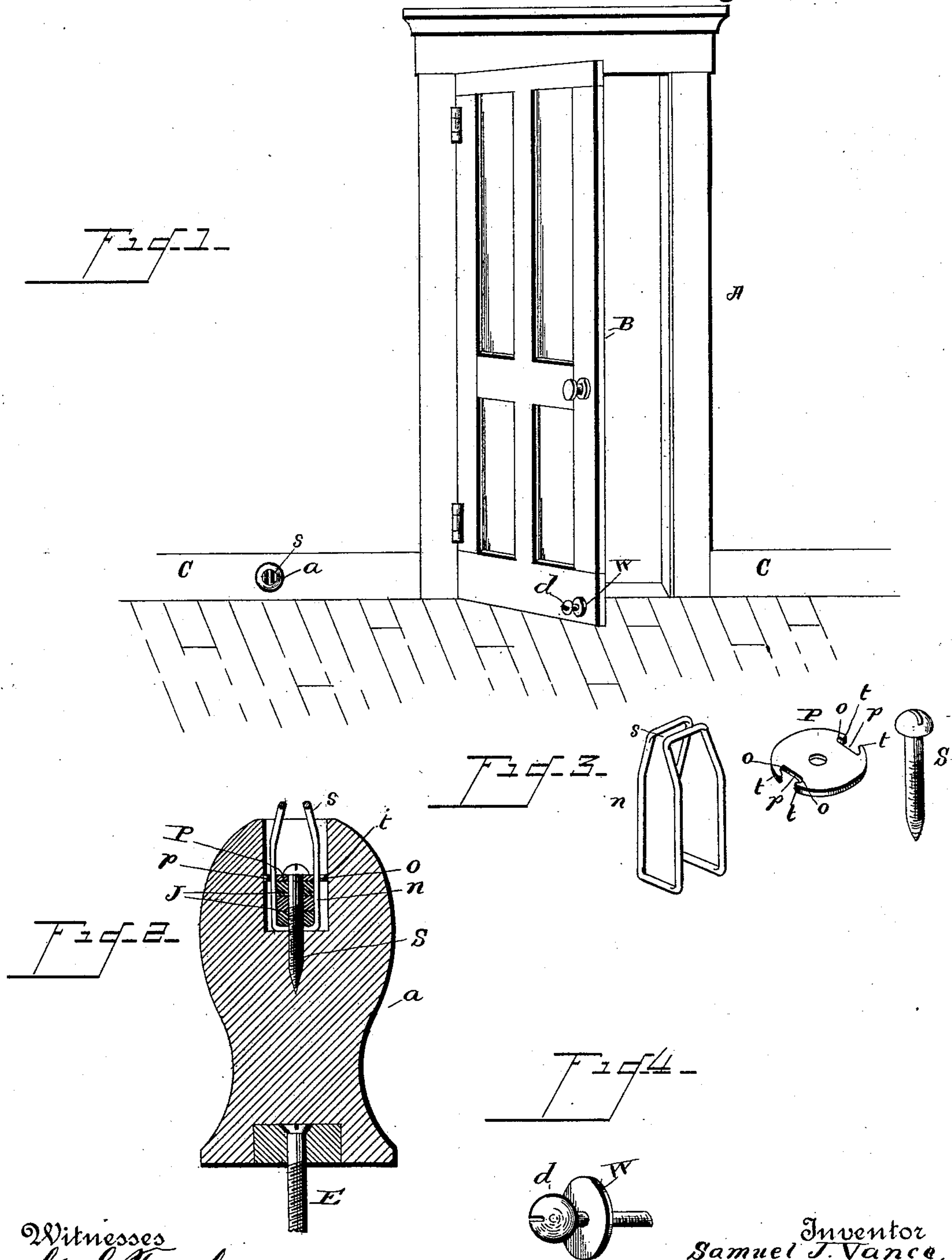


(No Model.)

S. J. VANCE.
DOOR CHECK.

No. 434,534.

Patented Aug. 19, 1890.



Witnesses
Geo. C. French.

A. J. Collamer.

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UNITED STATES PATENT OFFICE.

SAMUEL J. VANCE, OF MOUND CITY, MISSOURI.

DOOR-CHECK.

SPECIFICATION forming part of Letters Patent No. 434,534, dated August 19, 1890.

Application filed January 24, 1890. Serial No. 337,974. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL J. VANCE, a citizen of the United States, residing at Mound City, in the county of Holt and State of Missouri, have invented a new and useful Door-Check, of which the following is a specification.

This invention relates to door-checks of that class which are adapted to retain the door in open position; and the same consists in an ordinary knob secured to the base-board and having a pair of springs properly spaced, a globe-headed screw in the door adapted to engage between the springs and said knob, and the particular means of securing said springs to the knob.

The invention further consists in certain details of construction and arrangement of parts, all as more fully hereinafter set forth. In the accompanying drawings, Figure 1 is a perspective view of a door with my improved stop and holder attached. Fig. 2 is a longitudinal section of the stop. Fig. 3 is a perspective detail of the manner of securing the springs within the knob. Fig. 4 is an enlarged perspective view of the globe-headed screw.

In the drawings, A is the door-frame, to which the door B is attached in the usual manner. C represents the base-board, to which the wooden knob *a* is firmly attached by means of the screw E or otherwise.

The letter *d* represents a globe-headed screw seated in the front of the door, with its head projecting slightly therefrom, as shown in Fig. 1, and the head of this screw is adapted to engage the jaws *s* of springs *n*, which are secured within the wooden knob *a*, all as is common in devices of this character and well known in the art.

Coming now to the present invention, the letter W represents a washer or ring of metal surrounding and rigidly or otherwise secured to the shank of the said screw *d*, and when the screw is in place in the door this washer lies flat against the face of the door and protects the same from injury or from becoming jammed, scratched, or indented by the springs in the knob when the door is thrown forcibly open. The washer is broad enough and large enough in diameter to receive all such blows, as will be readily understood.

The wooden knob *a* has a hole bored centrally in its forward end, and in the bottom of this hole is passed a screw S. Upon the body of this screw is piled a number of leather washers J, which are preferably rectangular in shape, and above the uppermost washer J, and just beneath the head of the screw, a preferably metallic washer P is located. The opposite edges of this washer P are cut away, as shown at *p*, and the ends of these cut-away portions *p* are provided with notches *o*, which are inclosed by tongues *t*, formed in the periphery of the washer P.

The letter *n* designates a piece of spring-wire, which is preferably all in one piece, although it may be composed of two pieces, if preferred. This wire is bent in the form shown in Fig. 3, so that its body passes through the notches *o* in the plate P and down alongside the leather washers J, beneath which its ends are clamped. The outer ends of the wires *n* converge, and at their forward ends they protrude slightly beyond the front end of the knob *a*, forming parallel jaws *s*, which are preferably arranged so as to stand vertical.

With this construction when the door B is open the head of the screw *d* strikes between the jaws *s*, the inertia of the door causing it to force them apart, so that the washer W comes forcibly against the jaws and the movement of the door is stopped. The jaws close behind the globe-shaped head with a gentle spring-pressure sufficient to hold the door open; but when it is desired to again close the door a gentle pull thereon will disengage the head from the jaws, as will be readily understood. I prefer that the jaws *s* shall stand vertical, in order that if the door sags a trifle in time the screw *d* will not necessarily be adjusted. By removing one or more of the leather washers J the length of the spring-arms of the wire or wires *n* can be adjusted so as to permit the use of a screw having a larger or smaller head, or so as to give a greater or less spring-pressure to said wires, as may be found necessary in using my improved door-check in different places. The washer P is preferably of the same size as the hole in the end of the wooden knob *a*, whereby the springs will be securely retained in their proper positions in the knob.

What I claim as new is—

1. In a door-check, the combination, with the headed screw *d* on the door, of the knob *a*, having a hole in its forward end, wire
5 springs *n* therein, a screw passing longitudinally into the bottom of said hole and securing said springs therein, the bodies of said springs being free above said point of securing and converging toward the front, and
10 jaws *s* at their front ends projecting slightly beyond the front end of the knob, as and for the purpose set forth.
2. The combination, with the knob *a*, provided with a hole in its front end, of the
15 spring-wire *n*, seated in the bottom of said

hole, the leather washers *J*, resting thereon, the metallic washer *P*, resting on said leather washers and having notches *o* engaging the bodies of the members of said spring, and the screw *S*, passing through all said washers, the whole constructed as and for the purpose set forth. 20

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

SAMUEL J. VANCE.

Witnesses:

E. P. VANCE,
E. M. FERGUSON.