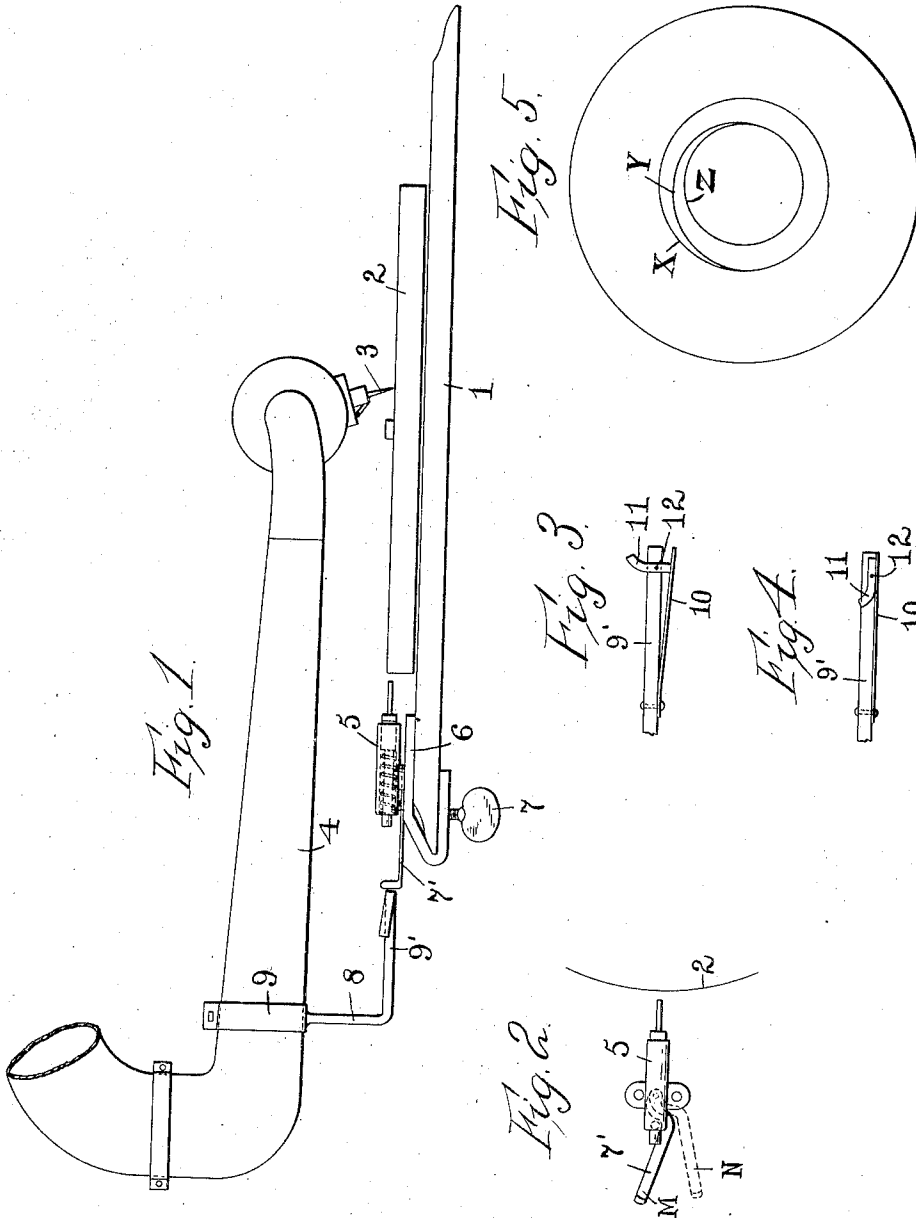


J. W. JONES.
 GRAPHOPHONE STOP.
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Attest:

Edward L. Tolson
 Edward M. Sarton

Inventor:

Junius Wallace Jones
 By Spear Middleton Middleton Spear
 Attys.

UNITED STATES PATENT OFFICE

JUNIUS WALLACE JONES, OF BATON ROUGE, LOUISIANA.

GRAPHOPHONE-STOP.

No. 901,910.

Specification of Letters Patent.

Patented Oct. 20, 1908.

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To all whom it may concern:

Be it known that I, JUNIUS WALLACE JONES, a citizen of the United States, residing at Baton Rouge, Louisiana, have invented certain new and useful Improvements in Graphophone-Stops, of which the following is a specification.

My invention relates to automatic stops for phonographs and in providing this mechanism I aim to produce an automatic stop susceptible of adjustment for use with record plates of different diameters.

My invention is designed to coact with a form of trip stop device now in use on what is known as the Victor machine.

It is my object to produce an automatic stop which will require the addition of the fewest number of parts and which will be simple in construction and effective in operation.

The invention consists in the features and combination and arrangement of parts hereinafter described and particularly pointed out in the claims.

In the drawings, Figure 1 is a side view of a turn table of ordinary construction to receive the record disk, said turn table having associated therewith the horn, the trip stop of substantially ordinary form and my improvements. Fig. 2 is a detail plan view of the ordinary trip stop in its relation to the turn table. Fig. 3 is a plan view of a part of my invention with the elements in one position, and Fig. 4 is a similar view to Fig. 3 with the parts in another position. Fig. 5 is a plan view of a record of disk form showing the grooves which are made on all records.

In these drawings, 1 indicates a part of the casing or frame, 2 the turn table, 3 the needle point or stylus which is carried at the end of the arm 4 which supports the ordinary horn. At 5 I show generally a trip stop device somewhat like that used to-day, carried by a bracket 6 which is clamped to the edge of the table by a set screw 7. This trip device has a lever or arm 7' projecting therefrom, which in ordinary practice may be manipulated by hand to trip the stop so that it will contact with the periphery of the turntable and thus stop the rotation of the same. With my improvement however, I design to operate this substantially ordinary form of trip stop lever automatically and for this purpose I employ an arm 8 attached by a clip 9 to the arm 4 of the horn, said arm 8 being of right angular form with its horizontal portion 9'

extending inwardly so that it will describe a path as the horn swings laterally of such diameter as will cause it to contact with the arm 7' of the ordinary trip stop device, and when this contact occurs the trip stop is automatically operated to bear upon the periphery of the table 2 and arrest the movement of the same.

The laterally swinging movement of the arm 4 is due, as in ordinary practice, to the action of the needle point traversing the groove of the record. The arm 9' is arranged to strike the trip arm 7' when the needle reaches the outer edge of the seal of the record. This is accomplished by making a groove Y extending from the point where the record or music grooves stop at the circle X, to the seal Z Fig. 5. The radii of the seals of ten and of eight inch records vary, and in order to meet this condition I provide an adjustment in my automatic attachment to suit the size of the record. For this purpose I provide a spring arm 10 attached to the side of the arm 9' and adapted to be set in either one of two positions as shown in Figs. 3 and 4 by a pivoted finger piece 11. This finger piece is pivoted at 12 to the arm 9' so that when thrown into the position shown in Fig. 3 it will move the spring 10 away from the arm 9', whereas, if it is placed in the position shown in Fig. 4 it will allow the spring or arm 10 to assume a position close to the side edge of the arm 9'. In other words, I provide by this means, in effect, an arm capable of being narrowed or widened to contact later or earlier with the trip arm 7' according to the diameter of the record plate. When the finger piece 11 is in the position of Fig. 4 it allows the needle 3 to reach the seal before the arm 9', or more accurately speaking, the member 10 carried thereby comes in contact with the lever 7' of the tripping device, thus stopping the apparatus for eight inch record. When, however, the finger piece 11 is in the position shown in Fig. 3, the arm 9' strikes the trip arm 7' before the needle 3 arrives within the seal of ten inch records, thus stopping the machine for ten and twelve inch records.

In Fig. 2 I show the lever arm 7' in two different positions, one being in dotted lines. When it is in the position M, the turntable rotates and when it is pressed so that it jumps to the position N the turntable stops. All that the operator is required to do after moving the arm 7' to the position M Fig. 2 to

start the graphophone is to set the finger piece 11 to the position shown in Fig. 3, for stopping ten or twelve inch records or to set the finger piece in the position shown in Fig. 4 for stopping eight inch records.

In the foregoing description I have referred to the trip stop device as similar to that used on the Victor machine. Specifically, however, my device differs from that used on the Victor machine in that it is set to a hair trigger while that on the Victor machine is not, and my controlling lever works in the reverse direction from that on the Victor machine. My device may be used on the Victor or any other machine.

The supporting arm 8, instead of being of the right angular form shown, may be of any other desired shape.

I claim as my invention:

1. In combination with the trip stop device, an arm attached to the arm of the horn to contact with the trip stop device, said arm being adjustable to a plurality of different predetermined conditions for operating the trip stop earlier or later to suit the records of

different diameters and having means whereby said adjustment is arrested at said predetermined points, substantially as described.

2. In combination with the trip stop device, an arm attached to the arm of the horn and having means whereby its contacting end may be widened or narrowed to predetermined degrees to strike the trip stop device earlier or later, said means being thrown at once from one position to the other and there arrested substantially as described.

3. In combination with the trip stop device, an arm attached to the arm of the horn having a spring member 10 attached thereto to contact with the trip stop device and a pivoted finger piece to adjust the spring member 10 towards or from the side of the arm on the horn, substantially as described.

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

JUNIUS WALLACE JONES.

Witnesses:

H. R. STRAUBE,
L. G. STIRLING.