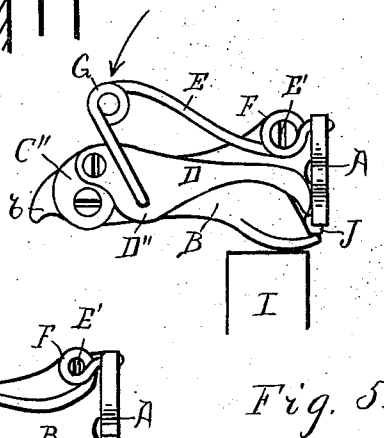
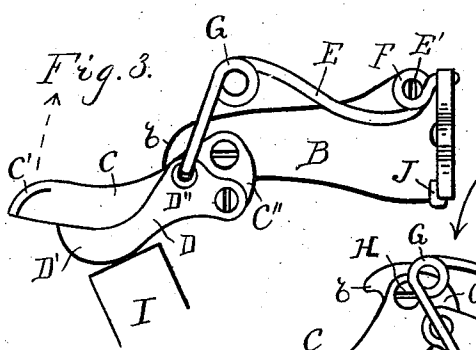
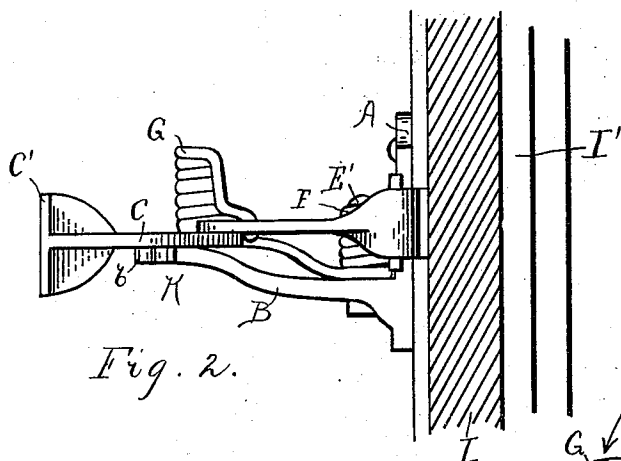
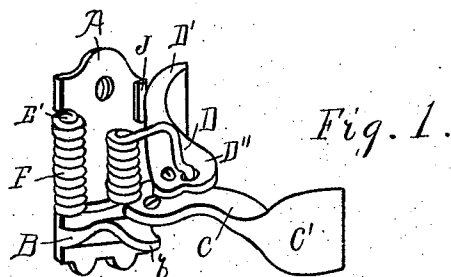


(No Model.)

H. W. HARRIS,
DOOR CLASP.

No. 570,017.

Patented Oct. 27, 1896.



WITNESSES
A. J. Peddie
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Fig. 4.

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UNITED STATES PATENT OFFICE.

HENRY W. HARRIS, OF DETROIT, MICHIGAN.

DOOR-CLASP.

SPECIFICATION forming part of Letters Patent No. 570,017, dated October 27, 1896.

Application filed February 28, 1896. Serial No. 581,215. (No model.)

To all whom it may concern:

Be it known that I, HENRY W. HARRIS, a subject of the Queen of Great Britain, residing at Detroit, county of Wayne, and State of Michigan, have invented certain new and useful Improvements in Door-Clasps; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to new and useful improvements in door-clasps; and it consists in the construction and arrangement of parts, as hereinafter fully set forth, and pointed out particularly in the claims.

The object of the invention is to provide a door-clasp that is cheap, simple, and durable, and one that shall prevent a door from slamming against the jamb and bounding away therefrom, consequently allow the door to stand ajar, also obviating the noise incident to such slamming, which object is attained by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my improved clasp. Fig. 2 is an enlarged side elevation thereof. Fig. 3 is a top plan of the clasp, showing the position of parts when a door having this improved clasp attached to its frame is being opened. Fig. 4 is a like view showing the position of parts when the door is being closed and the first engagement of said door with the clasp, and Fig. 5 is a like view showing the position of parts when the door has been nearly closed and the parts about to return to their normal position.

Referring to the letters of reference, A designates a plate, said plate having a curved arm B extending at right angles therefrom, the outer end of said arm terminating in the nose *b*. Pivoted on said arm B, near its outer end, is an arm C, said arm C terminating in the buffer-head C', and pivoted on the shoulder C'' of said arm is a like arm D, said arm D terminating in the head D', and in the shoulder D'' of said arm D is secured one end of the two-coiled spring E, the opposite end of said spring E being coiled around a suitable post E' and extended into a notch formed

in the edge of the plate A to retain it in its coiled position.

The operation of this improved clasp is as follows: The tendency of the coil F of the spring E being to unwind, the coil G of said spring E will be swung in the direction of the arrow, Fig. 4, consequently bowing the arms C and D outward between the bearings H and H' and causing said parts to stand normally, as shown in Figs. 1, 2, and 4. The door I being closed past the clasp and held against the jamb I' by the head D', (see Fig. 2,) said door being shown in section, when said door is opened said head D' will swing in the direction of the dotted line 2, Fig. 4, until it comes in contact with the arm C, as shown in Fig. 3, when said arm C will be swung from its pivot in the direction of the dotted line, Fig. 3, against the action of the coil G of the spring E far enough to allow the door I to pass the head D'. As soon as the door has passed said head D' the coil F will move the coil G in the direction of the arrow in Fig. 4, and the coil G, having a tendency to recoil, the parts will be returned to their normal positions. The plate A is provided with a piece J of soft material, as rubber or leather, against which the head D' is adapted to strike, when the parts are returned to their normal position, to prevent noise and jar. When the door is closing, the buffer-head C' will receive the impact thereof and swing in the direction of the dotted line 3, Fig. 4, and as the shoulder C'' thereof is carried around the pivot of the arm C the arm D will be carried into the position shown in Fig. 5, the door in this figure being shown as bearing against the face of the buffer-head C', which face is polished to allow said door to pass freely. As soon as the door I shall have passed the buffer-head C' from the position shown in Fig. 5 the coil F will carry the coil G in the direction of the arrow shown in said figure and return the parts to their normal positions. On said arm C is a pin K, Fig. 2, which is adapted to swing in front of the nose *b* on the arm B to prevent said arm C being carried too far around its pivot, as will be understood. By having the coil G rather weak it will not prevent the door swinging at a slow rate past the clasp, and by having the coil F somewhat stronger it will securely hold the

door closed. It will now be seen that by the employment of the parts comprising this improved door-clasp, associated in the manner set forth, a clasp is provided that is very effective and one that will obviate the noise incident to the slamming of doors, and in case it be used on screen-doors it will prevent said doors swinging partly open after they have closed, as is common with said doors when the springs employed for closing them have become weakened from use, for it is obvious that when said doors stand partly open their object, namely, to prevent the entrance of insects, is completely destroyed.

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

1. In a door-clasp, the combination of the plate, the portion extending at an angle from said plate, the arm pivoted to said portion, a like arm pivoted on said first-named arm, and the spring for normally holding said arms apart, as set forth.

2. In a door-clasp, the combination of the plate, the integral portion extending at an angle from said plate, the arm pivoted eccentrically on said integral portion, the buffer-head on said arm, the arm pivoted on said first-named arm said last-named arm also

having a head, and the coiled spring for normally maintaining said arms in an open position.

3. In a door-clasp, the combination of the plate, the integral portion extending at an angle therefrom, said integral portion having a nose or shoulder thereon, the arm pivoted on said integral portion, a lug or pin on said arm, the arm pivoted on said first-named arm, and the spring having the coils, for the purpose set forth.

4. In a door-clasp, the combination of the plate, the integral portion extending at an angle therefrom, said integral portion having a nose or shoulder thereon, the arm pivoted on said integral portion, the pin or lug on said arm, the arm pivoted on said first-named arm, the coiled spring, said arms adapted to be closed by an object bearing against either of them and to be opened by the operation of said spring, and the soft-material buffer on said plate, all substantially as and for the purpose set forth.

In testimony whereof I hereunto set my hand this 21st day of February, 1896.

HENRY W. HARRIS.

In presence of—

F. J. PEDDIE,

A. BERGMANN.