

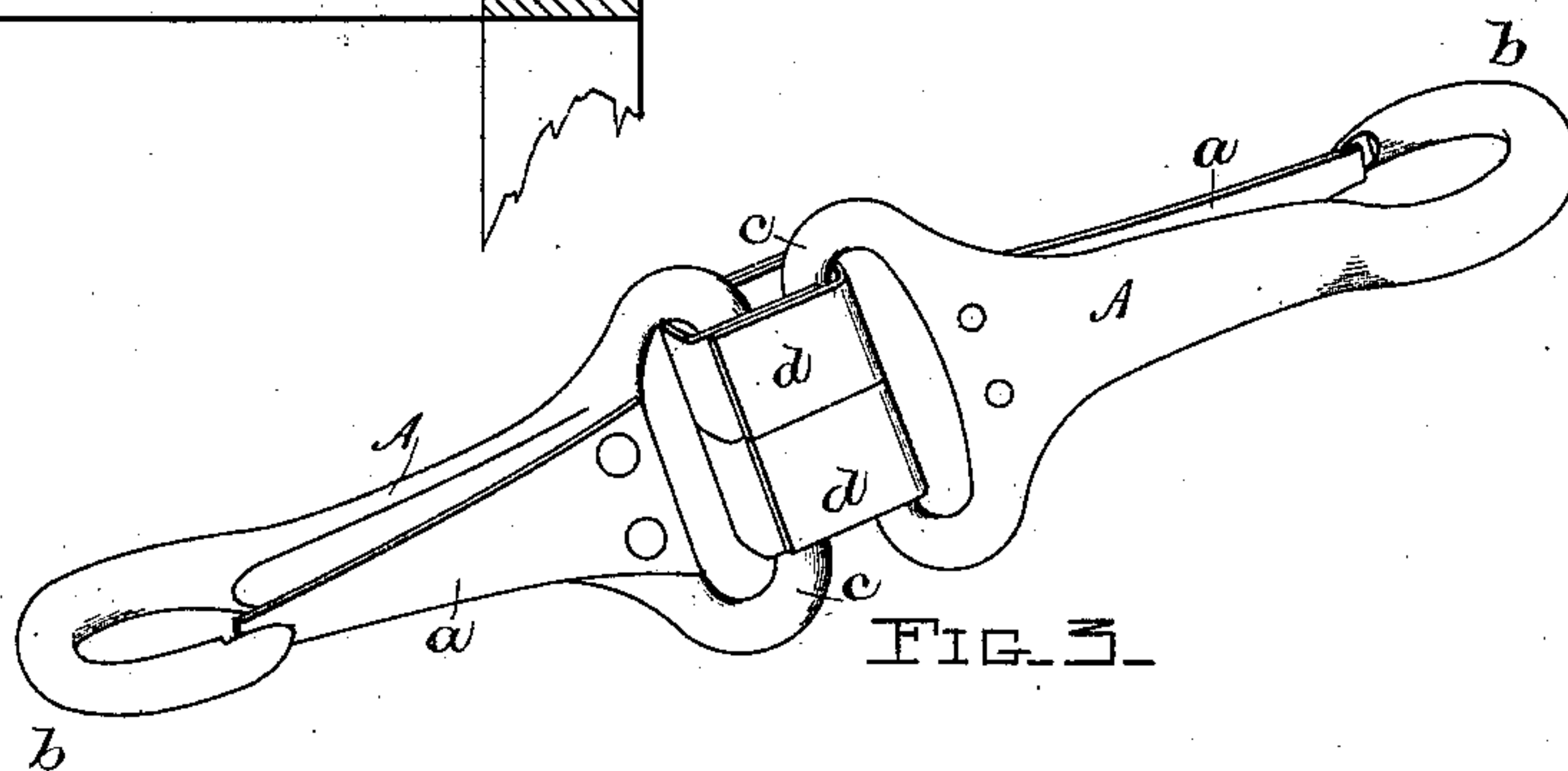
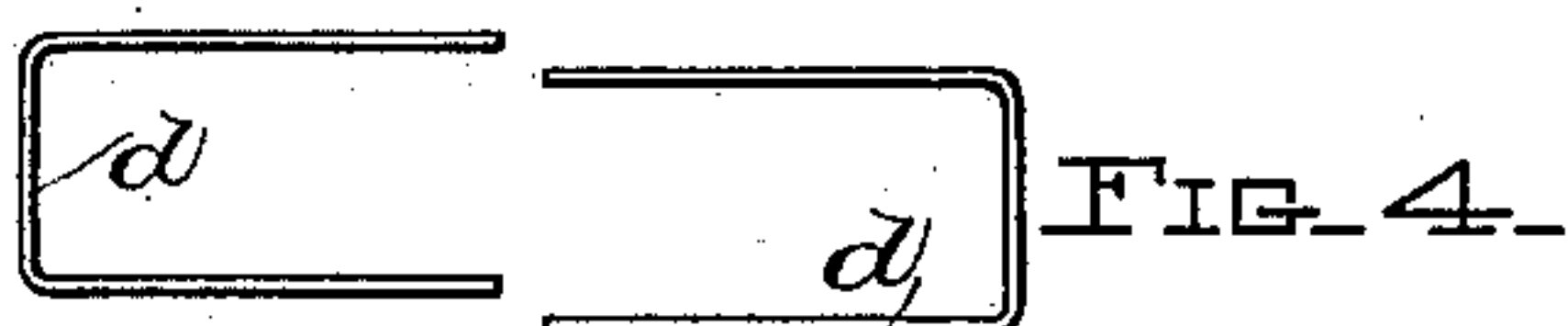
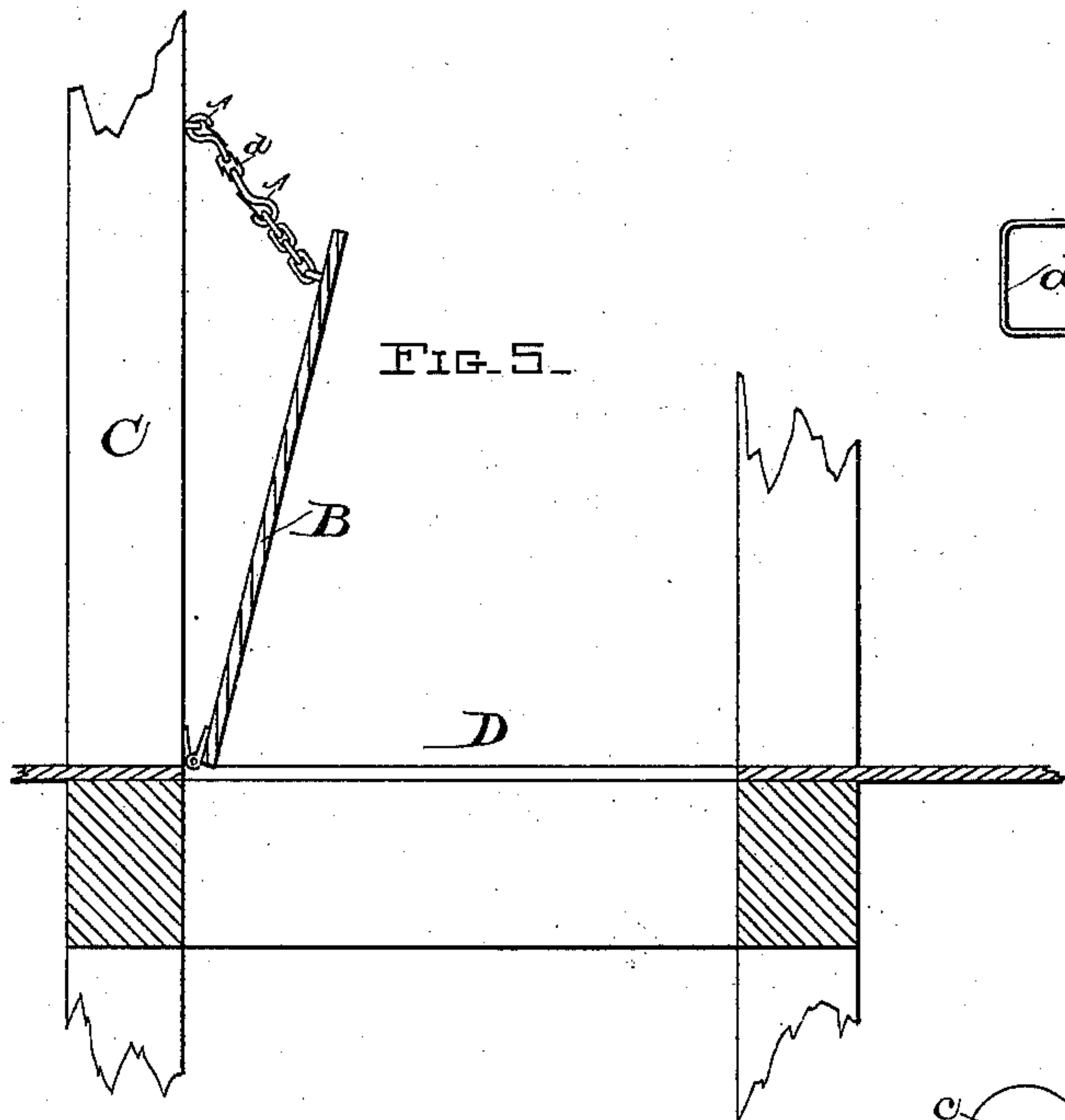
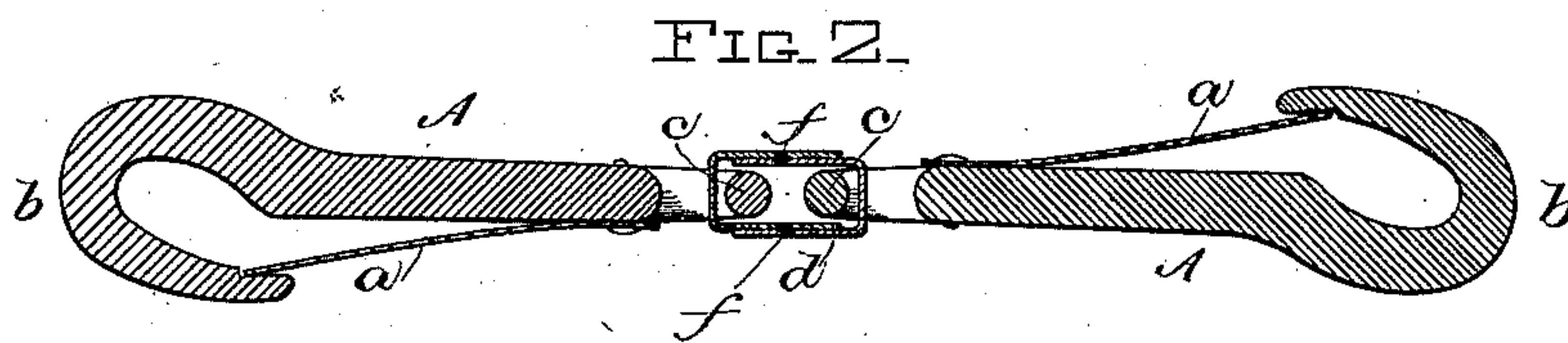
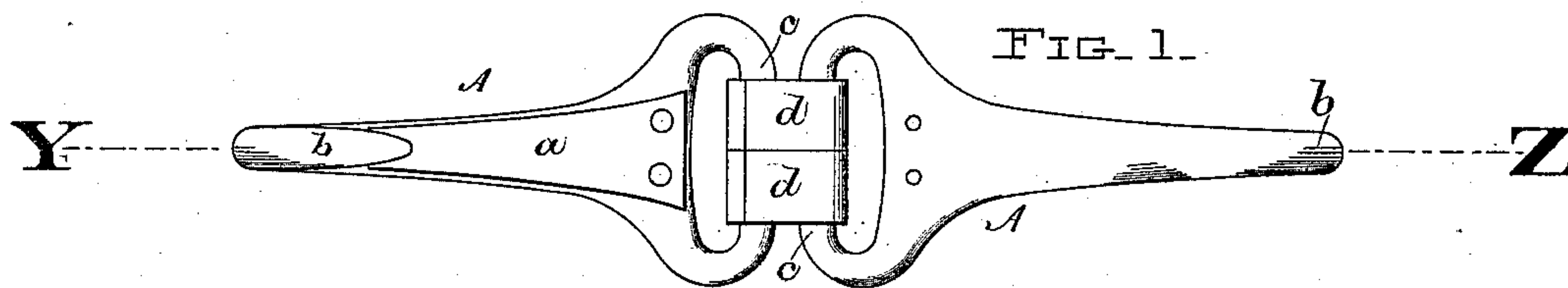
(No Model.)

O. B. HALL.

AUTOMATIC RELEASING HOOK.

No. 357,148.

Patented Feb. 1, 1887.



WITNESSES

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INVENTOR

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UNITED STATES PATENT OFFICE.

OSBORN B. HALL, OF MALDEN, ASSIGNOR OF ONE-HALF TO CALEB C. WALWORTH, OF BOSTON, MASSACHUSETTS.

AUTOMATIC RELEASING-HOOK.

SPECIFICATION forming part of Letters Patent No. 357,148, dated February 1, 1887.

Application filed July 12, 1886. Serial No. 207,779. (No model.)

To all whom it may concern:

Be it known that I, OSBORN B. HALL, of the city of Malden, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Automatic Releasing-Hooks, which will, in connection with the accompanying drawings, be hereinafter fully described, and specifically defined in the appended claims.

Figure 1 is a plan view of my invention. Fig. 2 is a section taken on line Y Z, Fig. 1. Fig. 3 is a perspective view of what is shown in Fig. 1. Fig. 4 is a detached view of the disconnected halves of the fusible links. Fig. 5 shows one of the uses of this invention.

My invention relates to means for holding open shutters, trap-doors, and other covers or means of closing openings and apertures in the walls of buildings, vaults, and other inclosed spaces, so that as long as the atmosphere remains at normal temperature the said holding devices will remain effective; but when the heat of the atmosphere is raised to the danger point, such holding device will, by being weakened by heat, give way and allow the shutter or other aperture-closing device to shut into place; and my invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Referring again to the drawings, A A represent two hooks of the well-known class termed "snap-hooks," which are provided with a securing-spring, *a*, and are formed with an engaging hook or beak, *b*, and a loop, *c*, at their opposite end. I unite these hooks by means of links *d*, one half of each link being placed astride the loop *c* of one of the hooks, when the two halves of the link are secured together by solder, (shown at *f*, Fig. 2,) that will be weakened by heat, so as to give way at the intended degree or danger-point.

One of the practical uses of my invention is shown in Fig. 5, where a trap-door or scuttle, B, is shown as raised and secured to the wall or vertical support C by means of a pair of hooks united by a fusible link, in the manner shown and already explained, the action of heat upon the securing-solder of the link allowing the door to fall, so that with floor D a continuous barrier to the fire is presented.

No claim is herein presented to the hooks A, as the same are not only old and well known, but may be varied and modified essentially without departing from the spirit of my invention. Nor is any claim made to the link itself, as the same has been already patented to me by United States Patent No. 234,316, dated August 11, 1885, and the link may be varied or modified as desired; but a link formed of two half-links, of brass or other tenacious metal fusing at high heat and united by suitable solder sensitive to heat, is preferable to any other for this purpose; and while the employment of two or more links to unite the hooks is not claimed as novel, yet it is advantageous, as thereby the danger of bad results from defects in soldering the links is almost entirely avoided.

Among the utilities of my invention are the facts that it is prepared complete and entire as a new article of manufacture at the place of manufacture ready for use, and may be applied to use by any person, all that is necessary being a means of attaching it to the door or shutter and to the body that supports the door or shutter when thus held open. Besides, if it be desired at any time to resolder or renew the links, the hooks may be detached from the door or shutter and the body of support, when they may be instantly replaced by others or resoldered and returned to use.

When used upon shutters or doors that swing horizontally, a weight or other well-known means may be employed for closing the doors as soon as the link gives way.

I claim as my invention—

1. As a new article of manufacture, a double-ended fastener formed at one end to be attached to a supporting-body and at the other to the door or shutter to be thereby held in position, and having said ends or parts united by a fusible link that will give way when the heat rises to the danger-point, substantially as specified.

2. The combination of hooks A and fusible link or links *d*, substantially as specified.

OSBORN B. HALL.

Witnesses:

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