G. PELOT.

HINGE.

APPLICATION FILED MAR. 11, 1916.

1,196,580. Patented Aug. 29, 1916.

Fig. 1.

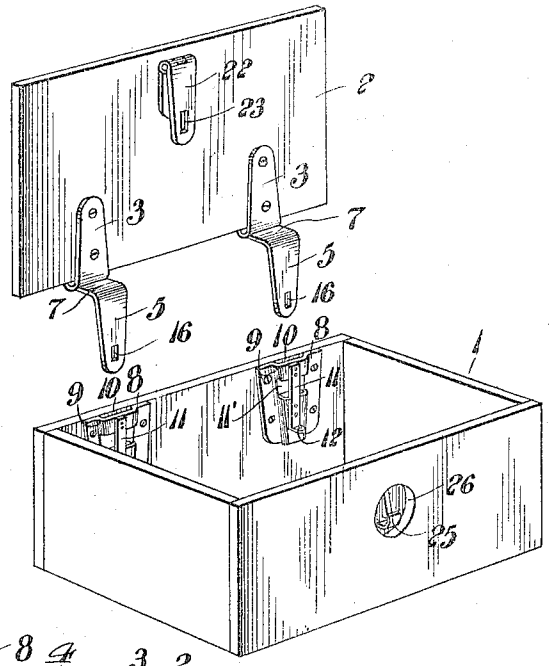
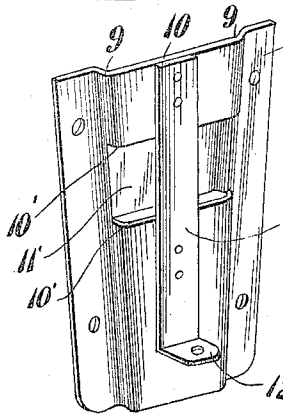


Fig. 3.



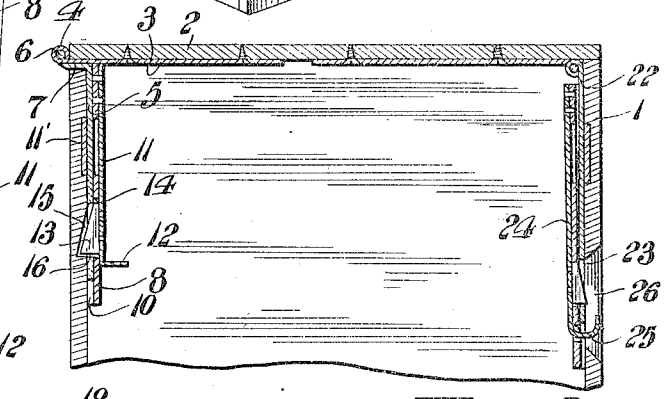
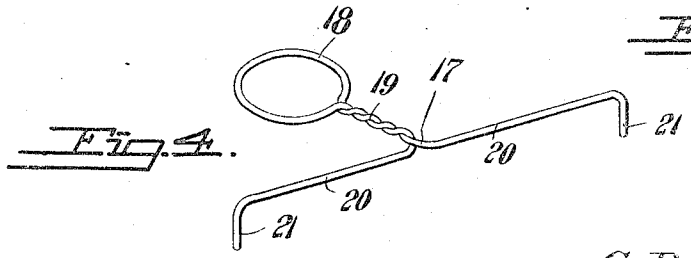


Fig. 2.

Fig. 4.



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UNITED STATES PATENT OFFICE.

GUSTAVE PELOT, OF ALTON, ILLINOIS.

HINGE.

1,196,580. Specification of Letters Patent. Patented Aug. 29, 1916.

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To all whom it may concern:

Be it known that I, GUSTAVE PELOT, a citizen of the United States, residing at Alton, in the county of Madison and State of Illinois, have invented new and useful Improvements in Hinges, of which the following is a specification.

In the use of leaf hinges and especially in the use of hasps when it is desired to connect two members, such as a door and a frame or a box and a lid, it is often of great advantage that the end or a portion of the hinge be detachably connected to one of the members whereby the remaining member may be detached therefrom, the detached member carrying the entire hinge or hasp thereupon.

It is therefore my purpose to provide a hinge of this character having means upon one of the members for detachably connecting the other member, the detached member carrying the hinge or hasp.

In carrying out my invention I provide a plate having a groove formed therein, which is secured to one of the members thereby forming a pocket, the pocket adapted to receive one of the leaves of the hinge as the case may be, and means upon the plate for retaining the hasp or the leaves within the pocket. In the present embodiment of my invention I have shown the same applied to a box of any common construction, having a hinged lid, the leaf hinges being used to connect the lid to the box and the hasp serving to keep the lid in closed position upon the box.

Other objects will appear as the specification is read in connection with the accompanying drawings in which:—

Figure 1 is a front elevation of the box showing my invention applied thereto. Fig. 2 is a vertical section through one of the hinges and the hasp, showing both of them in locked position. Fig. 3 is a detail view of the plate and retaining means for the hinges.

Referring to the drawings in detail, 1 designates a wooden box of any common construction which is provided with the usual hinged lid 2. Secured to the inner face of the lid at the rear edge thereof are a pair of leaves 3, each constituting a section of a leaf hinge, and provided with the usual alined knuckles 4, the latter being disposed beyond the rear edge of the lid. Swingingly mounted within each of the leaves 3 are the engaging leaves 5 of the hinges, they being connected together by means of a pin 6. The leaves 5 are bent at their connection with the leaves 3 at right angles to provide offset portions 7, whereby its connection with the leaves 3 will be disposed at a point rearwardly of the rear edge of the box 1. Secured to the inner face of the rear wall of the box 1 at points adjacent the opposite ends 3 thereof are a pair of elongated plates 8, each of which is bent longitudinally as at 9 to provide a vertically extending pocket 10. To provide a rear wall for the pocket 10 and protect the adjacent wall of the box, I have cut the bent portion of each of the plates 8 transversely as at 10′, the cut portion 11′ being bent inwardly or rearwardly so as to lie in the same plane as the vertical edges of the plate. It will be noted that in this embodiment of my invention, I have shown leaf hinges of a common construction, the respective leaves being tapered from their connection and the bent portions of the plate being tapered from their upper end downwardly to correspond to the outline of the leaves 5. Secured to the outer face of each of the plates and extending vertically of the same, are leaf springs 11 they being formed preferably of spring steel secured to the plates at their upper extremity. These springs 11 are bent longitudinally so as to dispose their free or lower end in spaced relation to the plate. The lower extremities of each of these springs 11 are bent at right angles outwardly to provide operating handles 12 each of which is provided with eyes for a purpose hereinafter described. Formed on the inner face of each of these springs 11 adjacent their lower ends are retaining lugs 13, they being preferably of wedge formation. These lugs 13 are adapted to extend through openings 14 formed in the plate and into recesses 15 formed in the rear wall of the box.

Mounted within each of the pockets 10 are the lower leaves of the hinges, each of these leaves being provided with openings 16, each of which is adapted to aline with the openings and recesses 14 and 15, the offset portions of the leaves limiting the downward movement thereof and causing the opening formed therein to register.

It will be seen from this construction that the leaves are placed within the pocket 10, the lugs 13 under the action of the leaf springs 11 will pass through the openings

16 in the leaves and owing to their edge formation, will hold the leaves within the pockets. When it is desired to remove the leaves of the hinge from the pocket and to detach the lid from the box, the leaf springs are gripped by the handles 12 and pulled away from the plate so as to cause the lugs 13 to be moved from the opening 16 in the leaves whereby the leaves may be slid from the pockets as will be understood. In order to pull both of the leaf springs 11 simultaneously and to release both of these leaves of the hinge simultaneously, I have provided a tool 17 which is formed of a single piece of wire bent upon itself at its medial portion to provide a loop 18 and then twisted upon itself as at 19 to provide a ridged section, the free ends of which are when bent at angles in opposite directions to provide the lateral extending arms 22. The free ends of the arms 20 are bent at right angles and in the same direction to provide the fingers 21.

It will be understood that the fingers 21 are arranged in such relation to each other as to correspond to the distance between the eyes on the disk of the handles 12, the fingers being adapted to be inserted into the eyes of the handles simultaneously whereby upon gripping the tool by the loop 18 and pulling in a direction away from the plate, the springs will be actuated to move the lugs from the pockets 10.

Referring more particularly to the hasp or the manner in which it is locked within the pocket formed on the inner face of the front wall of the box, it is thought that a detailed description of the construction of the plate forming the pocket is unnecessary, as it is identical with that of the plate formed on the rear wall of the pocket, and therefore a detail explanation of the same will be omitted.

Secured to the inner face of the lid at the forward edge thereof is a hasp 22 of any common construction the same being provided with the usual opening 23. The hasp is adapted to rest within the pocket formed in the front wall of the box when in closed position and is retained within the pocket in a manner similar to that of the leaves of the hinges.

Mounted upon the plate is the spring 24 similar to the springs 11, the only difference being that the spring 24 at the lower end thereof extends beyond the lower end of the plate and is then bent at right angles as at 25 in a direction toward the plate and is adapted to pass through an opening 26 in the front wall of the box. It will be seen from this construction that access may be had to the spring from the outside of the box whereby the spring may be actuated to remove the lug from the pocket and thereby release the hasp. It will thus be seen that I have provided means for locking the lid in closed position upon the box and for detaching the lid from the box.

What I claim is:—

In combination, a pair of hinged leaves, one of said leaves being formed with an opening, a plate having its longitudinal medial portion bent to provide a groove on one side thereof, the intermediate portion of the medial portion being slit transversely and bent to the opposite side of the plate to form an opening in the grooved portion and coöperating with the groove to form a pocket, a leaf spring secured to said plate and spanning the opening formed in the grooved side of the plate, and a lug formed on said spring and extending through said plate and into the opening in said leaf.

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

GUSTAVE PELOT.

Witnesses:
W. E. Seago,
Fred. Schelle.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."