J. PEYER.

Spring-Hinges for Doors.

No. 148,980. Patented March 24, 1874.

Fig: 1.

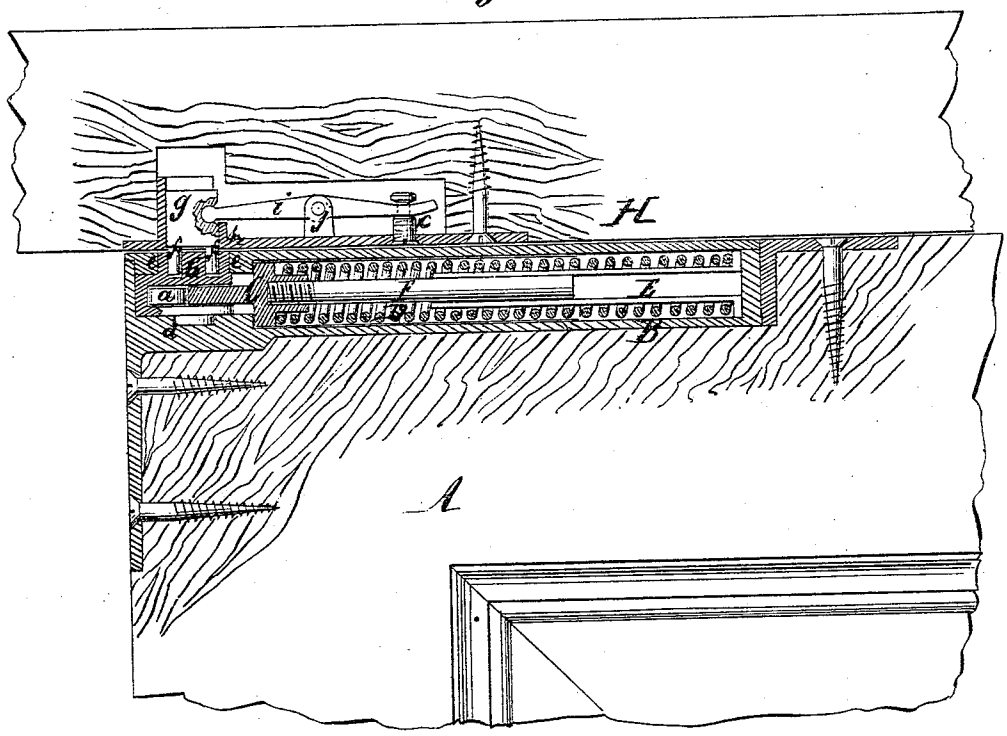


Fig: 2.

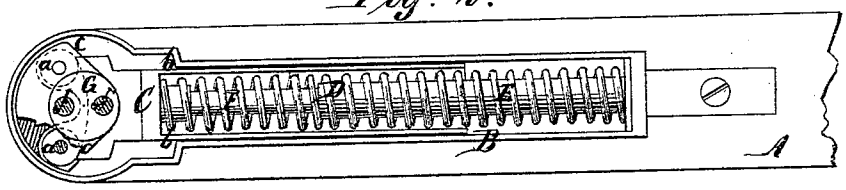
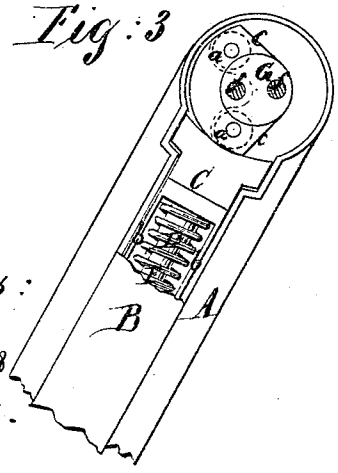


Fig: 3



Witnesses:
Henry Gintner
E. Bilhuber.

Inventor:
Johann Peyer
per
Van Santvoord & Hauff
Attys

UNITED STATES PATENT OFFICE.

JOHANN PEYER, OF WAHRING, NEAR VIENNA, AUSTRIA, ASSIGNOR TO JOSEPH R. VON WESSELY, OF NEW YORK CITY.

IMPROVEMENT IN SPRING-HINGES FOR DOORS.

Specification forming part of Letters Patent No. **148,980**, dated March 24, 1874; application filed February 4, 1874.

CASE C.

To all whom it may concern:

Be it known that I, JOHANN PEYER, of Wahring, near Vienna, in the Empire of Austria, have invented a new and Improved Door-Spring; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 represents a sectional front view of my invention. Fig. 2 is a horizontal section of the same when the door is closed. Fig. 3 is a similar section of the same when the door is open.

Similar letters indicate corresponding parts.

This invention consists in a slide which is fitted in a guide-tube secured to the top edge of a door, said slide being exposed to the action of a spring, which presses the same up against two roller-studs secured in arms projecting from a head or pivot, on which the door turns when the same is being opened, in such a manner that when the door is opened in either direction, the slide is forced back against the action of its spring, and when the door is released, the slide is forced back to its original position, and the door is closed and held closed. But if the door is swung open until its slide bears upon one of the roller-studs in a radial direction from the center of the head or pivot, the door retains its open position until it is turned out of its radial direction, when the same closes automatically by the action of its spring. The head or pivot is retained by two pins, which are secured to a slide that can be raised or lowered by means of a lever and screw, so that, when said pins are raised, the door can be adjusted in the required position, and by depressing the pins after the door is in position, they are made to catch in their sockets in the head or pivot, and the door is retained in position.

In the drawing, the letter A designates a door, on the top edge of which is secured a box or case, B, of cast-iron or other suitable material. Into this case is fitted a slide, C, which is subjected to the action of a spiral spring, D, that has a tendency to force the slide outward until its head strikes two roller-studs, *a a*. Said spring is wound round a tube, E, which is secured in the outer end of the case A, and forms a guide for a pin, F, that projects from the slide C; and, in addition to this pin F, the slide is provided with cheek-pieces *b b*, so that it is securely guided in the case A, and that it is not liable to bind during the operation of the apparatus. The roller-studs *a a* are secured to arms *c c*, which inclose an angle of about one hundred and twenty degrees, and radiate from a head, G, the lower end of which fits into a socket, *d*, in the bottom of the case A, while its upper part projects through a circular hole, *e*, in the top plate of said case, so that, if said head is held stationary, the case A can be turned round the same, and if the case is secured to a door, the head G forms the pivot on which the door swings. Said head is prevented from turning round by two pins, *f*, which engage with corresponding sockets in the head, and which are secured to a slide, *g*, fitted in a guide-box, *h*, which is let into the top rail H of the door-frame. The slide *g* is provided with a recess that engages with the end of a lever, *i*, which has its fulcrum in a standard, *j*, rising from the face-plate of the box *h*. The end of said lever is bifurcated, and it catches in a groove formed near the inner end of a screw, *k*, that is tapped into the face-plate of the box *h*.

By unscrewing this screw, the slide *g* is raised, and the pins *f* are withdrawn from the sockets in the head G, so that the door can be conveniently taken out or replaced. When the door is adjusted in the proper position beneath the pins *f*, the screw *k* is turned back to the position shown in Fig. 1, and the head G is retained by said pins, so that the door can swing freely in either direction. By referring to Fig. 2 it will be seen, that when the door is closed, the head of the slide C bears upon both roller-studs *a a*, and by this arrangement the door is retained in its closing position, so that the same is not liable to be blown open by the wind or by drafts of air. But if suf-

ficient power is applied, the door can be opened in either direction, and if the door is brought in the position shown in Fig. 3, where one of the roller studs *a* is brought in a line passing through the center of the head G, and through the longitudinal center of the slide C—or, in other words, in such a position that the slide is forced against the roller-stud in a direction passing through the center of said stud, and through the center of the head G then the door will retain its open position.

What I claim as new, and desire to secure by Letters Patent, is—

1. The studs *a a*, secured in arms *c c*, which radiate from a head, G, in combination with a slide, C, which is pressed up against said studs by a spring, D, all constructed and operating substantially as shown.

2. The slide *g*, carrying pins *f*, in combination with the head G, studs *a a*, and spring-slide C, constructed and operating substantially as set forth.

This specification signed by me this 25th day of November, 1873.

JOHANN PEYER.

Witnesses:

J. PEDLARZEK,

WILLIAM LIMING.