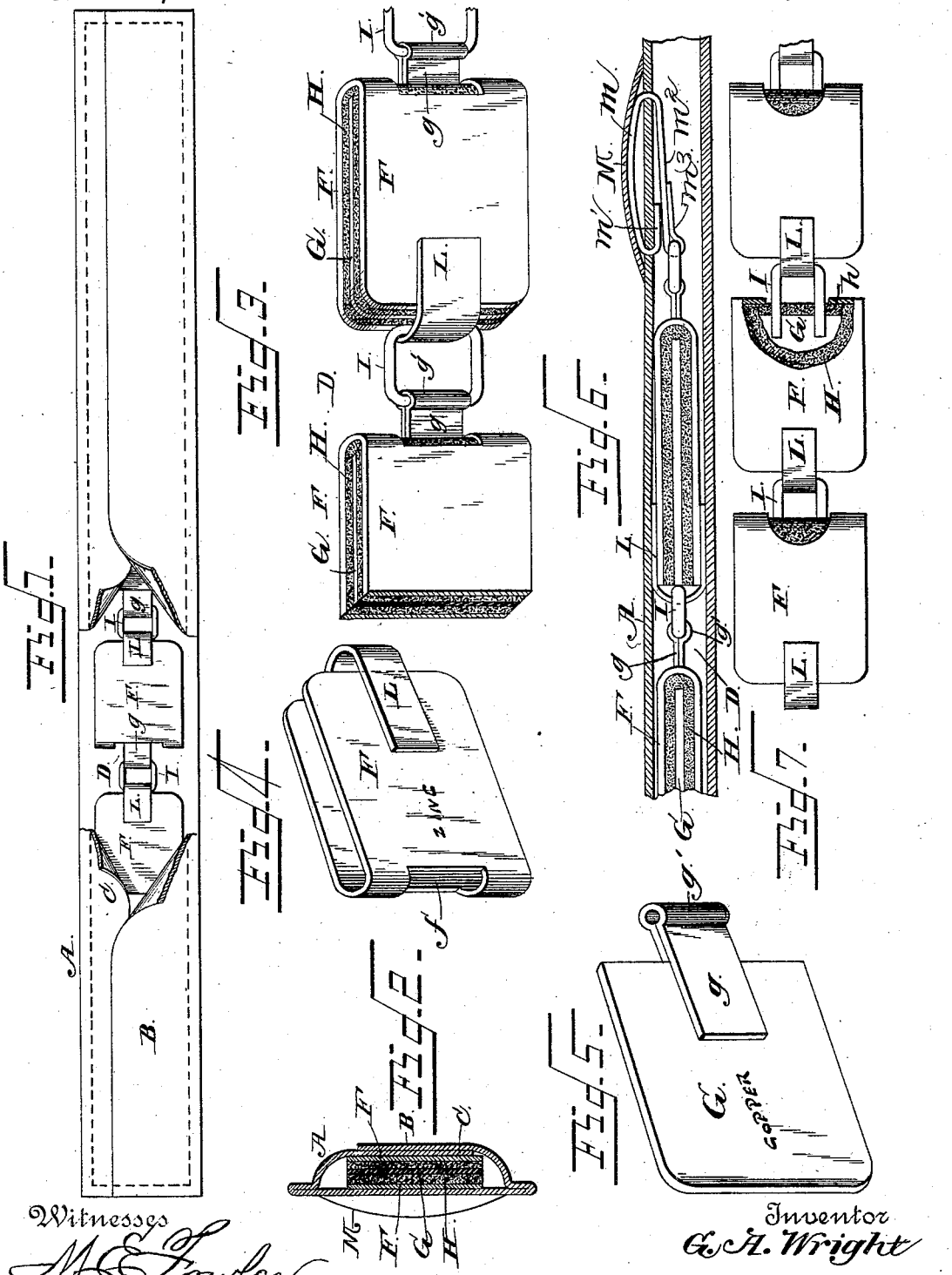
(No Model.)

G. A. WRIGHT.

ELECTRIC BELT FOR BODY WEAR.

No. 343,620. Patented June 15, 1886.



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ELECTRIC BELT FOR BODY WEAR.

SPECIFICATION forming part of Letters Patent No. 343,620, dated June 15, 1886.

Application filed December 19, 1885. Serial No. 186,208. (No model.)

To all whom it may concern:

Be it known that I, GEORGE ARTHUR WRIGHT, a citizen of the United States, residing at Concordia, in the county of Cloud and State of Kansas, have invented a new and useful Improvement in Electric Belts for Body Wear, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to an improvement in electric belts for body wear; and it consists in the peculiar construction and combination of devices that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the drawings, Figure 1 is an elevation of my invention with a part of the belt broken away to disclose the electric chain. Fig. 2 is a transverse sectional view of the same. Fig. 3 is a detail perspective view of a portion of the electric chain. Figs. 4 and 5 are detail perspective views of portions thereof. Fig. 6 is a detail view of one of the electrodes, showing the manner of connecting it to the belt and to the end of the chain; and Fig. 7 shows a modified form of my invention.

A represents a belt, which is made of oil-cloth or other insulating and water-proof material, and is provided on its rear side with the flaps B and C, which extend throughout its length, and are adapted to be folded over so as to envelop the chain D. This latter is formed of a series of links or couples, each of which is composed of a zinc plate, F, a copper-plate, G, and a dielectric absorbent material, H, which is interposed between the zinc and copper plates in each couple.

In order to form my chain, I first make the zinc plates in the form shown in Fig. 4, with opening *f* at the center. These plates are bent at their centers into a U shape, as shown at Fig. 6. The copper plates G are provided at one end with an extending tongue, *g*, which is bent, as at *g'*, to embrace one side of a connecting conducting-link, I. Strips of felt H or other absorbent dielectric material are provided with central openings, *h*, to receive the tongues of the copper plates, and are folded upon opposite sides of the copper plates, and then inserted between the opposing sides of the zinc plates, the tongues of the copper plates passing through the openings in the zinc plates, but out of contact therewith, as shown. The ends of the zinc plates are connected by metallic straps L, which are soldered to the zinc plates, forming loops to receive the links I, and thereby connect the couples or links of the chain together.

M represents the electrodes or contact-plates, which are preferably made in the form of buttons and of any suitable metal. Straps *m* are secured on the rear sides of the plates M, one arm of these straps being longer than the other. The short arms *m'* pass through openings in the ends of the belt, and are then bent over upon the inside of the belt, so as to confine the latter, and the long arms m^2 are similarly secured to the belt, and are bent into hooks m^3 at their ends, which hooks receive the links at the ends of the chain. The belt is worn in the usual way, with the plates M in contact with the person, and the chain is charged by saturating the absorbent dielectric in the couples with strong vinegar or other suitable acid.

In Fig. 7 I illustrate a modified form of my invention, in which I employ a loop of copper wire, instead of the tongue *g*, the said loop being linked into the strap L of the next couple and soldered to the copper plate, thereby entirely dispensing with the link.

Having described my invention, I claim—

1. In electric belts, the couples comprising the bent plates F, having the openings *f*, the plates G, having the tongues *g* passed through the openings *f*, and the links secured to the said tongues, and the absorbent dielectric interposed between the plates G and the opposing sides of the plates F, the said latter plates having the metallic straps L, forming loops connecting the links L with the plates F, substantially as described.

2. In electric belts, the electrodes having the metallic straps *m'* and m^2 passed through the belt and bent over thereon, to secure the electrodes to the belt, one arm of the straps having the hook to receive the links of the electric chain to connect the electrode with the chain, substantially as described.

3. A voltaic electric couple composed of the inclosing-plate F, having an opening, *f*, at the bend, forming one element, the plate G, located in the plate F and forming the other element, said plate G having a tongue or loop,

g, to project through opening *f*, provided with a link to form a connection with the next cell, and the absorbent dielectric to contain the exciting acid interposed between the sides of the plate G and the opposing sides of the inclosing-plate F, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

GEORGE ARTHUR WRIGHT.

Witnesses:
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