

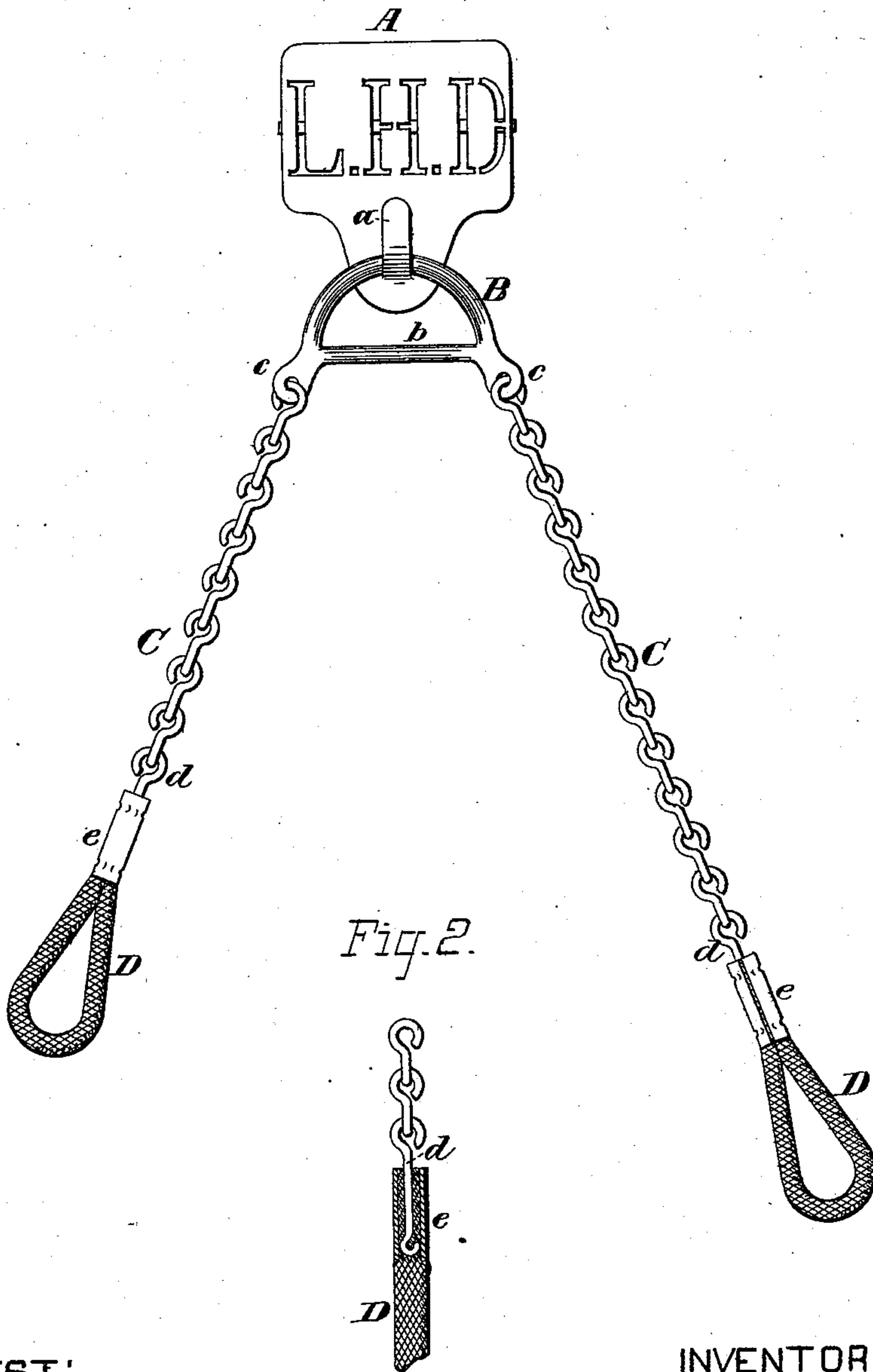
(No Model.)

L. H. DAY.
Suspender End.

No. 230,532.

Patented July 27, 1880.

Fig. 1.



ATTEST:

Julian A. Hurdle.

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INVENTOR:

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UNITED STATES PATENT OFFICE.

LYMAN H. DAY, OF NEW YORK, N. Y.

SUSPENDER-END.

SPECIFICATION forming part of Letters Patent No. 230,532, dated July 27, 1880.

Application filed June 7, 1880. (No model.)

To all whom it may concern:

Be it known that I, LYMAN H. DAY, a citizen of the United States, residing in the city, county, and State of New York, have invented certain Improvements in Suspender-Ends, of which the following is a specification.

This invention relates to the straps which connect the suspender-buckle with the buttons on the clothing; and it consists in a certain novel construction of loop to take over the button and a cast-off for connecting the chains and loops with the buckle, all of which will be more fully hereinafter described.

In the drawings, Figure 1 is a view of a suspender end and buckle provided with my improvements, and Fig. 2 is a section detail view on a larger scale, showing the method of attaching the textile loops to the chains.

Let A represent a suspender-buckle, which may be of the ordinary or any good kind. This buckle is provided with a hook, *a*, whereby the cast-off is attached. In some cases this attachment may be permanent; but in the present case I have shown a simple open hook to receive a semicircular cast-off, B. The ends of this cast-off are connected by a tie, *b*, to give it strength and rigidity, and it is furnished with eyes *cc* at the corners to receive and form attachments for the chains C C.

To the ends of these chains are attached loops D D, of some soft textile material, as cylindrical cord, which are designed to take over the buttons on the clothing.

To insure a firm attachment of the loop-cord to the chain I make the terminal link *d* of the chain in the form of an elongated hook, as shown in Fig. 2, and lay the ends of the cord along each side of its shank. I then incase the whole in a sheet-metal thimble or sleeve, *e*, and clamp the latter tightly upon it, indenting the metal so as to roughen it on the inside, if necessary. This forms a neat and secure fastening, and enables me to combine the strength, neatness, and flexibility of the chain with a strong and flexible loop that will not in any way injure the button or its attachment.

In lieu of the hook on the terminal link *d*, I may corrugate the shank of the link, or give

it a slightly spiral form to cause it to retain its hold; but the hook is, I think, preferable, it being easily constructed.

The semicircular cast-off B plays in the hook *a* when oblique or unequal strains are thrown on the chains by the wearer, and thus accommodates itself to every motion of the wearer on account of its semicircular shape.

I am aware that various devices have been employed to produce the equalization above referred to, such as pivoted levers and pulleys over which the loop-chains are arranged to pass. In the latter case, however, the chains or their substitutes are in one piece and the bight passes over the pulley or its substitute. Consequently, if the chain or a loop gives way, the suspender is released. In the case where a pivoted lever is employed very little movement is secured, and the pivot being of slight construction, it is weak and liable to break unless made very heavy and clumsy.

With my cast-off attachment B, I am enabled to get a sufficient amount of movement to properly compensate for the movements of the body of the wearer, and at the same time provide an independent attachment to the buckle for each chain, and it can be detached or cast off from the buckle at the pleasure of the wearer.

I am aware also that loops of cord and braid to take over the buttons are not new; but I am not aware that such loops have ever been secured to the terminal links of metal chains, as herein shown.

Having thus described my invention, I claim—

1. The combination, in a suspender-end, of the chain C, the terminal link *d*, constructed as set forth, the cylindrical textile loop D, its ends arranged to embrace the terminal link *d*, and the sleeve or thimble *e*, arranged to tightly clasp or embrace the ends of the loop and the terminal link, substantially as and for the purposes set forth.

2. The combination, with the chains C C, of the semicircular cast-off B, provided with a tie, *b*, and with eyes at the corners to form attaching-points for the said chains, and the

buckle provided with a hook or other equivalent attaching-point for the semicircular cast-off, substantially as set forth.

3. The combination, with the buckle and
5 the cast-off B, of the chains C C, the terminal links *d*, constructed as set forth, the loops D D, and the metal sleeves or thimbles *e e*, all arranged substantially as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

LYMAN H. DAY.

Witnesses:

HENRY CONNETT,
JOS. H. DENITHORNE.