W. F. FLOESSELL.

ADVERTISING DEVICE.

APPLICATION FILED JAN. 15, 1914.

1,166,515.

Patented Jan. 4, 1916

2 SHEETS—SHEET 1

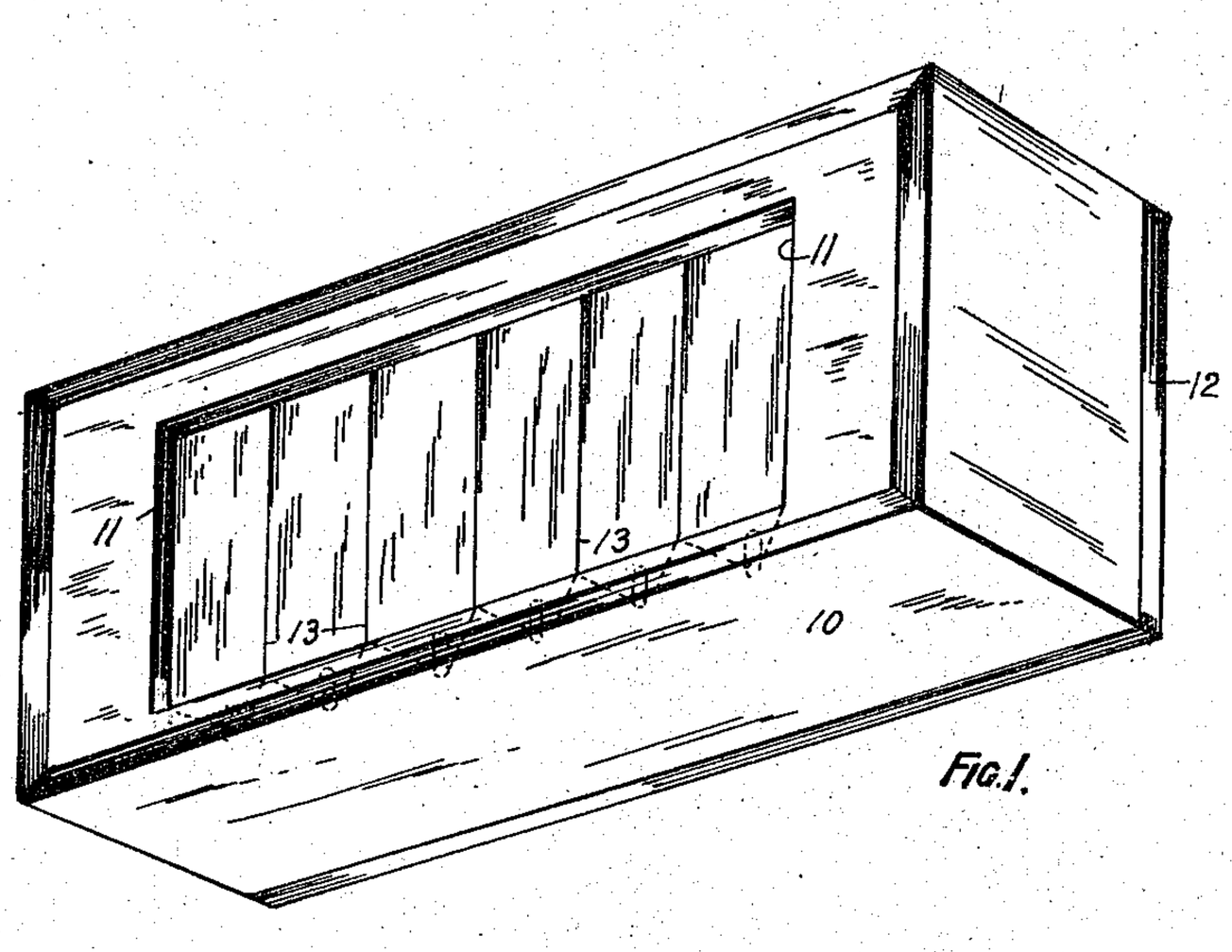

FIG. 1.

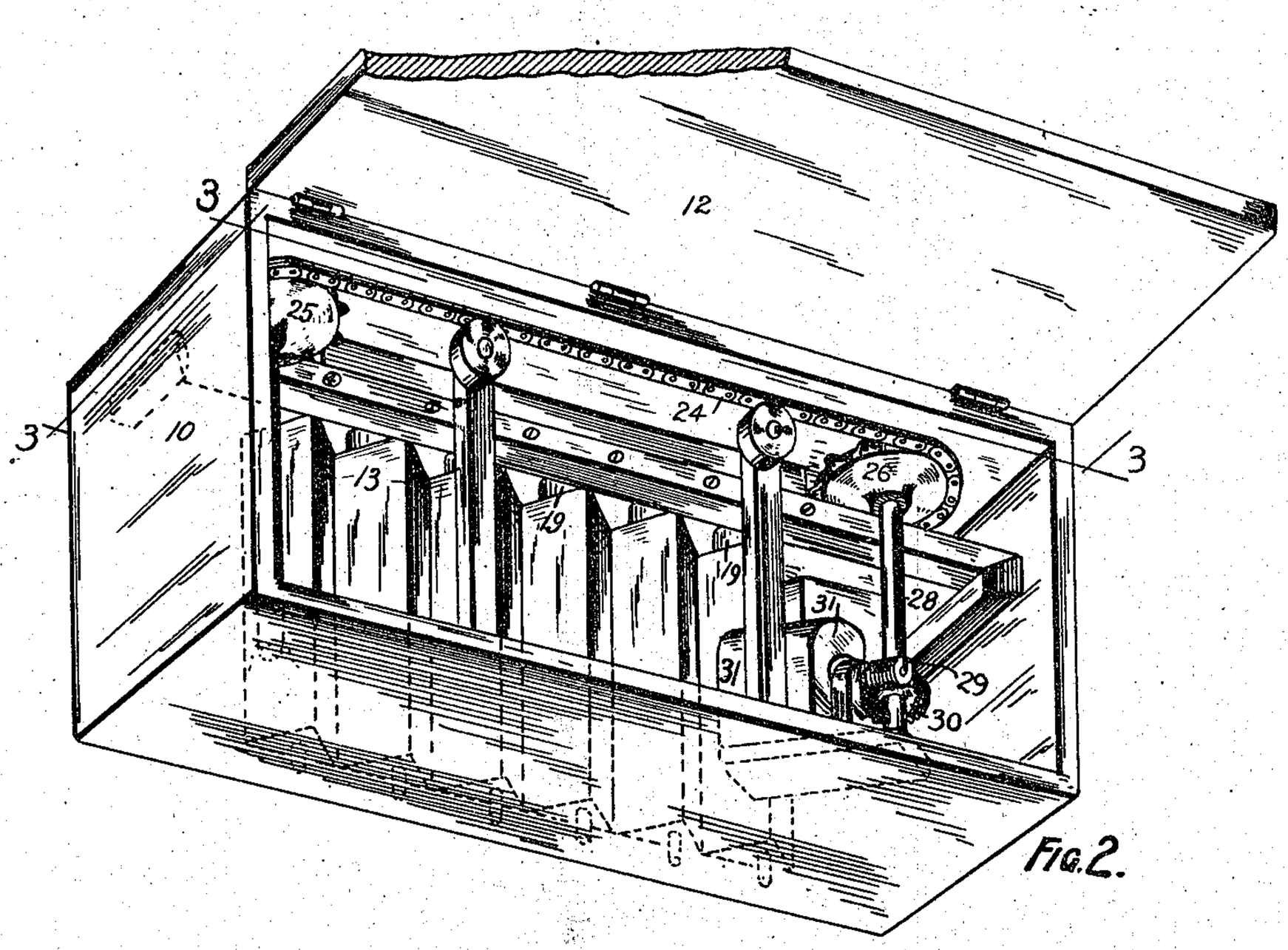

FIG. 2.

Witnesses
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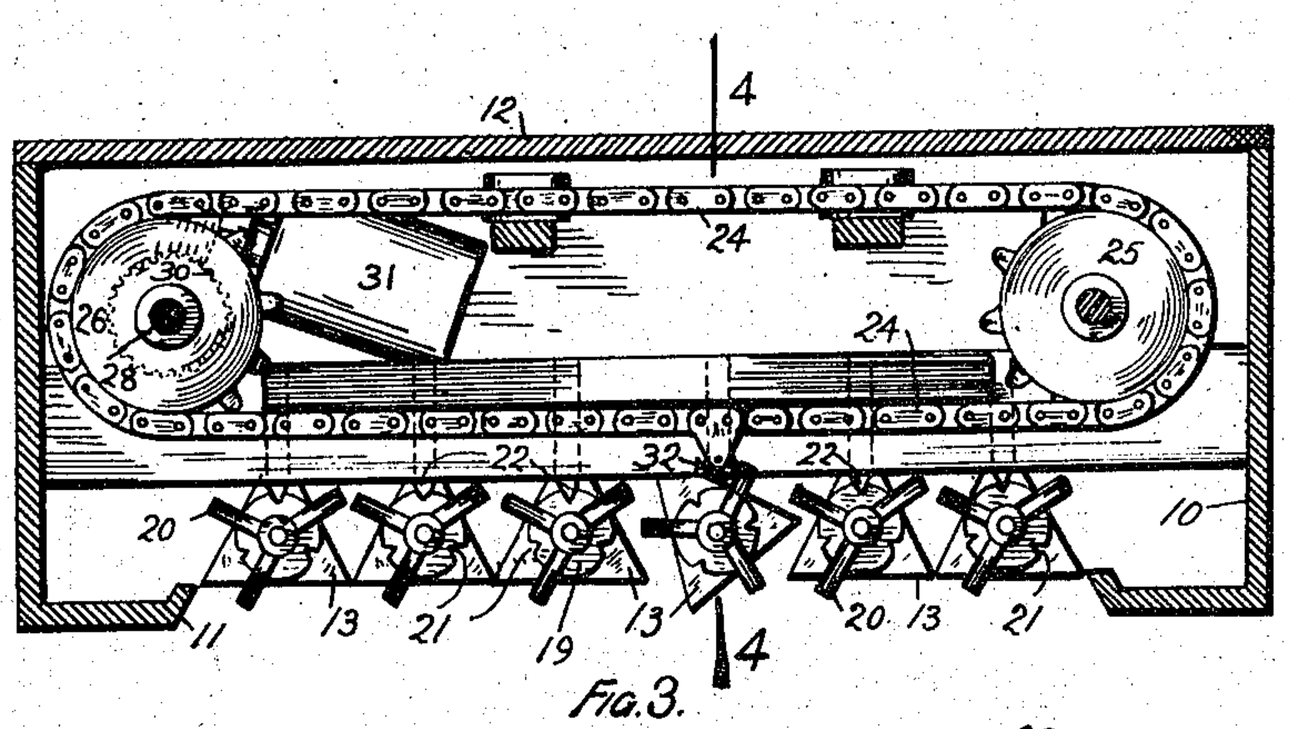

Fig. 3.

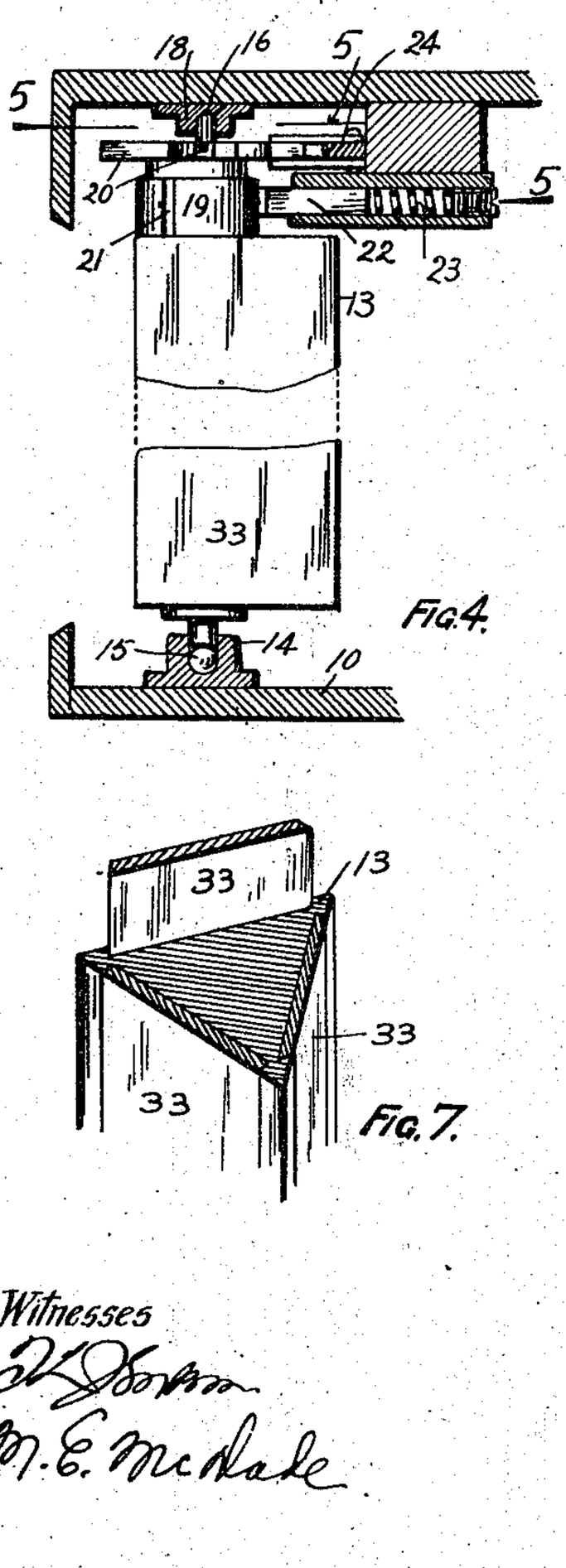

Fig. 4.

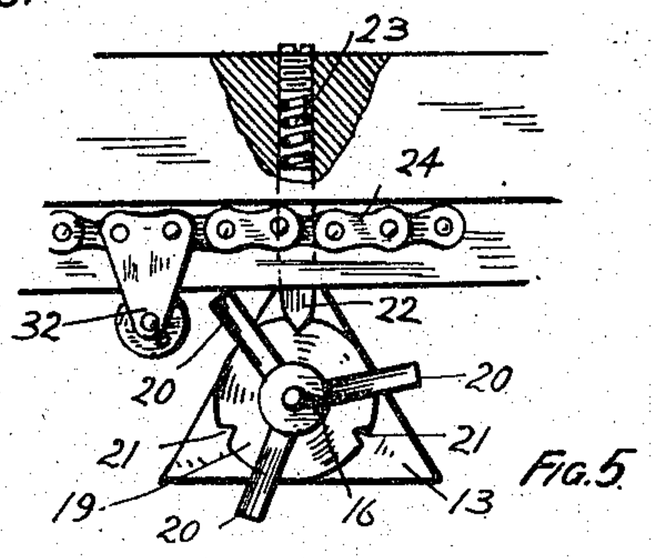

Fig. 5.

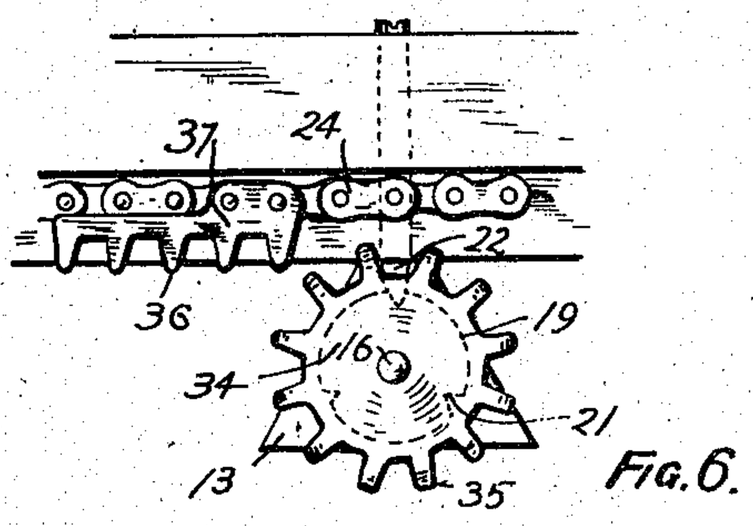

Fig. 6.

Fig. 7.

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UNITED STATES PATENT OFFICE.

WILHELM FREDERICK FLOESSELL, OF SYDNEY, NEW SOUTH WALES, AUSTRALIA.

ADVERTISING DEVICE.

1,166,515. Specification of Letters Patent. Patented Jan. 4, 1916.

Application filed January 15, 1914. Serial No. 812,310.

To all whom it may concern:

Be it known that I, WILHELM FREDERICK FLOESSELL, a subject of the Czar of Russia, residing at 350 George street, Sydney, in the State of New South Wales, Commonwealth of Australia, have invented certain new and useful Improvements in Advertising Devices, of which the following is a specification.

This invention relates to improvements in advertising devices of the type in which the advertising space is movable or capable of variation, the necessary motion being obtained preferably through the agency of clockwork, or an electric motor.

The invention consists of a series of parallel rotatable units whose adjacent edges almost meet, thereby forming a practically continuous advertising space of any size desired. These units are of triangular section, and each is provided with a projecting arm for each of its three faces, and with a disk having three equidistant recesses in which one end of a spring-pressed detent is adapted to engage to act as a stop. Adjacent to one end of the sections is arranged an operating element equipped with projections which are designed to engage the projections on the units, so as to effect the desired rotation of the latter during the movement of the said element. But in order that the invention may be clearly comprehended, I now refer to the drawings herewith, in which:—

Figure 1 is a front perspective view, and, Fig. 2 a rear perspective view with the door of the casing raised. Fig. 3 is a section on the line 3—3, Fig. 2. Fig. 4 is a section on the line 4—4, Fig. 3. Fig. 5 is a section on substantially the line 5—5, Fig. 4. Fig. 6 is a fragmental plan view of a modified actuating gear. Fig. 7 is a perspective view illustrating a portion of a preferred form of a unit.

The same numerals indicate the same or like parts.

10 is a casing having an opening 11 in front and a door 12 at the rear.

13 are the afore-mentioned rotating units which, as stated, are triangular in section, the entire series of these units forming the sign. The lower trunnion 14 of each unit fits in a ball bearing 15, and the upper trunnion 16 in a bearing 18. On the trunnion 16 is a disk 19 having integral therewith the arms 20. In the disk are three equidistant recesses 21 into which takes the pin or other detent 22 actuated by the spring 23. At the rear of the series of units is arranged the actuating mechanism for the same, said mechanism being here shown as consisting of the sprocket chain 24 and sprockets 25 and 26, the chain being actuated by the sprocket 26 on the shaft 28 driven by the worm 29 and worm wheel 30, the motive power preferably being an electric motor 31. On a link of the chain 24 is the wiper or sweeper 32.

The units 13 forming the sign may be of wood, glass, metal, or other suitable material, having the component parts of the sign painted or otherwise illustrated on them. Preferably, however, the three sides or panels 33 are held in grooves and are removable individually (Fig. 7), in order that variations of the sign may be readily effected by substituting fresh panels.

In order to minimize the noise of the gearing, the form illustrated in Fig. 6 has the wheel 34 substituted for the arms 20, the radially projecting teeth 35 on said wheel being engageable by the teeth 36 of the wiper 37 secured to the chain 24.

The operation of the invention is as follows:—The corresponding panel of each unit is illustrated to show a portion of a sign or advertisement, so that the whole sign may be shown by the whole of the corresponding panels. On actuation of the chain by the motor, the wiper is brought into contact with a projection on the first unit and forces the latter to rotate past the detent 22 one third of a revolution, thereby showing another panel or surface, and similarly as it passes each successive unit. The sign is then fully displayed and remains so until the wiper again reaches a position where it will act upon the units and cause them to show another sign. It will be evident that, by causing the chain 24 to move in the opposite direction to that shown in the drawings, the sign may be operated in a direction opposite to that shown.

It is obvious that instead of a horizontally displayed sign it may be arranged to be displayed at any angle.

I claim:—

1. In an advertising device, the combination of a series of rotatably-mounted, trilateral units arranged in juxtaposed, parallel relation; a disk secured to one end of each unit and provided with a plurality of radial projections and with a series of three

equidistantly-spaced, V-shaped peripheral recesses; a movable operating element having projecting means thereon for engagement with the projections on said units, to rotate the latter through one-third of a revolution; and a spring-controlled detent engageable in the recesses in each disk at the conclusion of each rotary movement, while permitting rotation of the units in either direction upon their axes.

2. In an advertising device comprising, in combination, a series of rotatably mounted, prism-shaped units arranged in juxtaposed, parallel relation, each unit having its side faces provided with movable panels; a disk secured to one end of each unit and provided with a plurality of radial projections and with a series of three equidistantly-spaced, V-shaped peripheral recesses independently separate of said recesses formed by said projections, means to engage with the projections for imparting a step-by-step rotary movement to each unit in succession and to successively display each panel thereof; a spring-pressed detent movable longitudinally of itself into and out of engagement with said V-shaped recesses to yieldingly lock the units in position at the conclusion of each rotary movement thereof, while permitting rotation of the units in opposite directions on their axes; and means for adjusting the spring tension of said detent.

3. An advertising device comprising, a casing formed with a display opening in one wall thereof and having an opposite wall in hinged relation therewith, a plurality of rotatably mounted, trilateral units arranged to have their edges in juxtaposed, parallel relation and adapted to close said display opening, spindles formed on the ends of said units, bearings for said spindles secured to the casing and disposed adjacent said display opening, the upper end of said units being formed with a circular reduced portion having a series of three equidistantly-spaced, V-shaped recesses therein, a disk secured to the upper end of each unit and provided with a plurality of radial projections, vertically-disposed shafts journaled in the casing at the ends thereof provided on their upper ends with sprocket wheels, a sprocket chain adapted to pass over said sprocket wheels, a worm gear formed on one of said shafts and having suitable connection with a motor disposed in the casing, idle rollers disposed in the casing and adapted to support the sprocket chain intermediate said sprocket wheels, projecting means carried by the chain for successive engagement with the projections on said units to rotate the latter through one-third of their revolution to successively display each side of the units, a supporting bar secured in the casing and adapted to extend transversely of said units, a plurality of hollow members supported on said bar and opposite each unit, a detent for each hollow member having slidable engagement therewith and adapted to engage with the V-shaped recesses in said unit for locking the same in position at the conclusion of each rotary movement thereof, while permitting rotation of the units in either direction upon their axes, spring means in said hollow members for yieldingly holding said detents in engagement with said recesses, and adjustable means carried by said hollow members for varying the tension of said spring means upon said detent.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WILHELM FREDERICK FLOESSELL.

Witnesses:

CHARLES E. GRAHAM,

HENRY W. CLARKE.