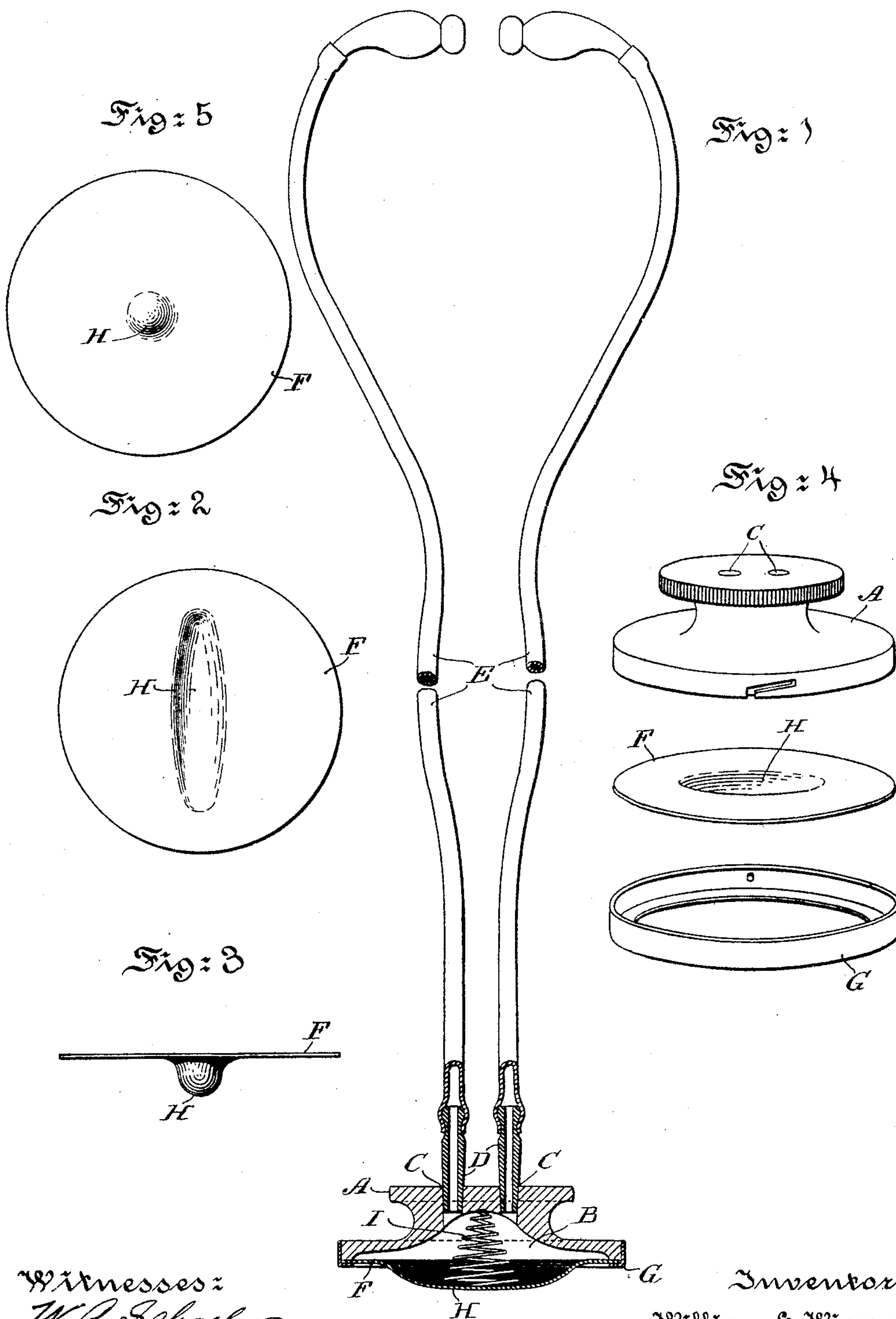


(No Model.)

W. H. WIGMORE.
STETHOSCOPE.

No. 581,929.

Patented May 4, 1897.



Witnesses:
W. A. Schaffer.
Chas. Shires

Inventor.
William S. Wigmore.
By his Attorney Chas A. Rutter.

UNITED STATES PATENT OFFICE.

WILLIAM H. WIGMORE, OF PHILADELPHIA, PENNSYLVANIA.

STETHOSCOPE.

SPECIFICATION forming part of Letters Patent No. 581,929, dated May 4, 1897.

Application filed January 11, 1897. Serial No. 618,756. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. WIGMORE, a citizen of the United States, and a resident of the city and county of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Stethoscopes, of which the following is a specification.

My invention relates to improvements in stethoscopes; and the object of my invention is to furnish a stethoscope, more particularly for intercostal examinations, which will be more efficient and less costly than instruments of this class heretofore made.

In the accompanying drawings, forming part of this specification and in which similar letters of reference indicate similar parts throughout the several views, Figure 1 is a central sectional elevation of a stethoscope of my construction, the ear-tubes being shown partly in side elevation and partly in section; Fig. 2, a plan of the vibrating diaphragm; Fig. 3, an end elevation of Fig. 2; Fig. 4, perspective views of the diaphragm-carrying shell, the diaphragm, and the ring or collar for securing the latter to the former; and Fig. 5, a plan of a diaphragm, showing a modified form of projection formed therewith.

A is the body of my instrument, which is preferably constructed of metal. It is furnished with an interior chamber B, with which communicate holes C, passing downward from the top of the body and adapted to receive and hold the metal ends D of the sound-carrying ear-tubes E.

F is a diaphragm secured to the body A by means of a flanged collar or ring G, a bayonet-clasp being the preferable means for attaching the latter to the former.

The diaphragm F closes the chamber B in body A and has formed integrally with it on its outer face a rounded projection H, the preferred form of which is oblong, as shown in

Figs. 2 and 4, but which for some purposes would be simply a projecting rounded knob, as shown in Fig. 5, which is adapted to be placed between the ribs of the patient in order to observe the sounds in that part of the body. The projection H is preferably formed by being struck up in dies from the diaphragm, and the thickness of its walls is practically the same as the thickness of the other parts of the diaphragm, although in some cases it might be a solid piece cast or molded with the diaphragm.

I, Fig. 1, is a coil-spring, one end of which bears against diaphragm F and the other against body A. This spring is not essential to the working of the device, but with it the sounds are given a somewhat clearer and more metallic ring than without it.

Having thus described my invention, I claim—

1. In a stethoscope, in combination, a body having a chamber formed therein, a diaphragm closing said chamber and having formed integrally therewith a rounded hollow projection, means for securing said diaphragm to said body, and sound-conducting ear-tubes connecting with said chamber in said body, all substantially as and for the purposes set forth.

2. In a stethoscope, in combination, a body having a chamber formed therein, a diaphragm closing said chamber and struck up to form a rounded hollow projection on its outer face, means for securing said diaphragm to said body, and sound-conducting ear-tubes connected to said chamber in said body, all substantially as and for the purposes set forth.

WILLIAM H. WIGMORE.

Witnesses:

FRED. BERNER,
CHAS. M. ROOT.