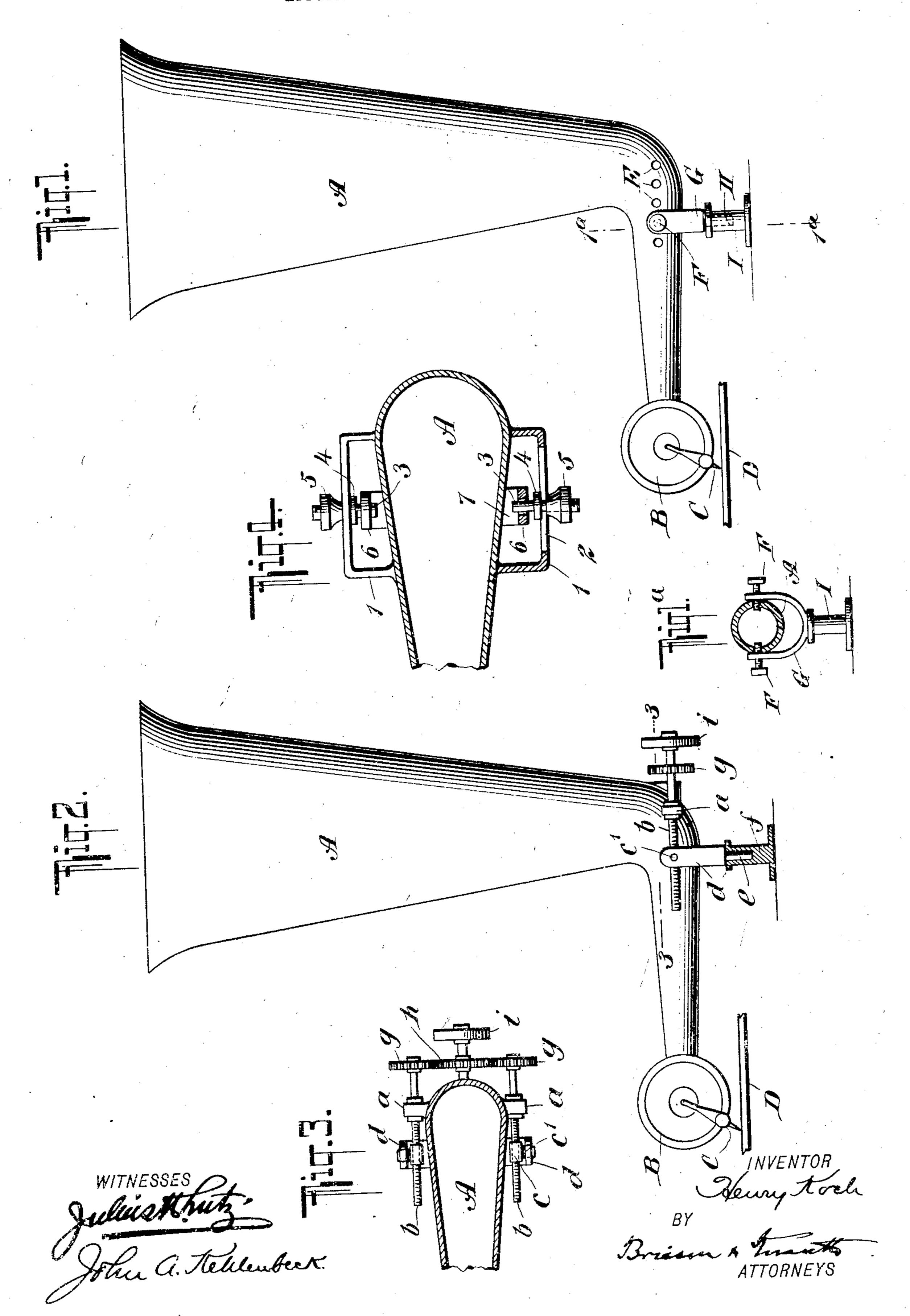
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TALKING MACHINE HORN. APPLICATION FILED MAY 1, 1906.



UNITED STATES PATENT OFFICE.

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TALKING-MACHINE HORN.

No. 865,399.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Henry Koch, a citizen of the United States, and a resident of Rahway, Union county, State of New Jersey, have invented certain new and useful Improvements in Talking-Machine Horns, of which the following is a specification.

My invention relates to horns for talking machines and has for its object to provide a means for pivotally supporting said horn, which means is adjustable so as to vary the distance between the pivot and the reproducer or sound box.

My invention will be fully described hereinafter and the features of novelty will be pointed out in the appended claims.

Reference is to be had to the accompanying drawings in which

Figure 1 is an elevation of as much of a talking machine as is necessary to illustrate my invention; Fig. 1s is a section thereof on line 1s—1s of Fig. 1; Fig. 2 is an elevation of another form of my device; Fig. 3 is a horizontal section thereof on the line 3—3 of Fig. 2, and Fig. 4 is a horizontal section of still another form of my invention.

Referring to the construction shown in Fig. 1, A is 25 the sound-conduit or amplifying horn which may be of any usual construction and which carries the customary reproducer B, having a stylus C in engagement with the record D. The said record may be supported and rotated in any convenient manner. The horn A is pro-30 vided on each side with diametrically opposite sets of holes E arranged at different distances from the end which carries the reproducer and adapted to receive the pointed ends of screws or other pivoting devices F. These screws F pass through a fork G near the upper 35 ends thereof, said fork straddling a portion of the said horn. The lower end of the fork G is connected with a stem H, which enters a bearing I, so that the said fork is rotatable about a vertical axis, the whole forming a support for the horn. It will be seen that with this con-40 struction the distance from the reproducer B to the pivot screws F may be varied; this is done for the purpose of regulating the weight or pressure of the reproducer on the record, since with many machines an arrangement is made for using different reproducers 45 which are not alike in weight.

In the form of my invention shown in Figs. 2 and 3 I provide for a gradual adjustment of the horn pivot in the following manner. The horn A is provided at each side with lugs or projections a through which screws b pass loosely. These screws b also pass through screw threaded blocks c which are pivoted at c' to the upper

ends of the fork d having a stem e in engagement with the bearing f in the same manner as described with regard to the construction shown in Fig. 1. The screws b carry pinions g each of which is in mesh with a central 55 pinion h. This pinion h is journaled on a convenient portion of the horn A and is provided with a milled operating knob i. Thus as this knob i is turned one way or the other the screws b will be rotated through the medium of the pinion g and the end of the horn carrying the reproducer will be brought nearer to or further away from the pivot blocks c as desired.

In the construction shown in Fig. 4 the horn A is provided with outwardly extending frames I having slots 2. Pivot pins 3 having collars 4 project through these slots 65 2 and are screw-threaded at one end to receive thumb screws 5. The opposite ends of these pivot pins project into suitable openings 6 in the fork 7 which may be of the same general construction as described hereinbefore. By loosening the thumb-screws 5, the horn may 70 be moved along the pivot pins 3 so as to vary the distance from the reproducer to said pivot pins. It is of course to be understood that the collars 4 form part of or are secured to the pins 3 so that as the thumb-screws are again screwed up the pins 3 and consequently the horn 75 will be secured in the adjusted position.

Various modifications may be made without departing from the nature of my invention as defined in the claims.

I claim:

1. The combination of a reproducer carrying horn, a member having a pivot for said horn, the axis of which pivot intersects the said horn, a supporting member with which said first named member is connected by a joint allowing a swinging motion about an axis corresponding to 85 the progressive motion of the horn during operation, provision being made to permit the position of said horn to be changed on said first named member to vary the distance between the reproducer and the pivot of the said horn.

2. The combination of a reproducer-carrying sound conduit, a support having a pivot for said conduit, the axis of which pivot intersects the sound conduit, and means adapted to permit the position of the said sound conduit to be changed on said support to vary the distance between the reproducer and the said support.

3. The combination of a reproducer carrying sound conduit, a jointed support having a pivot for said sound conduit, the axis of which pivot intersects the sound conduit, and means adapted to permit the position of said sound conduit to be changed on said support to vary the distance between the reproducer and the support.

In testimony whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

HENRY KOCH.

Witnesses:

JAMES D. LUTHER, F. J. MACDONALD.