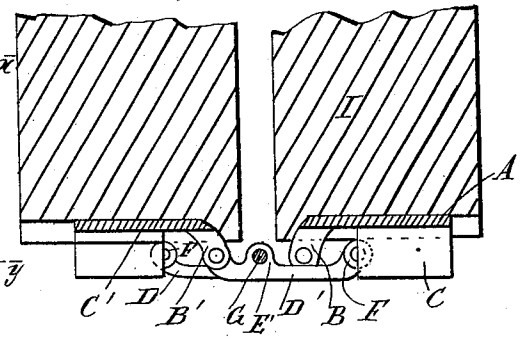


Fig: 3.

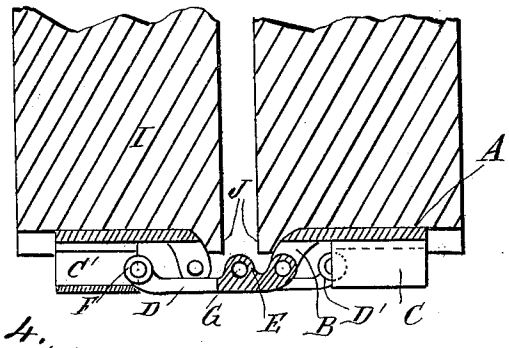
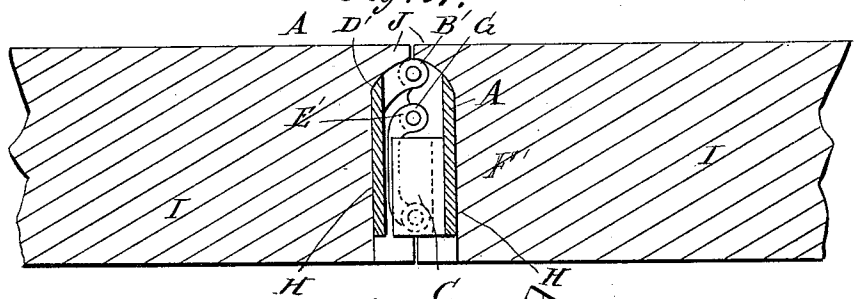


Fig: 4.



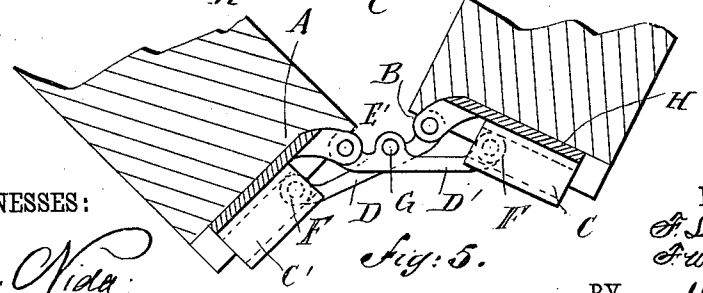


Fig: 5.

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FERDINAND L. SCHEIDEMANN AND FREDERICK W. BENDER, OF PHILADELPHIA, PENNSYLVANIA.

HINGE.

SPECIFICATION forming part of Letters Patent No. 373,611, dated November 22, 1887.

Application filed August 30, 1887. Serial No. 248,283. (No model.)

To all whom it may concern:

Be it known that we, FERDINAND L. SCHEIDEMANN and FREDERICK W. BENDER, both of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Improvement in Hinges, of which the following is a complete specification.

The object of our invention is to provide for use, particularly in fine cabinet-work, a practical hinge which may be applied so as to be invisible from outside the joint formed thereby when closed.

To this end in our improvement the hinge-leaves are combined with links having one end pivoted to either hinge-leaf and the other end adapted to travel on a guide on the opposite leaf, the links being connected pivotally together on a medial line nearer their pivotal than their traveling ends, substantially in the manner hereinafter described, and for the purpose set forth.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a face view of a hinge embodying our improvement when applied to make a joint and fully opened. Fig. 2 is a cross-section of the said hinge-joint on the line *x x*, Fig. 1. Fig. 3 is a cross-section of the same on the line *y y*, Fig. 1. Fig. 4 is a cross-section similar to that in Fig. 2, taken with the joint closed. Fig. 5 is a like cross section taken with the joint partially opened.

The hinge-leaf A is formed in this case at the middle of its inner edge with a pair of ears, B, and near its outer edge with, preferably, two pairs of transverse guides, C.

The hinge-leaf A′ is formed at the middle of its outer edge with a pair of guides, C′, and on its inner edge with, preferably, two pairs of ears, B′.

To and between the ears B is pivoted one end of a flat link, D, which is formed nearer said end than its free end with a transverse eye, E, and to opposite sides of the free end of which are pivoted friction-rollers F.

To and between each pair of ears B′ is also pivoted a flat link, D′, which is formed with an eye, E′, at a short distance from its pivotal end and has lateral friction-rollers F, like the link D.

The free end of the link D is adapted to travel between the guides C′ and the free ends of the links D′ between the respective guides C, the rollers F in each case running in straight ways formed in the guides and thereby serving to hold the free ends of the links to the respective hinge-leaves. The eyes E′ E of the several links being aligned, a hinge-pin, G, is passed through all the same to pivot the links together.

A mortise, H, is formed in each joint-section I to receive the respective hinge-leaf and attachments, said mortise terminating at a short distance from the outside joint-edge, so as to leave a rib, J.

The hinge-leaves A A′ being secured within the mortises in the usual way, so as to bring the hinge-pin G over the center line of the joint, as shown in Figs. 2 and 3, when the joint is closed, as in Fig. 4, the links will fold like a fan or scissors, and the ribs J on the two joint-sections I will meet outside the several ears B B′, so as to entirely conceal the hinge from that side of the joint. When the joint is opened, as in Fig. 5, the action of the scissors-like links is to automatically separate the two joint-sections, while allowing them to fold outward, so that the crushing of the edges of the joint, which would occur if the hinge-pin directly connected the two sections on a line, as in this case, within the joint, is prevented.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination of hinge-leaves, each provided with guideways, and links connected pivotally together and to either leaf, the free ends of said links arranged to run on the guideways, substantially as described.

2. The combination of hinge-leaves, each formed with a pair of guideways, links pivoted together and to either leaf and arranged to travel between the guides on the opposite leaf, and friction-rollers pivoted to the sides of the free end of each link and adapted to run within the guideways, substantially as shown and described.

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