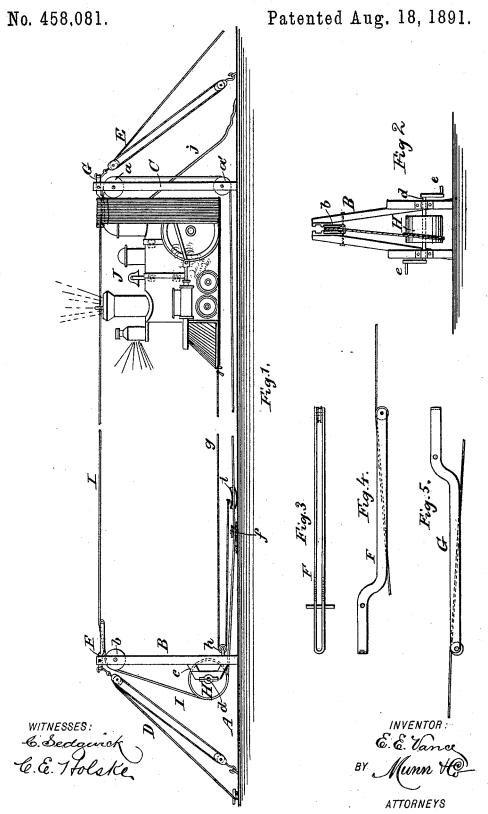
E. E. VANCE.
RAILROAD TRAIN EFFECT FOR DRAMATIC STAGES.



## UNITED STATES PATENT OFFICE.

ELMER E. VANCE, OF COLUMBUS, OHIO.

## RAILROAD-TRAIN EFFECT FOR DRAMATIC STAGES.

SPECIFICATION forming part of Letters Patent No. 458,081, dated August 18, 1891.

Application filed March 21, 1891. Serial No. 385,899. (No model.)

To all whom it may concern:

Be it known that I, ELMER E. VANCE, of Columbus, in the county of Franklin and State of Ohio, have invented a new and Improved Railroad-Train Effect for the Dramatic Stage, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a side elevation of my improved apparatus for producing a railroad-train effect. Fig. 2 is an end elevation. Fig. 3 is a plan view of one of the cable-supporting arms. Fig. 4 is a side elevation of the same, and Fig. 5 is a side elevation of the cable-supporting arm at the opposite end of the apparatus.

Similar letters of reference indicate corre-

sponding parts in all the views.

The object of my invention is to construct 20 apparatus for exhibiting an effect upon the dramatic stage to represent a locomotive and a train of cars, the said apparatus being capable of folding and packing in a small compass.

25 My invention consists in wooden uprights provided with drums and pulleys for supporting and driving an endless cable, means for bracing the uprights and placing the cable under tension, and a folding scene representing a locomotive and a train of cars supported by one strand of the endless cable and drawn forward by the other strand, all as will be hereinafter more fully described.

To the stage A are secured the lower ends of the uprights B C, the upper ends of which are braced by tackle D E, connected with levers F G, pivoted in the upper ends of the uprights. In the uprights C are journaled two sheaves a a', and in the end of the upright B is journaled a sheave b, and in brackets c, projecting from the lower part of the upright B, is journaled a shaft  $\bar{d}$ , provided with hand-cranks e, by which it may be turned. Upon the shaft d is mounted the drum H, and an endless cable I, of wire, passes once or twice around the drum H, thence around the sheaves b a a'.

To the stage is attached a block f, provided with pulleys for guiding the lower strand of 50 the cable I. The upper strand of the cable passes through the levers F G, which are

made double to admit of this arrangement, and over small sheaves in the free ends of said levers. By this construction, when the tackle D E is tightened, it not only draws the 55 upper ends of the uprights B C outwardly, but also tilts the levers F G, thereby increasing the tension of the cable.

Upon the lever G are suspended by means of rubber-lined eyes the folds of the scene J, 60 which represents a locomotive and a train of

cars.

To the pilot of the locomotive is attached a rope g, which passes over a sheave h, journaled in a fork projecting from the lower part 65 of the upright B. The end of the said rope extends forward and is attached to a clamp ion the lower strand of the cable I. The clamp i consists of a short piece of lead pipe, which fits the cable I very loosely, and it may be 70 made to engage the cable by bending it laterally. The rubber lining of the rings of the folding scene J engages the upper strand of the cable I with sufficient friction to cause the successive sections of the scene to be car- 75 ried along with the cable, while the rope gis pulled forward by the lower strand of the cable, and thus made to impart to the locomotive and train a steady forward motion as the drum H is turned by means of the cranks 80 As the locomotive is advanced in the manner described, the sections of the scene folded together and suspended by the lever G are drawn off one after the other and made to pass in front of the spectators. The end of 85 the scene on arriving at the opposite side of the stage is caught and made to fold upon itself, and the rear end of the scene is steadied by attendants by means of the rope g.

Sparks from the smoke-stack, the head-light, 90 and escaping steam are represented by suit-

able fire-works.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a railroad-train effect for the dramatic stage, the combination, with the cable I, of the uprights B C, the driving-drum H, sheaves  $a\ a'\ b$ , and the cable-tightening levers F G, substantially as specified.

the cable  $\tilde{I}$ . The upper strand of the cable | 2. The combination, with the endless cable passes through the levers F G, which are | I and the rope g, of a clamp i, formed of a

section of lead pipe and bent so as to engage the cable I, substantially as specified.

3. In a railroad-train effect for the dramatic stage, the combination of the endless carrying-cable I, the uprights B C, the propelling-drum H, the sheaves a a'b, the levers F G, provided at their free ends with cable-supporting sheaves, and the tackle D E for tightening the cable, substantially as specified.

4. A scenic effect comprising a main figure movable across the stage, and a curtain at the rear of the main figure, containing pictorial matter supplemental thereto and movable across the stage therewith, substantially as

15 set forth.

5. A scenic effect comprising a main figure movable across the stage, and a folding curtain at the rear of the main figure, containing pictorial matter supplemental thereto and movable across the stage therewith, said curtain being folded at its forward edge when the said main figure has crossed the stage, substantially as set forth.

6. A scenic effect comprising an endless ca-25 ble to cross the stage, a main traveling figure having a frictional connection with the lower

run of the cable to be moved across the stage thereby, and a supplemental folding part or curtain suspended from the upper run of the cable and frictionally connected therewith to 30 be unfolded and drawn across the stage after said main figure and again folded by the said cable when the opposite side of the stage is reached, substantially as set forth.

7. In a scenic effect, a movable cable to cross 35 the stage between proper supports, a folding curtain supported at one side of the stage in a folded condition and having eyes through which passes said cable and support, whereby the cable when operated will unfold the 40 curtain until it is suspended wholly thereby and then fold it from its forward edge at the opposite side of the stage, substantially as set forth.

8. In a scenic effect, an endless operatingcable crossing the stage, and a figure provided with a friction-clamp through which said endless cable passes, substantially as described.

ELMER E. VANCE.

Witnesses:

CLAY T. VANCE, E. J. ROWE.