

E. T. TURNEY.
CHECK CONTROLLED MECHANISM.
APPLICATION FILED NOV. 27, 1907.

988,410.

Patented Apr. 4, 1911.

Fig. 1.

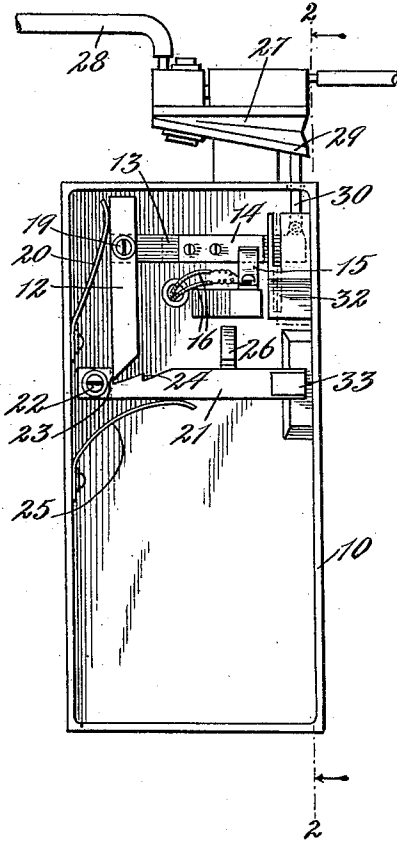
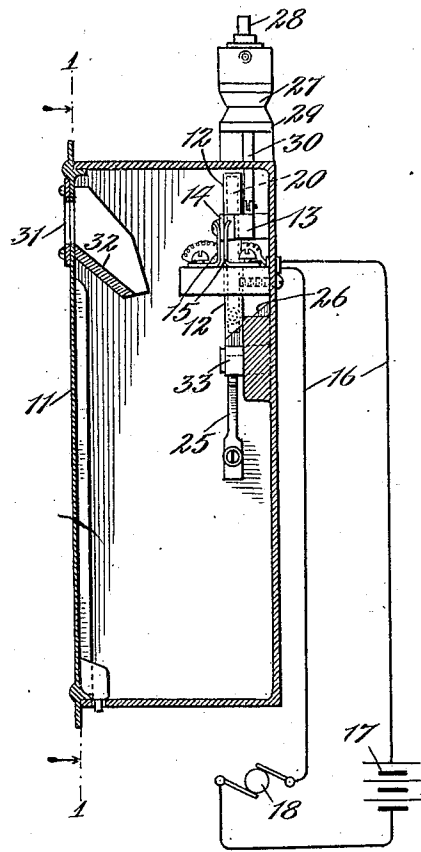


Fig. 2.



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UNITED STATES PATENT OFFICE.

EUGENE T. TURNEY, OF ROCK ISLAND, ILLINOIS, ASSIGNOR TO ARTISTA PIANO PLAYER COMPANY, OF MILAN, ILLINOIS, A CORPORATION OF ILLINOIS.

CHECK-CONTROLLED MECHANISM.

988,410.

Specification of Letters Patent.

Patented Apr. 4, 1911.

Application filed November 27, 1907. Serial No. 404,027.

To all whom it may concern:

Be it known that I, EUGENE T. TURNEY, a citizen of the United States, residing at Rock Island, in the county of Rock Island and State of Illinois, have invented certain new and useful Improvements in Check-Controlled Mechanism, of which the following is a specification.

This invention relates to improvements in check controlled mechanism and the primary object of the invention is to provide an improved device of this character for closing the circuit of an operating mechanism, such as a motor or the like, and improved means for locking the circuit closer against movement.

A further object is to provide improved means for releasing the mechanism or breaking the circuit.

A further object is to provide an improved device of this character which will be simple, durable and cheap in construction, and effective and efficient in operation.

To the attainment of these ends and the accomplishment of other new and useful objects, as will appear, the invention consists in the features of novelty in the construction, combination and arrangement of the several parts hereinafter more fully described and claimed and shown in the accompanying drawing, illustrating an exemplification of the invention, and in which—

Figure 1 is an elevation of an improved device of this character constructed in accordance with the principles of this invention and with one face of the inclosing casing removed, taken on line 1—1 of Fig. 2. Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1.

Referring more particularly to the drawing and in the present exemplification of the invention, the numeral 10 designates an inclosing casing which may be of any desired size and configuration and constructed of any suitable material, and 11 designates a removable closure which constitutes one wall of the casing.

Pivotally supported within the casing, and intermediate its ends is a lever or mem-

ber 12 which is preferably arranged adjacent the upper portion of the casing and projecting laterally from one side thereof is an arm or extension 13, which is provided with a suitable metallic portion 14. Suitably supported adjacent the arm or extension 13 are spaced contacts 15, to which are connected suitable conductors 16 which lead from a source of supply 17 and have operative connection with a suitable motor 18. The arm or extension 13 is adapted to be moved into and out of engagement with the contacts 15 by the movement of the lever or member 12 about its point of pivotal support 19, and a suitable spring 20 is provided which engages the lever or member 12 to one side of the pivot thereof for normally holding the metallic portion 14 of the arm or extension 13 in engagement with the contacts 15.

A latch 21 is pivotally supported by one extremity as at 22 adjacent one extremity of the lever or member 12 and is provided with shoulders 23, 24, the shoulder 23 being adapted to be engaged by the free extremity of the member or lever 12 to limit the movement of the latter about its point of pivotal support 19, when the metallic portion 14 of the arm or extension 13 is in engagement with the contacts 15. A suitable yielding member or spring 25 is provided and engages the latch 21 to normally hold the latter elevated so that the shoulder 23 will be held in the path of movement of the free extremity of the lever or member 12 in one direction, and if desired, a stop 26 may be arranged within the casing to limit the upper movement of the latch 21 under the influence of the yielding member or spring 25. The spring 20 serves to hold the free extremity of the lever or member 12 against the shoulder 23 of the latch and the yielding member or spring 25 tends to normally hold the shoulder 23 in the path of movement of the lever or member in one direction.

When the arm or extension 13 is raised so as to move the metallic portion 14 out of engagement with the contacts 15 the lever or

member 12 will be rocked about its point of pivotal support 19 to move the free extremity thereof away from the shoulder 23 and toward the shoulder 24. As the lever or member 12 moves against the tension of the spring 20, the yielding member or spring 25 will raise the latch 21 about its point of pivotal support 22 to cause the shoulder 24 to assume a position in the path of movement of the free extremity of the lever or member 12 in the opposite direction so as to lock the metallic portion 14 out of engagement with the contacts 15 to break the circuit.

Any suitable means may be provided for automatically raising the arm or extension 13 to rock the lever or member 12. A suitable and efficient means for accomplishing this purpose comprises a bellows or pneumatic 27, which is adapted to be exhausted through a suitable tube or pipe 28 in any desired manner, not necessary to illustrate. The movable member 29 of the bellows may be connected to the free extremity of the arm or extension 13 in any desired or suitable manner, such as by means of a connecting member 30, one end of which is connected to the movable member 29 and the other end is preferably detachably connected to the arm or extension so that when the bellows is collapsed by means of exhausting the air therefrom, the movable member 29 will be raised and will move the lever or member 12 about its point of pivotal support, at the same time the spring or yielding member 25 will automatically raise the latch 21.

The closure 11 of the casing is provided with a suitable check slot 31 and secured to the inner face of the closure is a check chute 32, which is adapted to receive the check passed through the slot 31. This chute 32 is arranged above the free extremity of the latch 21 in a different vertical plane and is of such an inclination that when a check of the proper size and weight is deposited therein, the check will receive sufficient momentum as it passes down the chute to throw it against the free extremity 33 of the latch 21 and being of the proper weight will depress the latch 21 against the tension of the yielding member or spring 25 to release the lever or member 12 and when the latter is so released, the spring 20 will rock the lever about its point of pivotal support 19 until the free extremity engages the shoulder 23 of the latch. At the same time the arm or extension 13 will be moved into engagement with the contacts 15 and the movable member 29 or the bellows 27 will be adjusted through the medium of a connecting member 30 to fill the pneumatic with air.

Obviously this improved check controlled

mechanism may be employed for any desired or suitable purpose where it is necessary to complete an electric circuit or otherwise but this improvement is particularly adapted for use for playing attachment for musical instruments of the type described and claimed in my application for Letters Patent Serial No. 331,740, filed in the United States Patent Office August 23, 1906.

In order that the invention might be fully understood by those skilled in the art, the details of the foregoing embodiment thereof have been thus specifically described, but

What I claim as new and desire to secure by Letters Patent is—

1. In a check controlled device, the combination with a stationary contact, of a bell crank contact lever arranged to have one extremity moved into and out of engagement with said stationary contact, means tending to force the movable contact into engagement with the stationary contact, and a check controlled lever with which the other end of the bell crank lever coöperates, said check controlled lever being pivoted at one end and provided adjacent that end with two spaced shoulders arranged one in advance of the other and movable into and out of the path of movement of the said other end of the bell crank lever, one of said shoulders engaging the end of the bell crank lever to hold the movable contact out of engagement with the stationary contact and against the tension of the said means, and the other of said shoulders being adapted to be engaged by the end of the bell crank lever to limit the extent of the movement of the movable contact by the said means.

2. In a check controlled device, the combination with a stationary contact, of a bell crank contact lever arranged to have one extremity moved into and out of engagement with said stationary contact, means tending to force the movable contact into engagement with the stationary contact, a check controlled lever with which the other end of the bell crank lever coöperates, said check controlled lever being pivoted at one end and provided adjacent that end with two spaced shoulders arranged one in advance of the other and movable into and out of the path of movement of the said other end of the bell crank lever, and yielding means tending normally to move the shoulders into the path of movement of the coöperating end of the bell crank lever and against the tension of which yielding means the shoulder lever is adapted to be moved by a check to release the bell crank lever, one of said shoulders engaging the end of the bell crank lever to hold the movable contact out of engagement with the stationary contact and

against the tension of the said means, and the other of said shoulders being adapted to be engaged by the end of the bell crank lever to limit the extent of the movement of the
5 movable contact by the said means.

In testimony whereof I have signed my name to this specification, in the presence

of two subscribing witnesses, on this 23rd day of November A. D. 1907.

EUGENE T. TURNEY.

Witnesses:

C. A. LÜTT,

A. D. WALKER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
