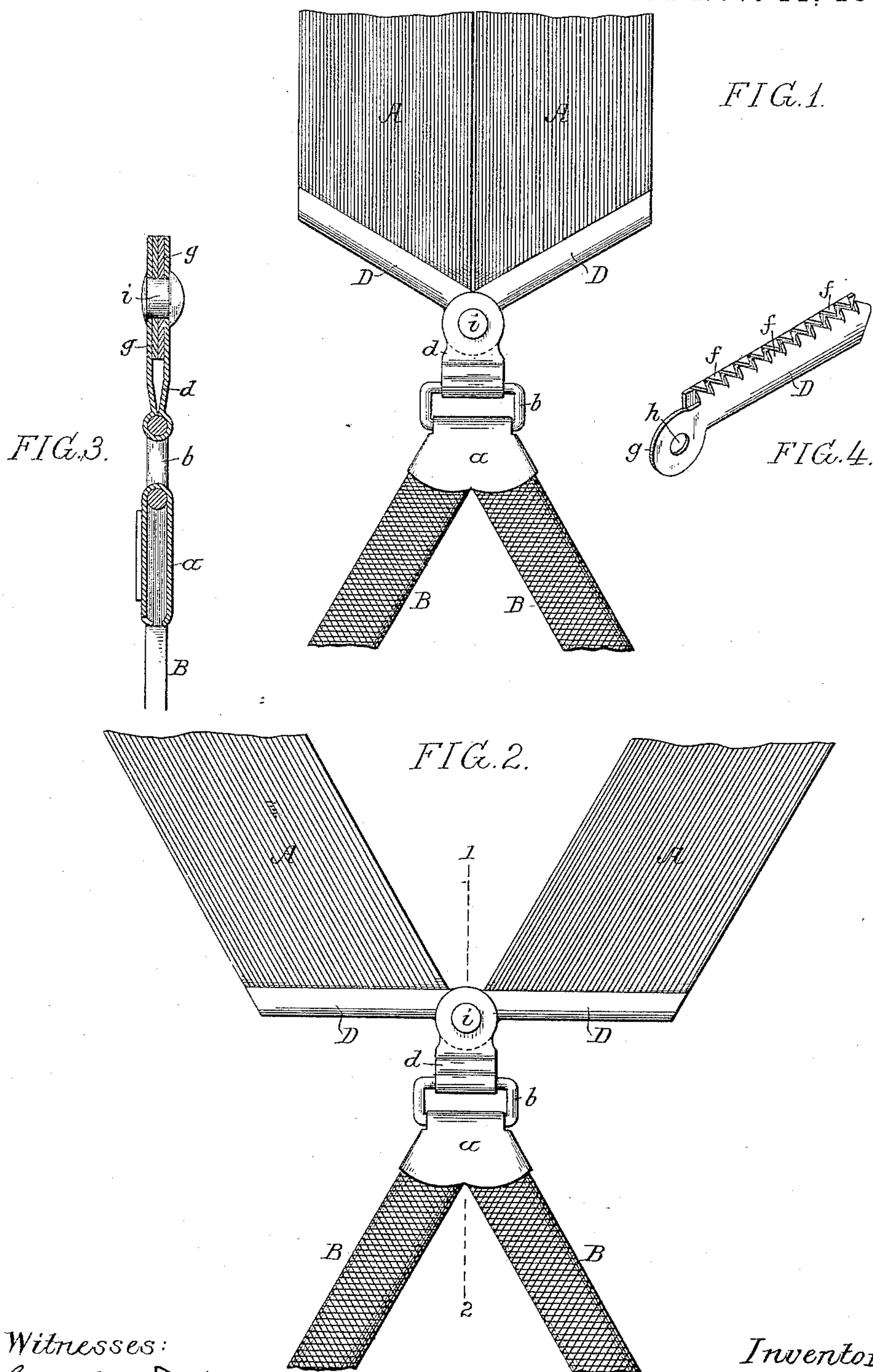


(No Model.)

W. A. LAVERTY.
SUSPENDERS.

No. 440,430.

Patented Nov. 11, 1890.



Witnesses:
Hamilton D. Turner
Alex. Barkoff

Inventor:
William A. Laverty
by his Attorneys
Howson & Howson

UNITED STATES PATENT OFFICE.

WILLIAM A. LAVERTY, OF PHILADELPHIA, PENNSYLVANIA.

SUSPENDERS.

SPECIFICATION forming part of Letters Patent No. 440,430, dated November 11, 1890.

Application filed September 5, 1890. Serial No. 363,970. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. LAVERTY, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Suspenders, of which the following is a specification.

The object of my invention is to provide a cheap and simple device whereby the shoulder-straps of a pair of suspenders may be connected to the rear waist-straps in such a manner as to provide for a pivotal movement of said shoulder-straps to permit them to assume different angles to suit the wearer; and this object I attain in the manner hereinafter set forth, reference being had to the accompanying drawings, in which—

Figure 1 is a view of a portion of the shoulder-straps and of the rear waist-straps of a pair of suspenders, illustrating my invention. Fig. 2 is a similar view showing the shoulder-straps in a different position from that illustrated in Fig. 1. Fig. 3 is an enlarged transverse section on the line 1 2, Fig. 2; and Fig. 4 is a detached view of one of the elements of the device.

A A represent parts of the shoulder-straps of the suspenders, and B B parts of the rear waist-straps of the same, the latter being secured at their upper ends to a folded clamping-plate *a*, with which engages a ring or loop *b*, the latter also engaging with a clip *d*, to which the lower ends of the shoulder-straps are hung.

As a means for effecting such connection of each of the shoulder-straps with the clip *d*, I use a bent or folded plate D, the upper edges of which are provided with teeth *f*, as shown in Fig. 4, one end of this plate having a projecting lug or ear *g* with central opening *h*. When the plate D is applied to the lower end of one of the shoulder-straps A and compressed thereupon, the teeth *f* bite into the web of the strap, and thus firmly secure the plate D thereto, said plate at the same time serving as a binding or finish for the raw or

cut rear edge of the web. The ears *g* of the binding-plates of the two straps A are then applied to the clip *d*, so as to overlap one another, as shown in Fig. 3, and are pivoted together and to the clip by means of a bolt or rivet *i*. By this means not only do I provide a cheap means of finishing the rear ends of the shoulder-straps A and connecting them to the waist-straps, but the connection also permits said straps A to lie closely side by side, as shown, for instance, in Fig. 1, when the suspenders are packed in a box, or provides for any desired degree of spread of the shoulder-straps, as shown, for instance, in Fig. 2, to suit the size of the wearer of the suspenders.

Although I have shown a folded clip-plate as a means of attaching the rear ends of the shoulder-straps to the waist-straps, it should be understood that any of the usual waist-strap attachments which permit the use of a pivot bolt or rivet in connection therewith may be used in carrying out my invention.

Having thus described my invention, I claim and desire to secure by Letters Patent—

The combination of the shoulder-straps of suspenders, rear waist-straps independent of said shoulder-straps, metallic binding-plates applied to and covering the rear end of each of the shoulder-straps and each having a projecting lug or ear at one end, an attachment on the rear waist-straps of the suspenders, and a pivot bolt or rivet whereby the lugs or ears on the binding-plates of the shoulder-straps are pivoted together and to said attachment on the rear waist-straps, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM A. LAVERTY.

Witnesses:

EUGENE ELTERICH,
HARRY SMITH.