

(No Model.)

2 Sheets—Sheet 1.

W. S. BURNETT.

COMBINED PHONOGRAPH AND COIN OPERATED MECHANISM.

No. 502,246.

Patented July 25, 1893.

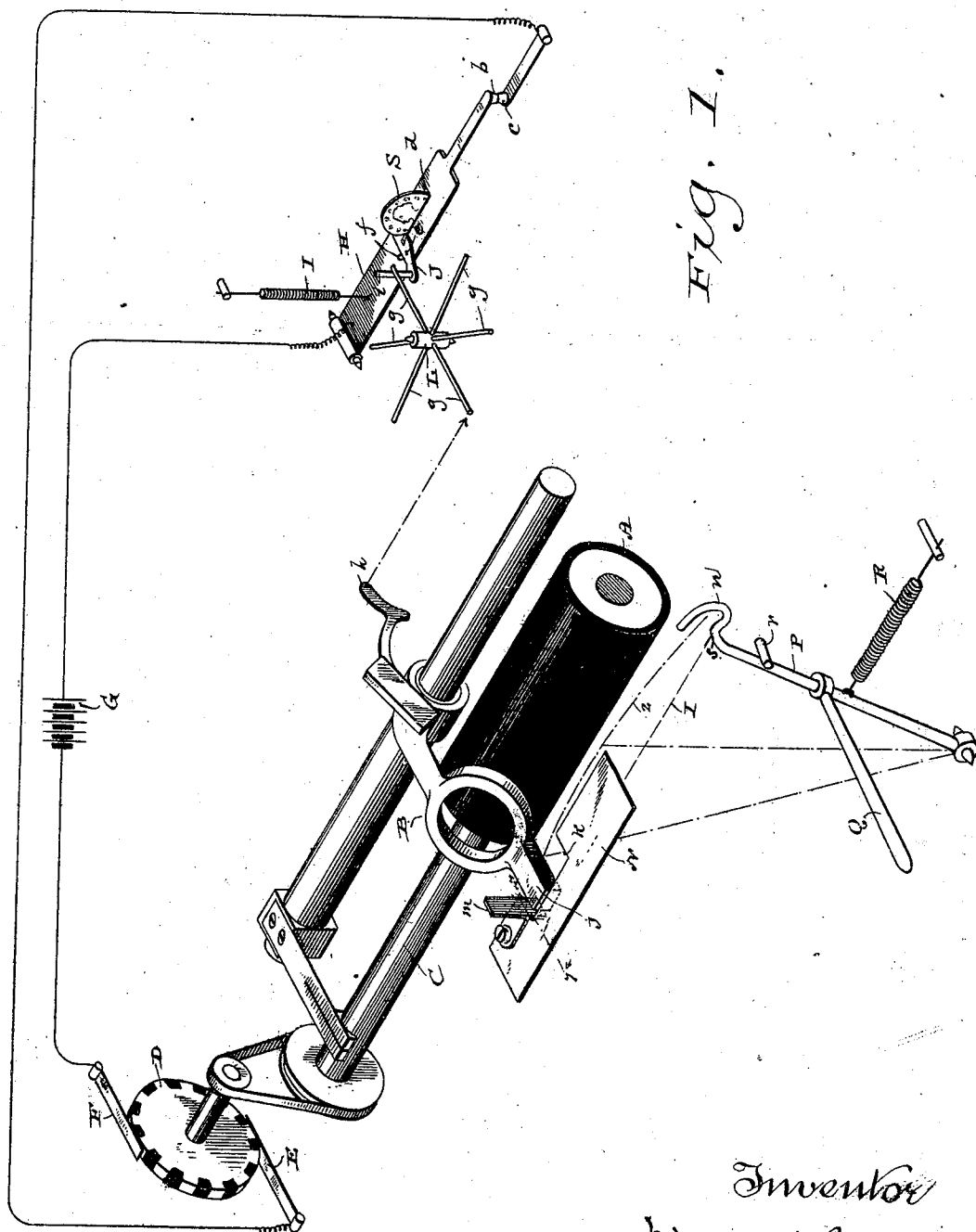


Fig. 1.

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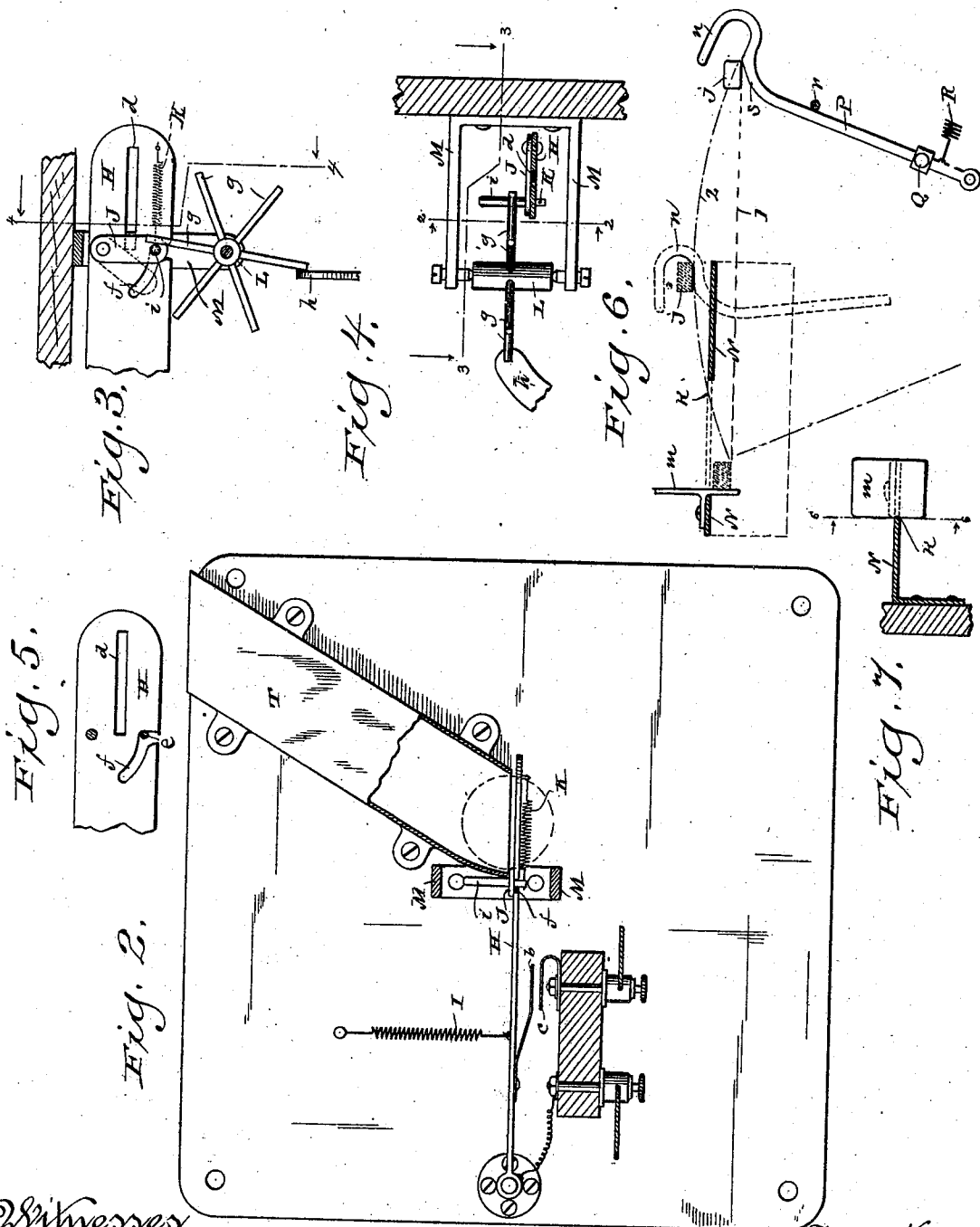
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UNITED STATES PATENT OFFICE.

WILLIAM S. BURNETT, OF MILWAUKEE, WISCONSIN.

COMBINED PHONOGRAPH AND COIN-OPERATED MECHANISM.

SPECIFICATION forming part of Letters Patent No. 502,246, dated July 25, 1893.

Application filed August 18, 1890. Serial No. 362,284. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. BURNETT, of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in a Combined Phonograph and Coin-Operated Mechanism; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to combined phonographs and coin operated mechanisms; and it consists in certain peculiarities of construction and combination of parts to be hereinafter described with reference to the accompanying drawings and subsequently claimed.

In the drawings: Figure 1 is a diagram view of my invention in perspective; Fig. 2, an elevation partly in section on line 2—2 of Fig. 4, illustrating a coin actuated electric circuit controlling mechanism; Fig. 3, a horizontal section on line 3—3 of the succeeding figure; Fig. 4, an elevation partly in section on line 4—4 of the preceding figure; Fig. 5, a detail plan view of a slot plate that forms part of the mechanism embodied in my invention; Fig. 6, a diagram view illustrating one of the movements constituting part of my invention, said view being partly in section on line 6—6 of the succeeding figure, and Fig. 7, a section on line 7—7 of Fig. 1.

Referring by letter to the drawings A represents the cylinder, B the needle-carriage of a phonograph, the cylinder shaft C being belt geared to that portion of an electro-motor represented in Fig. 1, by a shaft carrying a commutator D in contact with conductor plates E, F, the latter being terminals of a suitable system of wiring that connects a battery G, or other electric generator, with a circuit making and breaking mechanism hereinafter described.

The circuit making and breaking mechanism just mentioned comprises a plate H of conductive material provided with a contact point *b* opposed to another contact point *c*, and a spring I connected to the plate acts to keep said points normally out of contact. The plate H is provided with a slot *d* proportioned in its dimensions to that of an arbitrarily selected coin and pivotally connected to said plate is a transverse guard J that normally covers a portion of the slot, and this guard is

controlled by a spring K as best illustrated in Figs. 2 and 3. Depending from the guard J is a lug *e* that engages a curved slot *f* cut in the plate H, as best illustrated in Fig. 5.

A hub L has its bearings on a bracket M connected to a suitable support, and radiating from the hub are spokes *g* that oppose arms *h, i*, respectively arranged on the needle carriage B of the phonograph and slot-guard J on the spring-controlled plate H, above described. The needle-carriage B of the phonograph is also provided with another arm *j* and parallel to the phonograph-cylinder A is a horizontal plate N having its inner edge recessed at *k* and provided with a stop *m* as best illustrated in Figs. 1 and 7.

Pivotally connected to a suitable support is a lever P provided with a lateral handle Q and having a crook shaped upper end *n* in the path of the arm *j* on the needle carriage said lever being under the control of a spring R connected thereto, as best illustrated in Fig. 1.

In describing the operation of the mechanism, above set forth we will assume that a proper coin S has been deposited in a chute T (shown in Fig. 2) and thereby conducted to the partially closed slot in the plate H as shown in Fig. 1. The weight of the coin overcomes the resistance of the spring I and thus the points *b, c*, are brought into contact and to close the motor circuit and thus impart rotation to the cylinder A, the needle and diaphragm-mechanism (not shown) on the carriage B being in position to reproduce the sounds previously recorded on said cylinder. The carriage B being traveled along the cylinder A, the needle is kept in contact with said cylinder by the arm *j* of said carriage moving under the plate N on the dotted horizontal line 1 until it comes into contact with the crooked upper end *n* of the lever P, the latter being normally rested against a suitable stop *r*, as shown in Figs. 1 and 6. When the arm *j* strikes the curve *s* of the crooked end of the lever P, the continued travel of the carriage C causes said arm to ride up into the crook *n* of said lever and thus said carriage is elevated to bring the needle out of contact with the cylinder, while at the same time the carriage-arm *h* comes into contact with one of the spokes *g* on the hub L to thereby partially rotate the latter to cause

another of its spokes to actuate the slot-guard J against the resistance of the spring K, whereby the coin S is permitted to drop through the slot *d* in the plate H, and this plate being freed from weight is drawn back to its normal position by the spring I thus breaking the contact of the points *b, c*, to discontinue the operation. Another coin being dropped into the slot (which in the meantime has been again partially closed by the guard J returned to its normal position by the spring K) the lever P is swung over to the left, by hand, against the resistance of the spring R, this operation causing the carriage-arm *j* to travel on an arc of a circle above the plate N, as indicated by dotted line 2, until it strikes the stop *m* on the same and then when said lever is released, to be automatically returned to its normal position by said spring R, the carriage C will fall so as to permit the needle to again come in contact with the cylinder A and the operation above described is repeated.

It is intended that the mechanism above described shall be inclosed within a suitable case and that the phonograph cylinders shall contain records of musical renditions or other matter suited to the taste or fancy of the public, the reproductions of the cylinder records being effected in the manner above described.

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

1. The combination with a phonograph, adapted to be operated by a motor, of a coin actuated starting and stopping device for the motor, an arm on the needle-carriage of the phonograph, a recessed guard plate provided with a stop and arranged to normally oppose the carriage arm from above the latter, and a shifting lever having a lifting crook in the path of said carriage arm, substantially as set forth.

2. The combination with an electrically actuated phonograph, of contact plates forming terminals of an electric-circuit, a spring for holding one of the plates normally out of contact with the other, a slot in the spring-controlled plate, a spring controlled guard for a portion of the slot, a device for retracting the slot-guard, and an arm on the needle-carriage of the phonograph arranged to actuate said retracting device, substantially as set forth.

3. The combination with a phonograph, adapted to be operated by a motor, of a source of electricity and contact plates in circuit with the motor, a spring for holding one of the plates normally out of contact with the other, a slot in the spring-controlled plate, a spring controlled guard for a portion of the slot, a device for retracting the slot-guard, and an arm on the needle carriage of the phonograph arranged to actuate said retracting device, substantially as set forth.

4. The combination with a phonograph, adapted to be operated by a motor, of a source of electricity and contact plates in circuit with the motor, a spring for holding one of the plates normally out of contact with the other, a slot in the spring controlled plate, a spring-controlled guard for a portion of the slot, a device for retracting the slot-guard, an arm on the needle-carriage of the phonograph arranged to actuate the retracting device, another arm on said carriage and a shifting lever provided with a lifting crook in the path of the latter carriage-arm, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

WILLIAM S. BURNETT.

Witnesses:

N. E. OLIPHANT,
WM. KLUG.