(No Model.)

G. SCHUBERT & F. THIES.

HINGE.

No. 353,007. Patented Nov. 23, 1886.

Fig. 1.

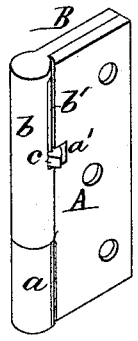


Fig. 2.

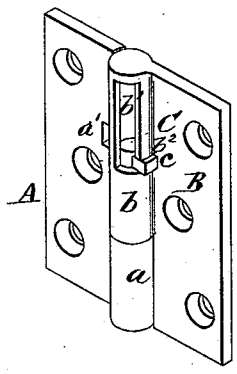


Fig. 3.

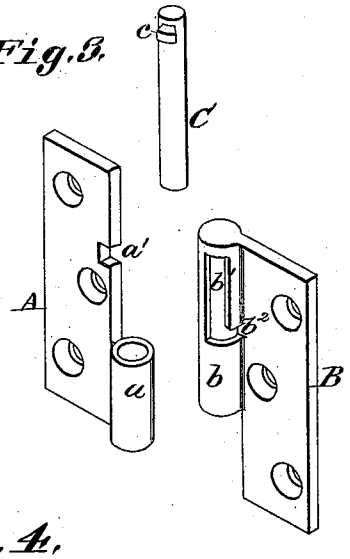


Fig. 4.

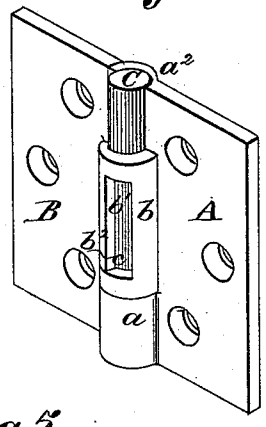
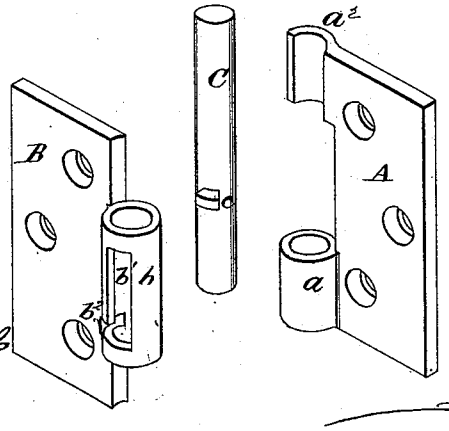


Fig. 5.



Attest:
F. A. Hopkins
Geo. L. Wheelock

Inventors:
George Schubert.
Frederick Thies.
By. Knight Bros.
Attys.

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

UNITED STATES PATENT OFFICE.

GEORGE SCHUBERT AND FREDERICK THIES, OF ST. LOUIS, MISSOURI.

HINGE.

SPECIFICATION forming part of Letters Patent No. 353,007, dated November 23, 1886.

Application filed February 16, 1886. Serial No. 192,103. (No model.)

To all whom it may concern:

Be it known that we, GEORGE SCHUBERT and FREDERICK THIES, both of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Hinges, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a perspective view of the hinge when closed. Fig. 2 is a perspective view when open. Fig. 3 is a perspective view with the parts separated. Fig. 4 is a perspective view of a modification, showing the hinge open; and Fig. 5 is a perspective view of the parts separated.

The hinge, as shown in Figs. 1, 2, and 3, will be first described. A and B are the two plates of the hinge. The plate A is fixed to the side of the window or door or other object, and the plate B fixed to the shutter or door, which is hinged to the other object. The plate A is shown with a pintle-socket, *a*, extending about one-third of its length, and the plate B is shown with a pintle-socket, *b*, extending about two-thirds of its length.. C is the pintle, which is shown about two-thirds of the length of one of the plates. When the hinge is in working position, the pintle occupies the socket *a* and the lower part of the socket *b*. *c* is a stud upon the pintle, which limits the ascent and descent of the pintle in the sockets. *b'* is a slot made in the side of the socket *b*, to allow the upward movement of the stud when withdrawing the pintle from the socket *a* to allow the plates to be disconnected. Where the door or shutter can be lifted bodily, it may be disconnected from the object to which it is hinged by a simple upward movement without lifting the pintle in the part B. b^2 is a side notch, into which the stud *c* may retreat when the hinge is folded up, as seen in Fig. 1. While the stud is in the notch the pintle cannot be raised in the sockets, so that when the hinge is closed the pintle cannot be moved upward.

In the modification shown in Figs. 4 and 5 the pintle is shown the full length of the plates A and B. In this case, as in the other, the stud *c* works in a slot, *b'*, which is closed at both ends, so that the pintle cannot be removed from the socket *b*, while it admits of sufficient upward movement to disengage it from the socket *a* and allow the parts A B of the hinge to be separated from each other, the pintle moving sidewise out of the half or semicircular socket a^2 upon the upper part of the plate A.

It will be observed that in both forms of the device the slot *b'* is closed at both ends, the object being to prevent the pintle becoming detached from the leaf of the hinge which has the slotted socket. The stud *c* is secured to the pintle C by any suitable means after the latter is put in place—as, for example, by driving it into a mortise cut in said pintle for the purpose. The pintle, when once in place, being incapable of being removed, it is obvious that the slot *b'* should be of sufficient length to allow of its being elevated until its lower extremity is withdrawn from the lower socket, *a*. In other words, the length of the slot *b'* should at least be equal to the length of so much of the pintle as is received within the socket *a* plus the thickness of the stud *c*. Where the stud *c* projects beyond the outside of the socket *b* a notch, *a'*, is made in the plate A, to allow the hinge-plates to be folded flat together. (See Fig. 1.)

This hinge is intended more especially for inside shutters, but may be used in many other places.

We claim as our invention—

The combination, with the part or leaf A, having the pintle-socket *a*, and the part or leaf B, having the pintle-socket *b*, the latter having the slot *b'*, closed at both ends, of the pintle C, having the stud *c*, working in said slot, whereby said pintle is allowed a limited movement within its socket, but held against removal therefrom, substantially as set forth.

GEORGE SCHUBERT.
FREDERICK THIES.

Witnesses:
SAML. KNIGHT,
EDW. S. KNIGHT.