

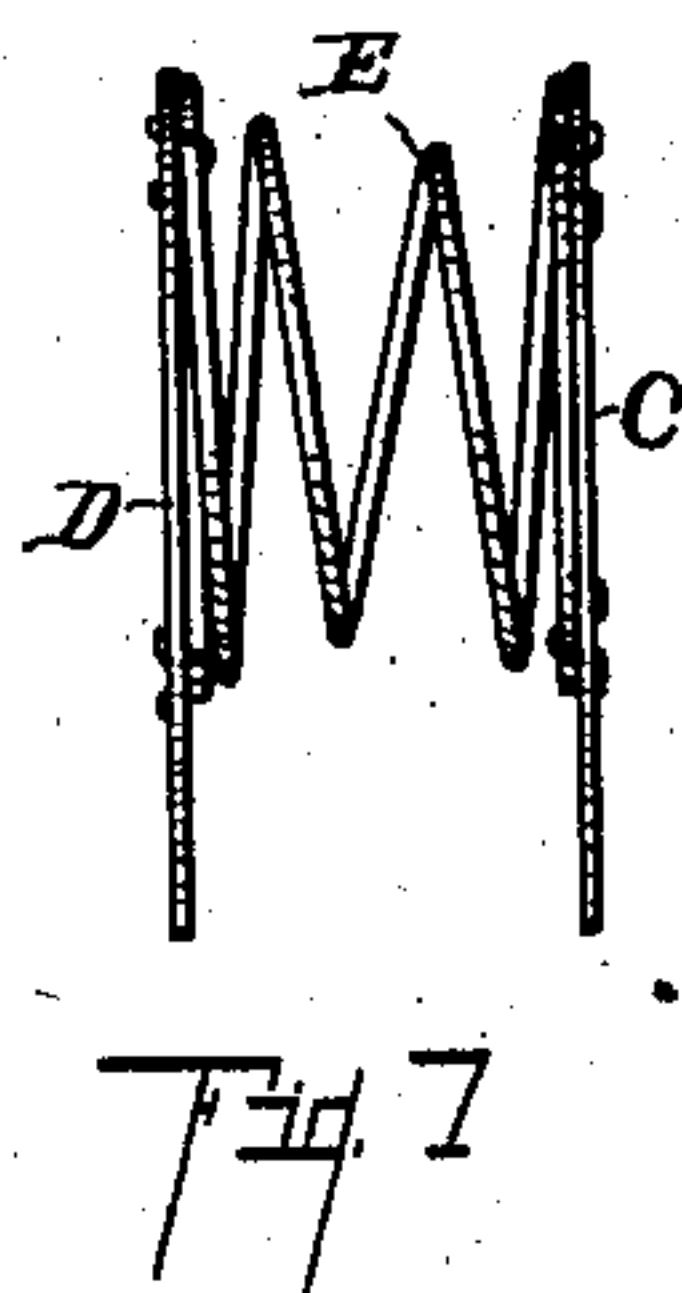
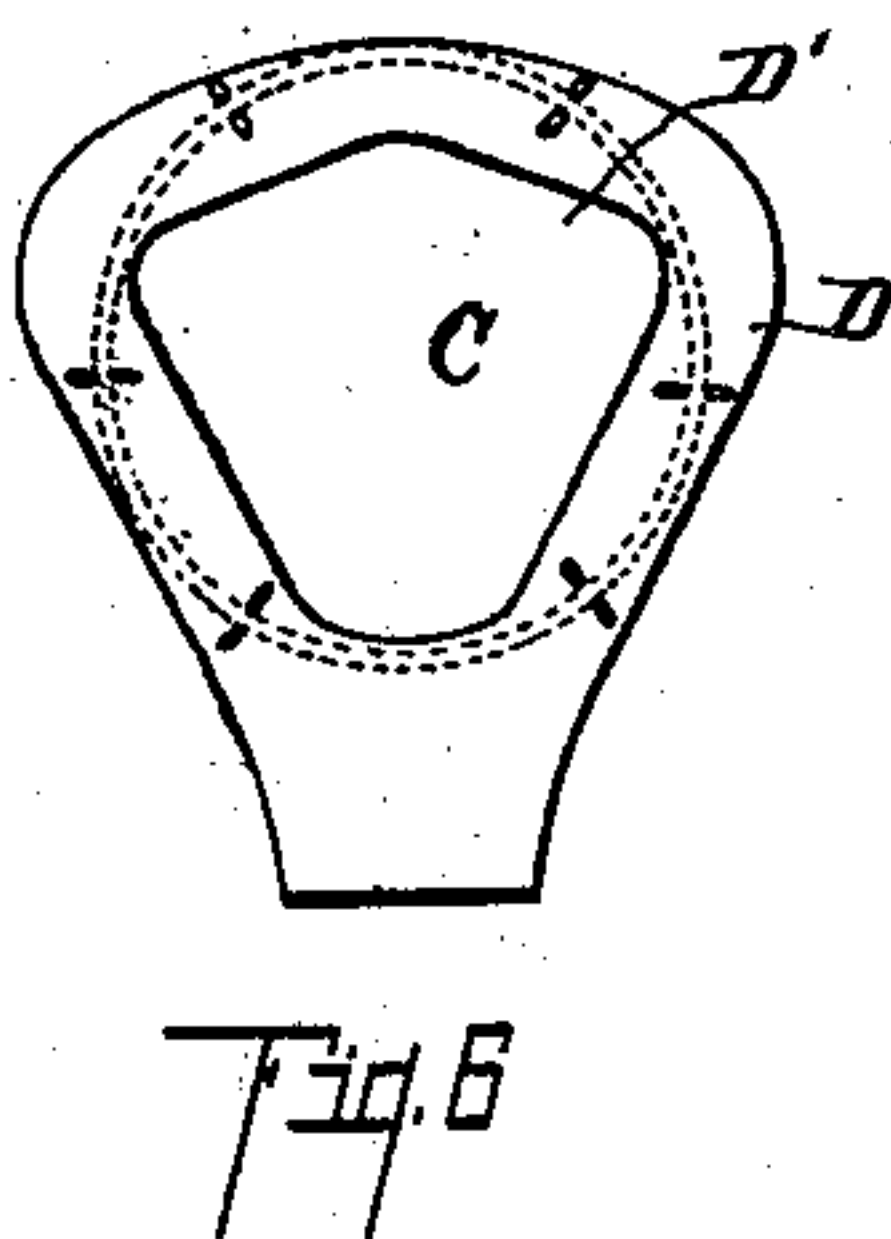
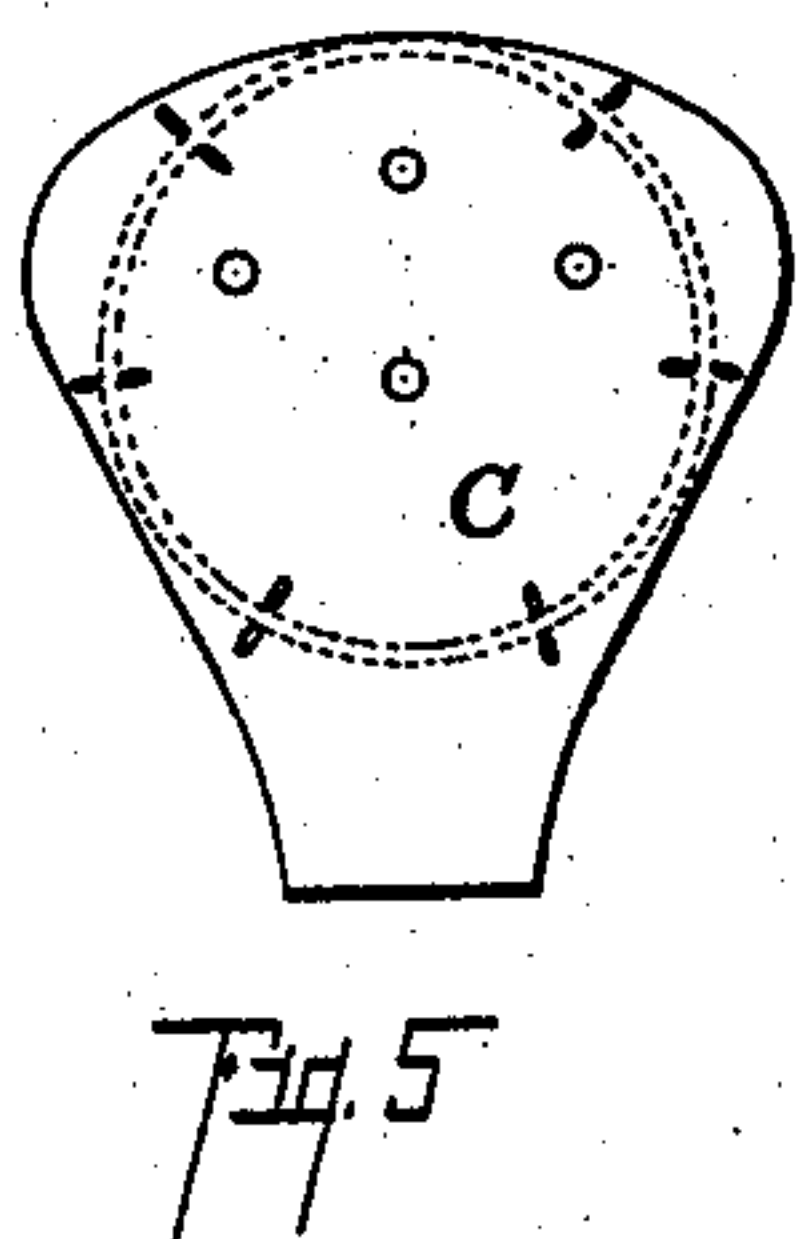
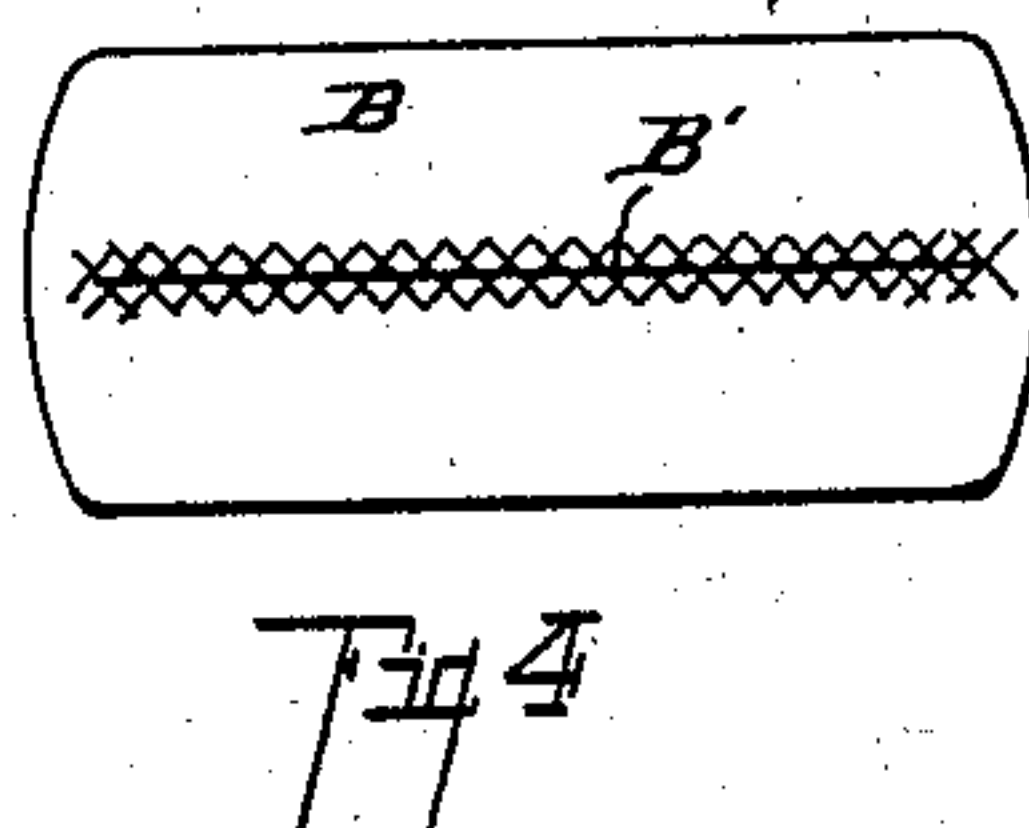
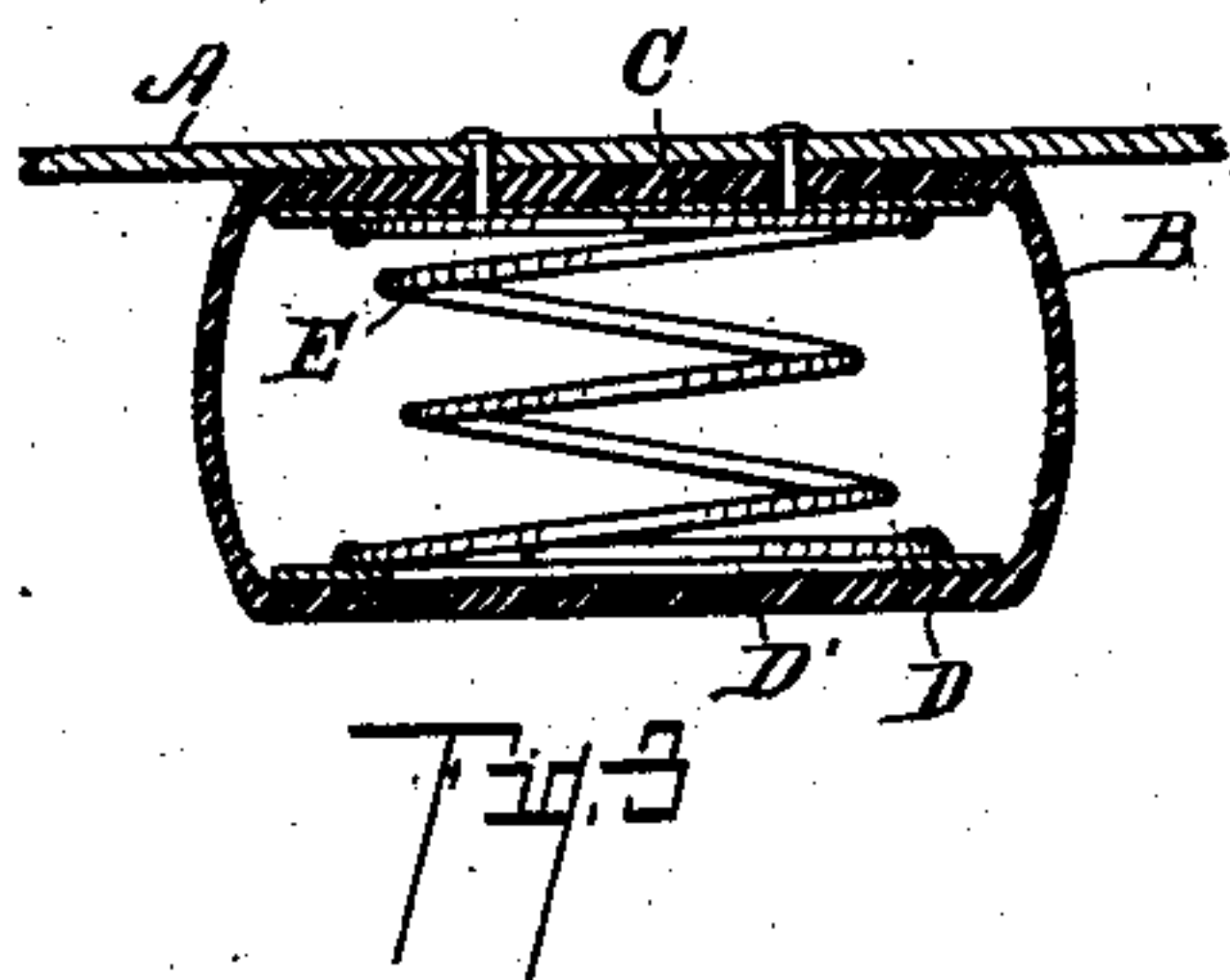
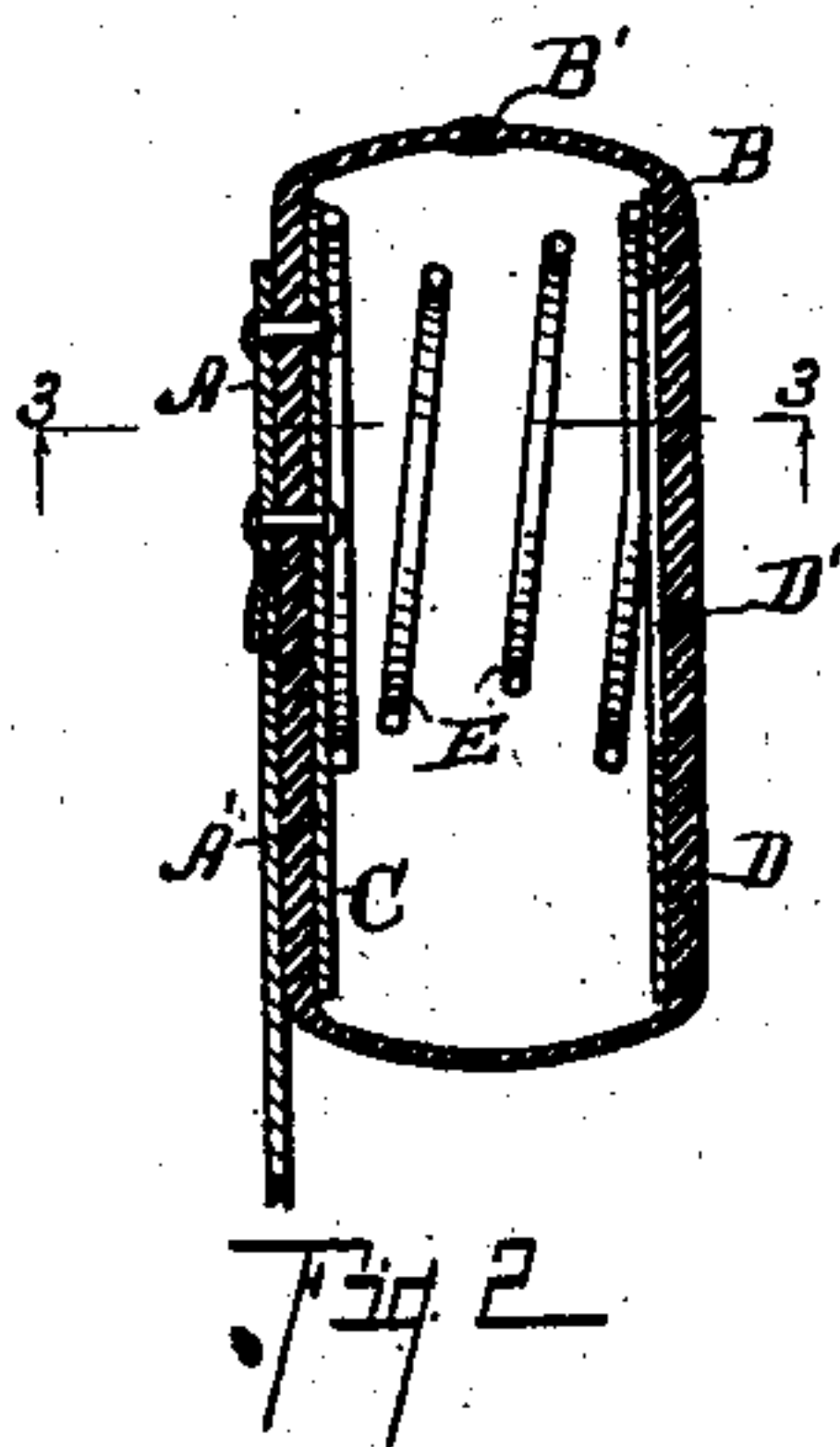
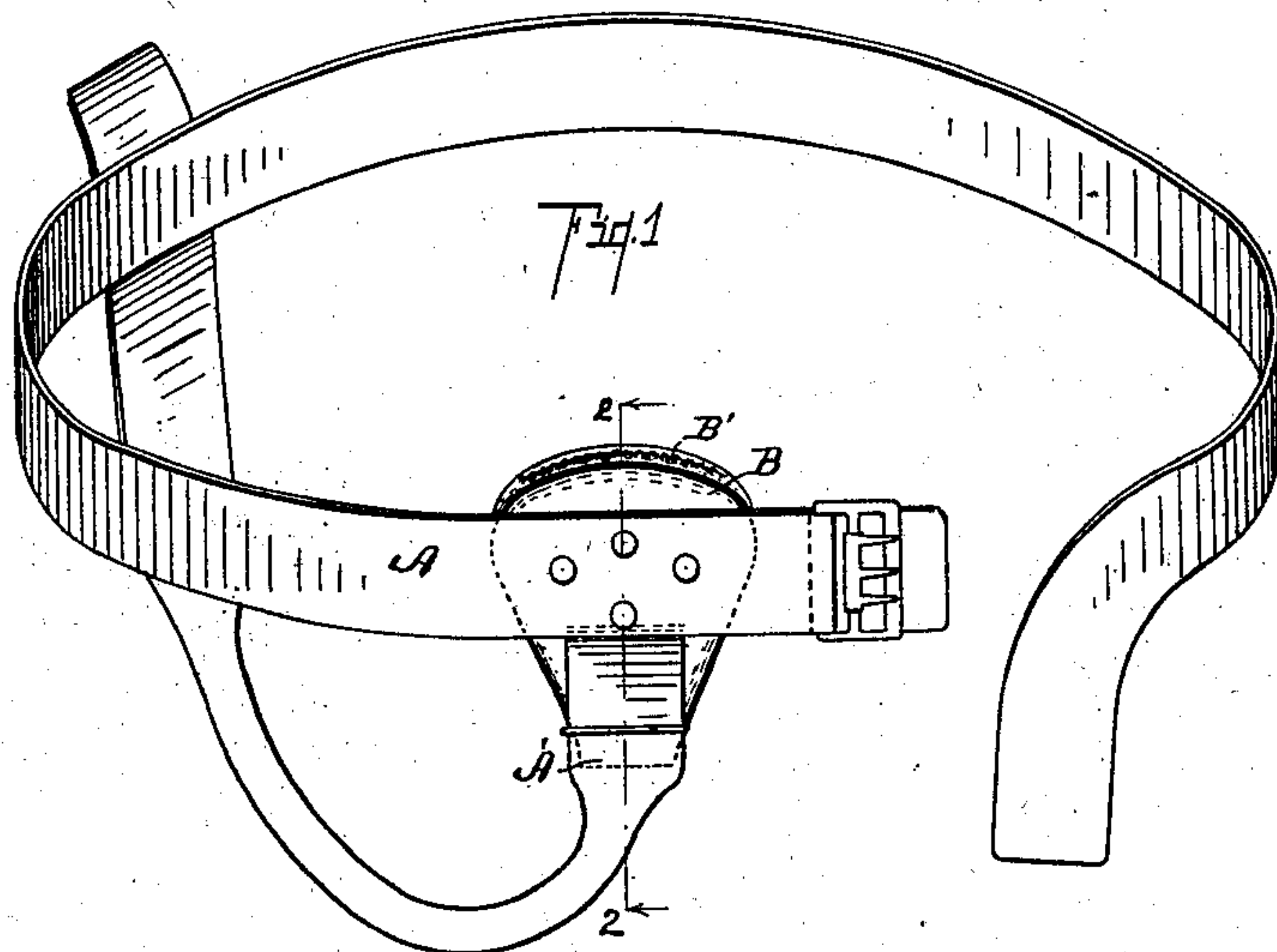
No. 721,603.

PATENTED FEB. 24, 1903.

H. T. PRANGE.
TRUSS.

APPLICATION FILED JULY 12, 1901.

NO MODEL.



Witnesses:

A. E. Houghton
Otis A. Earl

Inventor,

Henry T. Prange
By Fred L. Chappell
Att'y.

UNITED STATES PATENT OFFICE.

HENRY T. PRANGE, OF KALAMAZOO, MICHIGAN.

TRUSS.

SPECIFICATION forming part of Letters Patent No. 721,603, dated February 24, 1903.

Application filed July 12, 1901. Serial No. 68,104. (No model.)

To all whom it may concern:

Be it known that I, HENRY T. PRANGE, a citizen of the United States, residing at the city of Kalamazoo, in the county of Kalamazoo and State of Michigan, have invented certain new and useful Improvements in Trusses, of which the following is a specification.

This invention relates to new and useful improvements in trusses.

The objects of this invention are, first, to provide a truss which shall retain the protruding parts in the natural position and at the same time cause the wearer as little inconvenience as possible; second, to provide a truss which shall remain in position and maintain a constant pressure at the point of rupture, no matter what position be taken or movement be made by the body of the wearer; third, to provide a truss which shall be simple in its construction and easy to keep in a sanitary condition.

Further objects will definitely appear in the detailed description to follow.

I accomplish the objects of my invention by the devices and means described in this specification.

The invention is clearly defined and pointed out in the claims.

A structure embodying the features of my invention is fully illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective view of a truss embodying the features of my invention, the usual means of securing the same to the body of the wearer being illustrated. Fig. 2 is a detail longitudinal sectional view taken on line 2 2 of Fig. 1, showing a truss embodying my invention. Fig. 3 is a detail cross-sectional view taken on line 3 3 of Fig. 2. Fig. 4 is a plan view of the end of my improved truss. Fig. 5 is a rear plan view of the tension devices of my improved truss, showing the details of construction, the spring proper being illustrated in dotted lines. Fig. 6 is a top plan view of the same. Fig. 7 is a side elevation of the same.

In the drawings all of the sectional views are taken looking in the direction of the little arrows at the ends of the section-lines, and

similar letters of reference refer to similar parts throughout the several views.

Referring to the lettered parts of the drawings, A is the body band or belt, and A' the under band. These bands are of the usual style and material and do not relate particularly to my invention. The outer casing B of the pad-truss proper is made of flexible material, somewhat elastic, india-rubber being preferred. This is preferably formed in one piece, of an elongated or pear-like shape, although it may be of any shape desired.

E is a coil-spring, to one end of which is secured a plate of thin sheet metal or other suitable material D of a shape similar to that of the pad and of a size to fit the interior thereof. This plate D has in the preferred construction an opening D' therein, the purpose of which will be hereinafter described. A plate C of a similar size and shape to the plate D is secured to the other end of the spring E, which, with the plates C D, secured thereto, is inserted into the casing, and the pad is then riveted to the belts or bands, as shown in Fig. 2, the under plate C having suitable perforations to receive the rivets. This is found to be a very satisfactory and secure means of attaching the same to the belts, and the truss proper is rigidly retained in the desired position in relation to the belts. The opening B' is then sewed up or otherwise closed, which retains the parts together perfectly.

By the use of the plates C D the pad always retains its shape no matter how long it may be in use. Further, the plates D may be conformed to suit the requirements of the wearer. For instance, they may be made in any desired form as to general outline or they may be concave or convex, as is required. In the preferred construction I make an opening D' in the plate D, and the casing B being somewhat elastic relieves somewhat the pressure on the ruptured parts and gives an additional flexibility to the pad at this point.

The truss thus constructed when properly adjusted will remain in the desired position no matter what position the body of the wearer may assume. As before stated, the pad may be varied in its construction by the conforming of the plates D to the requirements of the

wearer. This truss is also very simple in its construction and therefore economical to manufacture. I have described the same in detail, although it is apparent that it may be
5 considerably varied without departing from my invention.

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

10 1. A truss-pad consisting of a casing B of suitable flexible material; a centrally-located coiled spring E; plates C and D of a size and shape to fit the interior of the said casing secured on the ends of said spring inserted into
15 said casing, as specified.

2. A truss-pad consisting of a casing B of suitable flexible material; a centrally-located coiled spring having a plate D with an opening D' secured to one end thereof, and a plate C secured to the opposite end inserted into
20 said casing, said plates being of a size and shape to fit the interior thereof, as specified.

In witness whereof I have hereunto set my hand and seal in the presence of two witnesses.

HENRY T. PRANGE. [L. S.]

Witnesses:

ALICE E. HOUGHTON,
OTIS A. EARL.