(No Model.)

G. W. BROWN.

PICTURE EXHIBITOR.

No. 576,542. Patented Feb. 9, 1897.

Fig. 1.

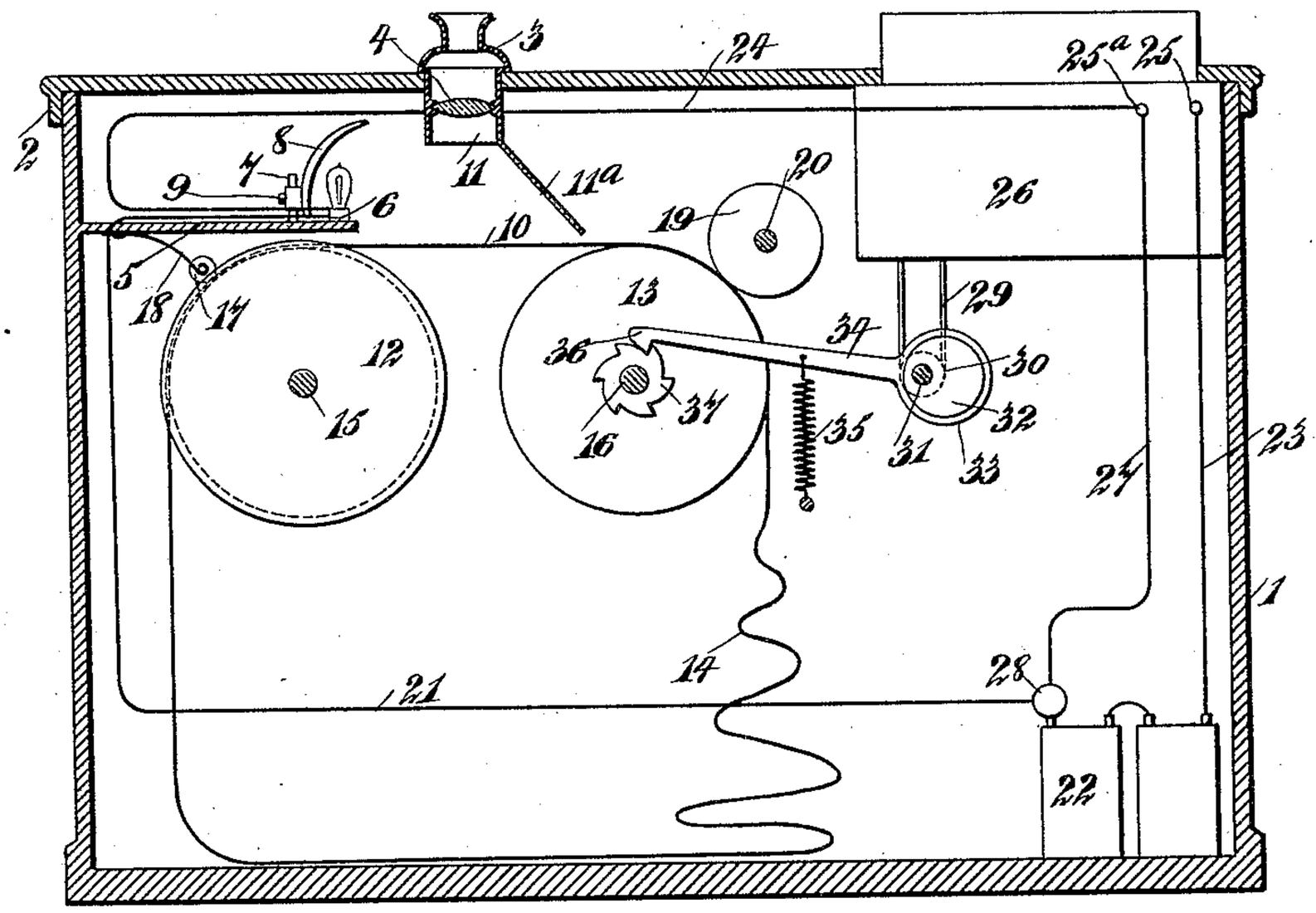


Fig. 2.

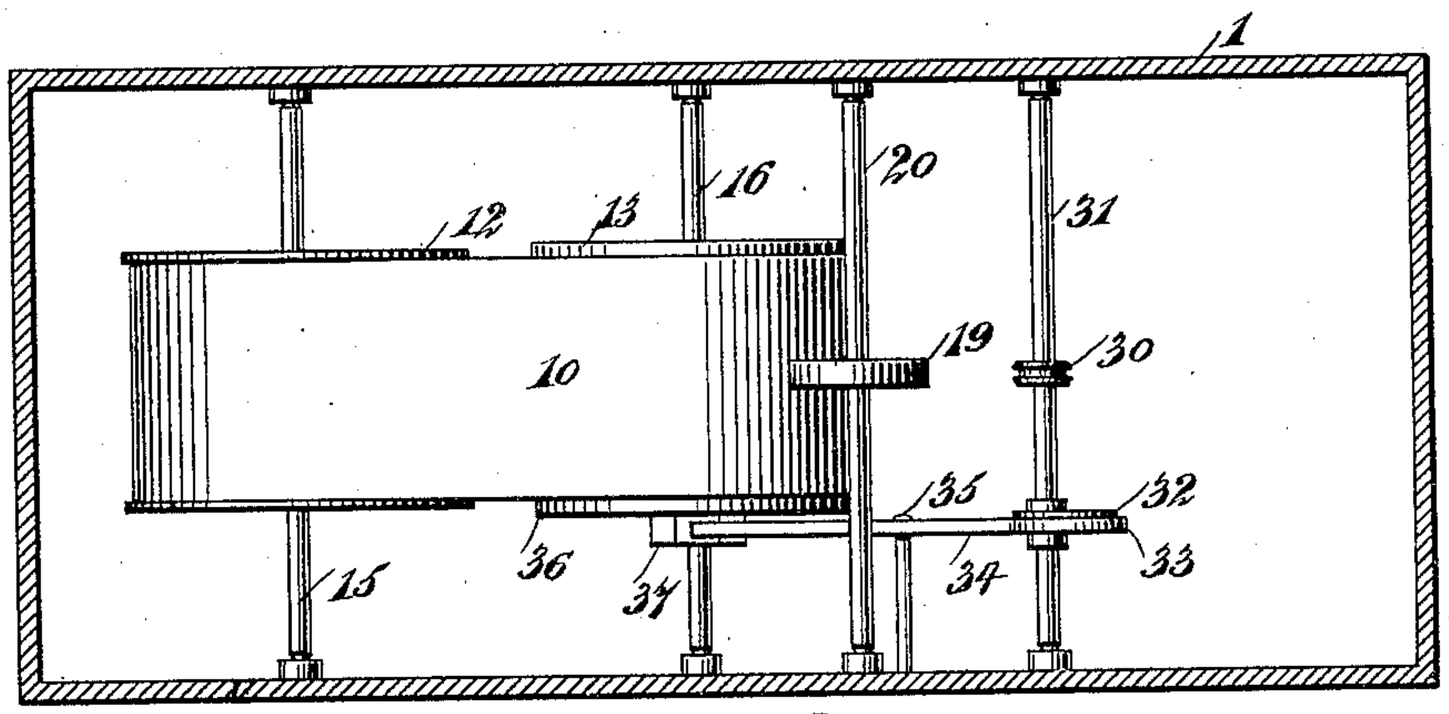
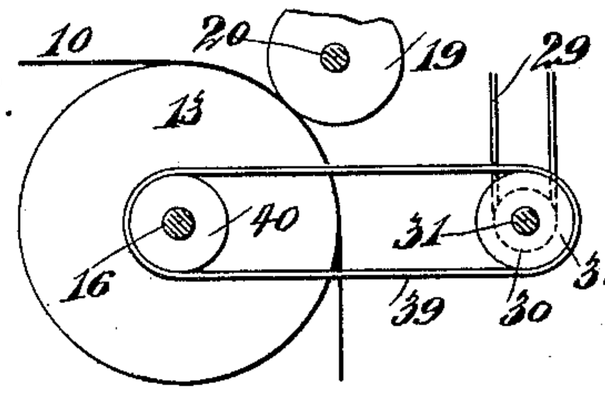


Fig. 3.



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PICTURE-EXHIBITOR.

SPECIFICATION forming part of Letters Patent No. 576,542, dated February 9, 1897.

Application filed December 12, 1895. Serial No. 571,916. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. BROWN, of Colorado Springs, in the county of El Paso and State of Colorado, have invented a new and Improved Picture-Exhibitor, of which the following is a full, clear, and exact description.

This invention relates to certain improvements in devices for exhibiting pictures, of which the device described and claimed in my application for Letters Patent of the United States, Serial No. 546,910, filed April 23, 1895, is a type; and the object of the invention is to provide a device of this character of a simple and inexpensive construction adapted to be used in connection with a phonograph or like instrument and to be actuated, together with said phonograph, from a common source of power.

The invention consists in a device comprising a closed casing having rollers, one of which is connected with an operating mechanism, such, for example, as the motor of a phonograph, an illuminating device arranged in the casing, a strip carrying pictures arranged to move over said rollers, and an eyepiece carried on the casing in position to render visible the pictures on said strip.

The invention also contemplates certain novel features of the construction, combination, and arrangement of the various parts of the exhibiting device whereby certain important advantages are attained and the device is made simpler, cheaper, and otherwise better adapted and more convenient for use than various other similar devices heretofore employed, all as will be hereinafter fully set forth. The novel features of the invention will be carefully defined in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a longitudinal section taken vertically through the casing of the device constructed in accordance with my invention. Fig. 2 is a transverse horizontal section through the casing of the device, showing the interior mechanism in place; and Fig. 3 is a fragmentary detached view showing a modified construction of the driving mechanism.

Referring first to Figs. 1 and 2, 1 indicates the casing of the device, which may be of any preferred form and dimensions, herein represented as a rectangular box having a removable cover 2, carrying an eye-tube 3, provided with a lens 4. At one end of the casing 1 a shelf 5 is arranged to extend transversely across the same, and on the extremity of said shelf is mounted an illuminating device, which may be an incandescent lamp 6, as shown in Fig. 1.

Behind the lamp 6 is arranged a concave reflector 8, carried on a short standard 7 by means of an adjustable clamp 9, said reflector being arranged to throw the light from said reflector onto the upper face of the endless paper band or strip 10, carrying the photographs, at a point directly under the lower open end 11 of the eye-tube 3, the said lower end being provided at its side opposite to the lamp 6 with an inclined reflector 11^a, as clearly indicated in Fig. 1.

The paper strip 10 is carried on two rollers or drums 12 and 13, mounted on shafts 15 and 16, journaled in the opposite side walls of the casing 1 and extending transversely across the same, as seen in Fig. 2, the roller or drum 12 being circumferentially grooved to receive between its respective end flanges the said strip 10, whereby the same is guided, said strip being held down in the groove of the roller by means of a small roller 17, carried on a spring 18, secured to the under side of the shelf 5. The main portion of the paper strip or band 10 is arranged to hang loosely down in the lower portion of the casing 1, as indicated at 14 in Fig. 1, and said strip is held in engagement with the driving-roller 13 by means of a thin friction disk or roller 19, carried on a shaft 20, also extending transversely across the casing and journaled at its ends in the side walls thereof.

From the lamp 6 a circuit-wire 21 extends to a battery 22, being controlled by a switch device 28, and from said battery 22 another circuit-wire 23 extends up and is connected to a binding-post 25, whereby said circuit-wire 23 is connected with the motor of a phonograph device arranged in a casing 26. (Seen in Fig. 1.) From the opposite terminal of the lamp 6 another circuit-wire 24 extends across to the other binding-post 25^a on the casing 26 of the phonograph, and another con-

ductor 27 extends from the switch device directly to the said binding-post 25ª, whereby it will be seen that said switch device may be operated to either throw the lamp 6 out of circuit with the phonograph and battery or to place said lamp in the circuit.

A belt or strap 29 extends down from the interior of the phonograph-casing, being driven from the motor therein, and said strap or band 29 passes over a grooved sheave 30 on a transverse driving-shaft 31, mounted in the casing 1 and having an eccentric 32 fixed on it and working in a strap 33, having an arm 34, provided with a spring 35, arranged to hold a finger 36, formed on the end of said arm, in engagement with the teeth of a ratchet-wheel 37, fixed on the shaft 16, whereby it will be seen that the said shaft, together with the roller or drum 13, mounted thereon, and the strip 10, passing over said drum, will be driven from the motor of the phonograph.

In operation it will be seen that as the phonograph is actuated by the flow of the electricity from the battery 22 intermittent rotary movement is imparted to the flexible strip 10, passing over the rollers 12 and 13, whereby the pictures carried on said strip are caused to pass under the open lower end of the eye piece or tube 3, so as to be visible to the eye outside the casing.

The construction of the device, as above described, is extremely simple and inexpensive and is well adapted for the purposes for which it is intended; and it will be obvious from the above description that the device is susceptible of considerable modification without material departure from the principles and spirit of the invention, and for this reason I do not wish to be understood as limiting myself to the precise arrangement of the parts herein set forth. For example, if desired, the construction shown in Fig. 3 may be employed. In this form of the device, in lieu of employing the eccentric and the ratchet-wheel for driving the roller or drum 13 from the motor of the phonograph, the driving-shaft 31 is provided with a grooved sheave 38, over which passes an endless band or strap 39, the opposite end of which is carried around a grooved sheave or pulley 40 on the shaft 16 of the drum 13, whereby it will be seen that when the motor of the phonograph is operated the flexible strip 10 will be continuously moved under the open lower end of the eye-tube 3.

If desired, a spring-motor may be employed to run the phonograph, or an oil-lamp may be used in lieu of the electric lamp for illuminating the pictures.

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

1. In a picture-exhibitor, the combination of a casing, a phonograph therein provided with a motor, drums journaled in the casing and driven from the motor of the phonograph, a flexible strip arranged to pass over the drums and provided with pictures, an eye-tube carried on the casing, through which tube the pictures carried on the strips are visible, a reflector arranged at one side of the eye-tube, and an illuminating device arranged at the opposite side of the eye-tube, substantially as set forth.

2. In a picture-exhibitor, the combination of a casing, a phonograph therein having a motor, drums journaled in the casing, a flexible strip arranged to pass over the drums and adapted to carry pictures, an eye-tube carried on the casing, means to illuminate the pictures passing under the eye-tube, a ratchet-wheel connected to one of the drums, a shaft journaled in the casing and driven from the motor of the phonograph, an eccentric carried by said shaft, and a strap for said eccentric provided with a dog to engage and turn said ratchet-wheel, substantially as set forth.

GEORGE W. BROWN.

Witnesses:
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