(No Model.)

N. W. MOTTINGER.

HINGE.

No. 481,044. Patented Aug. 16, 1892.

Fig. 1.

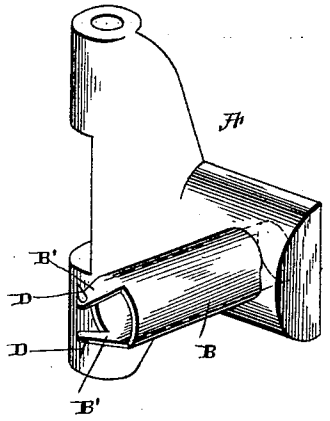
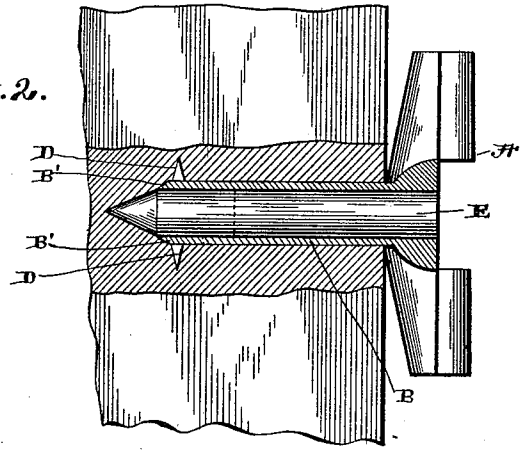


Fig. 2.



WITNESSES—
Geo. E. Freeh.
Roland A. Fitzgerald

INVENTOR—
Noah W. Mottinger
per Lehmann Pattison & Nesbit
Attys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

NOAH W. MOTTINGER, OF AKRON, OHIO, ASSIGNOR OF ONE-HALF TO SIMON MOTTINGER, OF SUFFOLK, VIRGINIA.

HINGE.

SPECIFICATION forming part of Letters Patent No. 481,044, dated August 16, 1892.

Application filed December 19, 1891. Serial No. 415,593. (No model.)

To all whom it may concern:

Be it known that I, NOAH W. MOTTINGER, of Akron, in the county of Summit and State of Ohio, have invented certain new and useful Improvements in 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in hinges; and it consists in forming the sections of the hinge each with an inwardly-extending hollow shank, which is forced in an opening in the door, door-casing, or other object to which the hinge is applied and which is secured therein by means of spurs on the inner end of the shank, which are spread outward, so as to engage the wall of the opening into which the shank is inserted, by means of a pin or plug being driven therein.

The object of my invention is to provide a simple yet effective way of securing the members of a hinge into their respective positions.

Referring to the accompanying drawings, Figure 1 is a detached perspective view of a hinge-section provided with my improvement. Fig. 2 is a sectional view showing the same in position in a door-casing or other object.

A represents a hinge-section of any preferred construction, and B an inwardly-extending shank made hollow, as shown, and formed integral with the section A. Formed on opposite sides of the inner end of this hollow shank portion are the wrought-metal arms B′, which before the hinge-section has been secured in place are bent inward, as shown in Fig. 1. Formed on the outer sides of the outer ends of these arms are the spurs D. The object to which the hinge-section is secured is provided with an opening, as shown in Fig. 2, and into this opening the shank portion of the hinge is forced. A pin or plug E is then driven into the opening in the shank, and when the inwardly-bent arms B′ are reached by the pin they are forced outward, projecting the spurs into the wall of the opening in the object to which the hinge is being secured. The opening in the shank portion being thus filled by the pin is not at all unsightly, and at the same time the spurs D are prevented from working inward, which would result in losing their hold. By this means a very simple yet effective hinge-securing means is provided. All screws are dispensed with and the cost of the hinge thereby greatly lessened.

I do not herein claim a slotted shank or an expansible shank or a shank having spring-spurred arms and screw means for expanding the arms. The important feature of my invention is the stiff, strong, tubular shank, which is not cut, slit, or otherwise decreased in strength and which has the opposite short pliable arms projecting inwardly and longitudinally from the end of the tube, so that the spurs on the outer ends of the arms will not engage the wall of the aperture when the tube is being forced in. After the tube is forced into its seat suitable means is provided to bend said arms out to throw the spurs into the wood, also to close the outer open end of the tube.

Having thus described my invention, I claim—

The hinge-leaf having a strong extended non-slitted tubular shank B integral with said leaf and provided at its inner extremity with the short pliable projecting arms B′ B′, extending inwardly and longitudinally, as described, and having the spurs on their outer sides, and means, substantially as shown, to bend said arms out straight when the shank has been inserted and to close the outer end of the shank, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

NOAH W. MOTTINGER.

Witnesses:
A. B. TINKER,
ABBY L. OLIN.