

(No Model.)

W. S. GILLESPIE.
HINGE.

2 Sheets—Sheet 1.

No. 470,043.

Patented Mar. 1, 1892.

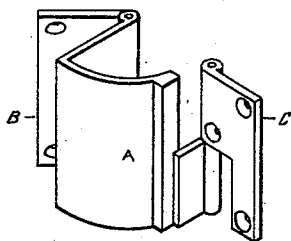
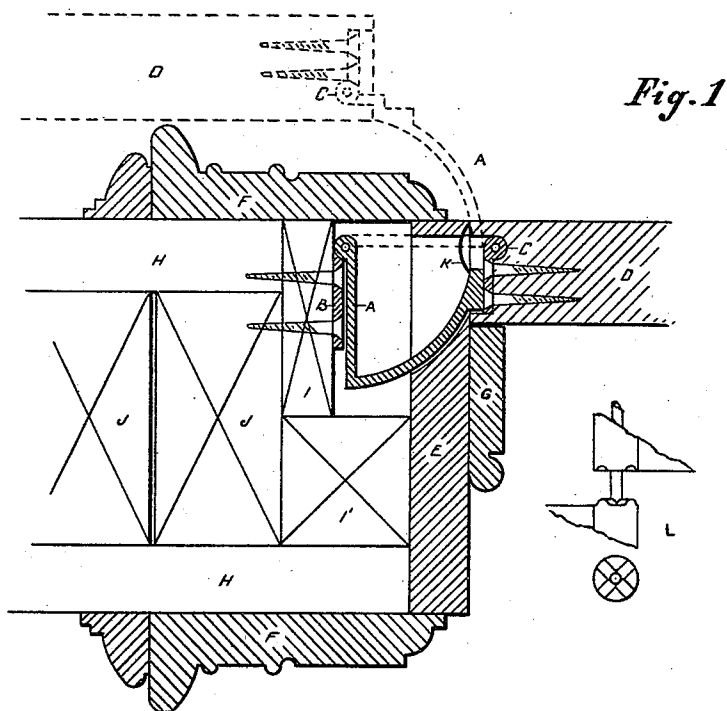


Fig. 2

WITNESSES:

Frank R. Pitbladdo
J. B. Bostwick

William Simon Gillespie

INVENTOR

BY

G. Curtis Gillespie ATTORNEY.

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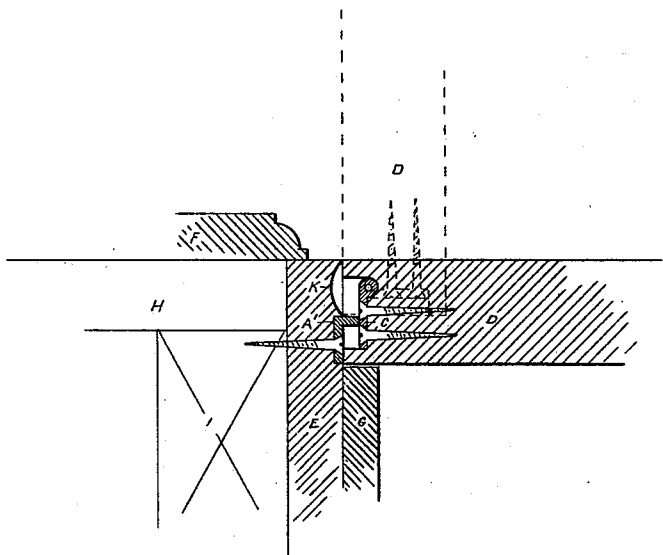


Fig. 3.

WITNESSES:

Grant R. Pitbladdo
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INVENTOR

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UNITED STATES PATENT OFFICE.

WILLIAM SISSON GILLESPIE, OF BROOKLYN, NEW YORK.

HINGE.

SPECIFICATION forming part of Letters Patent No. 470,043, dated March 1, 1892.

Application filed December 8, 1890. Serial No. 373,934. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM SISSON GILLESPIE, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Hinges for Lids, Doors, &c., of which the following is a specification.

My object is to provide a hinge which shall have all of the attributes of present hinges—viz., be strong, safe, easily applied under ordinary circumstances, which will throw the door beyond immediate projections or trim, and in addition be contained completely within the door and jamb and be entirely out of sight when the door is closed, still presenting a handsome and agreeable appearance when the same is open. A hinge which shall possess these qualities is very desirable in cabinet-work, piano-lids, ordinary room doors, &c., where no projections and unmarred surfaces are preferred; and, further, my hinge will be especially adapted for safe-doors, where a strong, serviceable, unseen, or internal hinge is very necessary, for by its uncertain whereabouts it will increase the burglar-proof qualities of safes.

The general construction of my hinge will be understood by reference to the accompanying drawings, of which—

Figure 1 is a plan of an ordinary room door-hinge, and Fig. 2 a perspective view showing hinge proper or detached. Fig. 3 is a plan showing the modification of my hinge for quarter-swing doors.

A, B, and C are the three members of the hinge.

D is the door; E, the jamb; F, the trim; G, the door-stop; H, the plaster or other finish, and I I' the blocking.

J J are the studs, and K a groove in jamb running full length of door.

L shows knuckle or connection between members A and B or A and C, or both.

A' in Fig. 3 is a modified form of member A, for purposes hereinafter described.

Member B is secured to blocking I, member C is secured to door D, and the curved member A connects B and C and swings on

pin in B, and C in turn swings on pin in A, thus completing semicircular swing of door, as indicated by dotted lines, which show door open and beyond trim F, the radius of curved member A, depending on projection or depth of trim F, being diminished for a less and increased for a greater projection. Its form may be angular, however, to meet requirements, still performing the same office.

Where it is only necessary to have the door make a quarter-swing, the member B and the curved portion of member A may be omitted and the portion of A in the immediate vicinity of C may be secured to the jamb direct, as shown in Fig. 3, thus making a hinge, with A' taking the place of A, of but one knuckle, as in present ordinary hinges.

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

The combination, in a hinge to be incased entirely within the surfaces of door and jamb, completely covered by portions of the same, and invisible when said door is closed, of two ordinary flat pin-flaps with an intermediate member connecting them, in form the segment of a circle with one end bent in straight as a radius to the center of said segment and at this point connected with one flap, while the segmental curved other end, said curve being struck from said center, connects directly with the other flap, said connections being by fixed pins and the bearing surfaces or knuckles of said members being provided with male and female recesses and projections fitting within one another to provide a definite frictional resistance on like members of two or more hinges of the same lid or door and thus secure a uniformity of operation, substantially as shown, and for the purposes described.

Signed at Brooklyn, in the county of Kings and State of New York, this 6th day of December, A. D. 1890.

WILLIAM SISSON GILLESPIE.

Witnesses:

J. D. BOSTWICK,
GRANT R. PITBLADDO,
A. P. MARONEY.