

(No Model.)

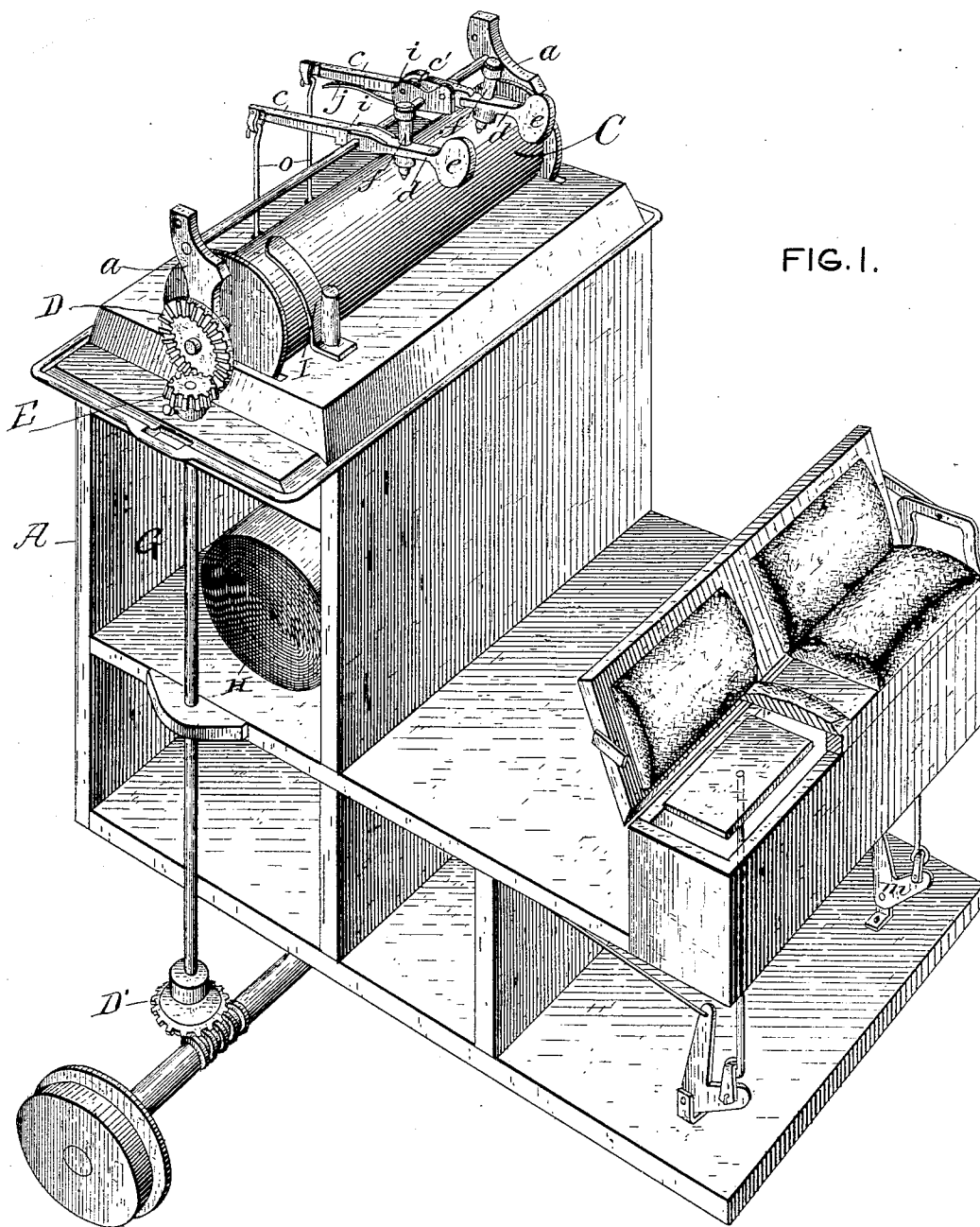
2 Sheets—Sheet 1.

S. M. WEST.

PASSENGER MILEAGE RECORDER.

No. 387,936.

Patented Aug. 14, 1888.



ATTEST.
J. Henry Kaiser
Victor J. Evans.

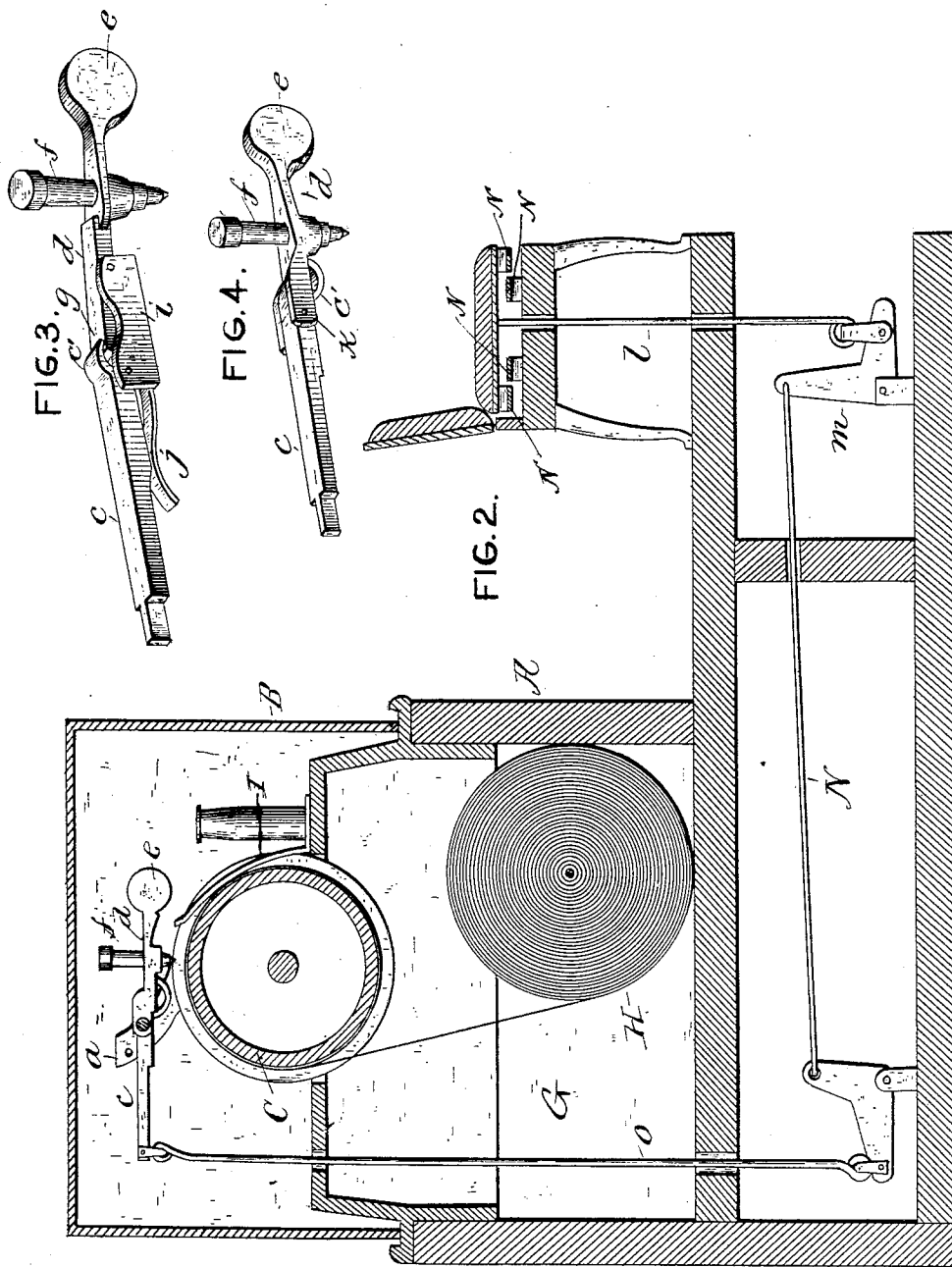
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Samuel M. West.
By
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UNITED STATES PATENT OFFICE.

SAMUEL M. WEST, OF FORT WORTH, TEXAS.

PASSENGER MILEAGE-RECORDER.

SPECIFICATION forming part of Letters Patent No. 387,936, dated August 14, 1888.

Application filed August 13, 1887. Serial No. 246,895. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL M. WEST, a citizen of the United States, residing at Fort Worth, Tarrant county, Texas, have invented new and useful Improvements in Passenger Mileage-Recorders, of which the following is a specification.

This invention relates to certain new and useful improvements in mileage-recorders for steam railway-coaches and similar vehicles; and it consists, substantially, in such features of construction, arrangement, and combinations of parts as will hereinafter be more particularly described, and pointed out in the claims.

The object of the invention is to supply mechanism for automatically recording the distances traveled over by each passenger, by which discrepancies in the return by the conductor or other attendant of money, tickets, &c., may be readily detected by a simple comparison of such returns with the registration.

The invention also has for its object to simplify the construction and arrangement of parts, as well as very materially cheapen the cost of manufacture thereof, as compared with former inventions of a like character, all as will more fully hereinafter appear when taken in connection with the accompanying sheets of drawings, wherein—

Figure 1 represents in perspective a passenger-register embodying my invention. Fig. 2 is a longitudinal sectional view thereof; and Figs. 3 and 4 are perspective views in detail of the holders for the pencils, crayons, or other marking devices.

Reference being had to the several parts by the letters marked thereon, A represents a case or housing in which the several parts of my improved mechanism are contained or mounted, and B represents a covering designed to fit over the top of the casing, by which to inclose or conceal from view the devices which perform the recording, and by which, also, to prevent access thereto by the conductor or other attendant, the removal of said cover being intended to be permitted only by those having the authority so to do by which to gain an inspection of the record-sheet.

C represents a cylinder or roller mounted in suitable bearings, *a a*, on the top of the casing

A, and to one end of the shafts of said roller is secured or mounted a bevel gear-wheel, D, meshing with a similarly-beveled pinion, E, carried on the end of a vertical shaft, having also at its other or lower end a like pinion, D', meshing with a worm-gear formed or provided on the axle of the vehicle in which the devices are located. It is by this means that in the travel of the vehicle the cylinder or roller will be operated to revolve; but I desire to state that these means are simply resorted to by preference, yet various others may be employed with equal effect or results.

Within the compartment G, formed by the case, a roll of paper, H, is located, on which are supposed to be inscribed in successive order the stations lying over the route traveled by the vehicle, as well, also, as the distances between each of the stations. At the time of starting, the end of the paper roll is passed up and partly over the cylinder, and as the latter is revolved the paper will be gradually wound up, while at the same time the marking devices will be performing their recording. For the purpose of maintaining the paper evenly on the cylinder I have provided the spring I, which bears upon the cylinder with a yielding pressure, and as the paper is wound up this spring will prevent any slipping and consequent inaccurate registration.

I have represented by Figs. 3 and 4 of the drawings two forms of holders for the pencils or other marking devices, and in the first-named figure the said holder is constituted of the portion *c*, having the curved lip *c'*, the portion *d*, weighted as at *e*, having receptacle *f* for the lead or crayon, and formed with part *g*, designed to come in contact with the lip, the two portions being pivotally united by a link, *i*. A spring, *j*, is secured to the link and bears against the under side of the portion *d* while the marking is being effected, and assists at the proper time in elevating the crayon from the sheet.

In Fig. 4 I dispense with the use of the spring *j* and reverse the part *c*, so as to bring its projecting lip to the under side, and the two portions are united pivotally, as represented at *k*.

The purpose of forming the crayon-holders jointed is to render the same of such elasticity as that the pencils or crayons will not cut

through the paper or cause it to bunch up, as would be apt to be the case were the holders of a single piece. Besides, this construction of holders can be readily turned back out of the way without detaching any of the wires through the medium of which they are operated, and thereby permit of the paper being readily taken out or inserted. Further, by weighting these jointed holders the pencil or crayon is maintained down on the record-sheet, with no liability of the leads or crayons becoming broken.

Beneath each seat of the coach, or rather between the frame and cushion thereof, are suitable flat springs, *N*, arranged to normally maintain the cushion elevated from the frame of the seat, and secured beneath the cushion and passing down through an opening in the floor of the coach is a rod, *l*, linked at its lower end to one arm of a bell-crank, *m*, while to the opposite arm of said bell-crank is linked in like manner a rod, *N'*, extending lengthwise beneath the floor to another bell-crank, from which extends vertically a rod, *o*, which passes up through openings in the floor and casing and unites with or is linked to the lead or crayon holder. A passenger on seating himself will act to depress the weighted portion *d* of the holder in such manner as that the lead or crayon therein contained will begin to mark on the sheet.

The operation is as follows: As a passenger seats himself in the car, the rods connecting the seat with the crayon-holders will be so operated upon as to depress the lead or crayon holders in such manner as that the recording will be started, and as long as the passenger remains seated a line will be clearly drawn lengthwise of the indicating-sheet, due to the turning of the roller through motion imparted thereto from the axle of the coach or in any suitable manner. As soon as the passenger

arises from his seat, the springs beneath the same will act to restore the parts to their original positions, and thereby elevating the markers from the sheet. There is a marker-and-wire connection for each individual seat of the car or coach, and thus may a registry be kept of all.

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

1. The combination, with a roller mounted in a suitable case and winding thereon a sheet of paper fed from beneath, of a series of crayon holders supported above the roller, the same being constituted of the part *c*, having lip *c'*, and the part *d*, weighted and formed with the portion *g*, the two parts being united by a link, to which a spring is secured, which bears against the part *d*, and means connecting with the seat of the coach for operating said holders, substantially in the manner described.

2. The combination, with a roller mounted in a suitable case and winding thereon as it turns a sheet of paper fed from beneath, of a series of crayon-holders supported above the roller, the same being constituted of the part *c*, having lip *c'*, and the part *d*, weighted and formed with the portion *g*, the two parts being united by a link, to which is secured a spring bearing against part *d*, the rods and bell-cranks, the spring-seats, means for operating the roller from the axle of the car, and the spring bearing upon the roller, by which the paper or other sheet is prevented from slipping, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

S. M. WEST.

Witnesses:

WM. C. McINTIRE,
E. EVERETT ELLIS.