

(No Model.)

O. H. P. G. SPENCER.
DETACHABLE HINGE.

No. 546,909.

Patented Sept. 24, 1895.

Fig. 1.

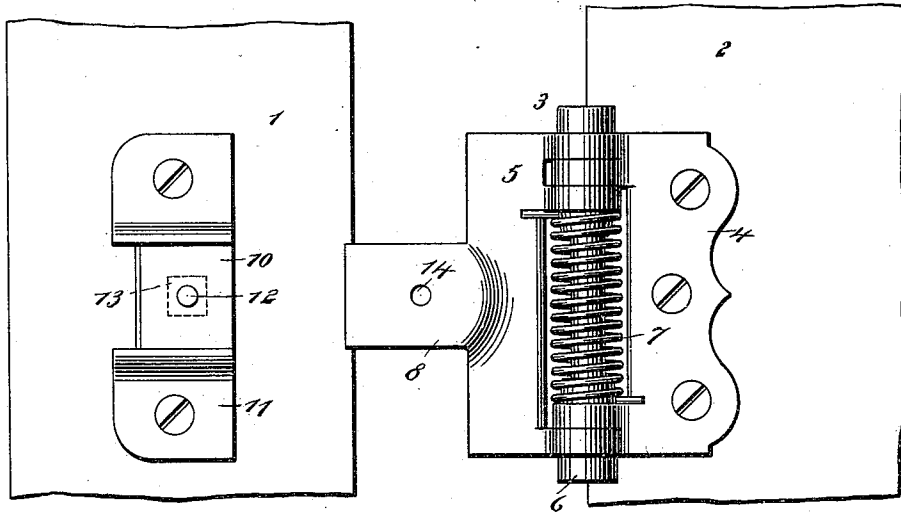


Fig. 2.

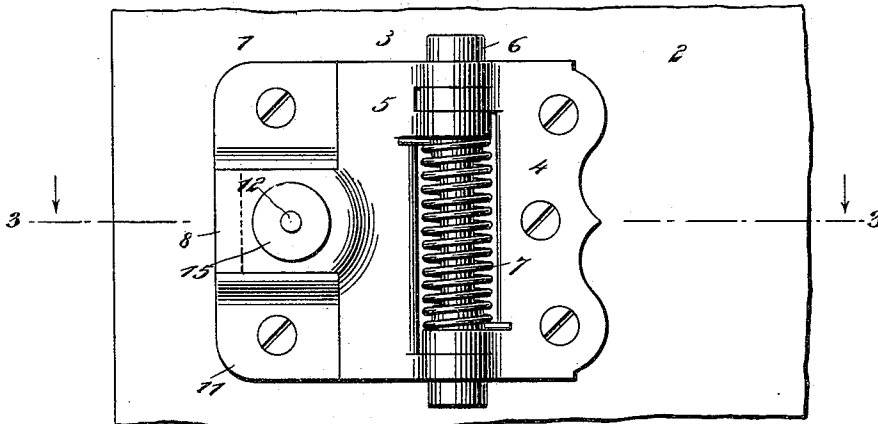
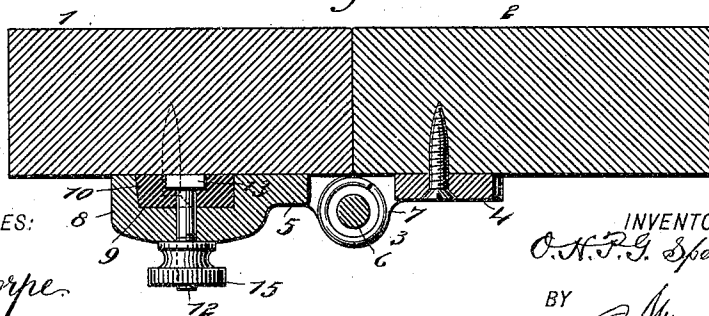


Fig. 3.



WITNESSES:

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DETACHABLE HINGE.

SPECIFICATION forming part of Letters Patent No. 546,909, dated September 24, 1895.

Application filed March 23, 1895. Serial No. 542,923. (No model.)

To all whom it may concern:

Be it known that I, OLIVER H. P. G. SPENCER, of Mount Carmel, in the county of Wash and State of Illinois, have invented certain new and useful Improvements in Detachable Hinges, of which the following is a full, clear, and exact description.

This invention relates to improvements in hinges, and especially to detachable hinges, such as are employed for securing screen-doors or the like, intended to be occasionally removed, to the door-casing; and the object of the invention is to provide a hinge of this character of a simple and inexpensive form, which shall present certain features of novelty and advantages for use over other similar devices heretofore employed, all as will be hereinafter fully set forth.

The novel features of the invention will be carefully defined in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a face view showing the spring-hinge as it appears when the door is removed from the frame or casing. Fig. 2 is a similar view showing the hinge as it appears when the door is secured to the casing, and Fig. 3 is a cross-section taken on the plane of the line 3 3 in Fig. 2.

In the drawings, 1 is a fragment of the casing or frame of the doorway, and 2 represents a fragment of the stile of a screen or other door, adapted to be hung on said casing by means of my improved hinge 3.

The hinge 3 is composed of two parts 4 and 5, connected by a pivot-pin 6, whereon is coiled a spring 7, having its ends secured to and adapted to bear on the respective sections 4 and 5. The section 4 is provided with screw-holes, as clearly seen, to receive screws whereby it may be attached to the stile 2. The section or leaf 5 is provided at the central portion of its rear edge with a projection 8, of general rectangular form, having in its under side a transverse groove 9, as indicated in Fig. 3, and this groove is so proportioned as to be adapted to receive and fit over the reduced portion 10 of the bracket-plate 11, such reduced portion, as clearly shown in Fig. 1,

forming a transverse groove and providing shoulders to engage the upper and lower edges of the projection 8. The bracket may be secured by means of screws or other fastening devices to the casing 1. At about the center of the reduced portion 10 of the bracket-plate 11 a bolt 12 is located, being provided with a square head 13, adapted to fit in a corresponding square recess formed in the rear or back face of the bracket 11, and having its free end threaded and projecting above the portion 10 of the bracket into position to engage and pass through a corresponding opening 14, formed in the projection 8 on the section or leaf 5 of the hinge.

A nut 15, milled about its edge and adapted to be turned by the thumb and finger, is arranged to screw on the outer end of the bolt 12, as clearly seen in Figs. 2 and 3.

In operation the bracket-piece 11 is permanently secured to the casing 1, and when it is desired to place the door in position it is only necessary to unscrew the nut 15 from the bolt 12 and insert the projection 8 in position over the reduced central portion 10 of the bracket-piece, the bolt 12 passing through the opening 14 in said projection, after which the nut 15 is screwed down, so as to clearly hold the projection in place on the bracket-piece. When it is desired to take down the door for any reason, the nut 15 is unscrewed and the door removed, the hinge 3 remaining in place thereon, after which the nut 15 is again applied to the bolt in order that it may not be lost.

The construction of the hinge as above described makes it possible to place the door in position and remove the same an infinite number of times, by simply unscrewing the nut 15 and without the necessity of removing wood-screws or other similar fastening devices inserted in the wood of the door-casing, whereby the surface of the same would be marred.

I do not desire to be understood as limiting myself to the embodiment of my invention in a spring-hinge such as that shown and described herein, since it is evident that the improvements may be applied to hinges of other constructions without material departure from the spirit of the invention.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

5 1. The combination of a hinge having a projection at the outside, said projection having a transverse groove formed in it, a bracket piece formed to fit the transverse groove in the said projection and adapted to be secured to the frame of the door, and means for securing said projection to the bracket plate, substantially as set forth.

10 2. The combination of a hinge, having a projection at one side, said projection having a transverse groove formed in it, a bracket piece provided with a reduced central portion to fit in the transverse groove of the projection on the hinge and shoulders at opposite

sides of said reduced central portion to engage the opposite sides of said projection on the hinge, and means for securing said projection to the bracket piece, substantially as set forth. 20

3. The combination of a hinge provided with a perforated projection at one side, a bracket piece adapted to be secured to a door frame and having a projecting threaded bolt to pass through the perforation in the projection on the hinge, and a nut screwing on said bolt outside said perforated projection and adapted to clamp the same to the bracket plate, substantially as set forth. 25

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Witnesses:

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