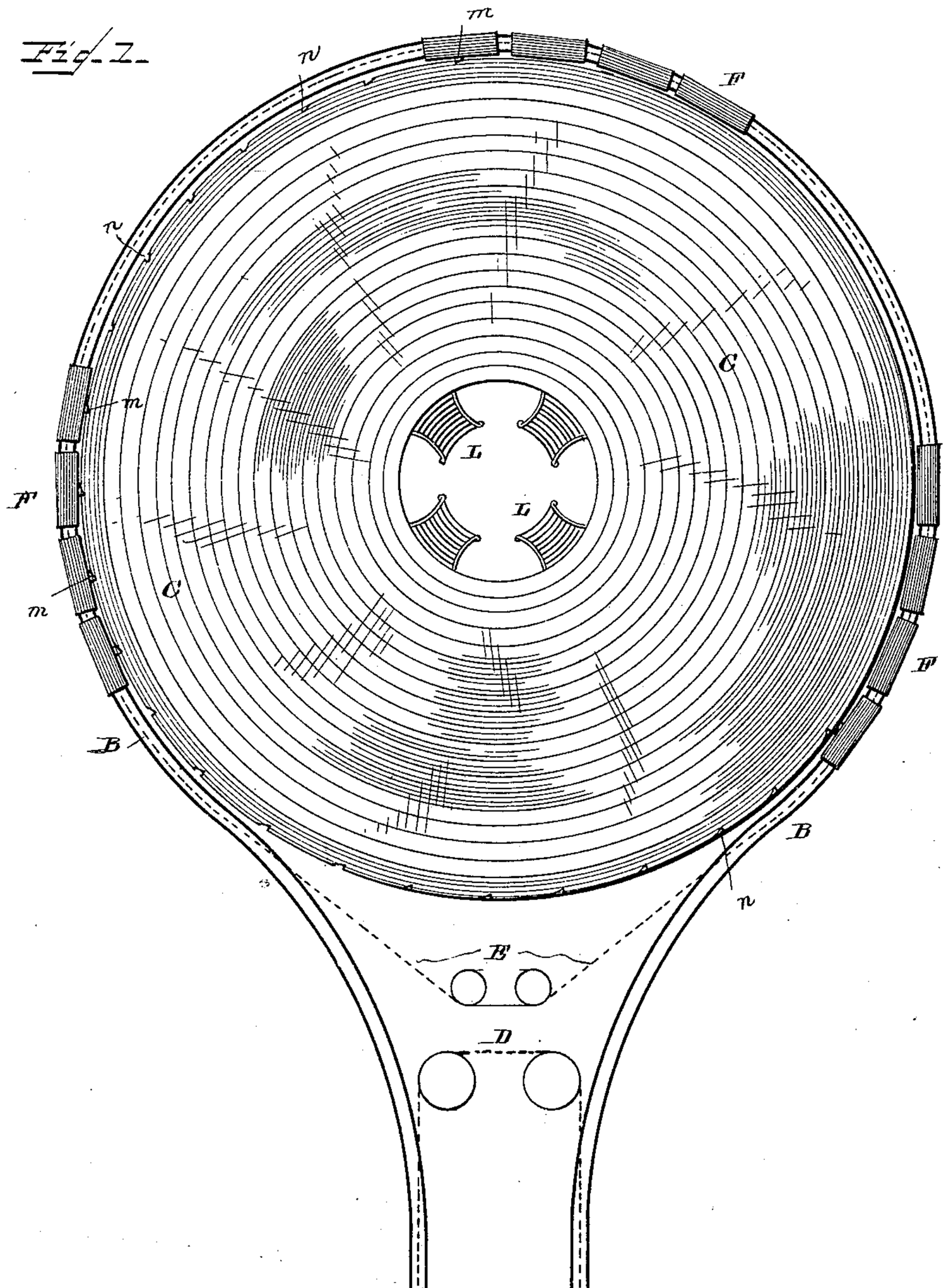
(No Model.) 2 Sheets—Sheet 1.

G. W. PEARSONS.

DEVICE FOR LOADING AND UNLOADING PASSENGER CARS AT TERMINALS.

No. 368,420. Patented Aug. 16, 1887.

Fig. 1.



WITNESSES

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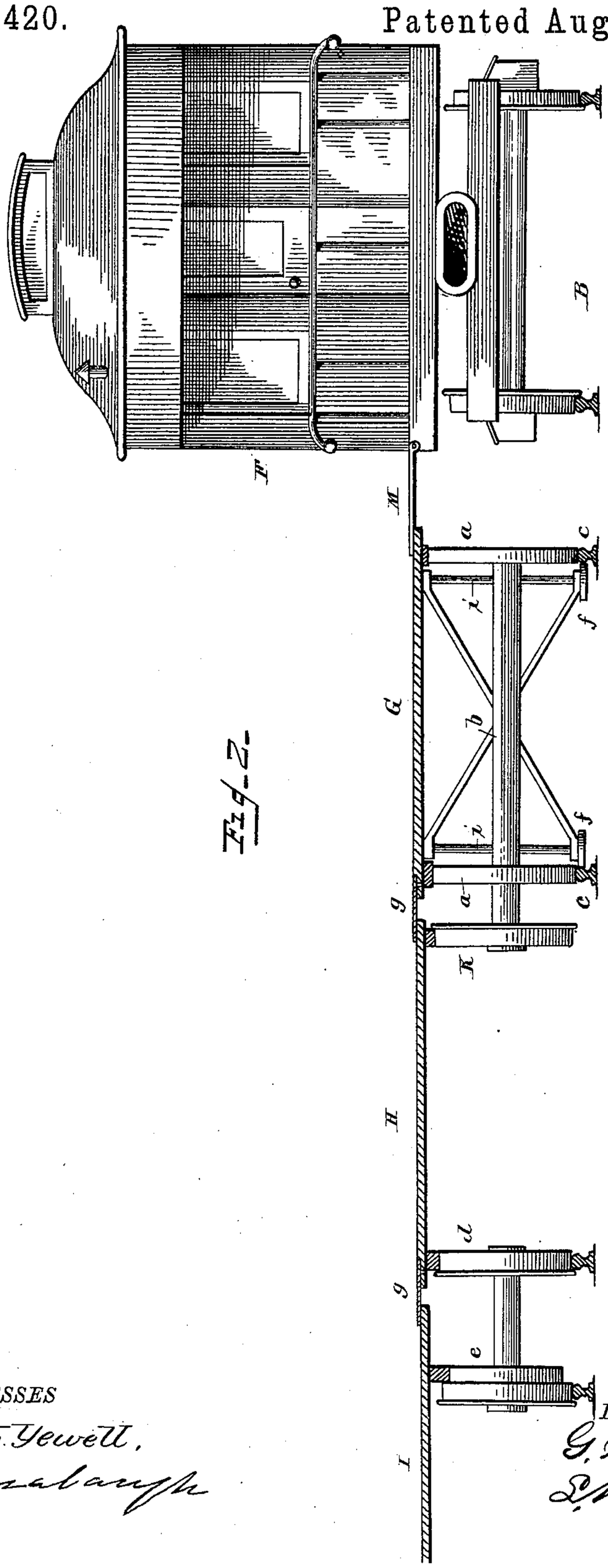

Fig. 2.

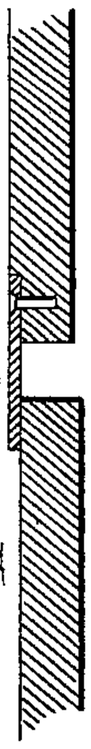

Fig. 3.

WITNESSES

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UNITED STATES PATENT OFFICE.

GALEN W. PEARSONS, OF KANSAS CITY, MISSOURI.

DEVICE FOR LOADING AND UNLOADING PASSENGER-CARS AT TERMINALS.

SPECIFICATION forming part of Letters Patent No. 368,420, dated August 16, 1887.

Application filed May 26, 1887. Serial No. 239,499. (No model.)

To all whom it may concern:

Be it known that I, GALEN W. PEARSONS, a citizen of the United States, residing at Kansas City, in the county of Jackson, State of Missouri, have invented certain new and useful Improvements in Devices for Loading and Unloading Passenger-Cars at Terminals, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in terminals for cable and other railroads.

The object of my invention is to provide means whereby railway-cars can be loaded and unloaded with great facility without stopping the same, whereby large numbers of persons can be readily transported with ease and perfect safety to life and limb insured.

My invention consists in forming a circular loop of the tracks at the terminals of the road, in which is located a turn-table or revolving platform which travels at the same rate of speed as the cars, so that passengers can readily leave or find access to the cars while the same are in motion.

My invention consists, further, in constructing the turn-table or revolving platform of a series of rings or annular sections, said rings being so constructed and timed in their movements that each interior ring moves at a less rate of speed than the next adjacent outside ring, as will more fully appear.

My invention consists, further, in forming a central opening in the turn-table, which communicates with a stairway, thus affording means of egress and ingress.

Other novel and important features of my invention will be fully described, and pointed out in the claims.

Referring to the drawings, Figure 1 is a top or plan view of the loop forming the terminal of the track, with the cars thereon, and the turn-table. Fig. 2 is a sectional view of a portion of the turn-table, showing one way in which a variable motion is imparted to the sections or rings of the turn-table, and also an end view of the car. Fig. 3 is a detached sectional view of a portion of the turn-table, showing the guard or shield connecting the rings of the turn-table.

A A indicate the tracks of a double-line road, which are widened out at the terminals to form a circular loop or track, B, of any desired diameter, within which is placed the turn-table or traveling platform C. The cars when on the main line are driven or propelled by the cable D; but as they emerge from the main line onto the loop the grip is transferred to the cable E, which not only moves the cars, but also the turn-table or revolving platform C.

F indicates the cars, which may be of any desired kind, but preferably of the style known as "compartment-cars," having the doors in the sides thereof, in order to facilitate the loading and unloading of the passengers.

As before intimated, C indicates the turn-table or rotating platform, of any convenient or desired size, and is by preference made up of a series of rings or annular sections, G H I, &c. The outer ring, G, is carried by the wheels *a*, mounted on the axle *b*, said wheels being adapted to fit the circular track *c*.

K is a wheel mounted on the inner end of the axle *b*, said wheel being of smaller diameter than the wheels *a a*. The outer edge of the ring H rests upon and is rotated by the wheel K. The ring H transmits its motion to the ring I, the inner edge of the ring H and the outer edge of the ring I being supported by the wheels *d* and *e*, and so on to the last or innermost ring, all the rings being in this manner driven by the outer ring.

It is of course understood that any desired number of wheels are placed under the several rings or annular sections of the turn-table.

The wheels of all the rings or annular sections of the turn-table, except the outer one, are kept on their track by means of the usual flanges, while the wheels supporting the outer ring are kept on the track *c* by means of the wheels *f*, mounted on the vertical posts *i*, which bear on the sides of the rails *c* to resist the pull of the driving-cable and to reduce the friction.

The frame-work of the rings or annular sections forming the turn-table, together with the trucks and tracks, should be made of such material and so braced that they will be sufficiently rigid to keep their shape and place.

The different rings or annular sections may be of the same height, forming a continuous level platform, or they may be of different

heights, so as to form steps between each annular ring, as is most desired. In either case the spaces between the rings or annular sections should be protected by guards *g*, so as to prevent accidents.

While the cars are passing around the loop B the turn-table should revolve at the same rate of speed, and this may be done by a side grip on the turn-table cable or by a friction-clutch upon a projecting rim of said table, or by self-acting pawls *m* upon the cars, engaging indentations or teeth *n* on the edge of the outer ring or annular section of the turn-table. In either case the devices used for maintaining the motion of the train around the turn-table should be self-releasing.

The central portion of the turn-table is open and communicates with a series of stairways, L, the interior ring or annular section of the turn-table next the stairway having an almost imperceptible motion, as compared with the outer ring, owing to its decreased diameter and the arrangement of the wheels just described, which support the rings or annular sections, so that the rate of motion insensibly increases as a person passes to the train from the stairway, and the entrance to the train is practically the same as if both turn-table and train were at rest, and the converse is true on leaving the train.

The operation of my devices is as follows: The trains or cars on leaving the cable of the main track are slackened in speed somewhat, so that by the time they reach the turn-table they have approximately its motion. The table is then made fast to the train, either automatically or by a brakeman, and the landing-platform M is dropped onto the ring G of the turn-table. The cars are now loaded and unloaded while passing around the loop, where they are again secured to the cable on the main line. By this means the trains can follow each other as fast as the movement of the turn-table gives room for the trains to take their places in succession. There is no switching or stopping of trains by this arrangement at the terminals of roads, which makes it possible to move more passengers in a given time than has heretofore been done.

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

1. A device for loading and unloading passenger-cars at the terminals of the road, which consists of a circularly-arranged track within which is placed a revolving table or platform, said table being provided with a central entrance and exit port and arranged to travel at the same or substantially the same speed as the cars while the same are being loaded and unloaded, as set forth.

2. In devices for loading and unloading passenger-cars at the terminals of the road, a turn-table having a central port or opening communicating with one or a series of stairways, as set forth.

3. In devices for loading and unloading passenger-cars at the terminals of the road, a turn-table or revolving platform composed of a series of rings or annular sections located within a circular track or loop and adapted to travel with the cars on the circular track, as set forth.

4. In devices for loading and unloading passenger-cars at the terminals of the road, a turn-table or revolving platform having a central exit and entrance port and composed of a series of rings or annular sections, said sections being so constructed and timed in their movements that each interior ring moves at a less rate of speed than the next adjacent outside ring.

5. In devices for loading and unloading passenger-cars at the terminals of roads, the circular track or loop connecting with the double line of tracks, as described, the main line and loop being provided with propelling-cables, in combination with the cars and a turn-table provided with a central ingress and egress port, the cars being adapted to engage with the turn-table in any suitable manner so as to revolve it at the same rate of speed, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GALEN W. PEARSONS.

Witnesses:
BRUCE DODSON,
LIONEL MOISE.