

M. S. NOLAN.
HINGE.
APPLICATION FILED FEB. 25, 1908.

900,579.

Patented Oct. 6, 1908.

Fig 1.

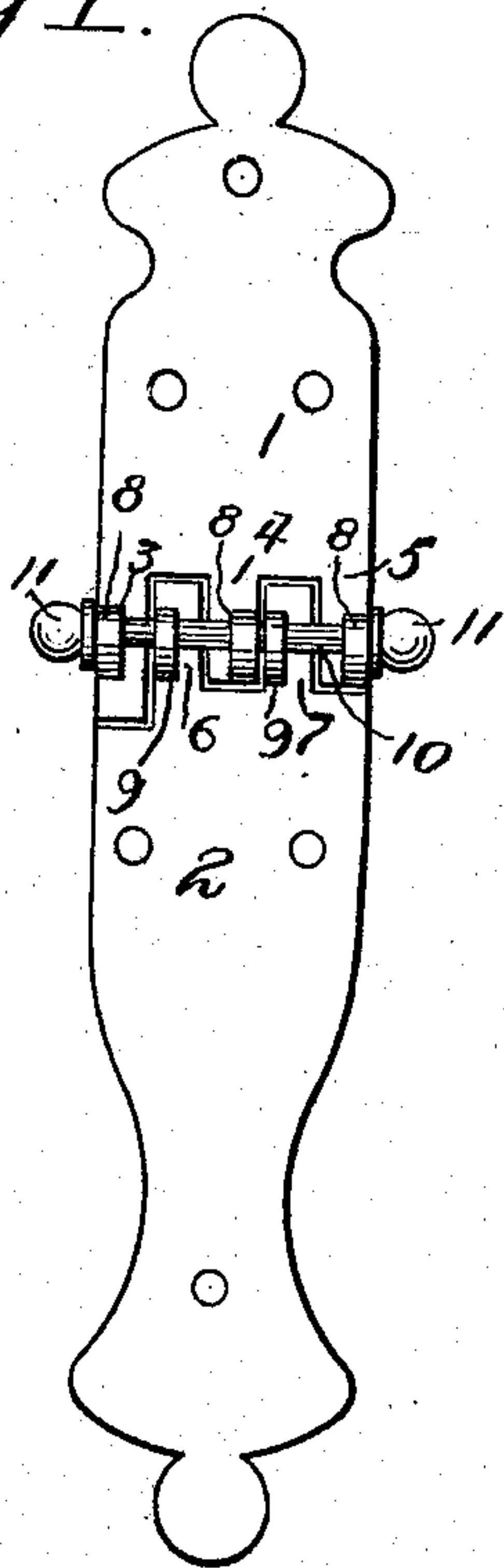


Fig 2.

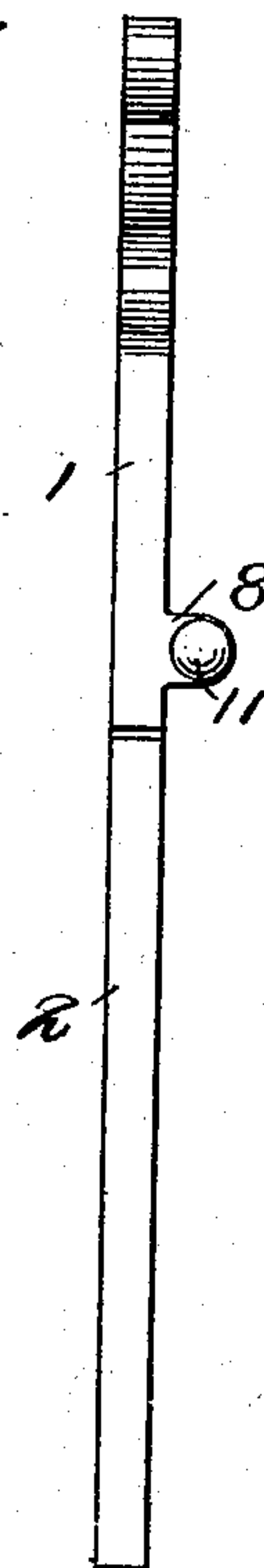


Fig 3.

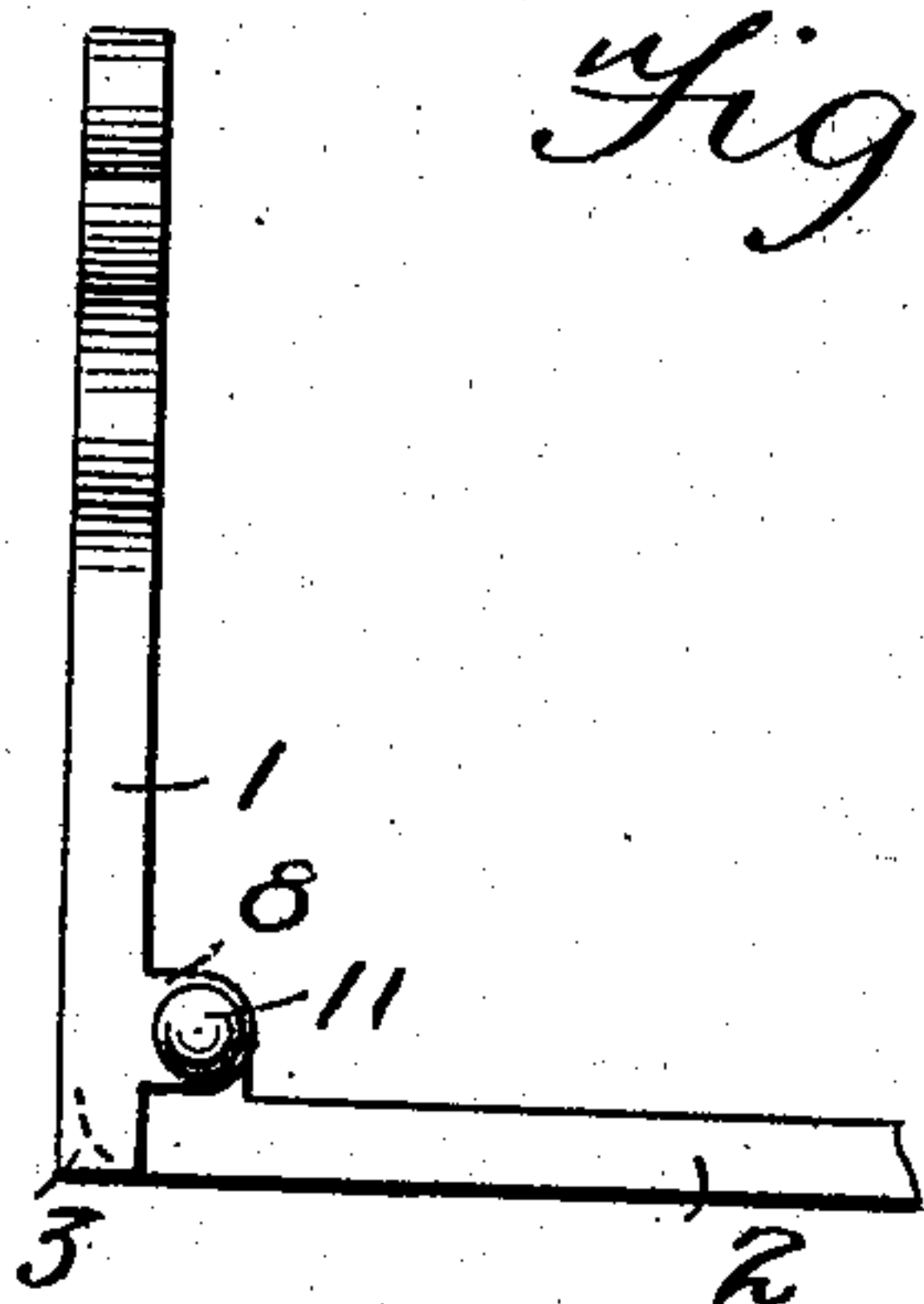
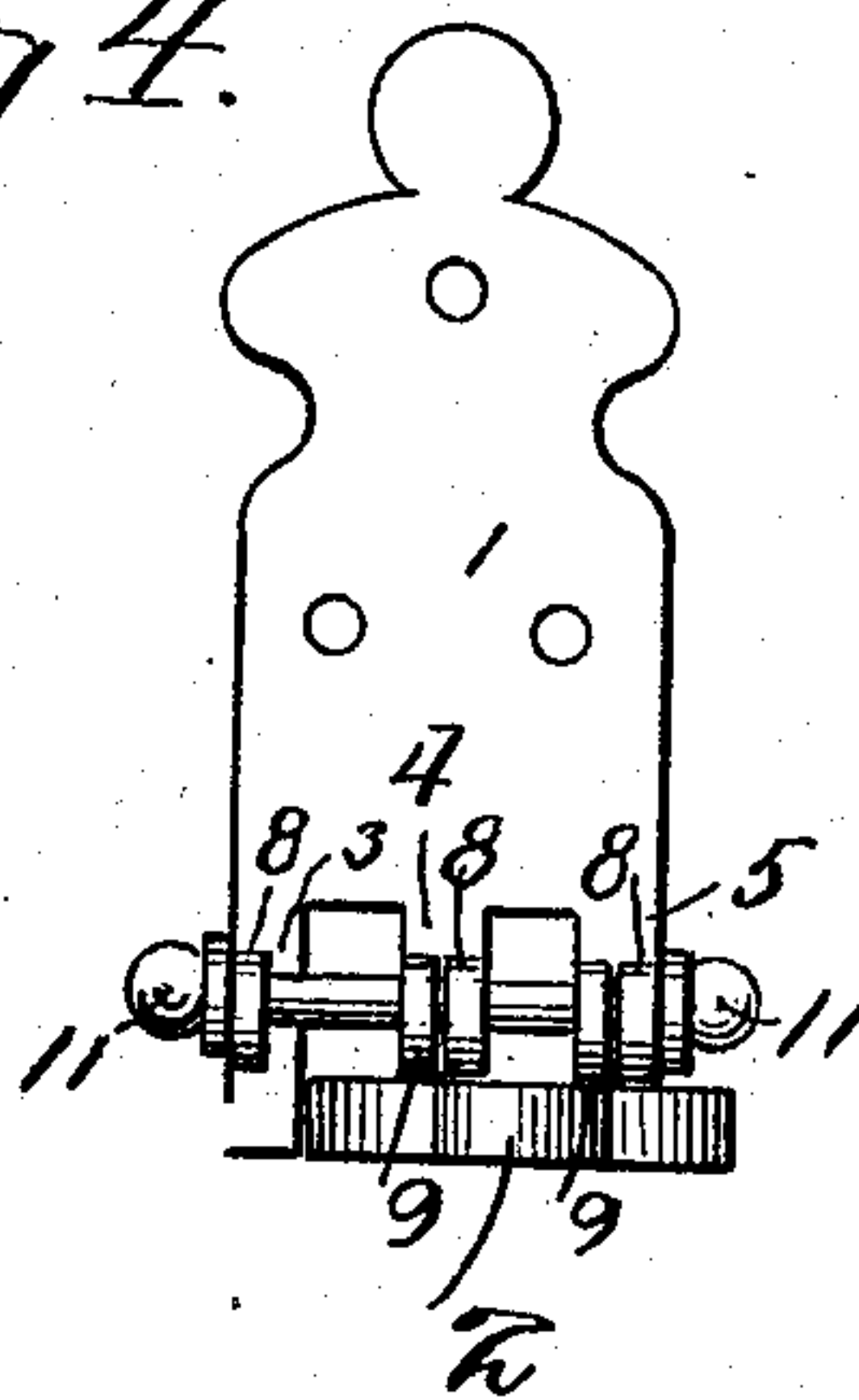


Fig 4.



Witnesses
Hugh H. Ott.
H. Allen

Inventor
Martin S. Nolan.
By Victor J. Evans
Attorney

UNITED STATES PATENT OFFICE.

MARTIN S. NOLAN, OF WALTHAM, MASSACHUSETTS.

HINGE.

No. 900,579.

Specification of Letters Patent.

Patented Oct. 6, 1908.

Application filed February 25, 1908. Serial No. 417,664.

To all whom it may concern:

Be it known that I, MARTIN S. NOLAN, a citizen of the United States, residing at Waltham, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Hinges, of which the following is a specification.

This invention relates to an improvement in hinges of that type in which one member is adapted for independent lateral movement relative to the other to permit locking of the members in open position.

The main object of the said invention resides in the production of a hinge in which the members are pivotally connected, both of the members being formed with interacting projections adapted for normal interfitting relation to permit movement of the respective members, the pivot connecting the hinge permitting independent lateral movement of the member to dispose the projections in interlocked relation when the members are open.

The invention in the preferred details of construction will be described in the accompanying specification, reference being had to the accompanying drawings, in which,

Figure 1 is a plan of a hinge constructed in accordance with my invention. Fig. 2 is an edge elevation of the same. Fig. 3 is a similar view with the members in open position, and Fig. 4 is a front elevation of the same.

Referring particularly to the drawings, my improved hinge is made up of two leaves, 1 and 2, which aside from the details hereinafter noted may be in any desired form or size. The meeting edges of the respective leaves are formed with spaced parallel projections, the leaf 1 having preferably three such projections, 3, 4 and 5, and the leaf 2 having two such projections 6 and 7. The respective projections are arranged for interfitting when the leaves are in normal position, that is, the projections 3, 4, and 5 are so spaced with relation to each other as to permit the loose fitting of the projections 6 and 7 between them. The projections 3, 4, and 5 of the member 1 are each formed with pintle bearings 8 projecting laterally or at right angles to the face of the leaf, while the projections 6 and 7 are formed with similar pintle bearings 9 also projecting at right angles to the face of the leaf 2. The projections and pintle bearings are so formed that when the leaves are assembled, the openings in the bearings will lie in alinement

transverse the leaves being thereby adapted for the reception of a pintle 10, headed at 11 in any usual manner and serving as a pivotal connection for the respective leaves.

The respective projections are of somewhat less width than the spaces in which they fit, whereby to permit a slight independent movement laterally of the respective leaves when in normal position. The bearings 8 and 9 are so arranged relatively to the longitudinal center of the projections, that when the leaves are in normal position the bearings are spaced one from another on the pivot pin, as clearly shown in Fig. 1.

The essential feature of the present invention resides in extending one of the projections, as the outermost projection 3 of the leaf 1, to a greater length than the remaining projections 4 and 5 of said leaf, the edge of the leaf 2 being formed with a recess appropriately formed for the reception of the extended projection 3. The pintle bearings 8 and 9 are of such size that when the respective leaves are open or disposed at a right angle with relation to each other, as shown in Fig. 3, the upper surface of the projections as 6 and 7 on the leaf 2 will be disposed below the free ends of the projections 4 and 5 of the leaf 1, but as the projection 3 is of greater length than the projections 4 and 5 it is at once obvious that said projection 3 will still extend below the upper surface of the leaf 2, as shown in Fig. 3.

When the respective leaves are in open position, it is apparent that the members are adapted for relative lateral movement in one direction, that is, the leaf 2 may be moved laterally in a direction away from the projection 3 until the projections 6 and 7 of said leaf 2 are disposed beneath the front ends of the projections 4 and 5 of the leaf 1. In this position the leaves are maintained open in any desired angular position, thus supporting the shelf or other article carrying the hinges in open position, as desired.

In returning the hinge members to normal position by lateral movement to permit the closing of the hinged article, it is obvious that the leaves 6 and 7, in order to avoid undue strain upon the members must accurately register with the openings between the projections 3 and 4, and 4 and 5. It is to insure this registry that the projection 3 is extended, as it will be evident that in the return of the parts to normal position, the edge of the projection 6 of leaf 2 will engage

the extended portion of the projection 3 and thereby limit the lateral movement of the leaf 2 relative to the hinge 1 in such manner as to accurately fit the projections 6 and 7 in the recesses formed for their reception.

The hinge forming the subject matter of the present invention is therefore adapted for opening and locking in open position and for returning the leaves to normal position to permit the closing operation without requiring special attention on the part of the operator, the extension of the projection 3 serving as a stop to accurately position the projections for the closing movement of the leaves, as will be obvious.

The hinge forms a simple invention admirably adapted for shelves, doors to be elevated, seats, and the like, its use, of course, being contemplated in any situation in which its peculiar construction is serviceable.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent is:—

1. A hinge comprising connected leaves having interfitting projections, said leaves being arranged for relative lateral movement to dispose the projections of one leaf between the free ends of the projections of the other leaf, and means for limiting the return movement of the leaves to accurately dispose the projections for interfitting.

2. A hinge comprising connected leaves having interfitting projections, said leaves being arranged for relative lateral movement to dispose the projections of one leaf between the free ends of the projections of the other leaf, one of the projections being extended to form a stop for the other leaf during the return movement of the leaves.

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

MARTIN S. NOLAN.

Witnesses:

JOHN A. JOHNSON,
REBECCA G. KELLEHER.