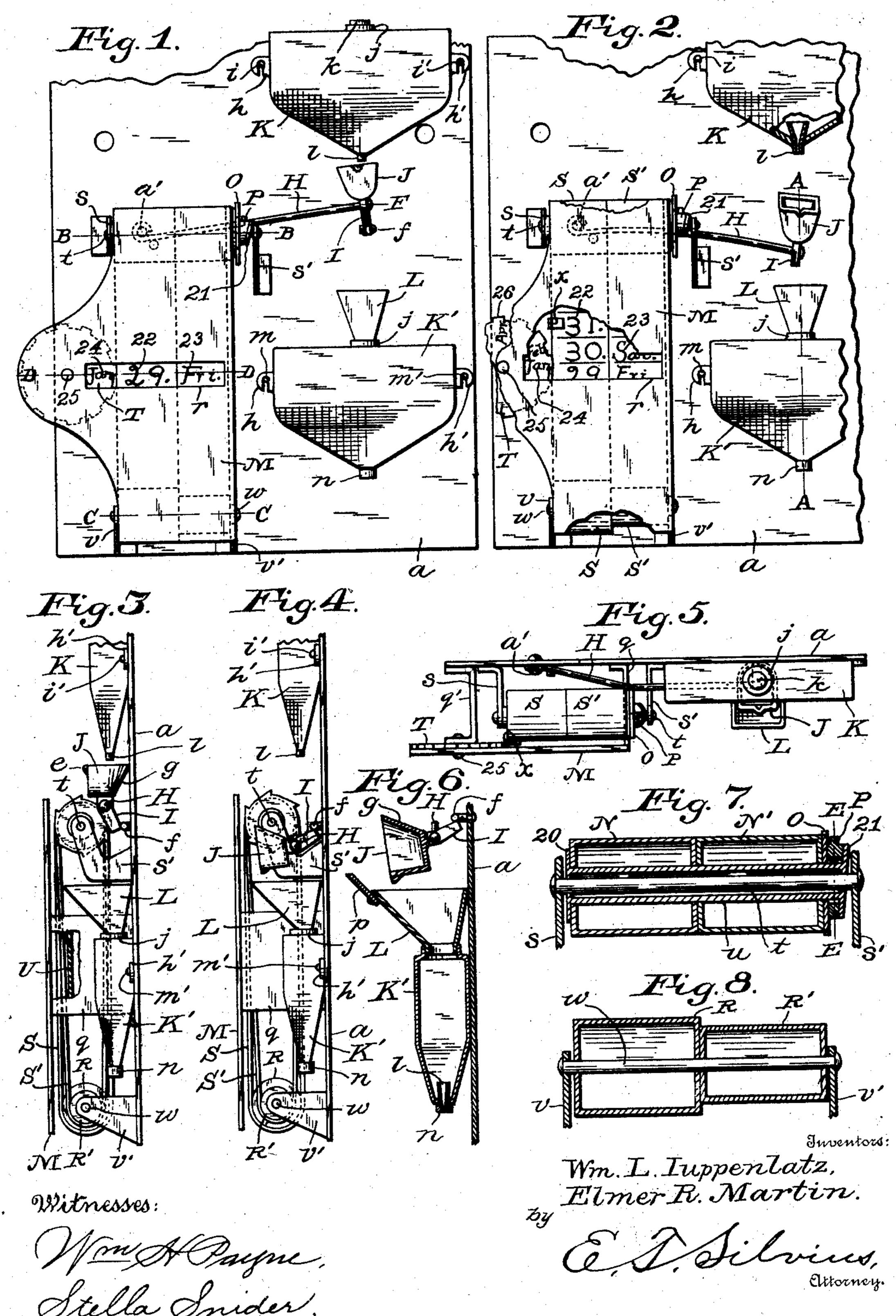
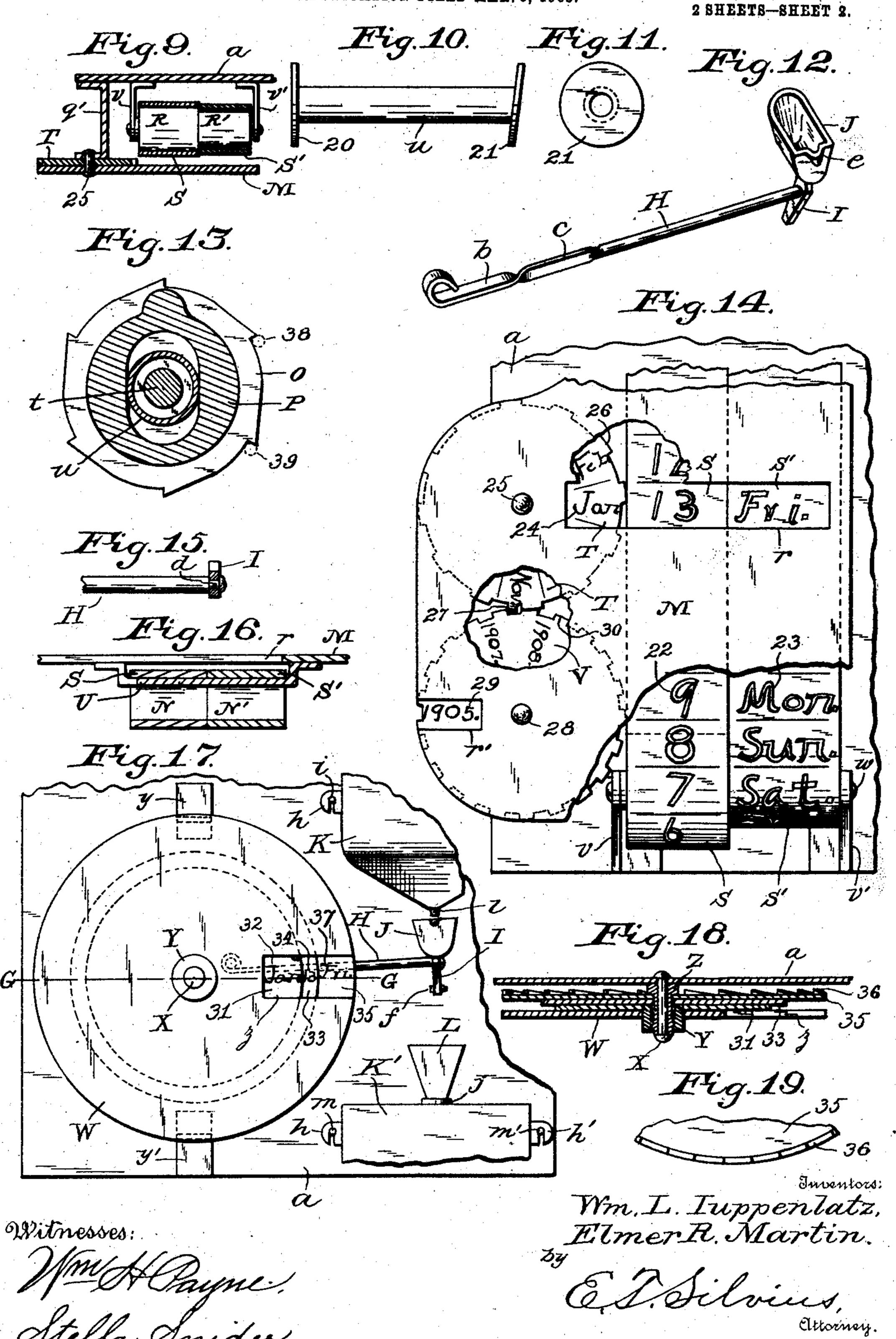
W. L. IUPPENLATZ & E. R. MARTIN. AUTOMATIC CALENDAR AND ADVERTISER.

APPLICATION FILED MAR. 6, 1905.

2 SHEETS-SHEET 1.



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UNITED STATES PATENT OFFICE.

WILLIAM L. IUPPENLATZ AND ELMER R. MARTIN, OF INDIANAPOLIS, INDIANA, ASSIGNORS OF ONE-THIRD TO OTTO N. MOORE, OF INDIANAPOLIS, INDIANA.

AUTOMATIC CALENDAR AND ADVERTISER.

No. 883,716.

Specification of Letters Patent.

Patented April 7, 1908.

Application filed March 6, 1905. Serial No. 248,596.

To all whom it may concern:

Be it known that we, William L. Iuppenlatz and Elmer R. Martin, citizens of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented new and useful Improvements in Automatic Calendars and Advertisers; and we do declare the following to be a full, clear, and exact description of the invention, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to apparatus for displaying and automatically shifting signs, such as signs used in calendars, advertising signs, and devices or illustrations that may be designed to attract attention or to amuse, and the object of the invention is to provide attractive and inexpensive means for shifting or changing the calendars or signs; and, a further object is to provide attractive and

amusing advertising mediums.

The invention consists principally in novel apparatus for exhibiting signs; and the invention consists further in the novel parts and the combinations and arrangements of parts, as hereinafter particularly described and claimed.

Referring to the drawings, Figure 1 is a front elevation of the apparatus, the base of which is broken away; Fig. 2, a similar view having parts broken away and showing a movable cup as when in the act of returning 35 to its normal position after having been actuated; Fig. 3, a side elevation showing the cup in its normal position as when being filled to be actuated; Fig. 4, a side elevation showing the cup in the position it would occupy 40 when discharging its contents into the receptacle therefor; Fig. 5, a top plan of the apparatus; Fig. 6 a fragmentary vertical sectional view on the line A—A in Fig. 2 but with the cup turned over; Fig. 7, a frag-45 mentary horizontal sectional view on the line B—B in Fig. 1; Fig. 8, a fragmentary horizontal sectional view on the line C—C in Fig. 1; Fig. 9, a fragmentary horizontal sectional view on the line D-D in Fig. 1; 50 Figs. 10, 11 and 12, views of detached parts of the apparatus; Fig. 13, a vertical detail section on the line E in Fig. 7; Fig. 14, a fragmentary front elevation showing details of construction and supplemental parts of

55 the apparatus; Fig. 15, a fragmentary sec-

tional view on the line F in Fig. 1; Fig. 16, a fragmentary horizontal sectional view on the line D—D in Fig. 1 looking upwardly; Fig. 17, a fragmentary front elevation showing modifications in the calendar structure; Fig. 60 18, a fragmentary horizontal sectional view on the line G—G in Fig. 17; and Fig. 19, a fragmentary inverted plan of the disk appearing in Figs. 17 and 18.

Similar reference characters in the draw- 65

ings designate like parts or features.

In construction many of the parts may be composed of sheet metal, others of tough card board, and others of either metal or glass; and belts may be made of fabric or of 70

strong paper.

In the drawings a designates a base on the front of which at a' is secured a movable arm H adapted by means of spring parts b and c to vibrate both vertically and laterally. On the 75 free end of the arm H is a journal d on which is mounted a rock-arm I to the upper end of which is secured a cup J having a spout e at the front thereof. A stop f projects from the front of base a in the path of the arm I and 80 the rear of the cup which has an inclined back g. A tank K is mounted above the cup J and has ears h h' engaging studs i i' attached to the base a, by which the tank is detachably connected to the base. The tank has a top 85 in which is a neck j closed by a plug k sufficiently loose to admit air into the tank. The bottom of the tank is provided with a funnellike outlet tube l extending above and also below the bottom through which water or 90 other liquid may pass slowly in drops.

Below the cup J is a receptacle K' which is interchangeable with the tank K, the receptacle having ears h h' also which detachably connect it to the base a by means of studs 95 m m' secured to the base, and the receptacle has also a neck j in which is inserted a removable funnel L which may be inserted in the neck of the tank K. The neck of the receptacle may be closed by the plug k after removal of the funnel L therefrom. The receptacle K' also has an outlet tube l in the bottom thereof closed by a cap l which may be removed when necessary. The front of the funnel L has a dash-plate l which, however may in some cases be dispensed with.

A calendar-front M of suitable shape has arms q q' by which it is connected to the base a, the front having a slot r therein. Near the upper end of the front M a pair of brack- 110

ets s s' are secured to the base a and support an axle t on which is rotatively mounted a sleeve u having a flange 20 at one end and an inclined flange 21 at the other end thereof. 5 A pair of drive rollers N and N' are mounted rotatively on the sleeve u, and adjacent to the roller N' a ratchet wheel O is mounted also on the sleeve in engagement with the arm H. A wedge P guided by the sleeve u engages the ratchet wheel and the flange 21 and normally locks the ratchet wheel and the rollers N and N' to the sleeve u by means of the flanges 20 and 21. Near the lower end of the front M a pair of brackets v and v' are 15 secured to the base a and support an axle w on which a guide roller R and a smaller roller R' are rotatively mounted. A belt S, having thirty-one numbers 22 indicating the days of months, is mounted on the rollers N and R, 20 and a relatively shorter belt S', having twenty-eight names 23 indicating the week days repeated, is mounted on the rollers N' and R'. A tooth x is attached to one side of the belt S near the number "31" thereon. 25 A disk T, having words 24 indicating the names of the months, is mounted on a pivot 25 behind the front M, the disk having teeth 26 adapted to be engaged by the tooth x, so that the disk T may be moved periodically 30 by the belt S. Behind the fronts of the belts S S' a table U is secured to the front M to support the belts in case it may be desired to write on the belts through the slot r. The disk T also has a laterally-projecting tooth 27 35 at a suitable point on its periphery. The numbers 22 and names 23 are spaced apart equal distances on the respective belts so as to ordinarily move together, and since there are possibly thirty-one days in a month, 40 while the names of the week days are repeated four times, making twenty-eight, the belt S' is shorter than the other one, with a guide roller R' smaller in diameter than the other roller R for the longer belt.

In some cases, as shown in Fig. 14, a disk V is mounted on a pivot 28 behind the front M and in a plane behind the disk T and has thereon numbers 29 indicating various years numerically, as "1905," which may be read 50 through a slot r' in the front M, the disk having teeth 30 adapted to be engaged by the tooth 27 to periodically move the disk V.

In some cases, in lieu of the front M, the rollers, and the belts and disks above-de-55 scribed, a front W having a slot d may be substituted as a modification of the calendar structure, the front being connected by means of supports y and y' to the base a, and behind the front on a pivot X is mounted a 60 disk 31 on which are names 32 designating the months of the year; behind the disk 31 is a disk 33 on which are numbers 34 indicating the days of the months; and behind the disk 33 is a disk 35 having ratchet-teeth 36 65 at the back thereof in engagement with the

arm H for the operation of the disk. On the front of the disk 35 appear words 37 designating the days of the week. The disks 33 and 35 are clamped together on a sleeve Z by a nut Y, the sleeve rotating on the pivot X, and the 70 disk 31 is directly mounted on the circular inner end of the nut and may be moved independently of the other disks.

In practical use the tank K is to be filled with liquid which may drop from the tube at 75 the bottom thereof into the cup J which will slowly descend as the weight of the liquid increases therein until finally when full the cup will descend sufficiently to permit the inclined back g to engage the stop f, the latter 80 causing the cup to tip over and empty its contents into the funnel L and thereby into the receptacle K'. As the arm descends it will pass from one tooth to another of the wheel O, as from 38 to 39, (Fig. 13,) and after 85 the cup J has been emptied, the arm H will rise and actuate the ratchet wheel O and thereby the connected apparatus of the calendar, the movements of the several elements of which will be understood from the forego- 90 ing description of their construction. After the contents of the tank K may have passed into the receptacle, these two vessels are to be transposed in position, the funnel L and the cap n and the plug k being changed from 95 one vessel to the other. Periodically the wedge P should be withdrawn and the belts S S'changed relatively by hand, as will be understood; also at certain times the disks 31 and 33 must be re-set by hand; otherwise 100 the dates will be changed automatically.

It is to be understood that in lieu of the calendar numbers and names, other numbers, words or characters may be substituted for advertising purposes, and advertisements 105 may be advantageously placed on the front M and the base a.

Having thus described the invention, what is claimed as new, is—

1. Sign-displaying mechanism including a 110 base, a stationary shaft mounted on the base, a sleeve mounted rotatively on the shaft, a pair of drive rollers mounted on the sleeve and adjustable rotatively thereon, means for binding the rollers together to the sleeve, a 115 pair of guide rollers mounted on the base, a belt mounted on one of the drive rollers and on one of the guide rollers and having words thereon, a belt mounted on the other one of the drive rollers and on the other one of the 120 guide rollers and having numbers thereon, and means for actuating the drive rollers.

2. Sign-displaying mechanism including a base, a drive roller and a guide roller mounted on the base, a belt mounted on the rollers 125 and provided with a projecting tooth, a disk mounted rotatively on the base and having teeth to be engaged by the tooth of the belt, and a slotted front attached to the base and extending over the fronts of the belt and the 130

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disk, and means for actuating the drive roller.

3. Sign-displaying mechanism including a base, a drive roller and a guide roller mount5 ed on the base, a belt mounted on the rollers and provided with a projecting tooth, a disk mounted rotatively on the base and having teeth to be engaged by the tooth of the belt and having also a separate tooth thereon, a second disk mounted on the base and having teeth to be engaged by said separate tooth, means for actuating the drive roller, and a slotted front attached to the base and extending over the belt and the disks.

4. Sign-displaying mechanism including a base, a stationary shaft mounted on the base, a sleeve mounted rotatively on the shaft, a pair of drive rollers mounted on the sleeve and adjustable rotatively thereon, 20 means for binding the rollers together on the sleeve, a ratchet wheel connected with one of the rollers, a vibrating arm mounted on the base and engaging the ratchet wheel, a pair of guide rollers mounted on the base, a 25 pair of belts each one mounted on a drive roller and guide roller, a slotted front attached to the base and extending over the belts, and a table suitably supported under the slotted front beyond portions of the 30 belts.

5. Sign-displaying mechanism including a base, a stationary shaft mounted on the

base, a sleeve mounted rotatively on the shaft and having a ratchet wheel adjustable thereon, a pair of drive rollers mounted on 35 the sleeve and adjustable rotatively thereon, means for binding the ratchet wheel and the rollers to the sleeve, a pair of guide rollers having different diameters and mounted on the base, a belt mounted on one of the drive 40 rollers and on the smaller one of the guide rollers and having conventional characters thereon, a belt mounted on the other one of the drive rollers and on the larger one of the guide rollers and having conventional char- 45 acters thereon and also provided with a lateral tooth, a disk mounted rotatively on the base and having conventional characters thereon and provided with teeth to be engaged by the tooth of the belt, a slotted front 50 attached to the base and extending over the belts and the disk, an arm mounted on to the base and having a free end movable in operative engagement with the ratchet wheel, a table attached to the front, and means for 55 operating the arm.

In testimony whereof, we affix our signa-

tures in presence of two witnesses.

WILLIAM L. IUPPENLATZ. ELMER R. MARTIN.

Witnesses:

HARRY D. PIERSON, E. T. SILVINS.