

(No Model.)

D. H. HAYWOOD.
DOOR CHECK.

No. 504,581.

Patented Sept. 5, 1893.

Fig. 1.

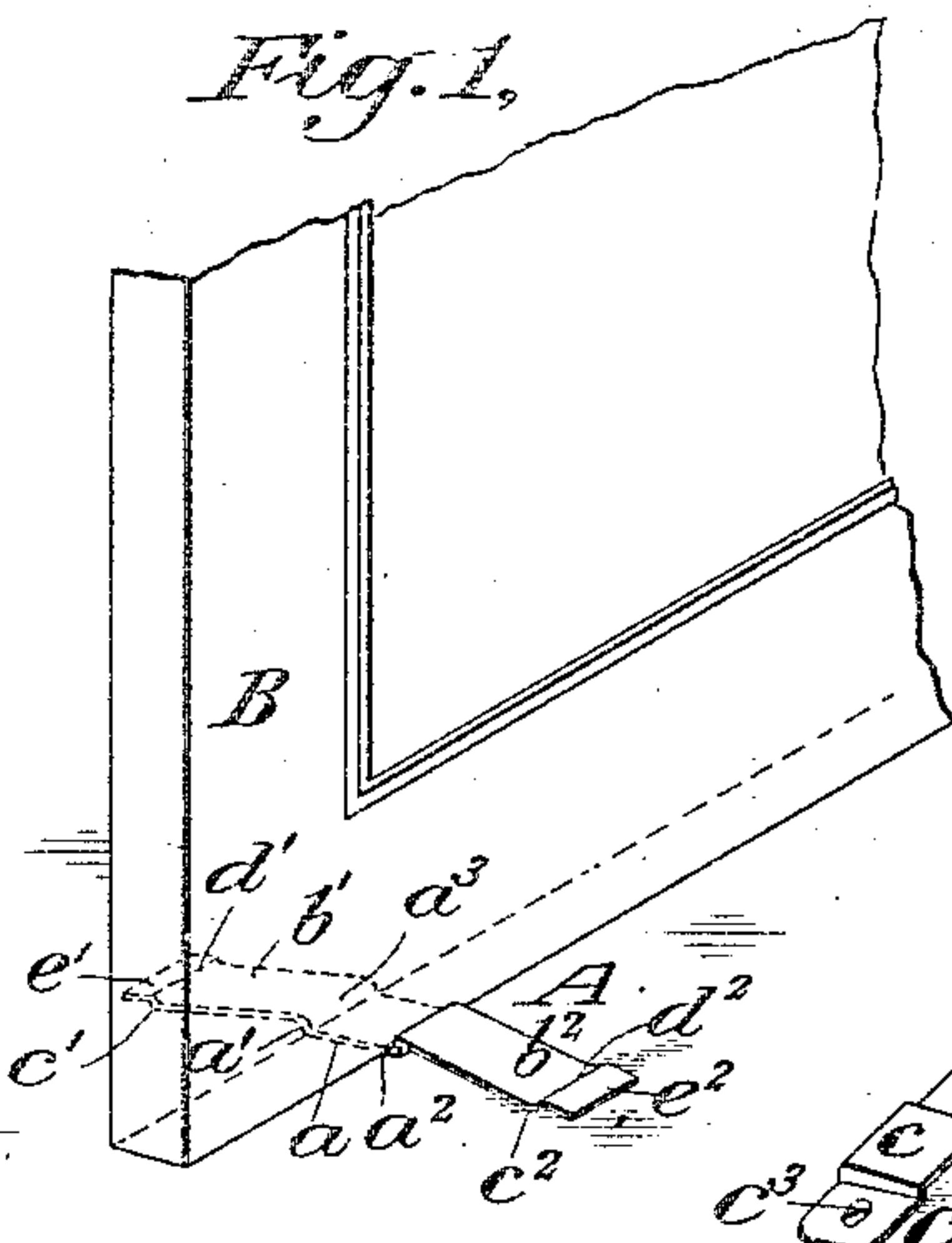


Fig. 3.

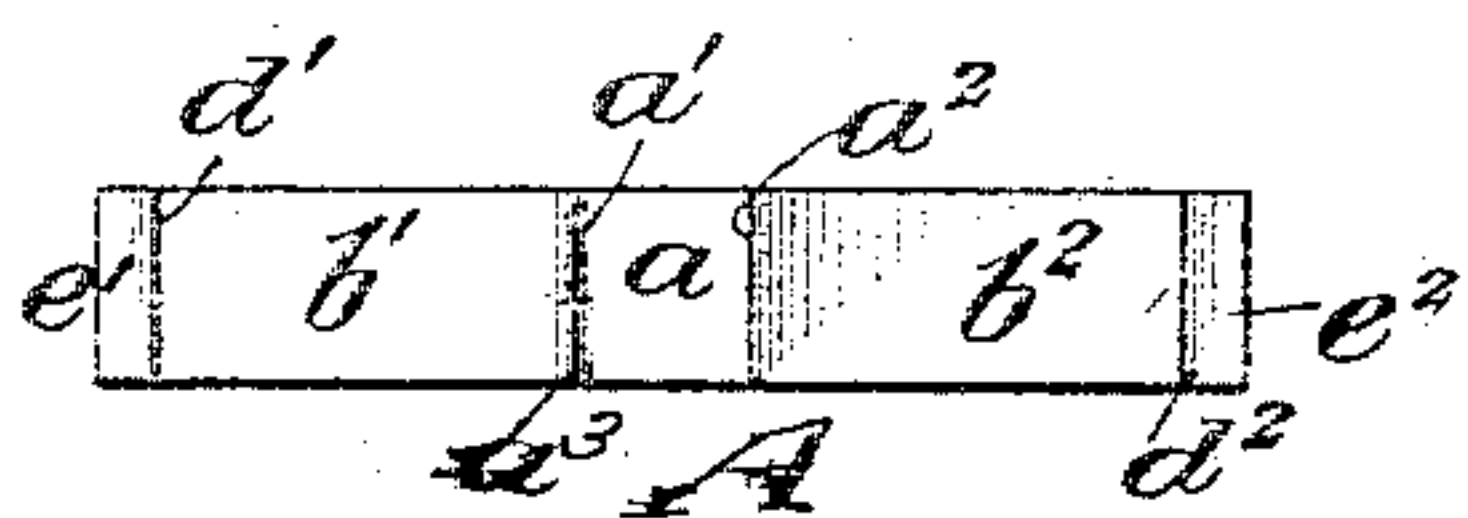


Fig. 2.

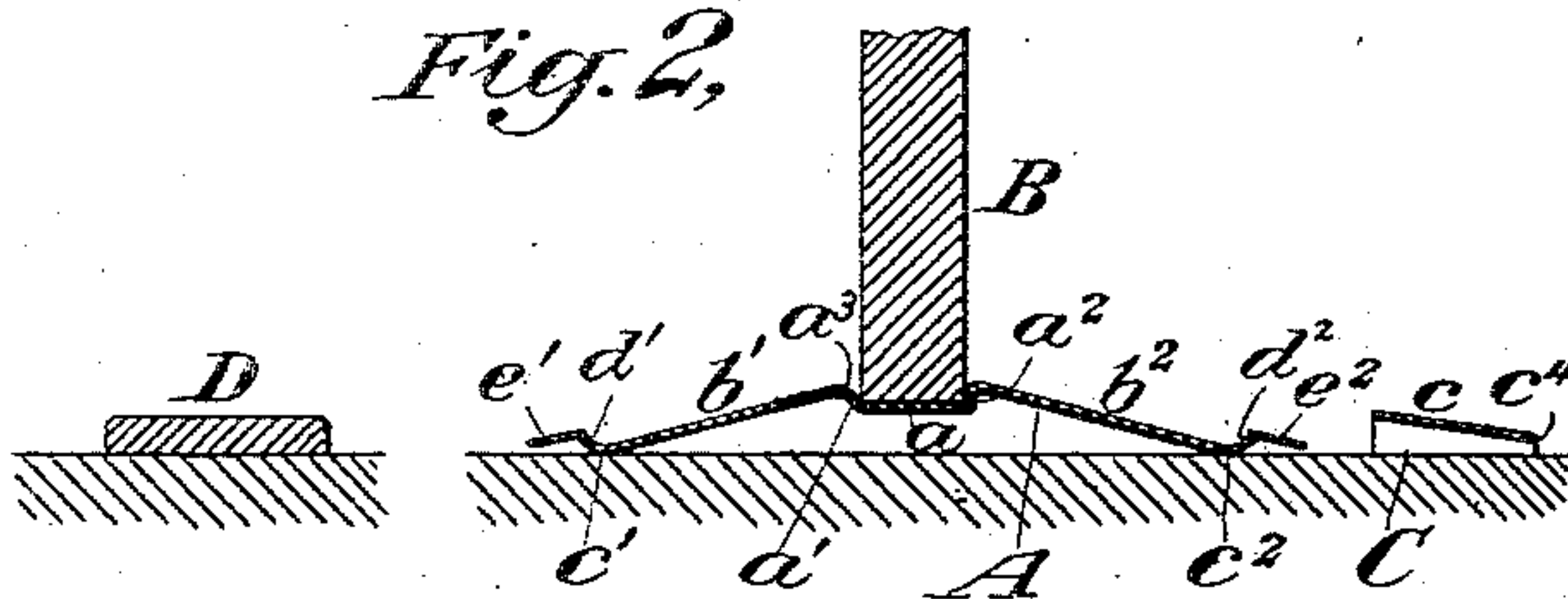
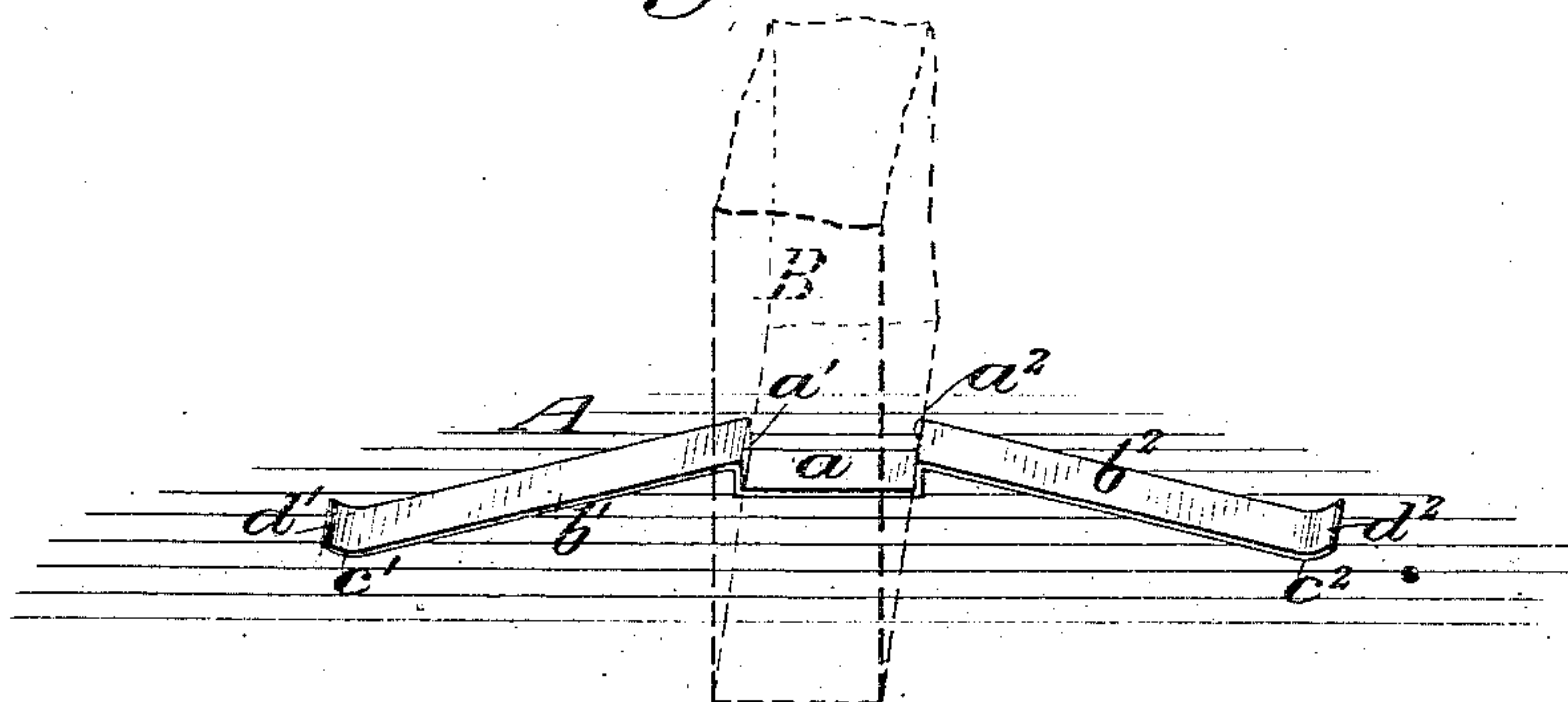


Fig. 4.



Witnesses:-

Chas. H. Paine.

Fred J. Kemper.

Inventor:-

D. Howard Haywood

UNITED STATES PATENT OFFICE.

DANIEL HOWARD HAYWOOD, OF NEW YORK, N. Y.

DOOR-CHECK.

SPECIFICATION forming part of Letters Patent No. 504,581, dated September 5, 1893.

Application filed July 7, 1893. Serial No. 479,793. (No model.)

To all whom it may concern:

Be it known that I, DANIEL HOWARD HAYWOOD, a citizen of the United States of America, and a resident of New York city, county and State of New York, have invented a new and useful Improvement in Door-Checks, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

My invention relates to a means for maintaining against accidental movement an open door in any position it may be placed but that it shall be free to be moved in either direction by hand when required, and to this end my improvement consists in a single piece of metal struck up in such a manner that one portion thereof shall embrace the lower edge of the door, and another portion bear with a yielding pressure against the floor.

The object of my improvement is that while the said check shall remain in engagement with the door when the same is moved from one position to another, it shall be readily detachable when required, and as readily adapted to be brought into re-engagement therewith.

My invention further consists in providing a device for catching and holding the door check when the door is opened a certain distance, and retaining the said check in such a way that it may be disengaged from the door.

In the drawings Figure 1 illustrates a portion of a door, and a door check embodying my improvement in engagement therewith. A retaining device for the same is also here shown. Fig. 2 is a cross section of the same. Fig. 3 is a plan view in detail of my door check, and Fig. 4 is a perspective view of the same but of a construction slightly dissimilar; a portion of a door is shown in dotted outline in its position therewith.

Similar letters of reference designate corresponding parts in all the figures.

A designates my improved door check as a whole. In detail it may be described as having a central portion a which as herein shown is depressed, forming with the side walls a' , a^2 a part adapted to embrace the lower edge of the door B.

b' b^2 designate the side portions of the door check which are turned downwardly from

where they leave the parts a' a^2 to such points as c' c^2 at which they touch the floor. They are then preferably turned slightly upward as at d' d^2 in order that the ends shall have rounded or smooth portions to bear against the floor or carpet, to prevent the liability of the possibly sharp or rough edges injuring the same.

In Figs. 1, 2 and 3 I have shown the extremities d' d^2 as having a further extension e' e^2 for a purpose as will hereinafter be explained.

C designates a catch or retaining device which may be secured to the floor as shown by screws c^3 c^3 or otherwise, and it is provided with an uprising central portion c which is made slightly tapering. The catch is arranged on the floor in such a position that it is directly in the path of the door check A as the door is swung open, and preferably in such a position that it will engage with said door check at such a time as the door has been opened to its fullest capacity.

The method of engagement is as follows:— One end b^2 of the door check A passes under the uprising central portion c of the catch C, until the extremity d^2 shall have passed completely under the same, and shall have sprung up on the other side against the edge c^4 . The door upon being given a sharp pull in the opposite direction will free itself from the door check, the shoulder a^3 being rounded as shown to admit of this. When now it is desired to disengage the check A from the catch C the door may be swung over into position directly over the check, which will then spring into its place. The extension e^2 may then be depressed by placing the foot on it, which will free the extremity d^2 from engagement with the side c^4 of the catch C and permit the check to be withdrawn from engagement with the said catch, the check now being held by and moving in connection with the door B. Now supposing it should be necessary to quickly shut the door without taking time to disengage the check in the way just described, it will be seen by reference to Fig. 2 that if the door is pushed sharply to, the extension e' or extremity d^2 in the check A coming violently in contact with the threshold D, will cause the check to spring out of its engagement with the door, the rounded shoulder a^3 permitting this in the same manner as

it permitted the release as hereinbefore described in connection with the catch C.

Fig. 4 illustrates the simplest and perhaps most practical form of my improved door check, in which I dispense with the catch C altogether, and construct the check A simply with the depressed central portion *a* having substantially square shoulders *a'* *a*², and ends *b'* *b*² bearing downwardly under spring action and having the extremities *d* *d'* rounded. In this case the check may be readily disengaged from the door by pressing either end *b'* or *b*² down with the foot and pulling the door free, and the check may be as readily readjusted by a similar pressure on either end, and by pulling the door over the catch and allowing the same to spring into position. Although the space between the floor and the lower edge of the door is limited, I am enabled to release the check in any of the ways herein before enumerated by the fact of making the check in one piece, this enabling me to so arrange that the thickness of the metal used plus the amount of the depression necessary to release the walls *a'* *a*², of the central portion *a* from engagement with the door shall be less than the said distance between the floor and the lower edge of the door, from which it will be seen that I am enabled to

make a very convenient, compact and inexpensive device. 30

What I claim is—

1. As an article of manufacture, a door check struck up from a single piece of metal and having a depressed central portion, shoulders on either side thereof and end portions projecting downwardly therefrom adapted to bear upon and travel over the floor with a yielding pressure substantially as described. 35

2. The combination of a door check, consisting of a single piece of metal having a depressed central portion embracing the lower edge of a door, and end portions bearing against the floor with a yielding pressure, the extremities thereof being turned upwardly, and a catch secured to the floor and adapted to receive and hold one end of the door check upon the same being brought into engagement therewith substantially as and for the purpose herein described. 40 45 50

In testimony that I claim the foregoing I have hereunto set my hand this 6th day of July, 1893.

D. HOWARD HAYWOOD.

Witnesses:

CHAS. W. PAINE,
FRED L. KEMPER.