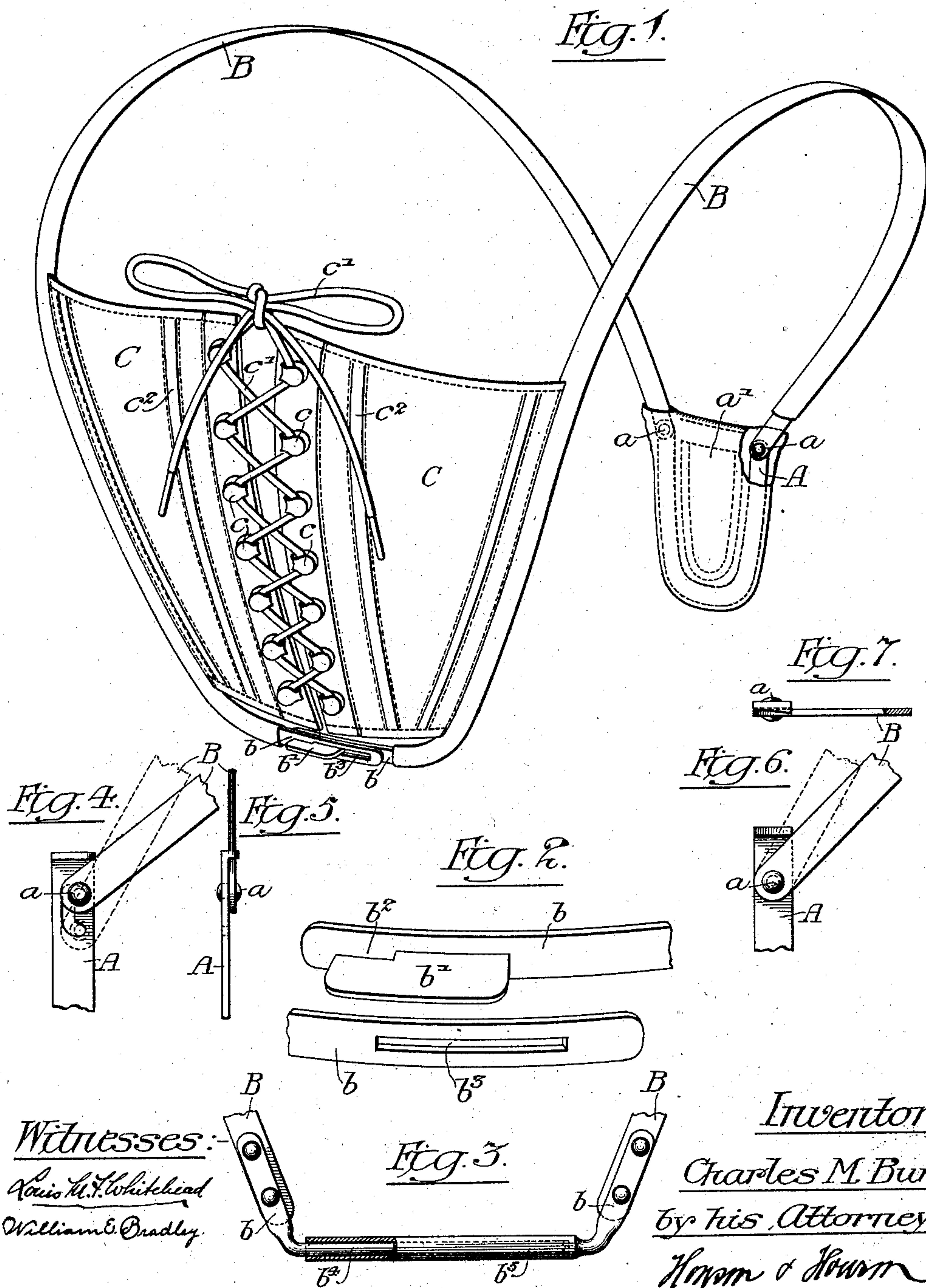


No. 712,646.

Patented Nov. 4, 1902.

C. M. BURK.
ABDOMINAL CORSET.
(Application filed Dec. 8, 1901.)

(No Model.)



UNITED STATES PATENT OFFICE.

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ABDOMINAL CORSET.

SPECIFICATION forming part of Letters Patent No. 712,646, dated November 4, 1902.

Application filed December 6, 1901. Serial No. 84,932. (No model.)

To all whom it may concern:

Be it known that I, CHARLES M. BURK, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain
5 Improvements in Abdominal Corsets, of which the following is a specification.

My invention relates to certain improvements in abdominal corsets, having for its object the provision of a device of simple and inexpensive construction which shall be easily
10 adjusted to various forms of the human figure, said construction being of such a nature that the device will be comfortable to the wearer while effectually accomplishing the objects of
15 this class of apparatus.

The above end I attain as hereinafter set forth, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my improved abdominal corset. Fig. 2 is a detached perspective view showing in detail the preferred construction of the catch or fastening
20 used with my invention. Fig. 3 is a front elevation, partly in section, of a second form of fastening device used with my invention. Figs. 4 and 5 are front and side views, respectively, of a modified form of connection between the sacral and the sacro-iliac pieces of
25 my device; and Figs. 6 and 7 are front and plan views, respectively, of another modified form of connecting device for the members of my invention.

In the above drawings, A is a U-shaped piece of flat metal, preferably made heavy
35 enough to be substantially non-resilient, and while I prefer to have this piece of the shape shown it will be understood that it may be altered without departing from the principle of my invention. In view of the function and
40 part of the body engaged by the part A, as herein set forth, I shall hereinafter refer to it as the "sacral" piece. To the ends of this piece are pivoted two curved sections B, referred to hereinafter as "sacro-iliac" pieces.
45 These are made of spring material, preferably steel, and are held to the sacral piece by pivots a , which allow them motion to a limited degree relatively to the said piece. These pieces B are bent over and down, the extreme
50 portion b of the free end of each being turned at an angle of between ninety and one hun-

dred and eighty degrees to the main portion and lying in the same plane as the said ends. They are provided with a fastening device, preferably of the form shown in Fig. 2, consisting of an L-shaped piece b' , fixed to the
55 outside face of one of the ends b in a plane at right angles thereto and having a notch b^2 , formed by its overhanging end placed toward the other end of the other piece b . This second end is provided with an elongated slot b^3
60 for the reception of the piece b' , the whole serving when in engagement to maintain the descending front sections of the sacro-iliac pieces rigidly at a fixed angle to the substantially horizontal pieces b .
65

The above-described framework, consisting of the sacral piece A and the curved sacro-iliac pieces B, is covered with fabric, rubber, or any material commonly used for devices
70 of the character of my invention.

The front or descending portions of the sacro-iliac pieces are provided with pieces of fabric C, extending toward each other, these being preferably attached to the covering
75 material over the said pieces. The adjacent edges of the pieces or flaps C are provided in the present instance with eyelets c , and laces c' may be employed to draw the two pieces toward each other.
80

I preferably insert substantially vertical pieces of stiffening material, such as steel or whalebone, in the fabric in the position indicated at c^2 , Fig. 1.

The sacral portion A of the frame is preferably provided with a continuous sheet a' of
85 covering material between its sides, and in use this portion of the corset is adapted to fit over the sacral projection of the wearer. The curved sacro-iliac pieces B pass upwardly
90 and over the hips, their ends extending toward the lower portion of the abdomen of the wearer and being latched together, as shown. These pieces B are of springy or resilient material and are given a set during their process of manufacture so that their ends normally meet one another. When, therefore,
95 the apparatus is fitted on the human body and the side pieces B are bent so as to keep the positions shown in Fig. 1, the horizontal front edges b and the back portion formed by the
100 sacral piece A tend to come together, with

the result that the device tends to support or hold up the pendulous portion of the abdomen. The laces c' are now placed in the eyelets c in the customary manner, and the flaps C, attached to the descending portions of the sacro-iliac pieces B, are drawn together to the desired extent, these still further pushing up and supporting the abdomen.

The peculiar construction of the latch or fastening for the ends of these pieces B will now be understood, for the above-noted drawing together of said pieces causes the overhanging portion of the pieces b' , which has been inserted in the slot b^3 , to project over the solid portion of the end b of the other piece, thus effectually preventing the latch from coming undone.

It will be noted that by providing a latch of the construction shown the ends of the sacro-iliac pieces B are always maintained rigidly in the same line, and consequently the descending or front portions of said pieces are also held at a practically fixed angle to the horizontal sections b and to one another. When, therefore, the flaps C are laced together, the abdomen of the wearer is supported without materially moving these side pieces B toward each other and without causing their upper portions to cut into the body of the wearer where they cross over the hips, they being held stiff and unyielding by the horizontal sections or pubic pieces b .

It is of course to be understood that devices other than that shown may be employed for the purpose of maintaining the said front portions of the sacro-iliac pieces at a fixed angle to the horizontal or pubic pieces b , since, if desired, a construction similar to that shown in Fig. 3 may be advantageously used. This consists of a cylindrical piece b^4 , having one end flattened and bent at an angle so as to join with the end of one of the sacro-iliac pieces, to which it is held by any suitable means, such as rivets. A tubular piece b^5 is similarly attached to the second sacro-iliac piece, and it is designed to receive the piece b^4 , as shown, the latter sliding within it as the flaps C are drawn together, while always maintaining the pieces to which they are fixed at a constant angle.

It will be seen that by providing the U-shaped piece A for the pivotal attachment of the side members B, I have a piece of constant shape fitted to the sacrum of the wearer, while the said side members are free to move loosely to some extent on the pivots a to accommodate themselves to the changes of figure of the wearer and are, moreover, readily

adjustable to almost any form of the human figure.

Should it be desired to still further stiffen the sacro-iliac pieces against moving toward each other, the ends a^2 of the sacral pieces may be bent at a right angle, as shown in Figs. 6 and 7, and the pieces B made to rest against this turned-up part. This latter is preferably on a level, so that should it be wished to allow free pivotal movement of these pieces B at any time they may be slightly sprung out and allowed to rest upon the beveled end portion a^2 , the bevel preventing too free motion.

The ends of the sacral piece A may be slotted, as shown at a^3 , the pivots a being free to move therein. Such construction allows of rigid adjustment of the sacro-iliac pieces in the two positions shown in Figs. 4 and 5.

From the construction shown in Figs. 1 and 2 it is evident that the apparatus in its simplest form may be made with sacro-iliac pieces held in front in rigid relation to each other with their other ends free or with said ends hinged or rigidly connected together in the back. On the other hand, the preferable form of the device would be provided with the U-shaped sacral piece A adjustably or non-adjustably pivoted to the sacro-iliac pieces.

I claim as my invention—

1. The combination of a U-shaped back piece of relatively rigid material, curved side pieces pivoted to the said U-shaped piece, means for directly connecting together the free ends of the side pieces, and a piece of material above and independent of the said connecting ends extending from the front descending portions of each of the said side pieces, with means for connecting said pieces of material to each other, substantially as described.

2. The combination of a U-shaped piece of relatively rigid material, curved side pieces pivoted to the ends of said U-shaped piece, means for connecting the free ends of the side pieces, flaps of fabric attached to the descending front portions of the said side pieces, with means for fastening together the adjacent edges of said pieces of fabric, substantially as described.

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

CHARLES M. BURK.

Witnesses:

WILLIAM E. BRADLEY,
JOS. H. KLEIN.