

F. HERRMANN.
SPRING HINGE.

No. 62,747.

Patented Mar. 12, 1867.

Fig: 1.

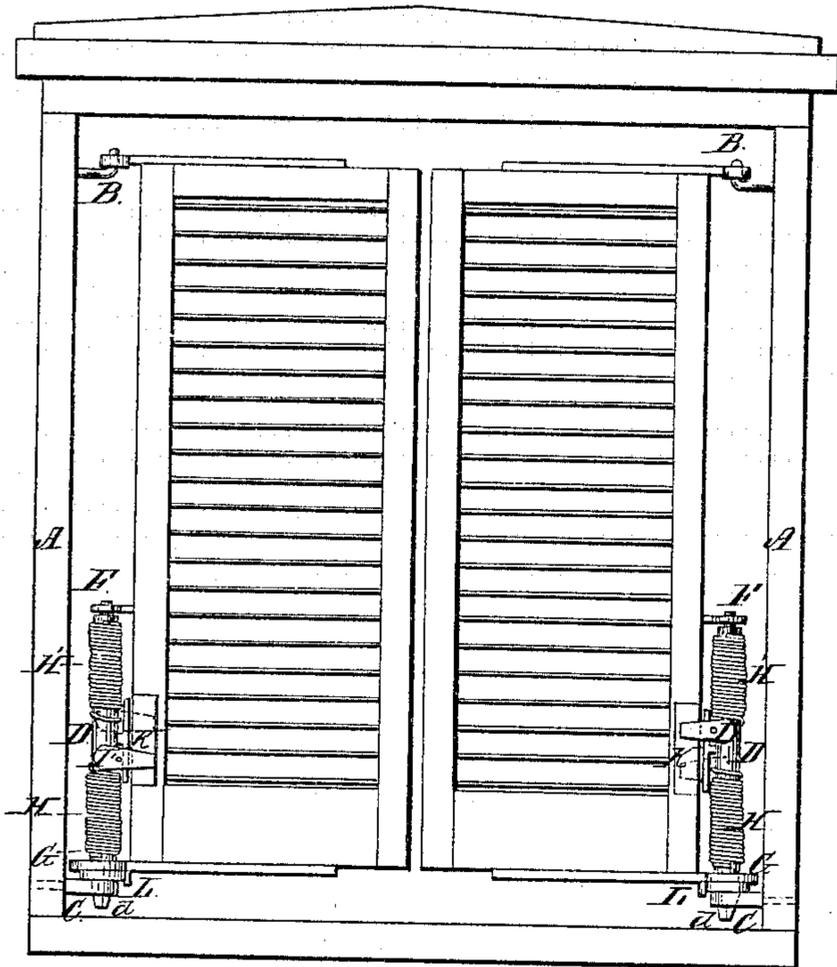
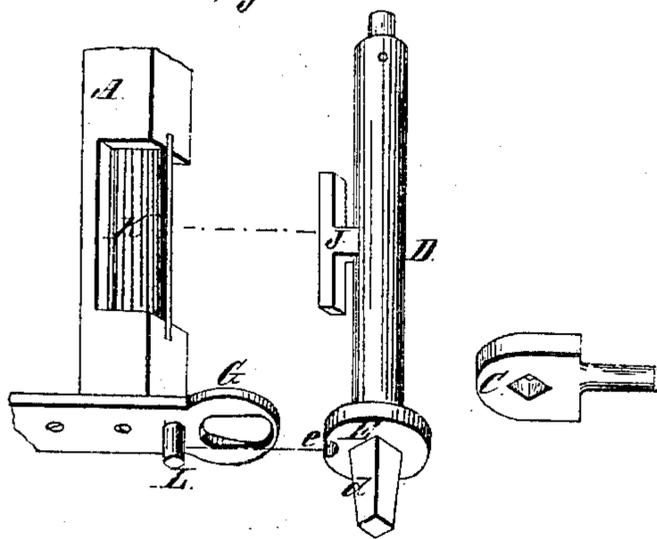


Fig: 2.



Witnesses:
James H. Lyman
Julius Keller

Inventor:
F. Herrmann.
By Knight Bros.
Attys

United States Patent Office.

FRANCK HERRMANN, OF NEWPORT, KENTUCKY.

Letters Patent No. 62,747, dated March 12, 1867.

IMPROVEMENT IN SPRING-HINGE.

The Schedule referred to in these Letters Patent and making part of the same.

TO WHOM IT MAY CONCERN:

Be it known that I, FRANCK HERRMANN, of Newport, Campbell county, Kentucky, have invented a new and useful Self-Closing Door-Hinge; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

My invention relates to a device for hanging or hinging a door, which enables it to close automatically and accurately after being opened. My invention also enables the same door, by a slight readjustment, to automatically swing to the open position after closure.

Figure 1 is a side elevation of a pair of folding doors, hung on my plan.

Figure 2 shows the stud-shaft or pintle and the adjacent portion of the door, detached.

A represents a customary door-post, provided near the top with a simple hinge-hook, B, of ordinary form, and near its lower end with a square eye or socket, C, to receive and immovably hold the corresponding toe *d* of a stationary pintle or stud-shaft, D. A collar, E, on this pintle, notched at *e*, serves the twofold purpose of supporting the door, and, by means of its said notch *e*, of causing the door to close accurately and to its proper plane, as hereafter explained. Two eye-plates F G, projecting from the door, receive respectively the upper part of the pintle D, and that part of said pintle D immediately above the collar E. The perforation of the eye G is oblong, and that of the eye F is circular. Attached to the pintle D, near its upper and lower ends respectively, are two helical springs H H', which, surrounding the pintle, terminate in two cheeks I I', which in their normal condition rest against a stationary lug or stop J, that projects from the pintle D. The cheeks I and I' enclose a tongue, K, on the back of the door, so that whenever the latter is opened in either direction, it presses against and pushes back one or another check, and in so doing winds the spring H or H', as the case may be, which spring, the instant that the door is left at liberty, operates to restore the latter to its original position. A stud, L, projecting from the bottom of the door by falling into the notch *e*, acts to bring and hold the door accurately to its closed position, so that two folding doors will stand, when shut, precisely flush with each other, or in a common plane. It will be perceived that the door A can be easily lifted out of its sockets for cleaning or otherwise; or by inserting it in a quarter round in the sockets, it will, when liberated, assume the open instead of the closed position. Instead of being square, the aperture in the eye G may have a circular form, with a catch for a feather on the pintle, or any other form that will hold the latter stationary while the door is being operated.

I claim herein as new, and of my invention—

1. The stationary pintle D, having the notched collar E *e*, and stop J, in combination with the helical springs H H', cheeks I I', and slotted eye G, constructed and arranged substantially as herein set forth.

2. I claim the square eye or socket C, in combination with the toe *d* on the pintle D, and collar E *e*, for the purpose herein set forth.

In testimony of which invention I hereunto set my hand.

FRANCK HERRMANN,

Witnesses:

GEO. H. KNIGHT,

H. G. WEBBER.