Aug. 21, 1923. 1,465,753

A. ANGEL

ADVERTISING APPARATUS

Filed Dec. 9, 1920

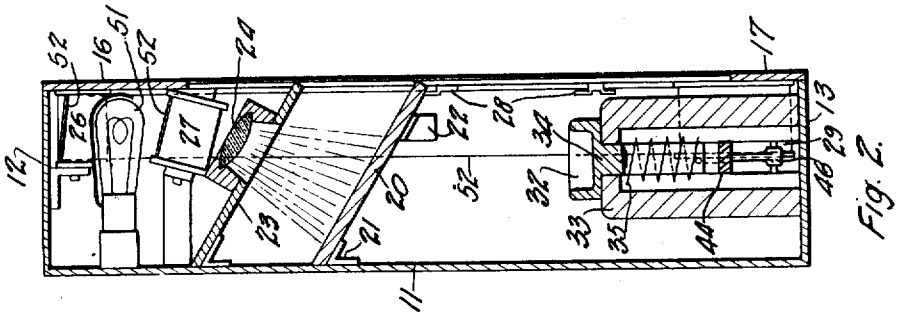


Fig. 2.

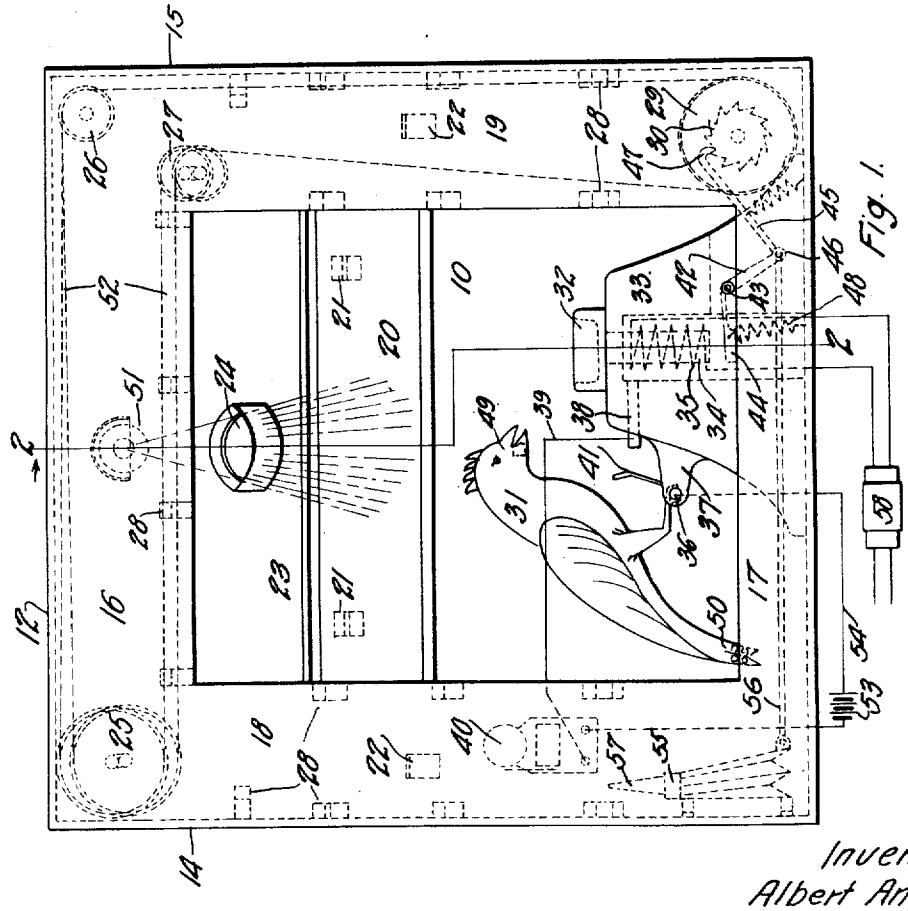


Fig. 1.

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UNITED STATES PATENT OFFICE.

ALBERT ANGEL, OF CLEVELAND, OHIO.

ADVERTISING APPARATUS.

Application filed December 9, 1920. Serial No. 429,309.

To all whom it may concern:

Be it known that I, ALBERT ANGEL, a citizen of the United States, residing at Cleveland, county of Cuyahoga, and State of Ohio, have invented a new and useful Advertising Apparatus, of which the following is a specification.

My invention relates to advertising apparatus wherein goods, figures, or signs, either stationary, or moving or animated, or both are displayed and wherein attention is called to the apparatus either by light, or sound, or both.

The object of my invention is an advertising apparatus to which attention is attracted readily and in which advertising matter is displayed prominently.

I attain this object by constructing a case or other suitable structure and providing therein or thereon means for displaying advertising cards, samples, etc., and further providing thereon or therein either a visionary means or an audible means, or both to attract attention to the apparatus and to the advertising matter displayed there. All of this is sufficiently illustrated in the accompanying drawing which shows one style of apparatus to accomplish my object and in which Fig. 1 is a general front view of an apparatus embodying the features of the present invention and Fig. 2 is a section on line 2—2 of Fig. 1.

Similar reference characters refer to similar parts throughout the two views.

The apparatus shown in the accompanying drawing has the case 10 which is formed box like in this instance and made of metal, wood or other suitable material or combination of materials. This case 10 has the rear wall 11, the top 12, the bottom 13, the side walls 14 and 15, and the flanges 16, 17, 18, and 19. It is preferred that these flanges be made of glass to the end that the advertising matter displayed there may be placed on the inside of the case to protect the same against atmospheric conditions, theft, etc.

Within this case 10 and in proper relation to other members of the apparatus as will appear presently, is mounted the inclined mirror 20 which extends to nearly the full width of the inside of the case and is cut away to permit the film strip to pass and is held in position by the brackets 21 and 22, although it is preferred that the mirror is not securely fastened but merely rests on the brackets.

Inside of the case 10 and above the mirror 20 is the partition 23 in which the lens 24 is mounted in proper relation to the mirror 20.

The rollers 25, 26, and 27 are journaled in the case 10 between the partition 23 and the top 12.

The flanges 16, 17, 18, and 19 have the cleats 28 to hold advertising cards.

The roller 29 is journaled in the case 10 near the bottom 13 and the wall 15 and is provided with the ratchet wheel 30.

For the purpose of ease of changing the moving or animated object, the bird 31 and the feeding cup 32 are here mounted on a removable base 33.

The cup 32 is made of magnetizable material, preferably soft iron which does not become permanently magnetized. This cup 32 has, integrally or detachably, the bar 34 which is made of material similar to the cup 32.

The magnetizing coil 35 is mounted over the bar 34 and adapted to periodically magnetize the same.

The shaft 36 is journaled in the ears 37 on the base 33.

The contact pin 38 is mounted on the base 33 and has the lead 39 for electrical connection with the bell 40.

The feet of the bird 31 are securely fastened to the shaft 36 and, in proper relation to the bird and to the contact pin 38, the contact arm 41 is also securely fastened to the shaft 36. It is preferred that the central portion of the contact arm is made sufficiently thin to act as a spring so as not to hinder the movement of the bird 31 and to take care of inequalities in the general structure.

The bell crank lever 42, made of material similar to the cup 32 and the bar 34, is fulcrumed in the base 33 on the pin 43 and is located in proper relation to the lower end of the bar 34 so that the end 44 acts as an armature as will appear presently.

One end of the rod 45 is hingedly connected to the end 46 of the lever 42 while the other end thereof is provided with a pawl 47 to engage the teeth on the ratchet wheel 30.

One end of the tension spring 48 is con-

nected to the lever 42 and the other end thereof to the base 33 or to the bottom of the case 10.

The bird 31 may be made of material similar to the cup and bar but since it should be as light in weight as possible, it is preferred that the same is made of material similar to paper, wood, celluloid, etc. When this bird is made of non-ferro material, a piece of soft iron 49, similar to the cup in composition, is fastened in the bill of the bird. The bird 31 also has a balance weight 50 in its tail.

Light bulbs may be installed wherever most convenient or advantageous, but a bulb 51 should be installed directly over the lens 24 and between the upper and lower horizontal portions of the film 52 as clearly seen in Fig. 1.

The coil 35 is inserted into the main electric circuit.

The bell 40 is inserted into an electric circuit energized by the battery 53. The lead 54 is in electrical contact with the shaft 36.

The bellows 55 is actuated by the rod 56 which is hinged to the end 46 of the lever 42. The mouthpiece 57 may be constructed to produce any suitable sound which can be produced by air as the chirping of birds for instance.

The film 52 has pictures thereon similar to the pictures on a moving picture film and the size of the pictures, and the movement of the end 46 of the lever 42, and the diameter of the ratchet wheel, and the diameter of the roller 29 being arranged so that the action of the lever 42 will move the film 52 such a distance that only one of pictures or portions of the film will rest directly over the lens 24 during the inactive moment of this moving apparatus to the end that only a complete or a desired portion of a picture or film will appear in the mirror 20.

The apparatus is energized by a main electric circuit in which the interrupter 58 is inserted.

The operation of this particular apparatus is as follows: Advertising cards are inserted into the cleats on the inside of the transparent flanges where they are protected from dust, damp, etc., and may readily be removed for cleaning or changing for other cards. Advertising cards may also be placed on the bottom of the partition 23 so that they appear in the mirror 20 on each side of the moving picture appearing in the middle portion thereof.

When the electric current is turned on, the interrupter will permit the electric current to flow and stop periodically in the main circuit. When the current is flowing, the bar 34 and the cup 32 become temporarily magnetized and attract the iron in the bird's bill and thereby cause the bird to tilt its head forward, as in the act of eating out of the cup, until the iron in its bill touches the iron of the cup where it will rest until the interrupter shuts off the current whereby the bar and the cup become de-magnetized and the bird will return to its original position due to the balance weight in its tail.

While the bird is so tilting forward, it also partially rotates the shaft 36 and the arm 41 which will then touch and make electrical contact with the pin 38 whereby the electric circuit, energized by the battery 53, is closed and the bell 40 will ring.

While the bird is tilting forward as above stated, the end 44 of the lever 42 is also attracted to the lower end of the bar 34 whereby the ratchet wheel 30 is moved rotatively one notch through the rod 45. As soon as the interrupter breaks the circuit, the spring 48 will return the lever 42 to its original position since the bar 34 will then become de-magnetized.

This continued flowing and breaking of the electric current will cause the bird to move its head down and up periodically and also cause the ratchet wheel 30 to rotate periodically and thereby move the film over the lens, and also operate the bellows periodically and in timed relation with the movement of the bird.

The end 46 of the lever 42 also actuates the bellows 55 through the rod 56.

While the ratchet wheel 30 is rotated periodically as stated, the film 52, which is wound over the rollers as shown, is periodically moved a certain distance so that after each move or step a complete picture rests over the lens 24. This picture will appear in the mirror due to the light 51 back of the film. Thus the periodic action of the lever 42 will cause moving pictures to appear in the mirror.

The present apparatus attracts attention through its lights and glass and mirror, also through its moving pictures, and also through its noise producing elements. The animated object, the bird in the present instance, is mounted on a unit independent of the case itself so that any other object can be substituted therefor without inconvenience. The film is wound over rollers so that it can readily be removed and another one substituted therefor. The advertising cards also are readily interchangeable.

When the main electric circuit is supplied with current of a voltage sufficiently low to operate the bell 40, the contact pin 38, the contact arm 41, and the battery 53 may be omitted and the bell 40 inserted in the main circuit which will cause the bell to ring whenever the interrupter permits current to flow in the main circuit.

Without limiting myself to the precise construction, nature of elements, and arrangements of elements shown and described,

I claim:

1. The combination with an advertising device, of an electro-magnet, an electric circuit adapted to periodically energize said electro-magnet, a movable object pivoted on said device and normally spaced away from said electro-magnet and provided with an armature adapted to be attracted by one end of the core of said electro-magnet on energization thereof and further provided with a balance weight adapted to return said object to normal position on de-energization of said electro-magnet.

2. The combination with an advertising device, of an electro-magnet, an electric circuit adapted to periodically energize said electro-magnet, a movable object pivoted on said device and normally spaced away from said electro-magnet and provided with an armature adapted to be attracted by one end of the core of said electro-magnet on energization thereof and further provided with a balance weight adapted to return said object to normal position on de-energization of said electro-magnet, an electric bell mounted on said device, a normally open electric circuit for said bell, and means connected with said object to close said bell circuit when said object is attracted to said electro-magnet.

3. The combination with an advertising device, of an electro-magnet, an electric circuit adapted to periodically energize said electro-magnet, a movable object actuated by one end of the core of said electro-magnet, a moving picture film over a set of rollers mounted in said device, means to project to view the successive pictures of said film, an armature on the other end of said core and actuated thereby, and a mechanism operatively connected with and actuated by said armature to periodically move said film.

4. The combination with an advertising device, of an electro-magnet, an electric circuit adapted to periodically energize said electro-magnet, a movable object actuated by one end of the core of said electro-magnet, a sound producing means mounted on said device, an armature on the other end of said core and actuated thereby, and a mechanism operatively connected with and actuated by said armature to periodically operate said sound producing means.

5. The combination with an advertising device, of an electro-magnet, an electric circuit adapted to periodically energize said electro-magnet, a movable object actuated by one end of the core of said electro-magnet, a moving picture film over a set of rollers mounted in said device, means to project to view the successive pictures on said film, a sound producing means mounted on said device, an armature on the other end of said core and actuated thereby, a mechanism operatively connected with and actuated by said armature to periodically move said film, and a mechanism operatively connected with and actuated by said armature to periodically operate said sound producing means.

6. The combination with an advertising device, of an electro-magnet, an electric circuit adapted to periodically energize said electro-magnet, a movable object on said device and normally spaced away from said electro-magnet and provided with an armature adapted to be attracted by one end of the core of said electro-magnet on energization thereof and further provided with means adapted to return said object to normal position on de-energization of said electro-magnet, an electric bell on said device, a normally open electric circuit for said bell, means connected with said object to close said bell circuit when said object is attracted to said electro-magnet, a moving picture film over a set of rollers mounted in said device, means to project to view the successive pictures of said film, a sound producing means mounted on said device, an armature on the other end of said core and actuated thereby, a mechanism operatively connected with and actuated by said second armature to periodically move said film, and a mechanism operatively connected with and actuated by said second armature to periodically operate said sound producing means.

7. The combination with an advertising device, of an electro-magnet, an electric circuit adapted to periodically energize said electro-magnet, a movable object actuated by one end of the core of said electro-magnet, a moving picture means mounted in said device, a sound producing means mounted in said device, an armature hinged at one side of and at the other end of said core and actuated thereby and provided with an arm, a ratchet mechanism connected to and operated by said arm to operate said moving picture means, and a mechanism connected to and operated by said arm to operate said sound producing means.

8. The combination with an advertising device, of an electro-magnet, a cup mounted on said magnet, a contact arm, a figure mounted on said contact arm and adapted on energization of said magnet to be moved toward said cup, and a bell circuit arranged adjacent said magnet and normally broken, said circuit being closed by said contact arm when said figure is drawn to said cup.

In testimony whereof I hereunto affix my signature.

ALBERT ANGEL.