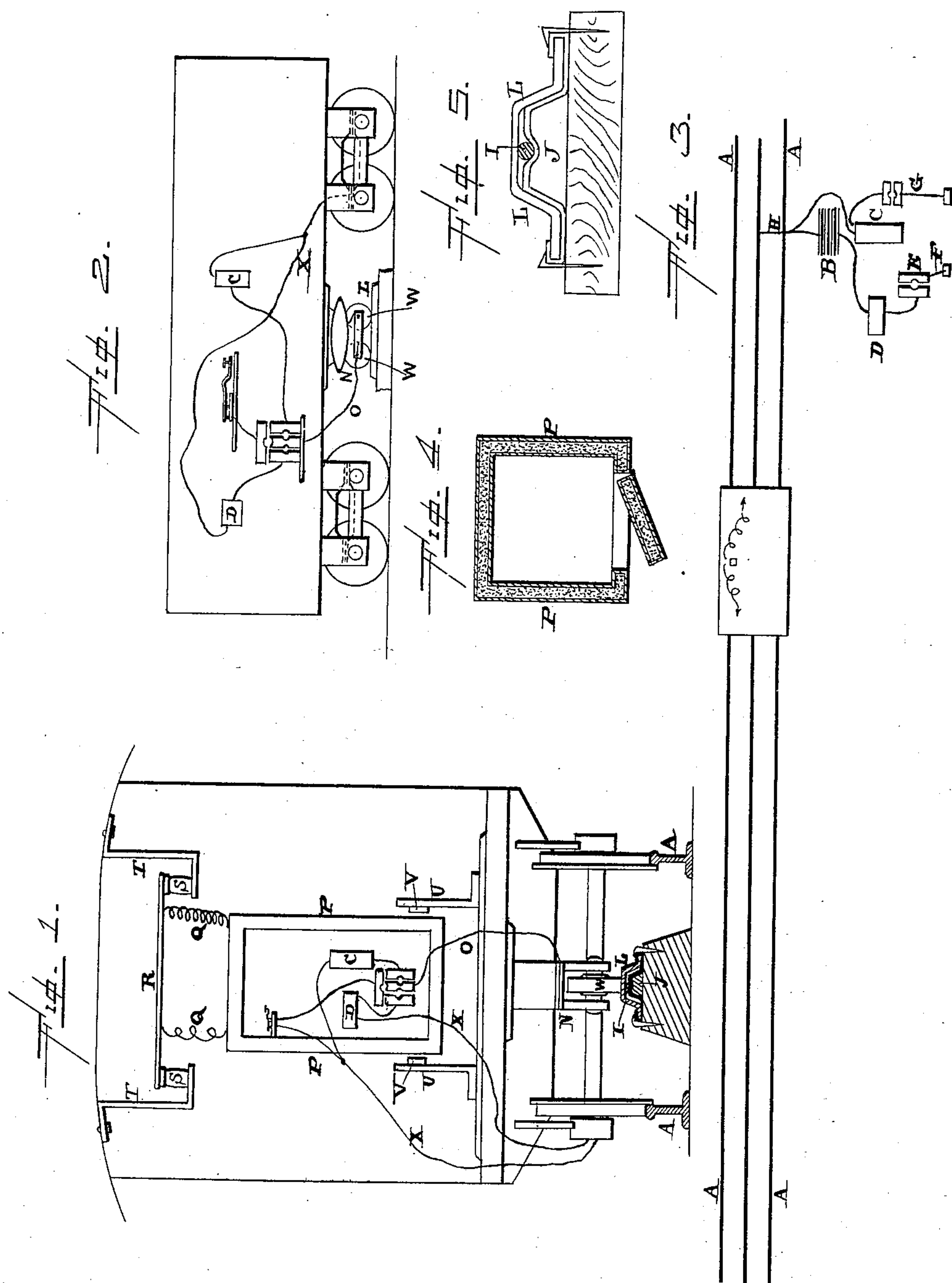


(No Model.)

W. VOGEL.
RAILWAY TELEGRAPH.

No. 333,178.

Patented Dec. 29, 1885.



-Witnesses.-
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UNITED STATES PATENT OFFICE.

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OF SAME PLACE.

RAILWAY-TELEGRAPH.

SPECIFICATION forming part of Letters Patent No. 333,178, dated December 29, 1885.

Application filed February 27, 1884. Renewed August 3, 1885. Serial No. 173,447. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM VOGEL, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Telegraphing or Telephoning from Stations to Moving Cars; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in telegraphing or telephoning from stations to moving cars; and it consists, first, in the combination, with a railroad-car, of a receiving-chamber which is placed therein and supported upon springs; second, in the combination of a car, a chamber placed therein and suspended upon springs, with brackets which prevent the lower end of the chamber from moving about; third, in the combination of the car, a chamber suspended therein upon springs, and suitable electrically-operated mechanisms in the chamber, with the connecting-wires, a conducting-connection which is applied to the under side of the car, a support which extends along the main track, and upon which the conducting-connection travels, and a conducting-wire placed upon insulating material and connected to the support, as will be more fully described hereinafter.

The object of my invention is to provide a means for sending telegraphic and telephonic messages to trains at a distance from the station, whether the trains are stationary or in full motion, and to so construct the receiving-chamber that the noise of the moving train will be deadened, so as not to interfere with the operator in sending and receiving messages.

Figure 1 is a vertical cross-section taken through the car and the railroad-track, showing the electrical connection between the station and the car. Fig. 2 is a longitudinal section of the car, taken at right angles to Fig. 1. Fig. 3 is a plan view of an apparatus embodying my invention. Fig. 4 is a detailed view of the receiving-chamber. Fig. 5 is a vertical cross-section of the wire, its bed, and covering.

A represents the rails of the main railroad-

track; B, the battery placed at the station; C, the telephone; D, a telegraph apparatus; E, the switch, and F G the ground-lines. The battery is connected with the wire I by the wire H, which wire I extends along the track between the two main rails. Along the main track, in between the two rails, is placed, upon any suitable base or support, the bearing J, of any suitable shape, size, or construction, and upon the top of which is placed any insulating compound or material. Upon this support J is placed the copper wire I, and over the top of the support J and the wire is placed a cap-piece, L, which is in contact with the wire, and which serves as a conductor between the wire and the wheels of the truck. This cap L is spiked or otherwise secured in position in any suitable manner.

Secured to the under side of the receiving-car is the truck N, which is provided with one or more wheels, which bear against the cap-piece L in between the rails of the main track. This truck is here shown as provided with two wheels and a suitable spring; but I do not limit myself in any respect to the construction of this truck, as any suitable construction will answer. This truck is insulated from the car, but is electrically connected to a telephonic or telegraphic apparatus, the same as at the station, by means of the wires O.

In the receiving-car is placed the receiving-chamber P, which is of any suitable shape or size, and which is suspended by means of the springs Q from the cross-bar R, which is supported in turn upon suitable springs, S, which are placed upon the brackets T, which project down from the roof of the car. The springs S may be formed of rubber or any other suitable material that may be preferred. The lower end of the chamber P does not extend down to the floor of the car, but is raised any suitable distance above it, and is prevented from swaying back and forth by means of brackets U, which are provided with rubber springs V upon their inner sides. The walls of the chamber are made double and packed with any suitable material for the purpose of deadening the sound and preventing the noise of the moving train from interfering with the operator in sending or receiving messages.

As before stated, the telephonic and telegraphic apparatus employed in the receiving-chamber are the same as used at the station. The current passes through the battery-wire I and through the wire to the covering L placed over it. Where the train is either in motion or at rest upon the track, the current passes through the covering L, the wheels W of the truck, through the wire O to the switch, and then either the telegraphic apparatus or the telephone, as may be desired. The return-current passes through the wire X to the car-wheels, and from thence into the ground.

The telegraph-operator, seated in the receiving-chamber P, can freely send and receive messages either upon the telephonic or telegraphic apparatus, as desired.

Having thus described my invention, I claim—

1. The combination, with a railroad-car, of a spring-supported receiving-chamber such chamber being formed with double walls and provided with interposed packing, as and for the purpose set forth.
2. The combination, with a railroad-car, of a receiving-chamber which is placed therein and suspended upon springs, and the brackets for keeping the lower end of the chamber from moving about, substantially as described.

3. The combination of the railroad-car, a suspended receiving-chamber placed therein, and suitable electrically-operated mechanisms in the chamber, with the connecting-wires, a conducting-connection which is applied to the under side of the car, a support which extends along the main track, and upon which the conducting-connection travels, and a conducting-wire placed upon insulating material and connected to the support, substantially as specified.

4. The combination, with a railroad-car, of a receiving-chamber, P, springs Q, cross-beam R, springs S, and hangers T, the parts arranged as and for the purpose set forth.

5. The combination, with a railroad-car, of a receiving-chamber, P, formed with double walls and provided with interposed packings, springs Q, cross-beam R, springs S, and hangers T, the parts arranged as and for the purpose set forth.

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

WILLIAM VOGEL.

Witnesses:

JOHN MALONEY,
JOHN A. CORWIN.