

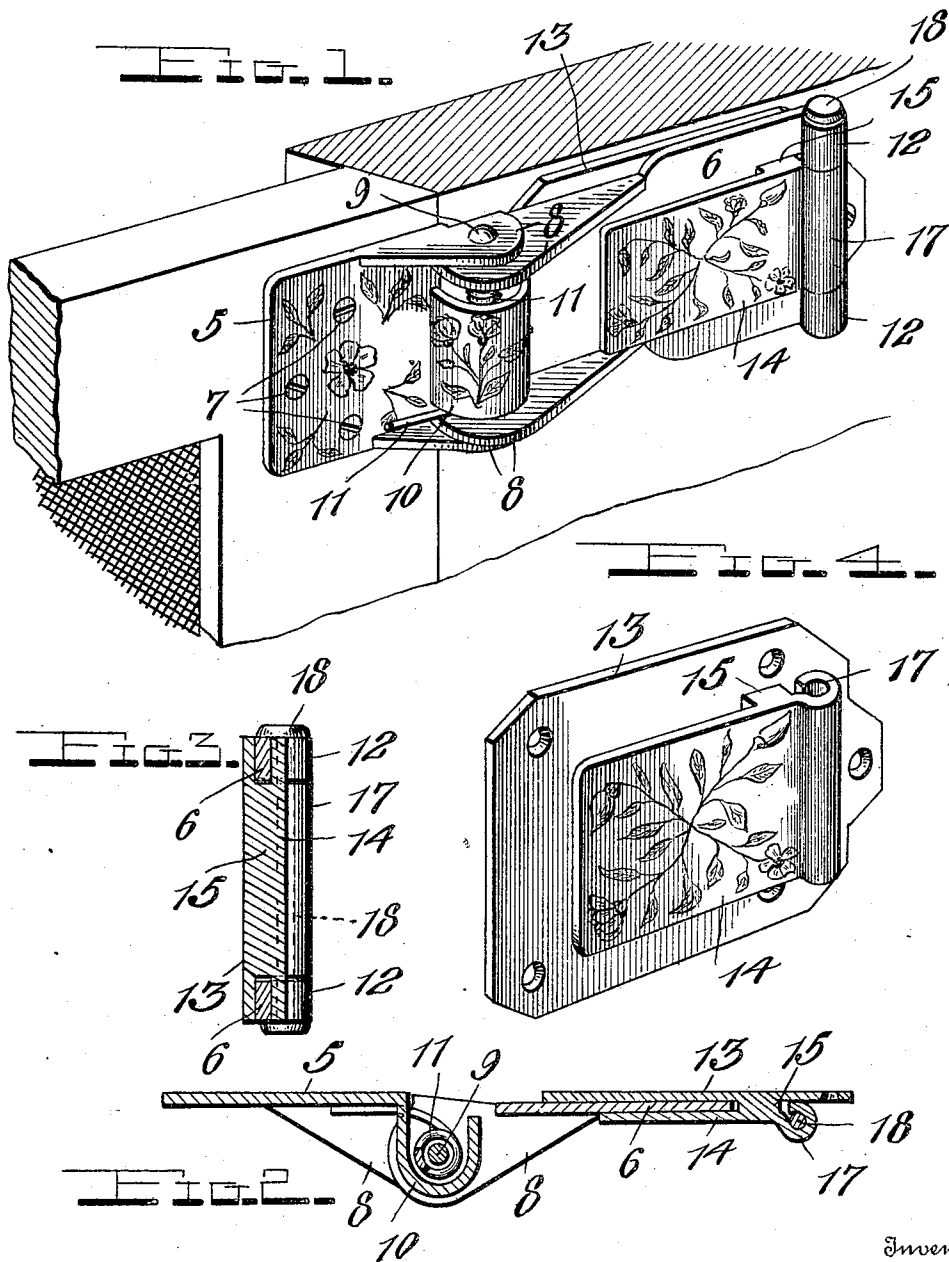
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HINGE.

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968,584.

Patented Aug. 30, 1910.



Witnesses

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HINGE.

968,584.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CLARENCE A. MILLER, a citizen of the United States, residing at Leadville, in the county of Lake and State of Colorado, have invented certain new and useful Improvements in Hinges, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to an improved hinge and has for its object to provide a hinge which is primarily adapted for use in the mounting of screen doors whereby the necessity of removing a number of screws or other fastening devices to remove the hinge from the door casing, is eliminated.

Another object is to provide a very simple and practical hinge which is so constructed that the door may be easily, quickly and securely arranged in place, and hingedly mounted in the door frame.

A still further object is to provide a very efficient hinge for the purpose specified and one which is also extremely durable in use and may be produced at a low cost.

With these and other objects in view, the invention consists of the novel features of construction and the combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view illustrating the application of my improved hinge; Fig. 2 is a longitudinal section thereof; Fig. 3 is a section taken on the line 3—3 of Fig. 1; and Fig. 4 is a detail perspective view of the hinge leaf attaching member.

Referring more particularly to the drawings 5 and 6 indicate the hinge leaves, the leaf 5 being secured to the screen or other door by means of a plurality of screws 7. The hinge plates have formed upon their longitudinal edges the ears 8 which are disposed at their ends upon each other and connected by means of a hinge pintle 9. The hinge leaf 5 has a knuckle 10 formed on its ends between the ears 8, said knuckle being disposed over the hinge pintle 9. Upon the pintle 9 a coil spring 11 is disposed, said spring extending between the opposed ears 8 of the hinge leaf 6. One end of said spring bears upon the face of the hinge leaf 5 while the other end thereof bears against the leaf 6. Upon one end of the hinge leaf 6 at the longitudinal edges thereof a knuckle

12 is formed, said knuckles being disposed in alinement and positioned beyond the end of the hinge leaf.

A hinge attaching member is secured to the door frame and comprises a base plate 13 which is adapted to be screwed or otherwise secured to the face of the door jamb. A plate 14 is disposed upon this base plate 13 and in spaced relation thereto, said plates being held in such spaced relation by means of a spacing block 15, which is arranged between the same at one end. The base plate 13, spacing block 15 and plate 14 would preferably be formed integral to provide a very strong and rigid support for the door. A sleeve or knuckle 17 is formed upon one end of the plate 14 and is disposed beyond said spacing block.

When the door is arranged in position, the hinge leaf 6 is disposed between the spaced plates 13 and 14 and the knuckles 12 formed upon the ends thereof are arranged in vertical alinement with the knuckle 17 formed on the end of the plate 14. A pintle 18 is then disposed through these alined knuckles whereby said hinge plate is securely held upon the attaching member between the plates 13 and 14 thereof. The plate 14 prevents any pivotal movement of the hinge leaf upon the pintle 18 so that the door when opened will hinge the leaves 5 and 6 upon each other, the spring 11 arranged upon the hinge pintle 9 returning the door to its closed position.

From the foregoing it is believed that the construction and operation of my improved hinge will be readily understood.

The device is extremely simple and by its use the necessity of removing a number of screws to detach the door hinge from the door casing is entirely eliminated and it is only necessary to remove the pintle 18 when the door may be easily and quickly removed, the hinge being allowed to remain secured to the face of the door frame.

It will also be observed that the hinge is very neat in appearance and obviates the necessity of defacing the door jamb by attaching the hinge leaf thereto at different places each time the door is put up, the old screw holes being incapable of holding the threads of the screws so as to support the weight of the door.

The device is also extremely durable in

construction, highly efficient in use and may be manufactured at a comparatively low cost.

While I have shown and described the preferred embodiment of my invention, it will be understood that the same is susceptible of many minor modifications without materially departing from the essential features or sacrificing any of the advantages.

Having thus described the invention what is claimed is:

1. The combination with a leaf hinge, of an attaching member adapted to be secured to a door jamb, said member comprising parallel plates adapted to receive between them the stationary hinge leaf, a knuckle formed upon one of said plates, a knuckle formed upon the end of said hinge leaf, and a pintle extending through said knuckles to removably secure the hinge leaf between said plates.

2. The combination with a leaf hinge, of a permanently secured attaching member, said member comprising parallel plates rigidly connected together at one end, said plates being adapted to receive between them one of the hinge leaves, a knuckle formed upon the end of one of said plates,

knuckles formed upon the end of the hinge leaf to be disposed upon the ends of the sleeve on said plates, and a pintle extending through said knuckles to removably secure the hinge leaf between said plates.

3. The combination with a leaf hinge, of a permanently secured attaching member, said member comprising a base plate, a plate arranged in parallel spaced relation to said base plate and rigidly secured thereto at one end, said plates being adapted to receive between them one of the hinge leaves, the other of said leaves being secured to the movable element, a knuckle formed upon the end of said last named plate, and a knuckle formed upon the end of the stationary hinge leaf at each of its longitudinal edges adapted to be disposed upon the ends of the knuckle on said plate, and a connecting pintle extending through said knuckles to removably secure the hinge leaf between said plates.

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

CLARENCE A. MILLER.

Witnesses:

D. J. McDONALD,
EUGEN KAUFMAN.