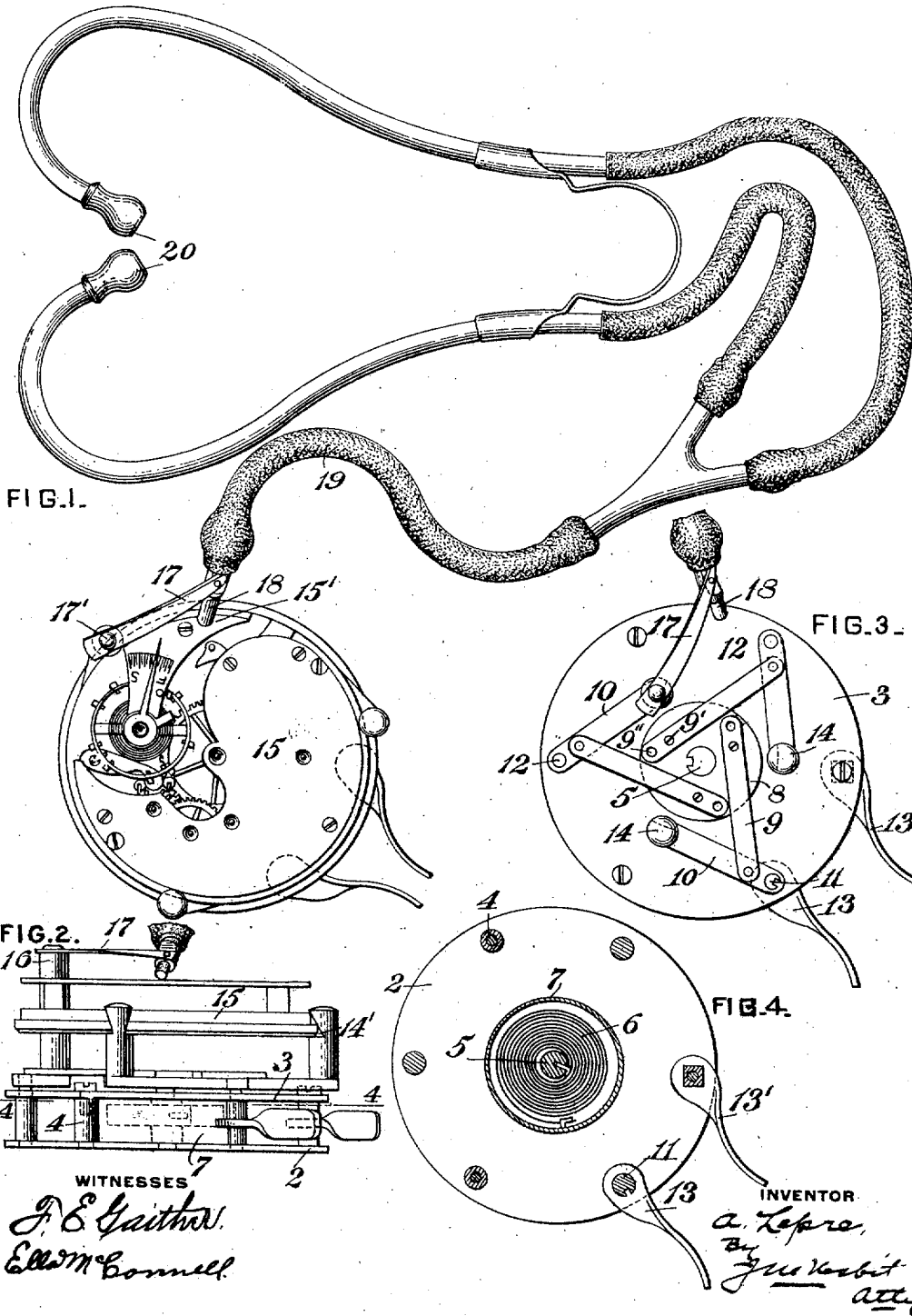


A. LEPRE.
WATCHMAKER'S APPLIANCE.
APPLICATION FILED MAY 3, 1910.

989,714.

Patented Apr. 18, 1911.



UNITED STATES PATENT OFFICE.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ARCANGELO LEPRE, a resident of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Watchmakers' Appliances, of which the following is a specification.

The object of this invention is to provide a support for a watch movement to be used with a stethoscope tube or other suitable sound transmitting device for enabling a watch maker to accurately observe the sounds emitted by the movement when working thereon. Ordinarily the movement rests on a bench, and many of the sounds are quite indistinct, making it necessary to frequently raise the movement to the ear to test the same. And this is especially true when the work is being done where there is more or less noise. With the invention herein proposed the work may proceed with the movement directly connected to the ears of the workman, thus enabling him to instantly detect irregularities, and to readily ascertain when they have been overcome.

In the accompanying drawing, Figure 1 is a view in top plan for the device with the watch movement in position thereon, and Fig. 2 is a side view. Fig. 3 is a view similar to Fig. 1 with the watch movement removed. Fig. 4 is a sectional plan on line 4-4 of Fig. 2.

Referring to the drawings, the base of the watch-movement support consists of the vertically separated plates 2 and 3, which are connected together by the spacing posts 4. Rotatable centrally in these plates and projecting through the upper plate 3 is spindle 5, and coiled around this spindle between the plates is spring 6, which is inclosed by barrel 7.

Secured to the upper extremity of spindle 5 is the wheel-like head 8 which is connected by links 9 to horizontally swinging arms 10. One of these arms is secured to spindle 11 which is rotatably mounted in plates 2 and 3, while the other of said arms are pivoted to plate 3 as indicated at 12. Spindle 11 forms the pivot or turning center of finger piece 13 projecting from the space between plates 2 and 3, the same being adjacent the rigidly held finger piece 13'. Arms 9 are provided with additional openings 9'' for pivots 9' for increasing the spread of the arms when desired.

Projecting upwardly from the free ends of

arms 10 are posts 14, which are preferably notched on their inner face at 14' to embrace the periphery of the watch movement 15, as in Figs. 1 and 2. The tendency of spring 6 is to hold the posts in contracted position, as in Fig. 3, but pressure on the movable finger piece operates to spread the posts to admit the movement, the tension of the spring-drawn posts serving to securely clamp the movement when the finger piece is released.

One of posts 14 is projected higher than the others, as indicated at 16, and connected thereto is a sound receiving end of the stethoscope tube. In the present embodiment, this connection is effected by means of a flat spring 17 pivoted at 17' to the post extension 16, with the free end of the spring secured to the metallic sound-transmitting pin 18 to which the stethoscope tube 19 is secured as shown. The normal shape of spring 17 is such that it holds pin 18 lower than the top plane of the watch movement when the latter is in place in the support, so that when the spring is bent upwardly and turned at 17' to engage the pin with the watch movement, the engagement is maintained under an appreciable tension. While the pin 18 may be thus held against any portion of the movement, the best results is secured when in contact with bridge 15'; as in Fig. 1. The usual two-branch form of tube is shown, each branch provided with an ear piece 20. Much of the work ordinarily done on the watch movement, particularly when repairing the same, may be accomplished with the movement mounted on the support and with the stethoscope tube in use, thus transmitting the sounds and enabling the watch maker to instantly detect the various sounds indicating regularity or irregularity, as the case may be, as the work proceeds.

The device is of very special advantage where work is being done in the presence of much noise, also when the hearing of the watch maker is defective.

I claim:—

1. The combination of a watch movement support, a stethoscope tube, a sound-transmitting part to which the tube is secured, and spring means holding said part in engagement with the supported watch movement.

2. In a watchmaker's appliance, the combination of a base, upwardly extending movement-engaging devices movable rela-

tively to each other to vary the area of the space therebetween, a spring opposing outward movement of the devices, means for moving the devices outwardly, a stethoscope tube, and means for holding the latter in operative relation with the supported watch movement.

3. In a watchmaker's appliance, the combination of a watch movement support, said support consisting of a base, arms pivoted to the base, movement-clamping uprights secured to the arms, a rotatable member, a spring for turning said member in one direction and opposing rotation thereof in the opposite direction, links connecting said member and the pivoted arms, means for turning said member in opposition to the spring, a stethoscope tube, and means holding the tube in sound-transmitting relation with the supported watch movement.

4. In a watchmaker's tool, a watch movement support consisting of a base, devices movably mounted on the base for engaging the watch movement, a spring for opposing movement in one direction of said devices, two finger pieces secured to the base—one fixed thereto and the other movable with the latter operatively connected to said move-

ment-holding devices, a stethoscope tube, and means for holding the latter in sound-transmitting relation with the watch movement.

5. In a watchmaker's tool, the combination of a watch movement support, said support consisting of two rigidly connected base-plates spaced apart, a revoluble spindle, a spring between the base-plates and secured to the spindle for opposing rotation thereof, the spindle projecting through the uppermost plate, a head secured to the projecting end of the spindle, arms pivotally secured to the upper most plate, watch-movement engaging posts carried by the arms, links connecting said arms with the spindle-carried head, means for moving said arms in opposition to the spring, a stethoscope tube, and means for holding the latter in operative relation with the supported watch movement.

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

ARCANGELO LEPRE.

Witnesses:

J. M. NESBIT,
F. E. GAITHER.