

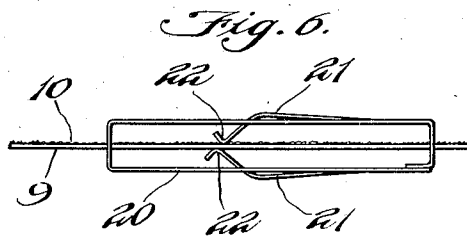
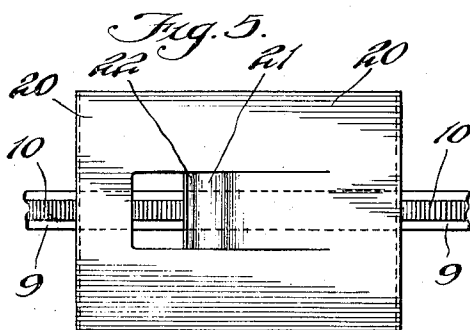
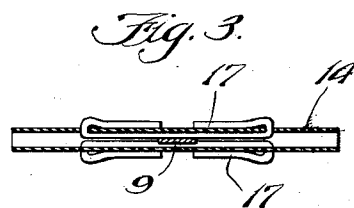
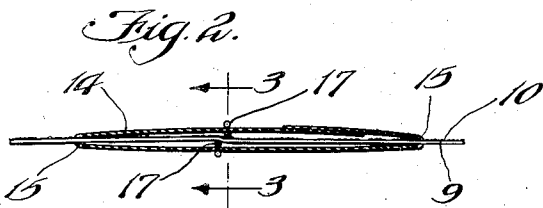
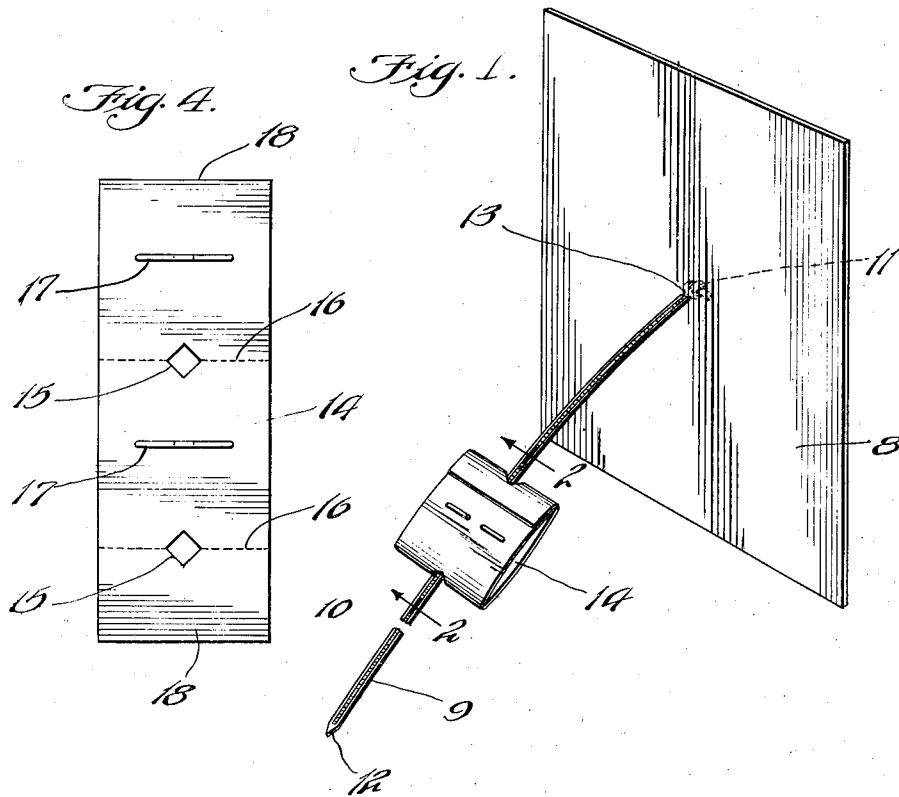
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L. H. OTTOFY

2,292,285

CARD PHONOGRAPH

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CARD PHONOGRAPH

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5 Claims. (Cl. 274—11)

This invention relates in general to a manually operated device for repeating messages, words, phrases, slogans, and the like, by means of a sound recording tape, and has more particular reference to a novelty, advertising or toy device of this kind.

An important object of the invention is in the provision of a sound reproducing device which requires only a thin vibratory sheet or card as a sound amplifying device.

A further object of the invention is in the provision of improved means for engaging the recorded sound track of the tape and insuring proper engagement thereof for each sound reproduction.

A still further object of the invention is in the provision of a sound reproducing device having a card or sheet amplifier, a record tape extending therefrom, and a manually movable tape engaging member which insures proper engagement with the recorded sound track on the tape regardless of its application thereto.

Other objects of the invention will appear in the specification and will be apparent from the accompanying drawing, in which

Fig. 1 is a perspective view of the invention;

Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1;

Fig. 3 is a transverse section taken on the line 3—3 of Fig. 2;

Fig. 4 is an enlarged open view of the foldable tape-engaging device; and

Figs. 5 and 6 are face and side views respectively of a modification of the tape-engaging device.

It has heretofore been the practice in manual sound producing devices to provide a hollow sound box or amplifying device and also to require exact engagement of the sound record track on the tape in order to produce an audible sound. The present invention overcomes these objections by providing a simple vibratory sheet or card of a size easily grasped and held by its edges in one hand, and by providing a movable tape-engaging device with projections on opposite sides which insure proper contact with the sound recorded track in the tape regardless of the application thereto and in such a manner that the vibrations are transmitted and amplified more audibly by the vibratory card.

Referring now more particularly to the drawing, a thin sheet or card 8 of vibratory material such as cardboard, fibre, light metal, or any suitable material, constitutes a sounding board or amplifying device to which a flat tape 9 having a sound recorded track 10 on one side face

thereof is secured in any suitable way, as for example by providing a knot 11 at one end of the tape and a pointed extremity 12 at the other end and inserting the pointed extremity through a slit 13 in the central portion of the vibratory card.

To insure proper engagement with the sound track 10, a slider 14 is provided which is made of cardboard or any other suitable flat strip material, preferably inexpensive and easily foldable a number of times without breaking. This slider has spaced perforations 15 through which the tape may be inserted and fold lines 16 extending transversely at the openings 15 and with projections preferably in the form of staples 17 also extending transversely of the strip and located at different distances at opposite sides of one of the perforations 15.

In applying the slider the pointed extremity 12 of the tape is inserted through both of the openings 15 from one side of the slider strip and then the extremities are folded over the tape with its extremities 18 overlapping in either direction and thus enclosing the tape within the slider strip and with the staples or projections 17 in contact with opposite faces of the tape, and thus when pressed from opposite sides against the tape insuring proper engagement of one of the staples with the recorded sound track 10 of the tape.

By having the staples or projections located at slightly different distances from the holes 15 a more flexible contact and engagement with the sound portion of the tape is insured. As both sides of the tape are engaged by the projections or staples a proper contact is made with the sound track which produces a vibration of the amplifying card and by its vibration a satisfactory reproduction sound.

Instead of the simple staple slider a variety of tape-engaging devices may be used for the same purpose, the essential principle of which is substantially the same but may be represented by Figs. 5 and 6 in which a flexible slider 20 is foldable more or less to a rectangular shape as shown, having end perforations through which the tape is inserted and flexible tongues 21 cut out of the material of which the slider is made and bent inwardly to provide angular contact extremities 22 between which the tape is inserted. The tongues may have sufficient resilience to engage the tape or they may be pressed inwardly by manual engagement of the outwardly extending portions of the tongues 21 so that by moving the slider along the tape and pressing

it inwardly, a proper contact is made with the sound recording portion of the tape and the corresponding vibration of the amplifying card 8.

Various other tape-engaging devices may be devised embodying the idea of opposite projections which insure the engagement of the sound track portion of the tape regardless of the direction of application of the slider, it being necessary only to move the slider in the proper direction at a suitable speed and to maintain contact with opposite sides of the tape.

I claim:

1. In a phonographic device, the combination with a vibratory sheet forming a sounding diaphragm, of a sound record tape having a recorded sound track at one side thereof, means to engage one end of the tape centrally of the sounding diaphragm, and a manually movable sound producing flexible slider through which the tape extends having projections spaced apart along the tape to yieldingly engage opposite sides of the tape and thereby insuring engagement of a projection with the sound track at one side of the tape when the slider is moved relatively thereto.

2. In a phonographic device, the combination with a vibratory sheet diaphragm adapted to be engaged at the edges by one hand, of a sound record tape attached centrally of the sheet and having a recorded sound track at one side of the tape, and a compressible slider manually movable along the tape, the slider having end openings through which the tape is inserted and overlapping extremities to fold over the portion of the tape between the openings, with projections at opposite sides of the tape projecting inwardly and spaced longitudinally thereof for insuring flexible contact of one of the projections with the sound track of the tape when it is manually moved thereon.

3. In a phonographic device, a vibratory sounding diaphragm, a sound record tape secured at one end centrally of the diaphragm, and

a compressible manually operable track-engaging device through which the free end of the tape is inserted, said device having projections extending inwardly and spaced longitudinally apart at opposite sides of the tape when thus inserted and at different distances from the ends thereof for insuring contact of both sides of the tape with said projections, the device being resilient and the projections yieldingly engaging the tape.

4. In a phonographic device, a sounding diaphragm and a sound record tape secured at one end to the diaphragm and having a recorded sound track at one side of the tape, and a manually movable vibratory device for insuring engagement with the sound track of the tape, said device comprising a strip having spaced perforations through which the free end of the tape is inserted from one side of the strip, staples extending transversely of the strip at different distances from the openings thereof and the extremities of the strip being foldable over the tape to enclose the portion thereof between the openings, and the strip being compressible from opposite sides to engage the staples with opposite sides of the tape, thereby insuring engagement of one of the staples with the sound track of the tape.

5. In a phonographic device, a sounding diaphragm, a sound record tape secured at one end thereto, a slider movable thereon comprising spaced perforations through which the free end of the tape is inserted and upon which it is movable, the slider enclosing that portion of the tape between the perforations being resilient and compressible, and means extending inwardly from the slider for resiliently engaging opposite sides of the tape at points spaced longitudinally apart and thereby insuring contact with the sound track of the tape for producing vibrations of the diaphragm when the slider is moved relatively along the tape.

LADIS H. OTTOFY.