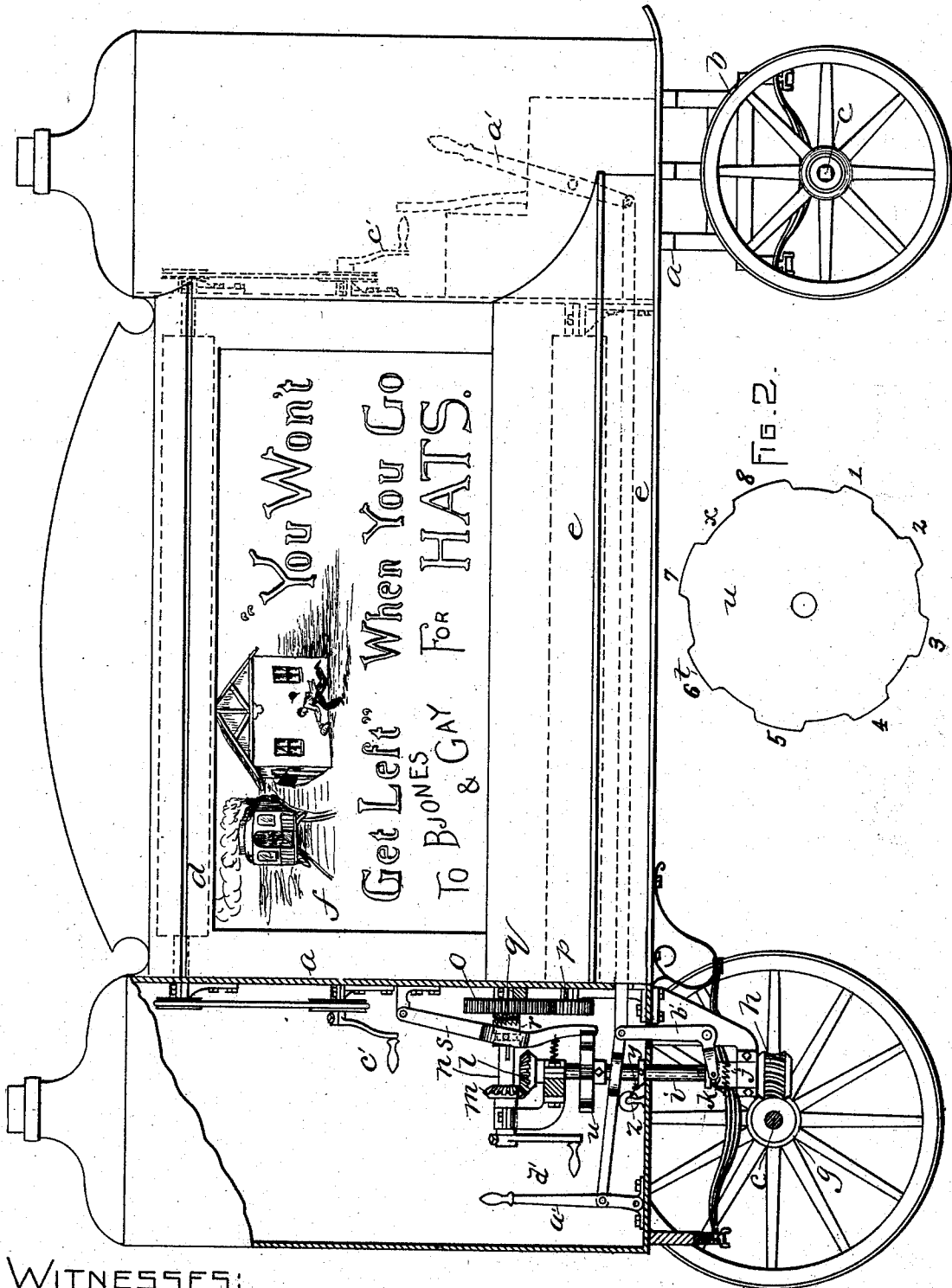


(No Model.)

H. D. STONE.
ADVERTISING WAGON.

No. 505,682.

Patented Sept. 26, 1893.



WITNESSES:
W. S. M^oLeod,
H. A. Hall.

FIG. 1.

INVENTOR:
H. D. Stone
By *Wright Brown Clemens*
ATTYS.

UNITED STATES PATENT OFFICE.

HENRIE D. STONE, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE AUTOMATIC ADVERTISING PANORAMA COMPANY, OF SAME PLACE.

ADVERTISING-WAGON.

SPECIFICATION forming part of Letters Patent No. 505,682, dated September 26, 1893.

Application filed November 19, 1892. Serial No. 452,515. (No model.)

To all whom it may concern:

Be it known that I, HENRIE D. STONE, 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 relation to that class of vehicles which are provided with shifting signs, said signs being operated or moved, as the wagon is driven through the street, in order to display different advertisements.

It is the object of the present invention to provide entirely practical means whereby a series of advertisements on a scroll or sheet may be moved from the moving axle of the vehicle to be successively brought into position to be displayed, and to dwell or remain stationary for a time, after being brought into display position, for a predetermined length of time.

It is also the object of the invention to provide improvements whereby the mechanism for operating the scroll of advertisements from the axle may be instantly thrown out of action, and the scroll operated at will by an attendant in the wagon.

It is also the object of the invention to provide other improvements of greater or less importance, having reference to the foregoing, all as will hereinafter more fully appear and be pointed out in the appended claims.

Reference is to be had to the annexed drawings and to the letters and figures marked thereon, forming a part of this specification, the same letters and figures designating the same parts or features in both views.

Of the drawings—Figure 1, is a side view, partly in section, and partly in elevation, of an advertising wagon embodying my invention. Fig. 2, is a top plan view of a cam hereinafter referred to for effecting certain operations of the device.

In the drawings *a* designates the body or frame of the wagon. *b* are the wheels, and *c* the axles. These parts may be of any desired form and arrangement. The center of the body *a* is constructed so as to display on both sides of the wagon, an advertisement upon canvas or any other flexible sheet of material, which advertising scroll or sheet may be connected with a roller *d*, journaled in bear-

ings in the upper part of the frame *a*, and a roller *e* similarly supported in the lower part of the frame. As herein shown, the advertisements to be displayed at the sides of the wagon are arranged in a series on a scroll or sheet *f*, which may be unwound from the roll *d*, and wound upon the roll *e*, thus displaying the advertisements on the scroll successively.

In carrying out the objects of this invention, the advertisement upon the scroll *f* will be moved down into position to be displayed at the sides of the wagon, and be brought to a dwell or rest for a time, when the rolls will be again set in operation, and another advertisement brought into view, and another dwell or rest secured. The means whereby this result or function is accomplished will next be described.

On the axle *c* there is a worm *g* which engages a worm wheel *h* loose upon the lower end of a vertical shaft *i*. The said worm wheel *h* has compounded with it a clutch part *j*, which is adapted to be engaged by a clutch part *k*, splined upon the shaft *i*, so that it may be turned therewith, but be longitudinally movable thereon. On the upper end of the shaft *i* there is a miter gear *l* which engages a miter gear *m* secured upon a horizontal shaft *n*. Upon the inner end of the shaft *n* there is a gear wheel *o* which turns loosely upon the said shaft *n*, and which engages a pinion *p*, fixed upon a journal or shaft of the roll *e*. Compounded with the gear wheel *o*, is a clutch part *q* which is adapted to be engaged by a clutch part *r*, splined upon the shaft *n* so as to be movable longitudinally thereon, and be turned therewith.

s designates a lever pivoted at its upper end upon a bracket *t*, and adapted at its lower end to rest against the face of a cam *u* in contact with which it is held by means of a spring *v* connected with the lever, and with a stationary part of the machine. The said lever *s* is provided with a stud or other similar means which enters a groove formed in a hub or collar connected with the clutch part *r*, so that as the said lever is swung upon its pivot or fulcrum, the said sliding clutch part *r* may be connected with, or disconnected from the clutch part *q* compounded with the gear *o*.

The face of the cam *u* is provided with raised parts 1, 2, 3, &c., which are graduated as to length as shown.

The operation of the invention as thus far described may be explained as follows: Supposing the scroll bearing the series of advertisements to be wound upon the roll *d*, and to be connected at its lower end with the roll *e*, and the wagon to be started with the lower end of the lever *s* resting upon the short raised part *t*, of cam *u*, the clutch part *r* will be moved into engagement with the clutch part *q*, and effect an operation of the roll *e* turning the same to an extent sufficient to bring an advertisement upon the scroll wound upon the roll *d*, down into position at the side of the wagon, and when brought into this position the lower end of the lever *s* will drop off the raised part *t*, upon a lowered point *x* of the cam *u* disengaging the clutch part *r* from the clutch part *q*, and allowing the rolls to come to a rest, the rotation of the shaft *n*, having no effect by way of operating the gear *o*, until the cam *u* shall have been turned far enough to cause the lower end of the lever *s* to ride up on the raised part 2, when the clutch part *r* will again be thrown into engagement with the clutch part *q*, and effect a turning of the roll *e* to an extent sufficient to bring another advertisement on the scroll *f* into position to be displayed at the sides of the wagon. Upon the further movement of the wagon the operation described will be repeated, bringing successive advertisements on the scroll *f* into position to be displayed, and allowing a rest of the same for a brief period, between each advertisement displayed, until the cam *u* shall have had a complete revolution imparted to it, and the lower end of the lever *s* shall have reached the end of the longer raised part 8, of the cam *u*, when a finger *y* or other device secured to the shaft *i* may be caused to strike a bell *z*, or give other alarm to inform the attendant that all of the advertisements upon the scroll have been displayed, and unwound from the roll *d* upon the roll *e*. At this juncture the attendant may take hold of either of the levers *a'*, and move the same so as to operate the bell crank lever *b'* with the effect of moving the clutch part *k* out of engagement with the clutch part *j*, and so permit the shaft *i* to be rotated without affecting the position of the cam *u*, or other parts of the device, and after the operation of the device shall have been stopped, the attendant may, by turning either of the cranks *c'* thereof, operate roll *d* through the medium of belts or pulleys, or otherwise, so as to wind back the scroll upon the roll *d* from the roll *e*, when the levers *a'* may be moved in a contrary direction from that in which they were first moved, so as to throw the clutch part *k* into engagement with the clutch part *j*, and repeat the operation before described.

The raised parts *t* of the cam *u* are graduated as shown and described, so that but a

sufficient length of the scroll *f* may be wound upon the roll *e* to bring the advertisement into position to be displayed, it being understood that as the diameter of the roll *e* increases, the extent of the rotation of said roll may be lessened in order to effect the last described result.

As many raised and depressed points may be provided on the face of the cam *u* as there are advertisements to be displayed, and if desired after the scroll shall have been shifted to bring an advertisement into view, the levers *a'* may be moved so as to throw the scroll operating means entirely out of action, and leave the advertisement in displayed position as long as desired.

It will be noted that when the two clutches are disconnected, the crank *d'* connected with the end of the shaft *n* may be operated so as to wind the scroll upon the roll *d* upon the roll *e* without affecting other parts of the mechanism, and this means of operating the device by hand may be employed when the wagon is forced by circumstances to come to a stand-still, as when blocked in a crowd.

It will be noted that various changes may be made in the form and arrangement of parts comprising the invention, without departing from the nature or spirit thereof. For example the upper roller *d* may be provided with a spring adapted to act in a manner similar to the spring on a curtain roller to rewind upon the said roller the scroll without the operation of the crank *c'*.

Having thus described my invention, what I claim is—

1. An advertising wagon comprising in its construction, a roll for winding on the advertising sheet or scroll, gear between an axle of the vehicle and said roll whereby the latter is actuated, a clutch for throwing the roll in and out of gear with the axle, a lever engaging said clutch, and a rotary cam in gear with the axle, and arranged to engage the said lever and thereby cause the roll to be intermittently thrown out of gear, substantially as and for the purpose described.

2. An advertising wagon comprising in its construction a roll for operating or winding on the advertising sheet or scroll, gearing for effecting the movement of the said roll, a movable clutch for setting in operation and arresting the movement of the said roll, a lever connected with the said movable clutch and a cam for operating upon the said lever, the face of the said cam having a plurality of raised surfaces of graduated length, 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. 1892.

HENRIE D. STONE.

Witnesses:

ARTHUR W. CROSSLEY,
W. S. MCLEOD.