

J. D. SWACICK.  
DETACHABLE SPRING HINGE.  
APPLICATION FILED JULY 5, 1904.

NO MODEL.

Fig. 1.

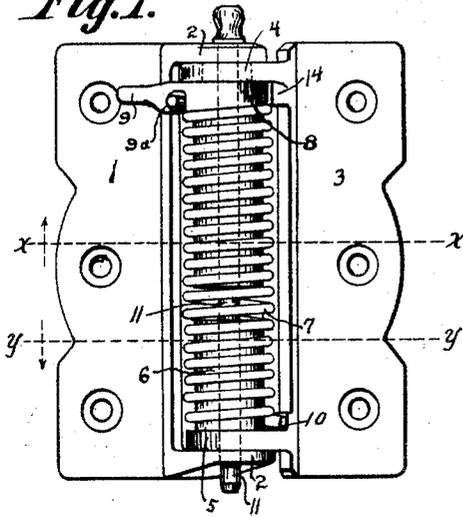


Fig. 2.

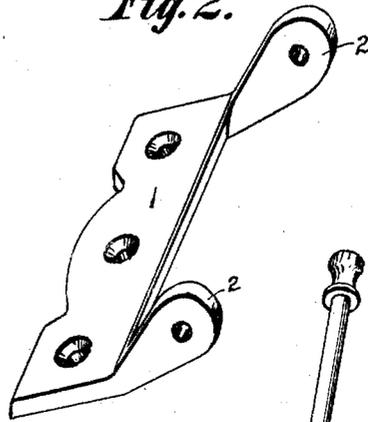


Fig. 3.



Fig. 4.

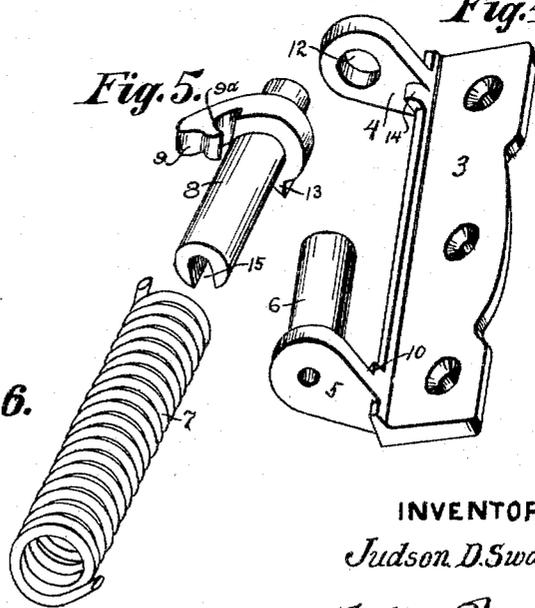


Fig. 5.

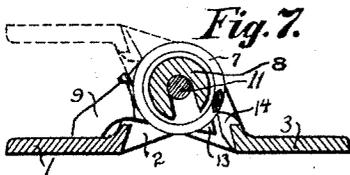


Fig. 7.

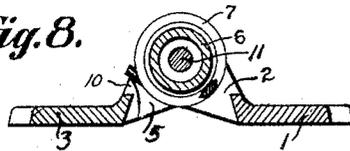
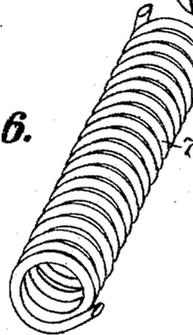


Fig. 8.

Fig. 6.



WITNESSES

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# UNITED STATES PATENT OFFICE.

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## DETACHABLE SPRING-HINGE.

SPECIFICATION forming part of Letters Patent No. 776,153, dated November 29, 1904.

Application filed July 5, 1904. Serial No. 215,434. (No model.)

*To all whom it may concern:*

Be it known that I, JUDSON D. SWACICK, a citizen of the United States, residing at New Brighton, in the county of Beaver and State of Pennsylvania, have invented certain new and useful Improvements in Detachable Spring-Hinges; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the numerals of reference marked thereon.

The object of the present invention is to provide a hinge that can be easily attached and detached or, in other words, one that can be easily detached from the door-casing.

Figure 1 is a front side view of the hinge. Fig. 2 is a detached view of the door-jamb leaf. Fig. 3 is a detached view of the coupling-pin. Fig. 4 is a detached view of the door-leaf. Fig. 5 is a detached view of the spring connecting-head and operating-arm. Fig. 6 is a detached view of the spring. Fig. 7 is a transverse section on line X X, Fig. 1. Fig. 8 is a transverse section on line Y Y, Fig. 1.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, 1 represents the jamb-leaf, which is provided with the connecting-ears 2.

The door-leaf 3 is provided with the ears 4 and 5, the ear 5 being provided with the short barrel 6, which is for the purpose of receiving the lower end or portion of the spring 7. As illustrated in Fig. 1, the spring connecting-head 8 is provided with the arm 9, which arm bears against the front face of the jamb-leaf 1, as illustrated in Figs. 1 and 7. For the purpose of giving the spring the proper tension the ends of the spring are seated in the groove 9<sup>a</sup> and against the shoulder 10, located upon the door-leaf 3 contiguous to the upper face of the arm 9. Said groove 9<sup>a</sup> is located in the arm 5.

For the purpose of preventing the spring 7 from becoming detached when the leaves are

separated by removing the pin 11 said spring is formed so that it must be compressed endwise in order to bring the spring into position illustrated in Fig. 1, by which arrangement the upper end of the head 8 will be seated in the aperture 12 at all times, so that when the door is removed after the pin 11 has been removed the spring 7 and the head 8 will remain in proper relative position, and all that is necessary to be done is to remove the pin 11 to detach the door from its jamb or casing.

It will be understood that in order to allow the spring to be compressed the combined length of the barrel 6 and the head must be shorter than the distance between the inner face of said head and the inner face of the ear 5, so that the head can be moved endwise in order to properly seat said head in the aperture 12.

The head 8 is provided with the shoulder 13, which shoulder abuts against the flange 14 when the hinge-leaves are in the position illustrated in Fig. 1 or when the door-leaf is removed. It will be understood that the tension of the spring is so adjusted that when the door-leaf 3 is removed said spring will hold the shoulder 13 against the flange 14.

It will be understood that after the door-leaf 3 has been removed, together with the different parts connected thereto, the pin 11 can be placed in its usual position and all of the parts removed with the door, the tension of the spring preventing any accidental displacement of the parts.

For the purpose of providing room for the connecting-pin 11 the spring connecting-head 8 is provided with the groove 15. The object of providing a groove instead of an aperture formed longitudinally through the head is to provide a means for casting said head without coring.

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

In a detachable spring-hinge, the combination of door and jamb leaves provided with ears, one of the door-ears provided with a

spring - barrel, a spring connecting - head  
loosely seated in the opposite ear from the  
one provided with a spring-barrel, and said  
head provided with a grooved arm, said arm  
5 adapted to bear against the jamb-leaf, and a  
shoulder formed upon said head, said shoulder  
adapted to abut against a flange formed upon  
the door-leaf, and a spring located around the  
barrel and head, means for connecting the  
10 ends of the spring to the spring-head and

leaves respectively, and a connecting-pin, sub-  
stantially as and for the purpose specified.

In testimony that I claim the above I have  
hereunto subscribed my name in the presence  
of two witnesses.

JUDSON D. SWACICK.

Witnesses:

F. W. BOND,

J. A. JEFFERS.