

(No Model.)

2 Sheets—Sheet 1.

J. N. RUSSELL.
ADVERTISING WAGON.

No. 520,541.

Patented May 29, 1894.

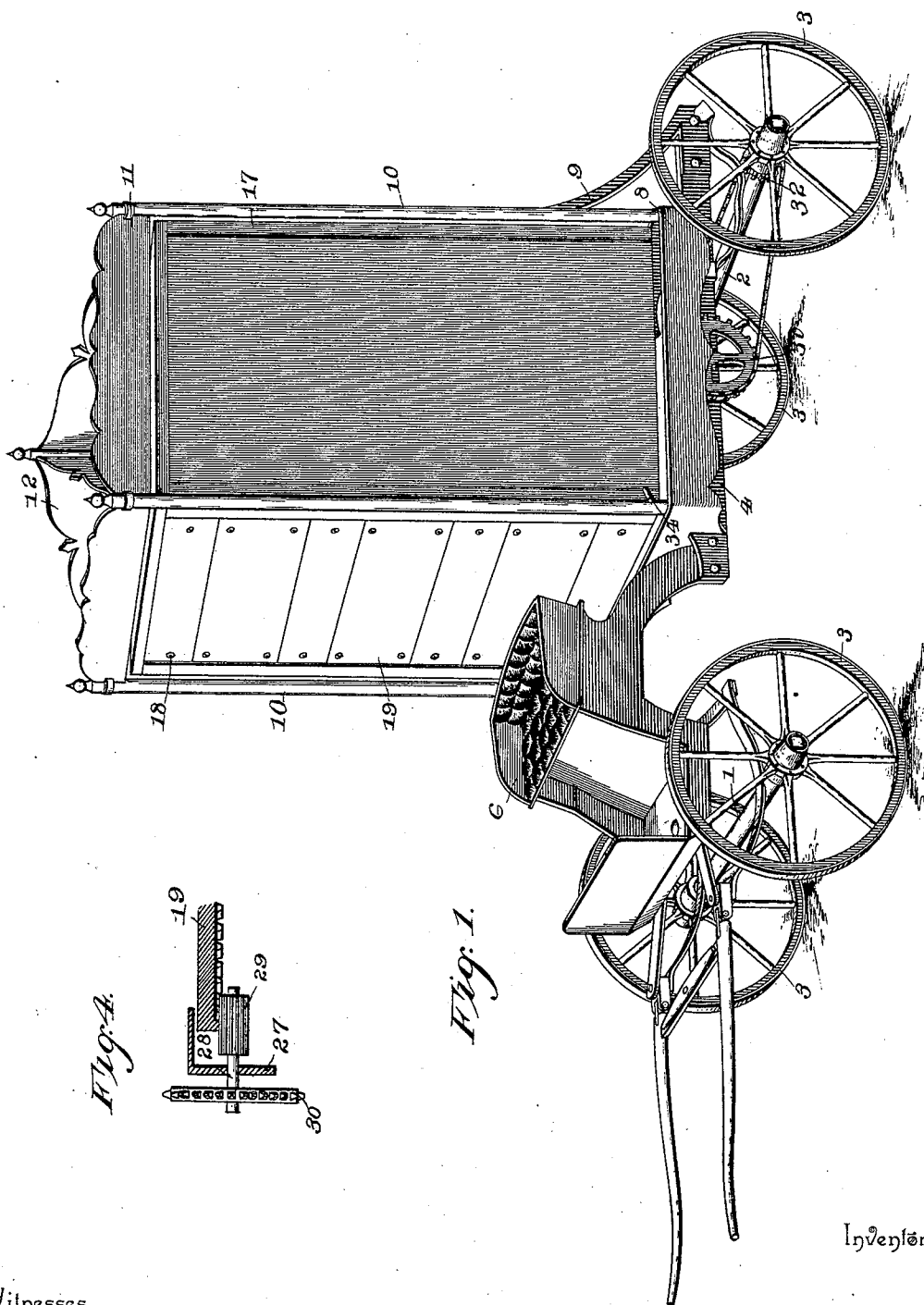


Fig. 4.

Fig. 1.

Inventor

Witnesses
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S. C. Humphreys

By his Attorneys.

John N. Russell,

C. A. Snow & Co.

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Fig. 2.

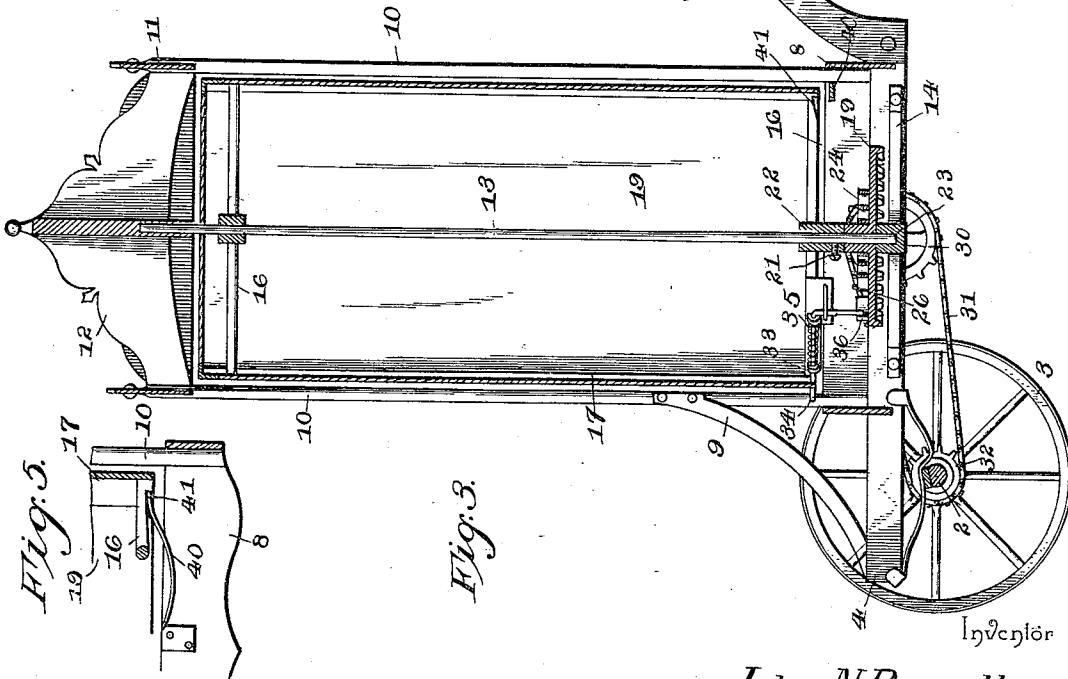
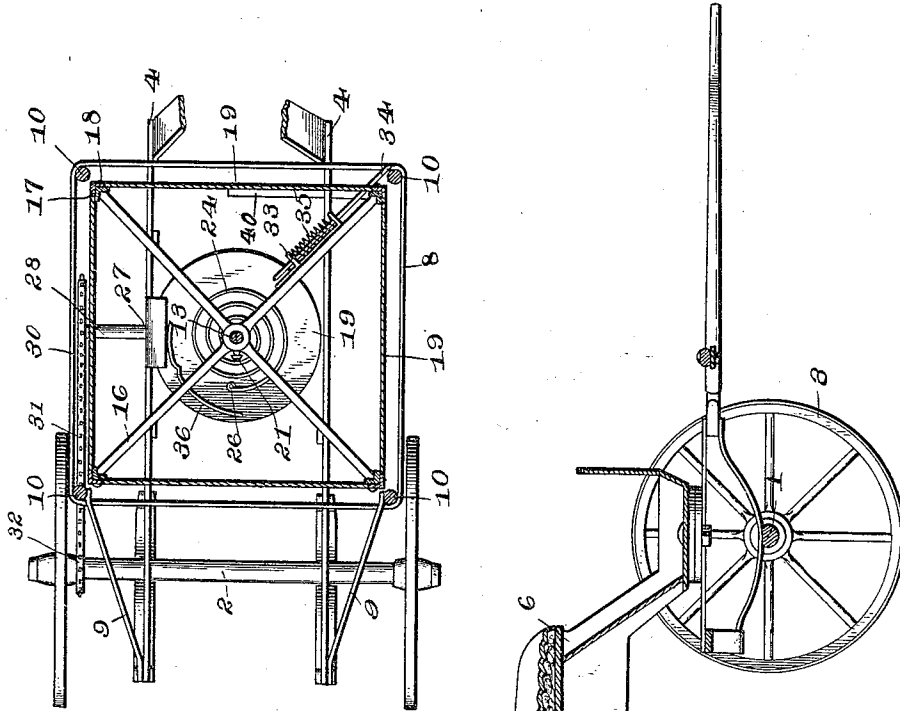


Fig. 3.

Fig. 3.

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S. C. Whipple.

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UNITED STATES PATENT OFFICE.

JOHN NEWTON RUSSELL, OF LOS ANGELES, CALIFORNIA.

ADVERTISING-WAGON.

SPECIFICATION forming part of Letters Patent No. 520,541, dated May 29, 1894.

Application filed January 5, 1894. Serial No. 496,851. (No model.)

To all whom it may concern:

Be it known that I, JOHN NEWTON RUSSELL, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Advertising-Wagon, of which the following is a specification.

My invention relates to that class of advertising mediums known as automatic signs, wherein at intervals different signs are presented to view.

My invention has particular reference to improvements in advertising wagons employing such signs, though, as will hereinafter appear, the mechanism for causing the signs to automatically change positions may be employed in other positions than upon wagons.

The objects of my invention are to provide a frame, the same carrying any number of advertising panels, suitably mounted for public view, and which will at predetermined intervals shift or turn so as to present different advertising panels at different points of view; furthermore to cause such movement of the frame by the travel of the wagon upon which the same is mounted.

Various other objects and advantages of my invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings:—Figure 1 is a perspective view of my invention, the same being shown in connection with a wagon, or in other words, constructed as portable. Fig. 2 is a transverse horizontal sectional view of the same. Fig. 3 is a vertical longitudinal sectional view. Fig. 4 is a detail sectional view showing the gearing meshing with the master-gear. Fig. 5 is a detail sectional view showing the engagement of the check-spring with the revoluble advertising frame.

Like numerals of reference indicate like parts in all the figures of the drawings.

I have herein illustrated my invention as applied to a wagon, or in other words, constructed so as to be portable, though as heretofore intimated, I may omit the wagon and mount the revolving frame upon a suitable axis and give motion to the frame by means other than that hereinafter described. The panels may moreover be transparent and artificial light located within the frame so as to

exhibit the signs during the night. However this may be I would have it understood that I do not limit my invention to the precise details of construction and arrangement of parts herein shown and described, but hold that I may make such variations in the details as come within the scope of my invention and the knowledge of the skilled mechanic. In the present instance I employ a front axle 1, and a rear axle 2, the aforesaid axles being mounted upon suitable ground-wheels 3, and the first axle of course swiveled. Upon these axles I arrange a pair of side beams 4, the aforesaid beams converging at their front ends and being arched to form a suitable seat support and platform 6 for the driver.

Surmounting the side beams 4, in rear of the platform, is a rectangular base 8, which is secured upon the beams in any suitable manner and is rendered stationary by means of inclined braces 9, which are bolted to the rear ends of the beams of the wagon and to the rear pair of vertical posts 10 with which each of the corners of the rectangular base-frame is provided. The posts 10 are connected and support at their upper ends a crown frame 11, which corresponds to the base frame, and radial braces 12 extend inward from the angles of the crown frame and produce at their meeting points a support for a vertical shaft or axle 13, which shaft or axle depends therefrom. An X-shaped frame 14 is arranged between the beams of the wagon and has its center vertically aligned with the depending shaft. This X-shaped frame supports the lower end of the vertical shaft 13 which extends through the entire height of the post frame. The shaft 13 passes downwardly through X-shaped bearing-frames 16, the extremities of these frames being connected by means of vertical frame bars 17. These frame-bars 17 are connected by suitable cross-bars and are provided with a series of holes for the reception of screws 18, by which the series of removable advertising panels 19 may be readily secured in position. These panels may be located on all four sides of the frame thus constructed or certain sides of the frame may be left solid, or be composed of but one panel and contain but one advertisement.

On the lower end of the shaft 13, I mount rotatably a master-gear 19 whose under side is toothed. A binding-screw 21 passes through the hub 22 of the lower X-shaped frame of the advertising frame, and binds upon the shaft or axis. The lower end of this shaft or axis is seated in a bearing 23 formed in the X-shaped frame interposed between the side beams of the wagon and is freely revolved therein. A convolute spring 24 is secured at one end of the hub of the lower X-shaped frame of the advertising frame, and at its opposite end is secured to a pin 26, which projects from the upper side of the master-gear.

A bearing 27 is formed in one of the side-beams of the wagon, and journaled therein is a short transverse shaft 28. The inner end of the short shaft is provided with a wide spur-gear or pinion 29, which engages with the teeth of the master-gear and at its outer end is provided with a sprocket-wheel 30 which through the medium of a sprocket-chain 31 has motion communicated to it from the rear axle by means of a sprocket-wheel 32 arranged on said axle.

A pair of keepers 33 is arranged upon one of the arms of the lower X-shaped frame of the advertising-frame and located for reciprocation in said keepers is a radial bolt 34, whose inner end depends to a point slightly above the master-gear, and whose outer end extends through an opening in the advertising frame a sufficient distance to engage with one of the vertical posts 10. For the purpose of normally projecting the outer end of said bolt such a distance as to engage with the posts 10, a coiled spring 25 is arranged upon the bolt between its keepers and is connected at one end. A cam-shaped flange 36 is arranged upon the upper side of the master-gear and is so located that when said gear revolves the flange will engage with the depending inner end of the bolt, and by the disposition of the flange a continued movement of the gear will cause said bolt to retract against the tendency of its spring, and thus cause an unlocking or disengagement of the bolt with the posts 10 with which it may be engaged.

In operation, the wagon traveling will cause the short transverse shaft to revolve, and this, through the medium of its spur-gear, will rotate the large or master-gear. One end of the spring being fast to the master-gear and the other end fast to the hub of the framework of the advertising frame, and the latter stationary, it will be seen that the rotations of the master-gear will cause said spring to tighten upon the hub of the advertising frame. At the time that the spring has been tightened and is therefore under tension, the cam-flange engages with the inner end of the spring actuated bolt, and gradually withdraws the same from its engagement with the post 10, so that the advertising frame being no longer locked will by the convolute spring be caused to rotate partially or until the locking

bolt re-engages with the next adjacent post 10. Such re-engagement with the next adjacent post, is of course permissible, in that the flange for retracting the bolt no longer influences the same after a disengagement has been effected, but the advertising frame remains locked until the gear has completed a second rotation, when a disengagement will be again effected and the advertising frame again actuated. By this arrangement I am enabled to rotate partially the advertising frame at predetermined intervals, and thus I present at the various points the different sets of signs, so that all may be read. The intervals of rest between the partial rotations of the advertising frame will be sufficient to give a person ample opportunity of reading all the signs on any particular side of the advertising-frame, which is a great advantage over that class of signs which are continuously rotated.

It will be obvious that the device may be stationary and the short transverse shaft actuated by any desirable motor.

From the foregoing description in connection with the accompanying drawings, it will be obvious that I have provided a very simple construction of advertising device of the automatic class wherein different sets of signs are at intervals presented to view and all may be read by an observer before the next set of signs are presented to view. At this point attention is directed to the fact that the spring projected bolt 34 is intended to check continued rotation of the revoluble advertising frame after the inner end of such bolt has left the cam-flange 36, and in order to check any tendency of the said revoluble advertising frame to turn or spring back after the bolt 34 has engaged one of the posts 10, I employ an upwardly projecting check-spring 40. The upwardly projecting check-spring 40 is suitably secured at one end to one side of the base-frame 8, leaving its other end free to engage the shouldered check notches 41, formed at each lower bottom corner of the said advertising frame. Immediately upon the engagement of the projected end of the bolt 34 with one of the posts 10, the free end of the check-spring 40 engages the shoulder of one of the notches 41, and prevents the advertising frame from turning or springing backward, as already noted.

Having described my invention, what I claim is—

1. In an advertiser, the combination with the wagon; of a stationary frame mounted on the body of the wagon, a revoluble spring-rotated advertising frame mounted to rotate within the stationary frame, gearing connected with one of the wagon wheels and the actuating spring of the advertising frame to provide for maintaining the tension of the spring to rotate the advertising frame, a lock device mounted on the advertising frame and adapted to normally engage with parts of the stationary frame, and a trip device carried

by said gearing and brought into engagement with the lock device at intervals to disengage the same from said stationary frame, substantially as set forth.

2. In a machine of the class described, the combination with the wagon; of a stationary frame mounted on the body of the wagon and provided with a series of spaced posts, a revolvable advertising frame mounted to rotate within the stationary frame, a suitably arranged coiled actuating spring connected to said advertising frame to revolve the same, gearing connected with one of the wagon wheels and with the actuating spring of the advertising frame, a spring projected lock bolt mounted on the advertising frame and adapted to engage normally at one side of the posts of the stationary frame, and a trip cam carried by one of the wheels of the gearing and adapted to engage with said bolt at intervals to disengage the same from the posts of the stationary frame, substantially as set forth.

3. The combination with the opposite beams, the front and rear axles and their supporting-wheels, the upper and lower rectangular frames, the intermediate posts, the lower frame between the beams having a central bearing, a rotatable shaft arranged in the bearing, a master-gear arranged loosely on the shaft, a short transverse shaft arranged in one of the side beams, a gear at the inner end thereof engaging the master-gear, a sprocket wheel at the outer end, a sprocket-wheel on the axle and a sprocket-chain connecting the same with the sprocket wheel of the short shaft, of the rigid frame arranged on the beams, comprising the upper and lower rectangular base and crown-frames, intermediate posts, the upper and lower X-shaped frames, the former arranged loosely on the shaft, and the latter of which has its hub secured rigidly on the shaft, the corner frame bars engaging the extremities of the arms of these upper and lower X-shaped frames, the advertising panels removably secured to the frame-bars, the convolute actuating spring secured at one end to the hub

of the lower X-shaped frame and at its opposite end to the master-gear, the opposite keepers arranged on an arm of the lower X-shaped frame, the L-shaped bolt arranged in the keepers, the coiled spring for actuating the same so as to engage at one side of the posts of the stationary frame, and the curved cam-flange arranged on the upper side of the master-gear and adapted to engage with one end of said bolt to retract the same at intervals, substantially as specified.

4. In a machine of the class described, the combination with the outer wheeled frame, of the inner automatically revolved advertising frame having shouldered check-notches at the bottom lower corners thereof, means for automatically checking the forward rotation of the advertising-frame, at intervals and a stationary upwardly pressing check-spring arranged below the advertising frame and adapted to engage any of the notches of the advertising-frame to prevent the backward rotation thereof, substantially as set forth.

5. In a machine of the class described, the combination with the wagon; of a stationary frame mounted on the body of the wagon and provided with a series of spaced posts, a revolvable advertising frame mounted to rotate within the stationary frame, a suitably arranged master wheel geared with one of the wagon wheels, an actuating-spring connected to said master wheel and to the advertising frame to revolve the latter, a spring-actuated L-shaped lock-bolt mounted on the advertising frame and adapted to engage at one side of the posts of the stationary frame, and a curved cam flange projected from the upper side of the master wheel and adapted to engage the inner end of said bolt at intervals, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN NEWTON RUSSELL.

Witnesses:

J. N. RUSSELL, Jr.,
L. LUMBARD.