No. 742,790. PATENTED OCT. 27, 1903.

W. JONES.

STETHOSCOPE.

APPLICATION FILED OCT. 25, 1902.

NO MODEL.

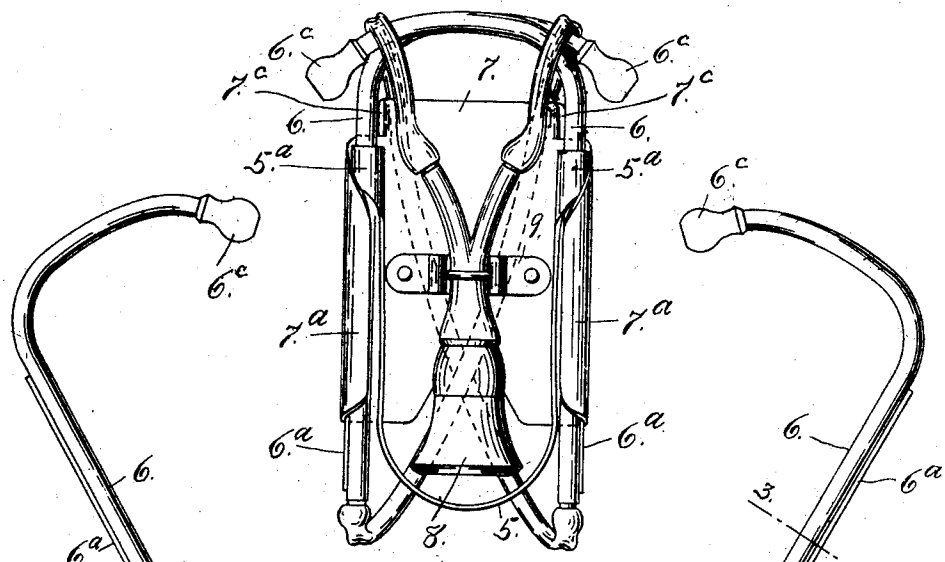


Fig. 2.

Fig. 1.

Fig. 3.

Fig. 4.

Fig. 5.

Witnesses
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No. 742,790. Patented October 27, 1903.

UNITED STATES PATENT OFFICE.

WILLIAM JONES, OF DENVER, COLORADO.

STETHOSCOPE.

SPECIFICATION forming part of Letters Patent No. 742,790, dated October 27, 1903.

Application filed October 25, 1902. Serial No. 128,830. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM JONES, a citizen of the United States of America, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Stethoscopes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in stethoscopes, my object being to make the device adjustable, whereby its dimensions may be reduced for convenience of carrying about and whereby the tension of the spring connected with the ear-tubes may be regulated to give more or less pressure, as may be desired. To accomplish this object, the ends of the spring are slidably connected with the ear-tubes, whereby the spring is movable back and forth thereon. As the spring is moved toward the ear-tube extremities the tension or pressure exerted on the tubes is increased, while when the spring is moved in the opposite direction the pressure or tension is diminished. My invention will now be described in detail, reference being made to the accompanying drawings, in which is illustrated an embodiment thereof.

In the drawings, Figure 1 illustrates a stethoscope provided with my improvements and shown extended, or in position for use, the ear-tube extremities being spread apart, as is the case when they engage the ears of the user. Fig. 2 shows the stethoscope placed in the holder, the spring having been moved toward the ear-tube extremities in order to make the device more compact or increase its compass for convenience of carrying in the pocket. Fig. 3 is a cross-section taken on the line 3 3, Fig. 1, viewed in the direction of the arrow. Fig. 4 is a detail view of the stethoscope-holder. Fig. 5 is a section taken on the line 5 5, Fig. 4, shown on a larger scale.

The same reference characters indicate the same parts in all the views.

Let the numeral 5 designate the leaf-spring of the instrument, adapted to give the desired pressure on the ear-tubes 6 when they are applied to the ears of the user. Each end of the spring is provided with a clasp 5^a, consisting of a split sleeve slidably mounted on the tube and prevented from turning thereon by a longitudinal tongue 6^a, formed on the tube and entering the split or opening in the sleeve. (See Fig. 3.)

When the device is in use, the spring is moved downwardly or away from the tips of the ear-tubes to allow the spring to pass in front of the face or swing below the face of the user. The distance of the clasps 5 from the tips 6^c of the ear-tubes determines the pressure exerted on the tubes by the spring. The farther the spring is removed from the tips of the tubes the less the tension, as will be readily understood. In Fig. 1 the device is shown in position for use, the ear-tubes being spread apart to allow the tips 6^c to enter the ears of the user. When it is desired to put the device in the pocket, the spring is moved toward the tips of the ear-tubes, the latter being pressed toward each other until they are in position to engage the hook-shaped flanges 7^a of the holder 7. The ear-tubes pass between these flanges and occupy a position outside of the lip 7^c of the holder, whereby they are held securely in place. The nozzle 8 is then passed under the holder and thence up over the ear-tubes at one end of the holder and pressed between the parts 9^a of a spring-clamp 9, attached to the front face of the holder. The device then occupies the position shown in Fig. 2 and is ready to be placed in the pocket for convenience of carrying about.

Having thus described my invention, what I claim is—

A stethoscope having a spring whose extremities are provided with split sleeves slidable on the ear-tubes, the latter having longitudinal tongues engaging the openings of the sleeves to prevent rotation.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM JONES.

Witnesses:
DENA NELSON,
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