

B. J. GENESY.
 PHONOGRAPH BRAKE AND STOP.
 APPLICATION FILED JUNE 17, 1912.

1,061,282.

Patented May 13, 1913.

Fig. 1.

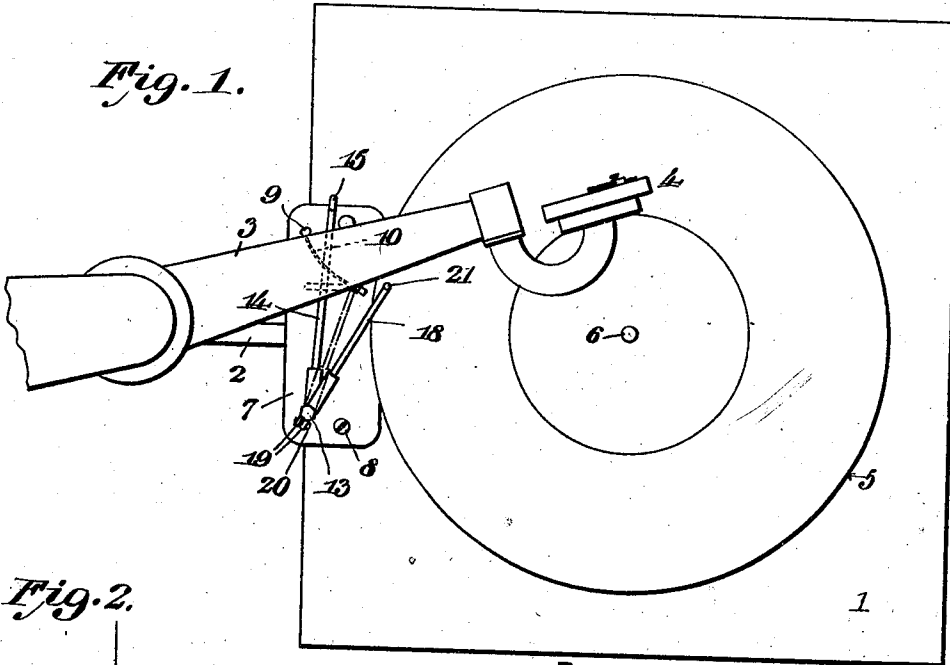


Fig. 2.

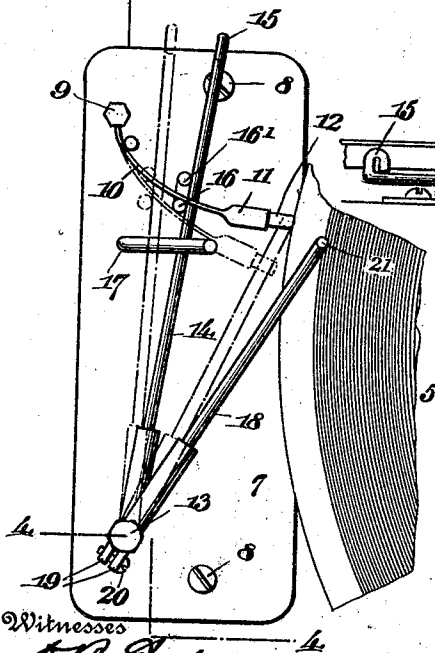


Fig. 3.

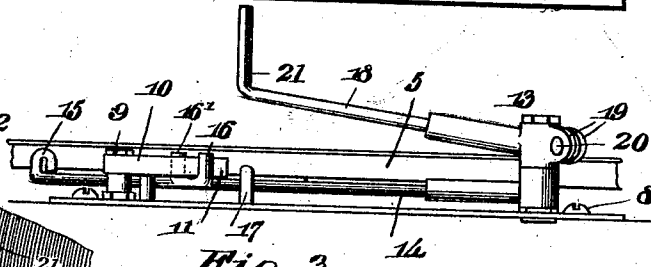
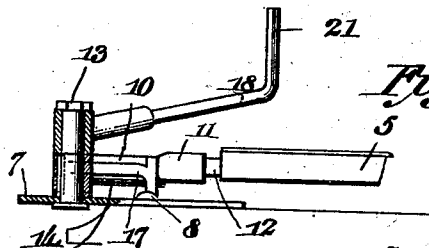


Fig. 4.



Witnesses

H. B. Austin

Inventor
Baptiste J. Genesy.

By

John A. H. Porter

Attorney

UNITED STATES PATENT OFFICE.

BAPTISTE J. GENESY, OF RENO, NEVADA.

PHONOGRAPH BRAKE AND STOP.

Specification of Letters Patent.

Patented May 13, 1913.

Application filed June 17, 1912. Serial No. 704,116.

1,061,282.

To all whom it may concern:

Be it known that I, BAPTISTE J. GENESY, a citizen of the United States, residing at Reno, county of Washoe, and State of Nevada, have invented certain new and useful Improvements in Phonograph Brakes and Stops, of which the following is a specification.

This invention relates to graphophone stop mechanisms and particularly to such mechanisms as are adapted for use in conjunction with talking machines of the disk type.

The object primarily of my invention is to provide a stop mechanism which will at a predetermined point, automatically bring the turntable and operating machinery to a stop without jar to the turntable or machinery or without injury to the stylus, disk or reproducer, and which will prevent the machine being played until the stop mechanism has been released by the operator.

A further object of my invention is to provide a stop mechanism of the class mentioned which may, at the discretion of the operator be adjusted to automatically stop the machine at any desired point on the playing record to compensate for records of various durations.

A still further object of my invention is to provide a graphophone stop mechanism of such character that the automatic stop actuating element may be rendered inoperative without affecting the stop mechanism, whereby the latter may be wholly manually operated.

A still further object of my device is to provide a graphophone stop mechanism which may either be applied to the machine at the factory, or which may be sold as a separate article of manufacture, the stop mechanism being of such construction as to be readily applicable to machines of various makes or styles employing the disk record.

A still further object of my invention is to provide a device of the class described which is applied to graphophones in such a way that records of greater diameter than the turntable of the machine may be played without danger of being contacted, or interfered with by the stop mechanism.

Further objects will appear hereinafter.

In carrying out my invention I mount my stop mechanism upon the top of the graphophone box and in close proximity to

the periphery of the turntable. This stop mechanism may be applied directly to the top of the graphophone box or may be, as shown, attached to the machine by means of a plate. Secured to one end of the plate and extending vertically therefrom is a post to which one end of the brake carrying member is attached, which latter member extends in a direction toward the periphery of the turntable of the machine and carries at its extremity a brake shoe for engagement therewith.

A brake actuating arm is secured to a pivoted post at a point remote from the brake member and is extended longitudinally of the plate to engage and actuate the brake member into and out of engagement with the periphery of the turntable by oscillations of said arm. A finger grip is provided upon the free end of the arm for conveniently manipulating the same.

For the purpose of automatically applying the brake to the turntable I resort to the use of a trip arm, one end of which is attached to the pivoted post at a point above the brake actuating arm, the free end extending over the edge of the turntable and which is adapted to be contacted by the oscillating reproducer supporting arm. This trip arm is attached at its inner end to the pivoted post in such manner that various radial adjustments of the arm may be made to compensate for records of different durations, or to be stopped at any predetermined point in the record, the free end of the arm being provided with an upturned finger to be engaged by the reproducer arm.

The entire stop mechanism with the exception of the trip arm and pivoted post to which it is attached, is so arranged and applied to the graphophone as to lie in a plane below that of the upper surface of the turntable in order to allow for the extension of disks of greater diameter than the turntable. The pivoted post is located at a point distant from the turntable suitable to allow for the passage of the largest stock sized disks.

In the drawings forming a part of this specification: Figure 1 is a plan view of a device embodying my invention and illustrating the same applied to a graphophone. Fig. 2 is similar view of the device upon an enlarged scale, a fragment of the turntable being shown. Fig. 3 is a rear view of the

stop mechanism applied and Fig. 4 is a sectional view taken upon the line 4-4 of Fig. 3.

Referring now more particularly to the drawings, 1 designates a disk playing graphophone of the usual well known construction, the box of which is provided at its rear with a horn and reproducer arm supporting bracket 2. The swinging reproducer supporting arm 3, being pivotally secured at one end to the bracket 2, carries at its free end a reproducer 4, which may be of any preferred construction.

The turntable is indicated at 5 and is mounted upon the motor driven spindle 6.

The stop mechanism is located upon the upper surface of the graphophone box and preferably at the end adjacent the horn supporting bracket where it may be conveniently manipulated by the operator.

In manufacturing the improved stop mechanism with the machines, it may be found convenient to mount the mechanism directly upon the top or woodwork of the graphophone, but as a separate article of manufacture a plate is employed to support the mechanism.

The supporting plate is indicated at 7 and may be secured to the top of the graphophone in any suitable manner, screws 8 being employed in the present instance. At a point adjacent one end of the plate and at a suitable distance from the periphery of the turntable is a post 9, to which is attached one end of a flat brake carrying spring 10. This spring, as stated, being secured at one of its ends to the post 9, extends toward the periphery of the disk, and is provided at its free end with a socket 11 into which is fitted a brake shoe 12. Near the opposite end of the plate 7 and near the outer edge thereof is a vertically extending pivotally mounted post 13 having keyed, or otherwise secured thereto a laterally extending brake actuating arm 14. This arm being spaced slightly above the upper surface of the plate 7, extends substantially the entire length thereof and is provided at its outer end with a finger grip 15. Secured to the arm 14 at a point adjacent the free end thereof, is a pair of upwardly extending arms or stops 16, and 16', spaced slightly apart and which are adapted to hold between them the brake carrying spring 10. A keeper 17 is provided upon the plate 7, through which the arm 14 extends and which also acts as a stop for the spring 10 when the same is in released position.

It is obvious from the foregoing description that when movement is imparted to the arm 14 in a direction toward the turntable of the graphophone, a similar movement is transmitted to the brake shoe 12 through the action of the stop 16 upon the brake spring 10, and that when the brake shoe

contacts the periphery of the turntable, a binding action will be brought about, holding the turntable against any further rotation and which binding action will be relieved only when the arm 14 has been returned to normal or inoperative position. When the arm 14 has been retracted, the action of the spring 10 against the stop 16 will hold the arm to open or retracted position.

For the purpose of automatically throwing the arm 14 to operative position, I secure upon the post 13 at a point above the arm 14, a tripping arm 18. This trip arm 18 is spaced above the brake actuating arm 14 a distance suitable to allow it to swing over the upper surface of the graphophone disk, and is secured to the post 13 by means of a split sleeve 19 and set screw 20 in order that various radial adjustments may be made. An upturned finger 21 is provided at the free end of the trip arm 18 and is adapted to be engaged by the reproducer supporting arm 3.

Through the adjusting feature of the arm 18 it will be seen that at any predetermined point on the record the machine may be automatically stopped, and that in the event the operator desires to exclusively manually operate the stop mechanism, the trip arm 18 may be swung to inoperative position away from the path of the traveling reproducer arm.

The operation of the device is as follows: The trip arm 18 is adjusted to operate the stop mechanism at the termination of the spiral threads upon the disk or at any desired portion of the record. The turntable is then set in motion by releasing the brake shoe 12 from engagement with the periphery thereof by moving the arm 14 to the position shown in Fig. 1, or more clearly illustrated in dotted lines in Fig. 2. This releasing movement of the arm 14 simultaneously throws the trip arm 18 to operative position in the path of the traveling reproducer arm 3. The reproducer is then placed upon the disk and the spiral groove thereon gradually moves the arm 3 toward the center of the disk until, at the terminal of the groove or at a predetermined point therein, the arm contacts the finger 21 upon the arm 18, moving the latter to the position shown in full lines Fig. 2. This movement is likewise transmitted to the arm 14 and the action of the stop 16 thereon upon the brake spring 10 causes the brake shoe 12 to contact the periphery of the rotating turntable 5, and bring the latter to a stop.

The movement imparted to the stop mechanism from the traveling reproducer arm is so gradual that the brake shoe at first, lightly contacts the periphery of the turntable, forcing the same to a gradual stop and without shock to the graphophone 1

motor. It is also obvious that disks of greater diameter than the turntable of the machine may readily be played, without interfering with the operation of my improved stop mechanism, as the brake and brake actuating arm lie in a plane below that occupied by the extended disk, the trip arm lies entirely above the record, and the pivoted post 13 to which the arms are secured is arranged at a distance from the axis of the table, greater than the radius of the largest disk adapted for use on the device.

Having described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a device of the class described, the casing, rotatable members and movable arm, in combination with a post mounted upon said casing, a spring arm secured at one end to said post, a brake shoe at the free end of said spring arm, a pivotally mounted brake actuating arm provided with a pair of stops engaging said spring arm, and a trip arm connected to said brake actuating arm and having its free end arranged in the path of said movable arm, said trip arm being arranged above the plane of the rotatable member and the rest of the mechanism being arranged entirely below the plane of said rotatable member, substantially as described.

2. An attachment for a machine having a casing, a rotatable member and a movable arm comprising a plate adapted to be secured to the upper surface of the casing adjacent the rotatable member, a post on said plate, a spring brake arm secured at one end to said post and extending toward the periphery of the rotatable member, a pivotally mounted post adjacent the opposite end of said plate, a brake actuating arm fixed to said post and provided with stops for engagement with said brake arm, and a

trip arm secured at one end to said pivoted post and having a free end adapted to be arranged to lie in the path of the movable arm, substantially as described.

3. An attachment for a machine having a casing, a rotatable member, and a movable arm comprising a plate adapted to be secured to the casing adjacent the rotatable member, a post on said plate, a spring brake arm secured at one end to said post, a pivotally mounted post adjacent the opposite end of said plate, a brake actuating arm fixed to said post and provided with stops for engagement with said brake arm and a trip arm adjustably secured at one end to said pivoted post, the free end thereof being adapted to be arranged to lie in the path of the movable arm substantially as described.

4. An attachment for a machine having a casing, a rotatable member, and a movable arm comprising a plate adapted to be secured to the casing of the machine adjacent the rotatable member, a post on said plate, a spring brake arm fixed at one end to said post and having a brake shoe at its free end to engage said rotatable member, a brake actuating arm pivotally mounted on said plate and adapted to engage and operate said spring arm, a trip arm adjustably connected to said brake actuating arm, said spring arm and brake actuating arm lying in a plane wholly below the upper surface of the rotatable member and said trip arm lying above the plane of the upper surface of said rotatable member, said trip arm being adapted to be actuated by the movable arm, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

BAPTISTE J. GENESY.

Witnesses:

MATTHEW KYLE,
FRANK D. KING.