(No Model.)

G. S. BENNETT.

ELECTRIC BELT.

No. 373,044. Patented Nov. 15, 1887.

Fig. 1,

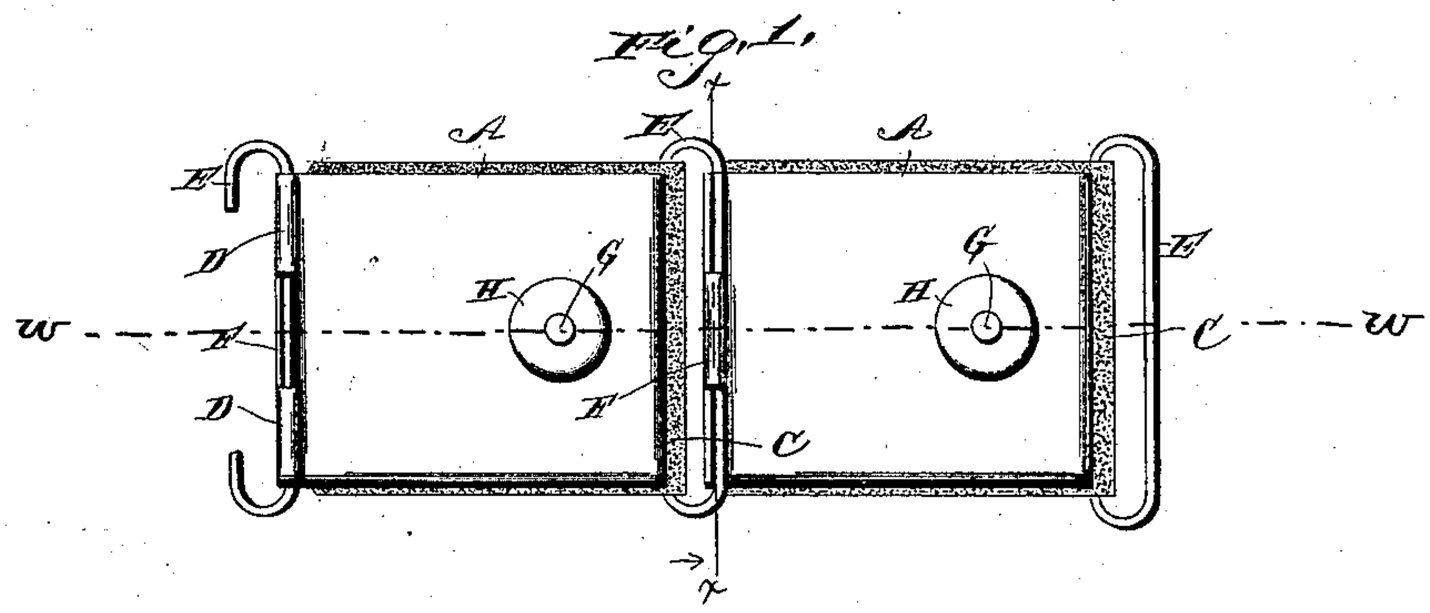


Fig. 2,

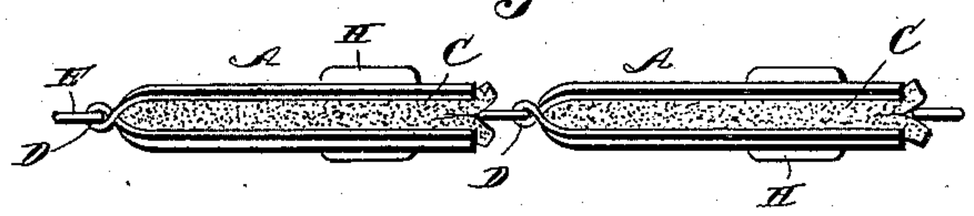


Fig. 3,

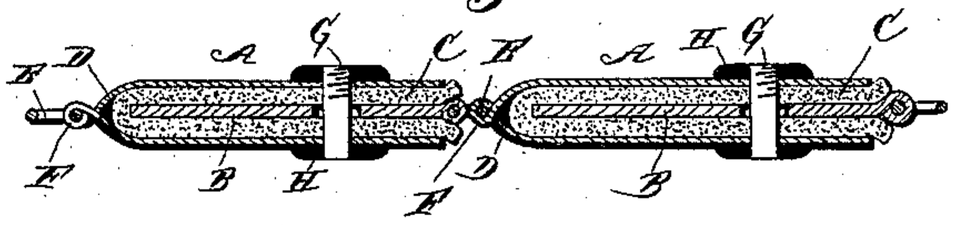


Fig. 4,

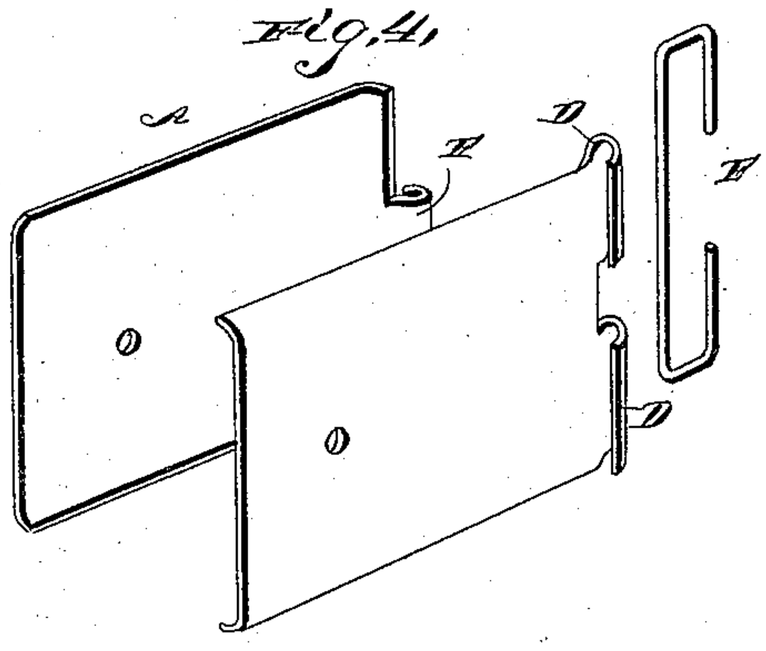


Fig. 6,

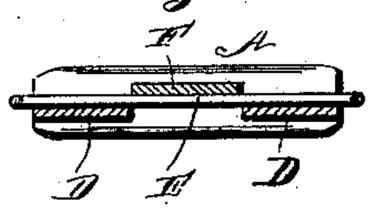
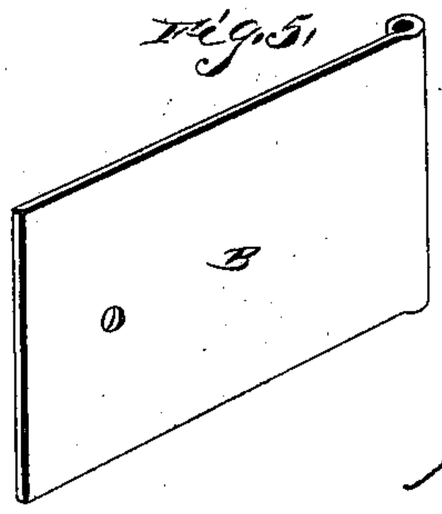


Fig. 5,



Witnesses

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UNITED STATES PATENT OFFICE.

GEORGE SEDAM BENNETT, OF DENVER, COLORADO.

ELECTRIC BELT.

SPECIFICATION forming part of Letters Patent No. 373,044, dated November 15, 1887.

Application filed June 10, 1887. Serial No. 240,923. (No model.)

To all whom it may concern:

Be it known that I, GEORGE SEDAM BENNETT, a citizen of the United States, residing at Denver, in the county of Arapahoe and State of Colorado, have invented a new and useful Improvement in Electric Belts, of which the following is a specification.

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 two sections of an electric belt embodying my improvements. Fig. 2 is a side elevation of the same. Fig. 3 is a vertical longitudinal sectional view taken on the line *w w* of Fig. 1. Fig. 4 is a detached perspective view of the two copper side plates of one section of the belt. Fig. 5 is a similar view of the zinc plate of one section of the belt. Fig. 6 is a transverse section on the line *x x*, Fig. 1.

Each section of the belt is composed of a pair of copper plates, A, a zinc plate, B, arranged between the copper plates, and an absorbent, C, of cloth or other suitable material, arranged between the opposing sides of the copper and zinc plates. One of the copper plates is provided at one end with a pair of projecting ears, D, at opposite corners, which ears are curved in semi-cylindrical form, and are thereby converted into hooks adapted to engage a loop or bale, E, attached to one end of the zinc plate. The other copper plate is provided at one end with a central projecting ear, F, bent in semi-cylindrical form and open on the side opposite the vertical openings in the hooks or ears D. The said hook or ear F is adapted to be inserted between and in line with the hooks B and to engage the central portion of the loop E. The copper plates A are thus hinged to the loop of the zinc plate of the adjacent section and may be closed together upon opposite sides of the absorbent C, which bears against opposite sides of the zinc plates B. Aligned openings are made in the copper plates near their free ends in the absorbent and in the zinc plate, and a metallic screw, G, extends transversely through the said aligned opening and engages heads or nuts H, which are made of hard rubber and are placed on the outer side of the copper plates. By this means the copper plates are closed together, so as to retain the absorbent and the zinc plate in position between them, and the heads or nuts H, being made of hard rubber or other non-conducting material, form insulators which project from the side of each section of the belt.

It will be readily understood from the foregoing description and by reference to the drawings that the copper elements of each section are connected electrically with the zinc element of the adjacent section, so that the sections of the belt are connected in series. The belt is provided at each end with the usual electrode to come in contact with the person of the wearer, and thereby cause the electricity which is generated by the belt to flow through his body. These electrodes are not here shown, nor more particularly described, for the reason that they are well understood by persons skilled in the art and form no part of my present improvement.

In order to charge the belt, a small quantity of exciting acid is used to saturate the absorbents C. When the zinc elements become nearly consumed by chemical action, the heads or nets H are removed from the screws G, and thereby the copper plates are adapted to be opened to permit the zinc plates to be removed and replaced by new ones.

Having thus described my invention, I claim—

1. In an electric belt, the combination of copper plates A, having the hook-ears, the zinc plate having the loop E, adapted to be engaged by the hook-ears of the adjacent section, and the absorbent interposed between the copper and zinc plates, substantially as described.

2. The combination, in an electric belt made of flexible jointed sections, of the zinc plates having the loops E, the copper plates having the hooks or ears D and F, adapted to engage the loops of the adjacent zinc plates and thereby hinge the copper plates thereto, the absorbent arranged between the zinc and copper plates of each section, the screws G, extending transversely through the zinc and copper plates, and the nuts or heads H, made of non-

conducting material and screwed to the outer ends of the screws G, on the outer sides of the copper plates, substantially as described.

3. In an electric belt, the copper plates A, one of which has the ears D, and the other has the ears F, combined with the loop E on the other section to engage the ears D F, as set forth.

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

GEORGE SEDAM BENNETT.

Witnesses:
G. A. NEWKIRK,
G. T. WOODSIDE.