

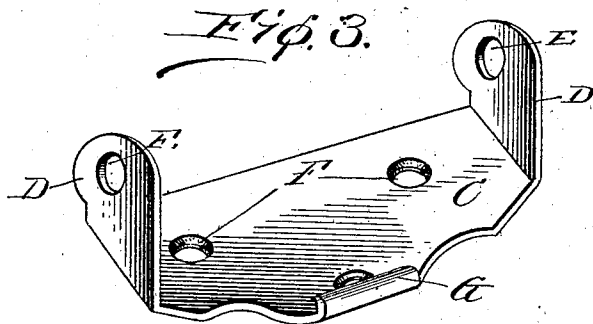
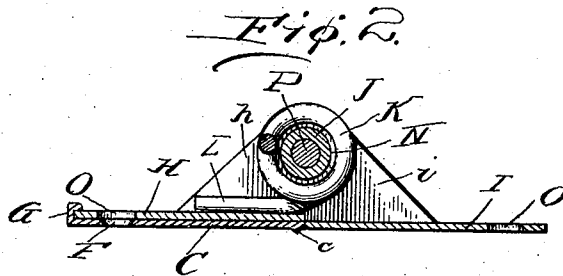
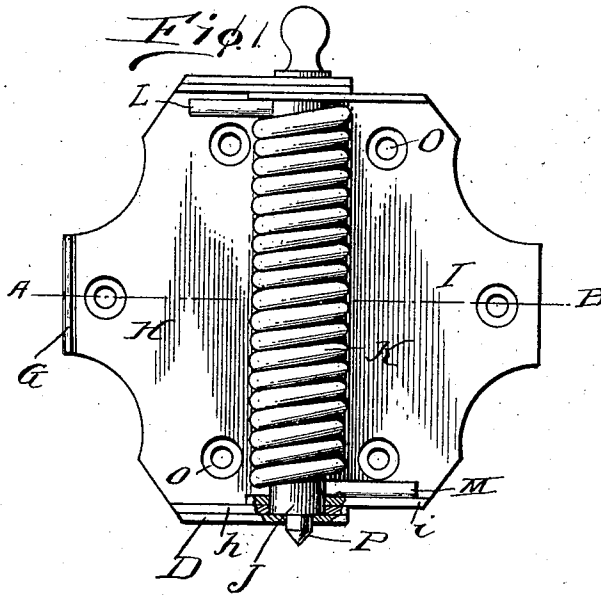
J. L. LARKIN & J. C. WOODY.

HINGE.

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938,669.

Patented Nov. 2, 1909.



Witnesses

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UNITED STATES PATENT OFFICE.

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HINGE.

938,669.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, JOHN L. LARKIN and JOHN C. WOODY, citizens of the United States of America, residing at Mount Vernon, in the county of Posey and State of Indiana, have invented certain new and useful Improvements in Hinges, of which the following is a specification.

This invention relates to hinges and particularly to a spring hinge designed for use on doors, gates, and the like, the said spring being particularly adapted for screen or other doors which are periodically hung or removed.

An object of this invention is to produce a hinge capable of use in the ordinary way, that is to say capable of being attached to a door and its jamb or to a gate and its post, by means of screws, or the hinge may be provided with an anchoring plate by which one of the wings of each hinge is connected to a door jamb by a removable fastening, leaving the anchoring plate permanently attached to the door jamb or gate post.

A further object of this invention is to provide novel means for insuring a proper alignment of the anchoring plates of two or more hinges, whereby the anchoring plates are secured by screws while the said anchoring plates are in operative relation to the wings of the hinges.

A further object of this invention is to produce a hinge capable of use as an ordinary strap hinge by the omission of the spring and novel form of pintle and when such spring and pintle are omitted, the wings of the hinge may be connected by pintles as ordinarily used in hinges of this character. The inventors have therefore provided for the utilization of the same type of wings for a spring or an ordinary strap and provision is also made, as heretofore stated, for removably anchoring the wings of the hinges to a door jamb or gate post without the use of anchoring screws which engage the wings which overlie the door jamb or gate post.

With the foregoing and other objects in view, the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail, reference will be had to the accompanying drawings forming part of this specification,

wherein like characters denote corresponding parts in the several views, in which—

Figure 1, illustrates a view in elevation of the front of a hinge and anchoring plate embodying the invention; Fig. 2, is a sectional view on the line A—B of Fig. 1; and Fig. 3, is a perspective view of the anchoring plate.

In the drawings C, denotes the base plate of the anchoring device having ears D, extending therefrom at an angle thereto and said ears are provided with holes E, for purposes to be presently explained.

The base C, of the anchoring device is provided with apertures F, designed to receive screws by which the plate is secured to a door jamb or gate post, or other fixed object on which the door, gate, barrier, or the like is to be hung. The base C, has a lug G, extending over its outer edge and shaped to engage and retain the wing or strap of a hinge.

The hinge here illustrated has two wings H and I, practically duplicates of each other, one of which, H, for instance being designed to be secured to a fixed support, while the other wing is designed to be secured to a movable object, as a door. The wings or leaves of the hinge are provided respectively with ears or flanges *h*, and *i*, having coinciding apertures to receive a hollow pintle J, having its ends preferably flush with the outer surface of the outer ears when the said ears are in assembled relation. The hollow pintle J, is encircled by a spring K, and the two ends L and M, of the spring are bent in opposite directions and are caused to bear against opposite wings of the hinge for the purpose of holding the wings in the position shown in Fig. 2, and said springs will return the wings to the position shown, should the wings be swung on the pintle J.

As shown in Fig. 2, it is preferable to have the springs slightly larger than the diameter of the pintle in order that a space N, may be left between the spring and the pintle when the spring is partially unwound, for when the spring is partially wound or contracted through the operation of the wings, the space allows a movement of the spring to insure a satisfactory operation thereof.

Each wing is provided with a series of holes O, adapted to receive screws by which

the wings are attached to a fixed support door or the like and, as heretofore stated, the base C, is also provided with holes to receive the screws, and we have found it desirable to have the holes in the wing which engages the base of the anchoring device larger than the holes in the base of the anchoring device, in order that the heads of the screws may pass through the holes in the wings and be seated in the counter-sinks of the base of the anchoring device, while the wings and anchoring device are in assembled relation for, by this means, the anchoring device may be secured in place, while the parts are in operative relation, and the anchoring devices may be properly alined to insure a successful operation of the hinges.

As shown in Fig. 1, the ears D, are parallel and in engagement with the ears h, and the holes E, are adapted to aline with the hollow pintle in order that a securing pin P, may be run through the holes of the ears D, and through the hollow pintle for the purpose of retaining the hinge and anchoring device in assembled relation, it being observed, of course, that the outer edge of the wing H, is seated under the lug G, and is held by said lug when its companion wing is moved.

The base C, of the anchoring device is provided with lugs c, which act as guides to facilitate placing the hinge on a door with exactness, dispensing with the use of squaring or other tools for placing the hinges with exactness on doors and the like.

When the spring hinge is to be dispensed with and it is desired to make an ordinary strap hinge, the hollow pintle J, is omitted and the two wings H and I, are placed to-

gether with their ears overlying and with the apertures of said ears registering in order that the pin P may be applied to the said apertures of the ears. In this use of the parts, the pin P, acts as an ordinary pintle and the wings H and I, are secured to the door and to its jamb, or to a gate and its posts as in ordinary practice.

We claim—

1. A hinge comprising in its construction wings having coinciding apertured ears, in combination with a hollow pintle passed through said aperture and a pin extending through said pintle, of an anchoring plate adapted to be secured to a fixed object and having ears adapted to be engaged by said pin, and also having means for securing the outer edge of the wings thereto, and a spring mounted on said pintle.

2. In a hinge, the combination with two pivotally connected wings, of an anchoring device having a lug adapted to engage one of the wings, and means for connecting the anchoring device to the pivotal connection of the wings.

3. In a hinge, the combination with two wings and a pivot therefor, of an anchoring device, means for holding one of the wings in operative relation to the anchoring device, and means for connecting the anchoring device in operative relation to the pivot of the wings.

In testimony whereof, we affix our signatures in the presence of two witnesses.

JOHN L. LARKIN.
JOHN C. WOODY.

Witnesses:

LIONEL J. LARKIN,
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