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APPARATUS FOR PUBLICITY

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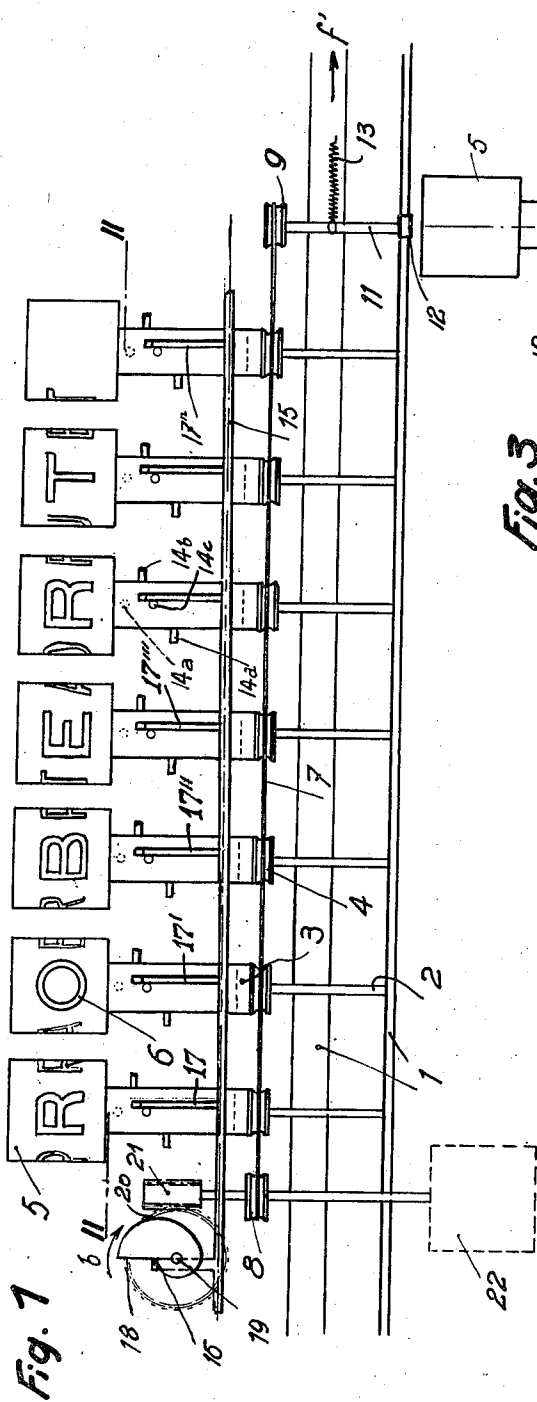


Fig. 1

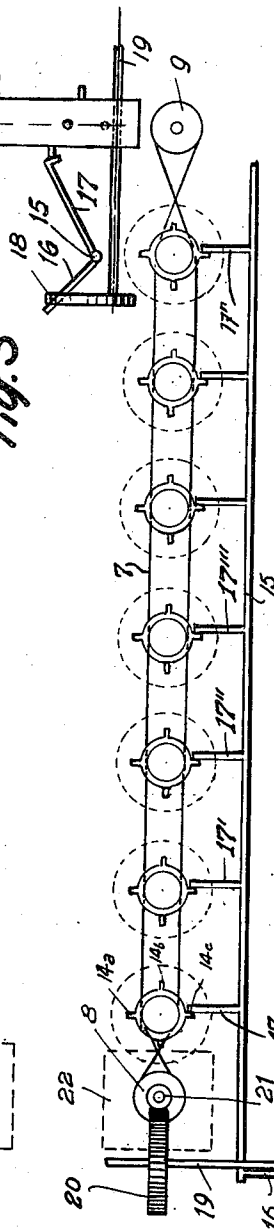


Fig. 2

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6 Claims. (Cl. 40—76)

The present invention relates to advertising apparatus in which a series of letters are made visible and subsequently replaced by another set of letters and so on.

5 The object of the invention is to provide a device of this kind which is better adapted to meet the requirements of practice than apparatus of the same type made up to this time.

10 The essential feature of the present invention lies in the fact that the letters are carried by cylindrical or prismatic supports, set in rotation by cables or belts which are relatively slack so that the driving elements of said letters may be held from revolving during a certain period of time, in a predetermined position against the effort exerted by the belt drive upon the letter supports proper.

15 In a preferred embodiment of the invention, the means for keeping the supports stationary in a given position include fingers forming part of the sleeves carrying the letter supports and adapted to cooperate with a series of levers rigidly mounted upon a shaft arranged to be set in oscillating motion by means of a cam system which, itself, is actuated by suitably disposed gearing in operative relation with the means for driving the belt through which the supports are actuated.

20 Whenever, due to the oscillatory motion of the levers actuated by the cam mechanism, one series of fingers, forming part of the sleeves, becomes disengaged from said levers, the driving belt will impart a rotary motion to said sleeves causing same to revolve rapidly about a certain angle until a second series of fingers comes into co-operating engagement with the system of levers, and so on. A series of letters may thus be held in a fixed position until the corresponding series of fingers is out of engagement with the levers whereupon sleeves carrying the letter supports 30 revolve rapidly through a certain angle and a new series of fingers is brought into engagement with the levers, and so on.

35 The several series of fingers 14 of the sleeves are disposed at different elevations which are determined by the curvature of the operating cam. This difference in altitude is calculated in such manner that in accordance with, and upon the functioning of, the varying curvature of the cam, the period of time between disengagement of one series and reengagement of the succeeding series of fingers 14 by levers 17 shall always be alike.

40 Other objects of my invention as well as its method of operation shall be described hereafter

in connection with the accompanying drawing in which like numerals refer to like parts.

Fig. 1 is a side elevation;

Fig. 2 is a sectional view on the line II—II of Fig. 1;

Fig. 3 is a partial schematical end view of Fig. 1.

5 In a base, are mounted rods 2, upon each of which is inserted a sleeve 3 adapted to rotate thereon and having its lower portion formed with a groove 4. These sleeves carry operatively connected therewith, the cylindrical or prismatic supports 5 of the letters 6.

10 The grooves 4 are in operative contact with a cable 7, the ends of which pass around a driving pulley 8 and an idle pulley 9 respectively, the latter being mounted on a transverse shaft 11 the opposite end of which is mounted within a sleeve 12 arranged to slide on a frame 1. A spring 13 urges shaft 11 in the direction of arrow *f* thereby tightening cable 7 so as to bring same in operative contact with grooves 4.

15 The sleeves 3 are provided with fingers 14a, 14b, 14c, etc., forming a part thereof and the number of which is equal to the number of letters or signs carried by the letter supports 5.

20 Rigidly connected to an oscillating shaft are levers 16, 17, 17', 17'', etc. Lever 16 bears against a cam 18 mounted on a shaft 19 and it is actuated by means of gearing and an endless screw mechanism 20, 21, controlled by the same motor, either mechanical or electrical, 22 and driving pulley 8, which causes levers 17, 17', 17'', etc., to oscillate.

25 These levers 17, 17', 17'', etc. are adapted to successively bear against fingers 14a, 14b, 14c, etc., as shown by Fig. 3, that is to say in such manner that upon becoming disengaged from one finger such as 14a, they come into engagement with another finger 14b, and so on, due to the fact, that a lever 17, 17', 17'', etc., engages a finger in the direction opposed to that of rotation of the sleeves 3 preventing said sleeves from rotating owing to the relative slackness of cable 7.

30 The device above described operates in the following manner:

35 The motor 22 which drives pulley 8, also drives, through transmission 20—21, cam 18 in the direction of arrow *f*. Lever 16, which is guided by the cam, is caused to oscillate and imparts its movement to shaft 15 and levers 17, 17', 17'', etc., each of which bears against a finger e. g. finger 14a. Upon disengagement of levers 17, which corresponds to the position in which lever 16 bears against portion 18a of the cam and moves along path 18a—18b, fingers 14a are no longer braked

and sleeves 3 are driven until fingers 14b engage levers 17, 17', 17'', etc.

Letters 6, which are stationary as long as sleeves 3 are stationary, turn during the very short period of time during which lever 16 travels from 18a to 18b, the time required depending upon the angular velocity of sleeves 3.

As soon as letters such as R. O. B. E. R. T. etc., disappear, automatically the letters that follow the R on the first letter support, the O on the second support, and so on, replace the first mentioned letters, and remain in position until levers 17 release the fingers corresponding to said letters, and so on.

Of course, the cylinders might be replaced by prisms and the fingers might be actuated through any suitable mechanical or other means.

In a general manner, while I have, in the above description, disclosed what I deem to be practical and efficient embodiments of the present invention, it should be well understood that I do not wish to be limited thereto as there might be changes made in the arrangement, disposition and form of the parts without departing from the principle of the present invention as comprehended within the scope of the appended claims.

What I claim is:

1. An advertising device of the type described which comprises, in combination, a series of members rotatable about respective parallel axes, a support carrying a plurality of signs around its periphery mounted on each of said members, all of these members being provided with respective circumferential grooves all located in the same plane, an endless driving cable engaged in all of these grooves in slipping frictional engagement therewith, means for continuously driving said cable, and means for intermittently stopping all of these rotary members simultaneously in predetermined respective positions.

2. An advertising device of the type described which comprises, in combination, a row of sleeves rotatable about respective parallel axes all located in the same plane, a support carrying a plurality of signs around its periphery mounted on each of said sleeves, all of these sleeves being provided with respective circumferential grooves all located in the same plane at right angles to the above mentioned plane of the axes, an endless driving cable engaged in all of these grooves in slipping frictional engagement therewith, means for continuously driving said cable, radial fingers carried by said sleeves, one for each sign carried by the corresponding sleeve, a rocking shaft running transversely of said axes, rocker arms carried by said shaft, adapted to cooperate respectively each with the successive fingers of one sleeve when rocked across the path thereof, and means for rocking said shaft.

3. An advertising device of the type described which comprises, in combination, a row of sleeves rotatable about respective parallel axes all located in the same plane, a support carrying a plurality of signs around its periphery mounted on each of said sleeves, all of these sleeves being provided with respective circumferential grooves

all located in the same plane at right angles to the common plane of said axes, an endless driving cable engaged in all of these grooves in slipping frictional engagement therewith, means for continuously driving said cable, radial fingers carried by each of said sleeves, one for each sign carried by the corresponding sleeve, a rocking shaft running transversely of said axes, rocker arms carried by said shaft adapted to cooperate respectively each with the successive fingers of one sleeve when rocked across the path thereof, a motor, including a driving shaft, a worm keyed on said shaft, a shaft at right angles to said rocking shaft, a worm wheel keyed on said second mentioned shaft and in mesh with said worm, a cam keyed on said second mentioned shaft, and an arm rigidly carried by said rocking arm transversely thereto arranged to cooperate with said cam.

4. An advertising device of the type described which comprises, in combination, a row of sleeves rotatable about respective parallel axes all located in the same plane, a support carrying a plurality of signs around its periphery mounted on each of said sleeves, all of these sleeves being provided with respective circumferential grooves all located in the same plane at right angles to the common plane of said axes, an endless driving cable engaged in all of these grooves in slipping frictional engagement therewith, a motor for continuously driving said cable, radial fingers carried by said sleeves, one for each sign carried by the corresponding sleeve, a rocking shaft running transversely of said axes, rocker arms carried by said shaft, adapted to cooperate respectively each with the successive fingers of one sleeve when rocked across the path thereof, and means, operative by said motor, for rocking said shaft.

5. An advertising device of the type described which comprises, in combination, a row of sleeves rotatable about respective parallel axes all located in the same plane, a support carrying a plurality of signs around its periphery mounted on each of said sleeves, all of these sleeves being provided with respective circumferential grooves all located in the same plane at right angles to the common plane of said axes, an endless driving cable engaged in all of these grooves in slipping frictional engagement therewith, a grooved pulley for tensioning said endless cable arranged to engage therewith, spring means for pulling said pulley, means for continuously driving said cable, radial fingers carried by said sleeves, one for each sign carried by the corresponding sleeve, a rocking shaft running transversely of said axes, rocker arms carried by said shaft, adapted to cooperate respectively each with the successive fingers of one sleeve when rocked across the path thereof, and means for rocking said shaft.

6. An advertising device according to claim 5 including a common support for all of said sleeves, said grooved pulley being mounted slidable on said common support.

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