(No Model.) 3 Sheets—Sheet 1.

G. E. ROWE.

ADVERTISING WAGON.

No. 444,236. Patented Jan. 6, 1891.

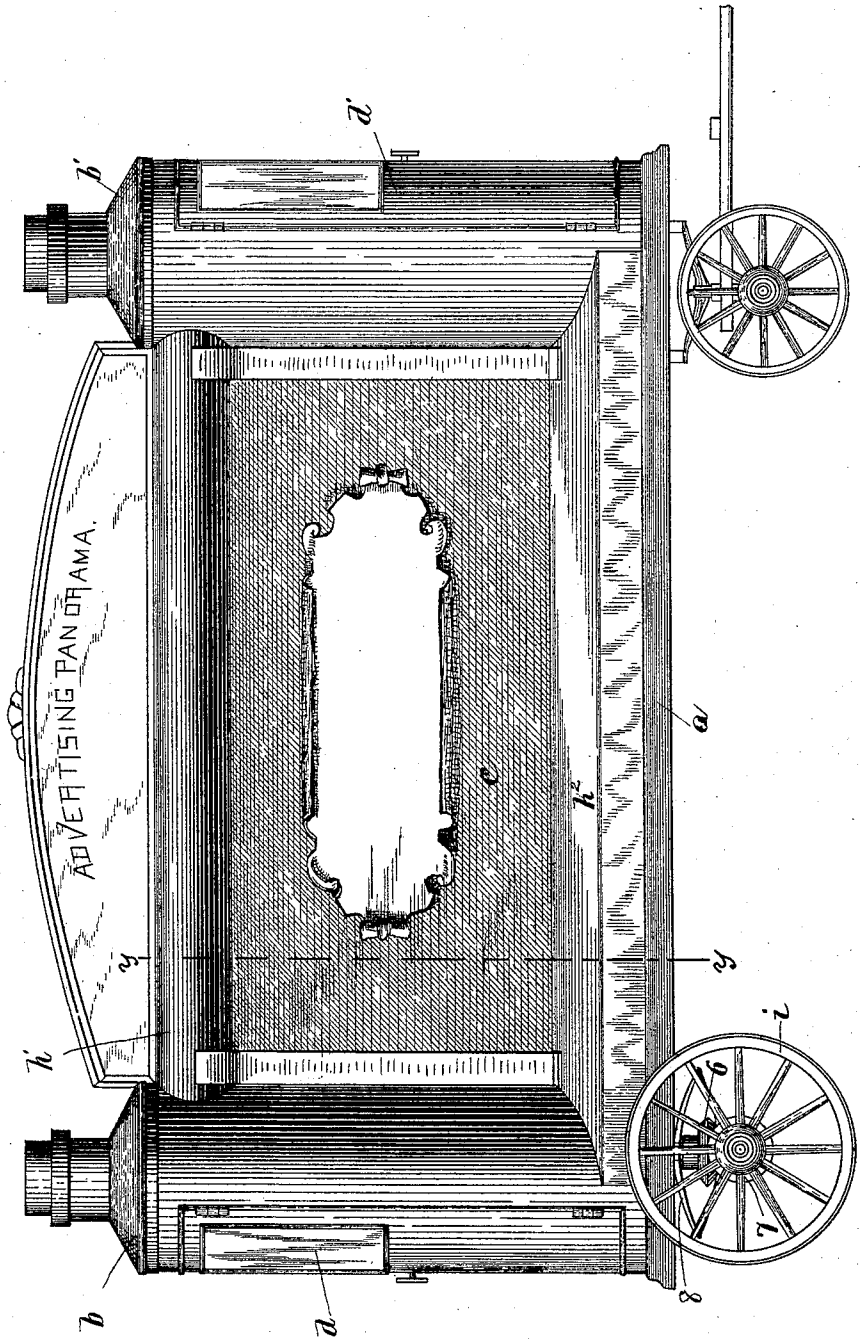


Fig. 1.

WITNESSES:
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

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G. E. ROWE.

ADVERTISING WAGON.

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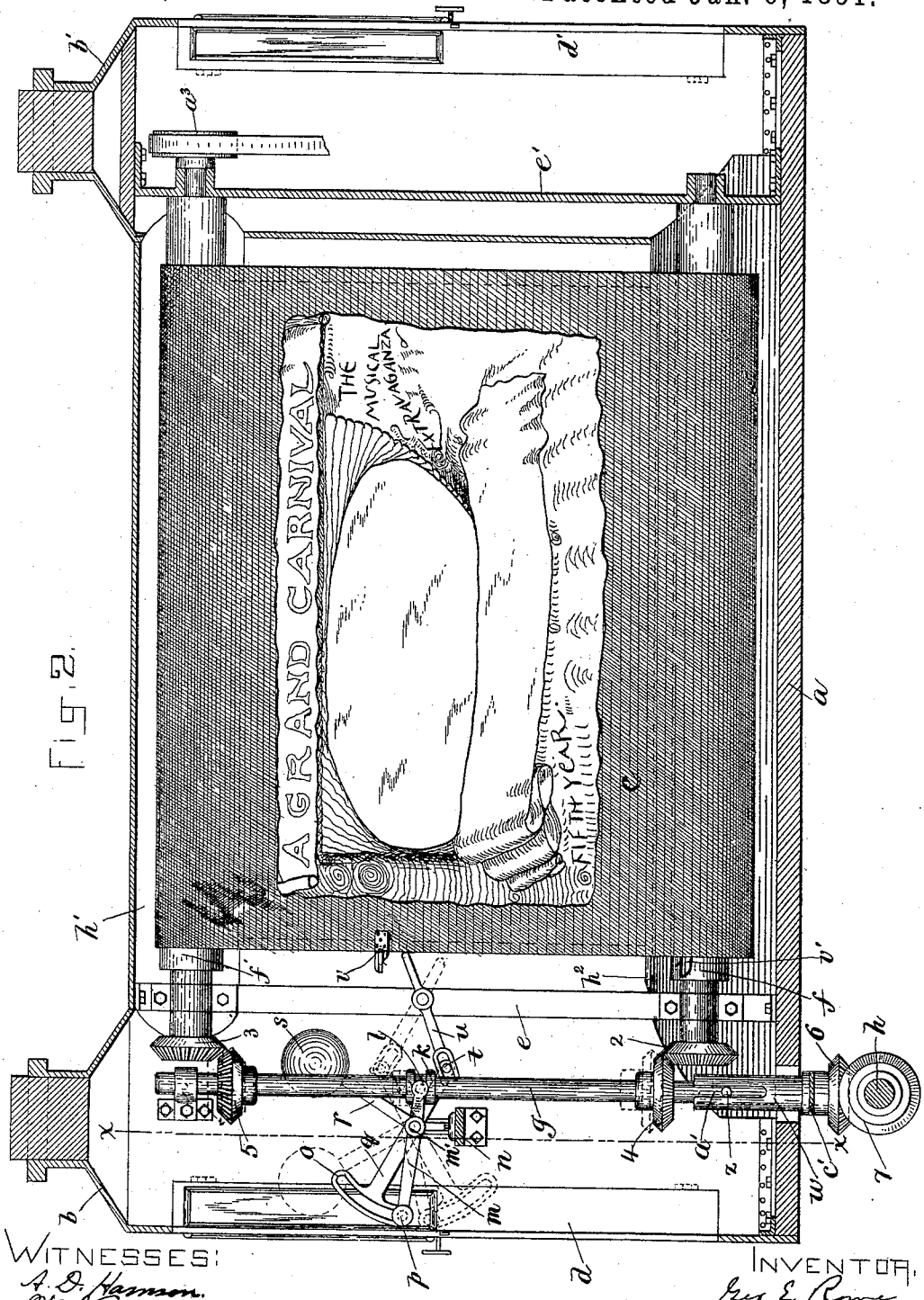


Fig. 2.

WITNESSES:
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G. E. ROWE.

ADVERTISING WAGON.

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Fig. 4.

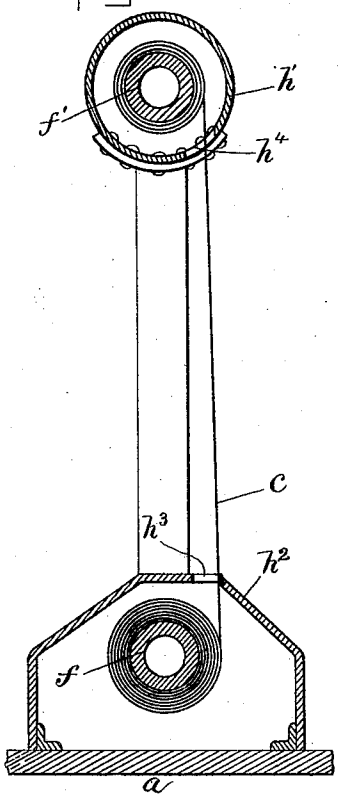


Fig. 3.

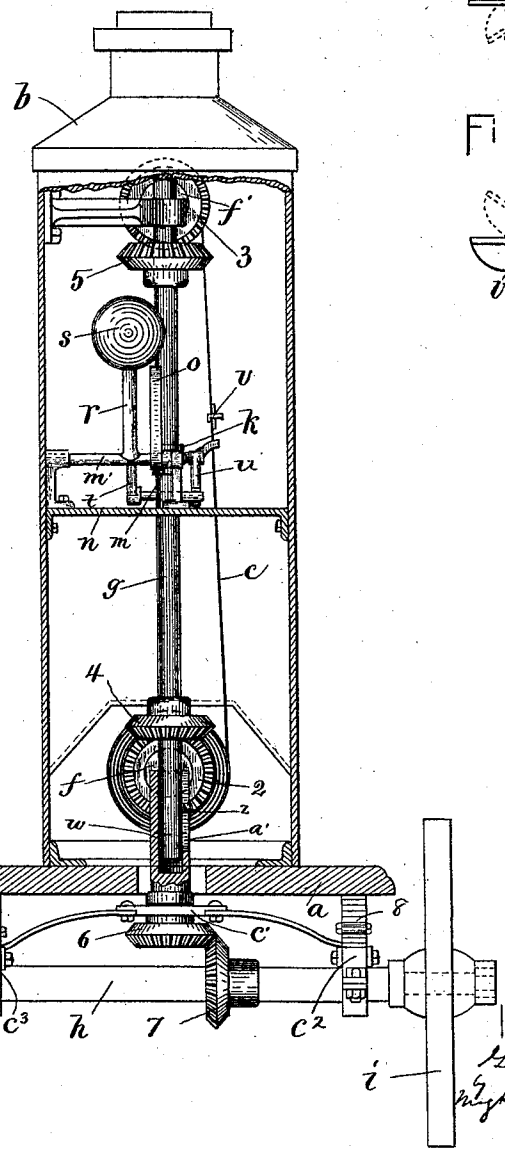


Fig. 5.

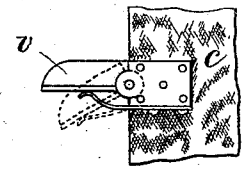
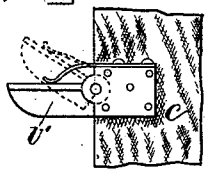


Fig. 6.



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UNITED STATES PATENT OFFICE.

GEORGE ERNEST ROWE, OF BOSTON, ASSIGNOR TO CHARLES S. CRAIN, TRUSTEE, OF NEWTON, MASSACHUSETTS.

ADVERTISING-WAGON.

SPECIFICATION forming part of Letters Patent No. 444,236, dated January 6, 1891.

Application filed December 13, 1888. Renewed July 9, 1890. Serial No. 358,201. (No model.)

To all whom it may concern:

Be it known that I, GEORGE ERNEST ROWE, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Advertising-Wagons, of which the following is a specification.

This invention has for its object to provide a vehicle adapted to display advertisements upon the streets by having a curtain provided with mechanism so arranged in connection with said vehicle that when the latter is drawn along the curtain will be moved in such a manner as to display any advertising cards or announcements which may be printed or painted thereon.

The invention consists in the combination, with the vehicle, of a curtain, rollers whereby the same may be operated, mechanism whereby the rollers are caused to rotate, and mechanism for automatically changing the direction of said rollers when necessary, or when the curtain has been unrolled from one roller, so that said curtain may be continuously in motion, all of which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a side elevation of a vehicle embodying my improvements. Fig. 2 represents an enlarged sectional view of the body of the vehicle, showing the curtain and its operative mechanism in elevation. Fig. 3 represents a section on line $x\,x$, Fig. 2. Fig. 4 represents a section on line $y\,y$, Fig. 1. Figs. 5 and 6 represent detail views.

The same letters of reference indicate the same parts in all of the figures.

In carrying out my invention I provide a vehicle a of any suitable design for the purpose of attracting attention thereto, preferably the style shown in Fig. 1, having at each end a jar or bottle shaped portion $b\,b'$. The forward portion b' is adapted to contain the driver of the vehicle, while the rear portion b contains the roller-operating mechanism hereinafter described. These jar-shaped ends are provided with doors $d\,d'$, having windows therein, and are constructed of any suitable material, preferably thin iron. To the above-named end portions are suitable supports e e', in which are journaled rolls $f\,f'$, Fig. 2. Said rolls are provided with bevel-gears 2 3, adapted to mesh with bevel-gears 4 5 on a vertical shaft g, which shaft is provided with a bevel-gear 6 on the bottom of the same, adapted to mesh with a bevel-gear 7 on the axle h. Said axle is adapted to be rotated by the motion of the wheels $i\,i'$, which are rigidly attached to the same, by which means motion is communicated to the shaft h and rolls $f\,f'$, as shown in Fig. 3.

The curtain c is of suitable material, preferably of duck, and is secured to rolls $f\,f'$ and is adapted to be wound thereon. Upon said curtain can be painted or printed advertising devices, as shown in Figs. 1 and 2.

It will be seen by reference to Fig. 2 that only one of the rolls $f\,f'$ is in gear with the shaft g at the same time. This arrangement is essential, because the roll on which the curtain is wound constantly increases in size, and consequently the speed of the roll from which the curtain is being unwound increases in proportion to the size of the winding-roll, so that it is impracticable to positively rotate both rolls at the same speed.

In order that rolls $f\,f'$ may be alternately thrown into and out of gear with the shaft g, I have provided the following mechanism: k represents a collar placed on shaft g and provided with a groove l. An arm m, loosely attached to a tumble-shaft m', journaled in bearings on a support n, is connected with said collar k at one end and at its opposite end with a link o by means of a bolt or pin p, Fig. 2. Said link is attached to an arm q, rigidly secured to shaft m', to which shaft is also connected another arm r, having a weight or ball s on its upper end sufficiently heavy to overbalance the weight of shaft g and hold the same in gear with the rolls alternately. An arm t, also secured to tumble-shaft m', engages with a lever u, pivoted to support e, the arrangement of said lever being such that its outer end will be engaged with a lug v, secured to the curtain, which engagement will serve to move the end of said lever in the direction that the curtain is moving, as will be presently explained.

Lug c, as seen in Fig. 2, is placed on the curtain at a point where the latter is nearly unwound from roll f', and the curtain is moving in the direction of the arrow in said figure and winding upon roll f. It is necessary, now, that the direction of the curtain be changed and that roll f' become loose. Said result is accomplished as follows: As the curtain moves down, lug v is brought against lever u, carrying the same with it. This movement raises the other end of said lever, raising the end of lever or arm t, and imparting a rotary movement to tumble-shaft m', carrying the weighted arm to and beyond a perpendicular position, when the gravitation of said weight exerts sufficient leverage, with shaft m' as a fulcrum and through the engagement of the upper end of link o with pin p on lever m, to depress the outer end of the same and through the engagement of the inner end with collar k to raise the latter and shaft g into gear with roll f' and out of gear with roll f, as shown in full and dotted lines in Fig. 2. The engagement of gears 3 5 will reverse the direction of rotation and cause the curtain to be moved upwardly, as will be readily understood by reference to the last-mentioned figure.

Shaft g is in two parts, the lower portion w being hollow to receive the upper portion g. A pin z in the upper portion passes through a slot a' in the lower portion, said pin imparting motion to the upper portion, this arrangement being necessary both to permit the described endwise movement of shaft g and to permit the movement of the vehicle upon its springs 8 9. The bottom portion w is rigidly secured in position by a clamp c', surrounding the same and secured to the rear axle-boxes c^2 c^3, said clamp preventing said gear from being disengaged by the vertical movement of the body of the vehicle.

The rolls f f' are concealed from view by suitable covers h' h^2, extending from one end portion of the casing to the other, and provided with slots h^3 h^4 for the curtain to pass through, as shown in Fig. 4.

I have shown in Fig. 2 a pulley a^3 on roll f' and a portion of a belt a^4, the intention being to have a suitable musical instrument located in the forward end portion, said instrument to be provided with winding mechanism to be operated from said pulley.

It will be seen by reference to Fig. 2 that lug v is necessarily placed on the curtain at the point where the latter is quite unwound from roll f, and when said lug has operated the reversing mechanism through lever u, as already described, the change of direction of the curtain will of course carry said lug back again in contact with said lever, but the lever will not be operated by it, as I provide said lug with a hinged end which yields in moving upwardly when it strikes the lever u, but is rigid when it strikes said lever in moving downwardly; hence said lug will operate the reversing mechanism only when going in the direction shown in Fig. 2—that is, when the curtain is quite unwound from roll f' lug v', Fig. 6, will change the reversing mechanism in the opposite direction, said lug being placed in position on the opposite end of the curtain to that shown in said figure and arranged to be hinged so as to be rigid in moving upwardly and to yield in moving downwardly.

I do not limit myself to the devices shown and described for reversing the motion of the curtain or the rolls on which it is wound, as other means may be employed without departing from the nature or spirit of the invention.

I claim—

1. The combination, in an advertising-wagon, of an advertising curtain or panorama, rollers f f', to which the ends of the same are affixed, a telescopic shaft g w, composed of a section which is geared to one of the axles, and a sliding section rotatively engaged with said geared section and provided with gears adapted to engage with like gears on the rollers f f', lugs moving with the curtain, and mechanism operated by said lugs to impart an endwise movement to the section g and thereby reverse the direction of movement imparted to the curtain, as set forth.

2. The combination of the advertising curtain or panorama, the curtain-rollers f f', having the gears 2 3, the telescopic shaft composed of the section w, geared to one of the axles, and the sliding section g, rotatively engaged with the section w and having the gears 4 5, arranged as shown, so that in one position of the section g the gears 4 and 2 are in engagement and in the other portion the gears 5 and 3 are in engagement, the lugs v v', attached to the curtain, the lever u, arranged to be moved by said lugs, and mechanism, substantially as described, operated by the movements of said lever, whereby the section g is moved endwise, as set forth.

3. The combination, in an advertising-wagon, of an advertising curtain or panorama, rollers f f', to which the ends of the same are affixed, a telescopic shaft g w, composed of a section which is geared to one of the axles, and a sliding section rotatively engaged with said geared section and provided with gears adapted to engage with like gears on the rollers f f', said gears being arranged so that an endwise movement of the section g will reverse the direction of movement imparted to the curtain, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 17th day of September, A. D. 1888.

GEORGE ERNEST ROWE.

Witnesses:
C. F. BROWN,
A. D. HARRISON.