

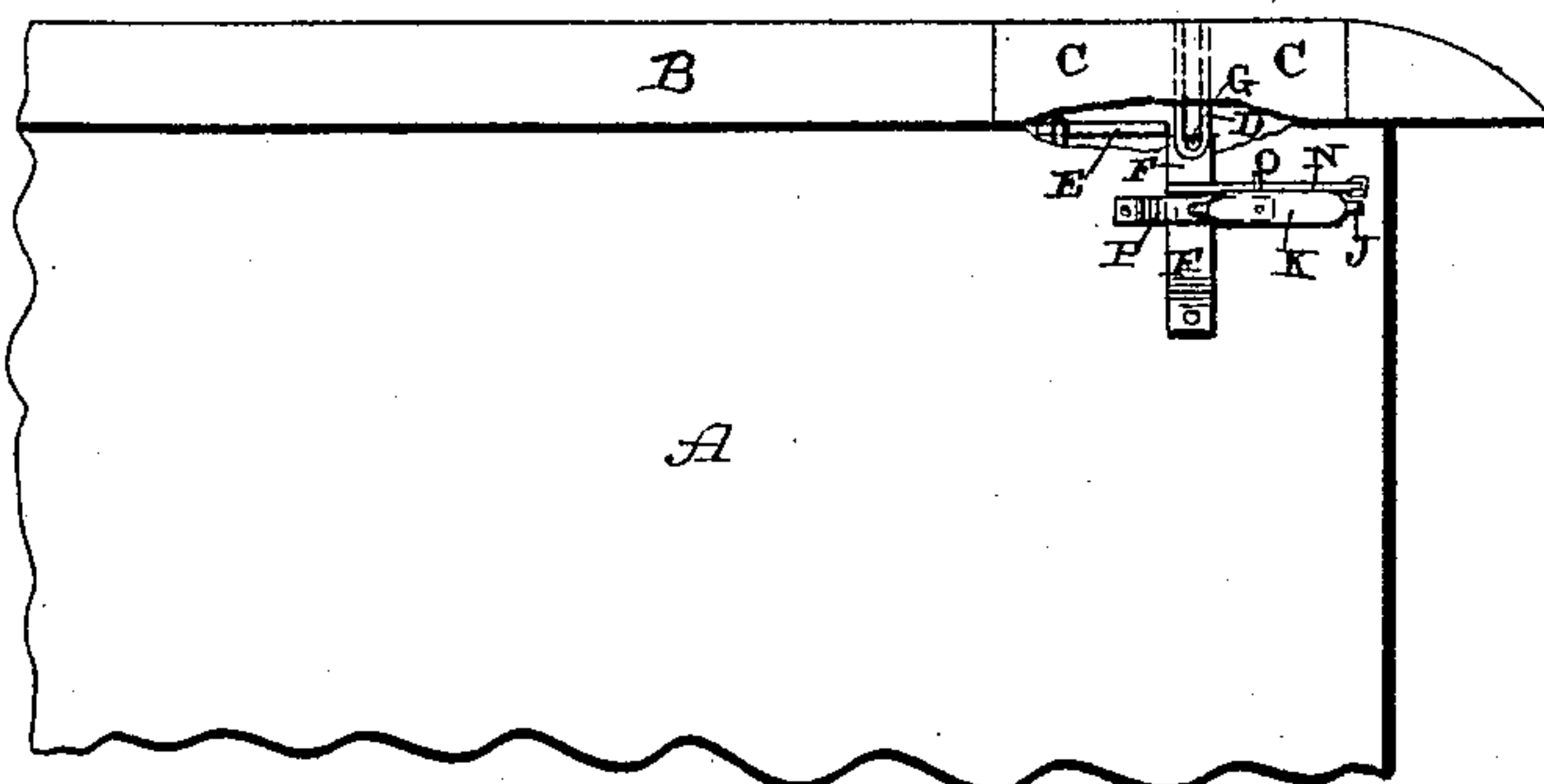
(No Model.)

W. KLINKER.
RAILROAD CAR.

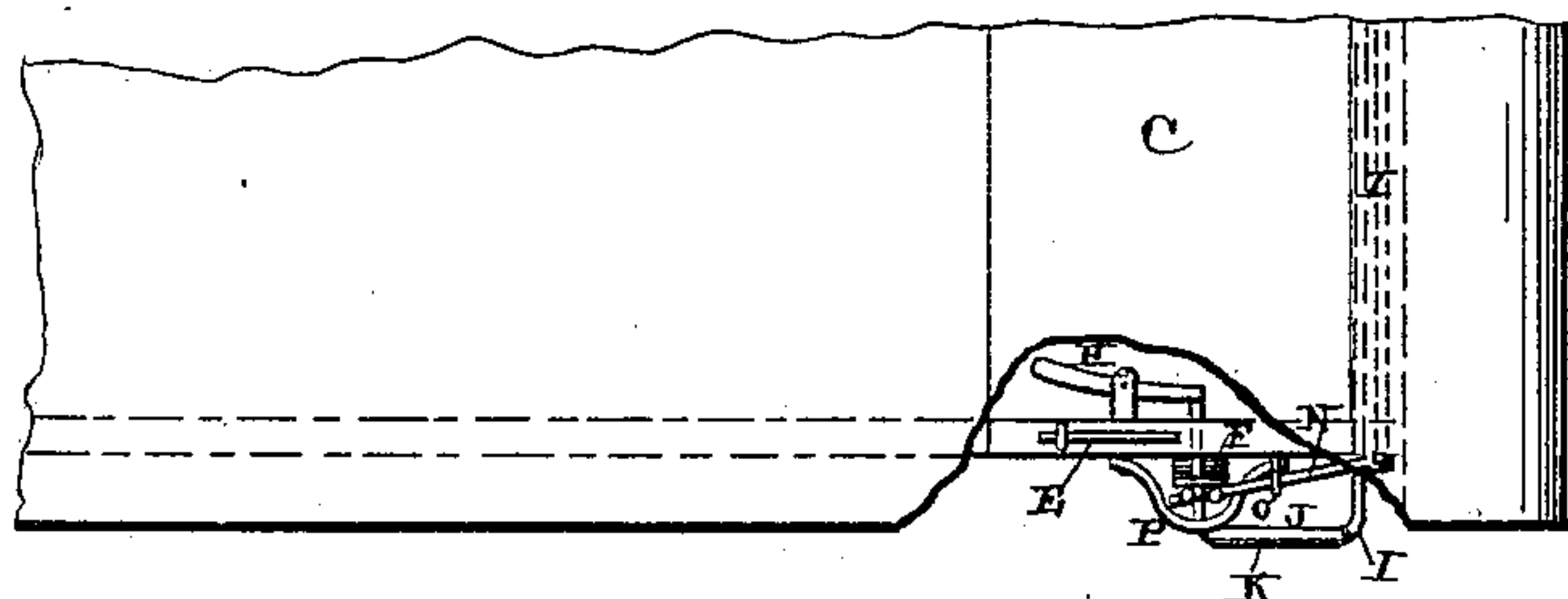
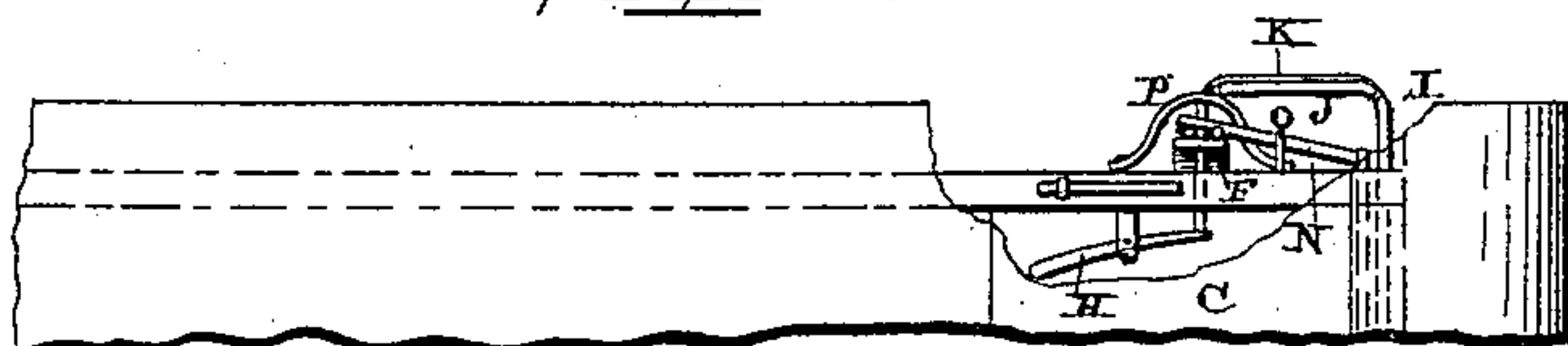
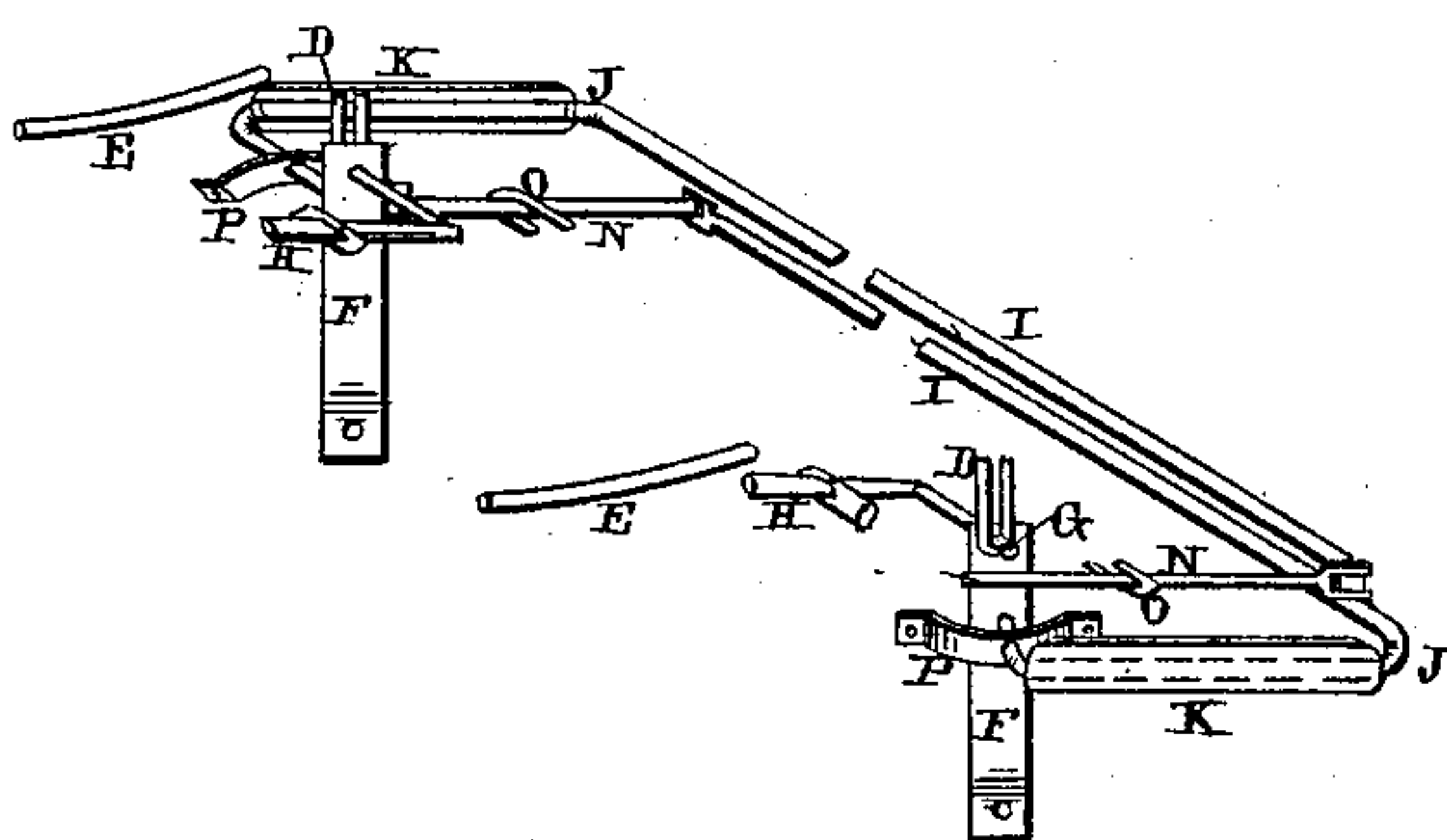
No. 390,865.

Patented Oct. 9, 1888.

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Witnesses.
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per
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att'y.

UNITED STATES PATENT OFFICE.

WESLEY KLINKER, OF UNION MILLS, IOWA.

RAILROAD-CAR.

SPECIFICATION forming part of Letters Patent No. 390,865, dated October 9, 1888.

Application filed June 21, 1888. Serial No. 277,842. (No model.)

To all whom it may concern:

Be it known that I, WESLEY KLINKER, of Union Mills, in the county of Mahaska and State of Iowa, have invented certain new and useful Improvements in Railroad 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 railroad-cars; and it consists in the combination, with the body of the car, of the top provided with any number of movable sections and spring-actuated holding devices for locking the movable sections of the cover in position, and which devices are operated either from the inner side of the car by the passengers or which are automatically operated by the turning over of the car, and springs which displace the movable sections when they are left free to move, as will be more fully described hereinafter.

The object of my invention is to provide railroad-cars with means of escape for the passengers in case of a wreck or accident and by means of which one or more sections of the roof will be instantly displaced, so as to allow the imprisoned passengers to escape from the car.

Figure 1 is a side elevation of one end of the car to which my invention is applied. Fig. 2 is a plan view of the same, partly in section. Fig. 3 is a detached perspective of one of the automatic releasing devices, shown independently of the car.

A represents the body of either a freight or a passenger car, and B the roof. This roof, instead of being made in one solid piece, in the usual way, is made in sections, the movable sections C being preferably placed one near each end and made detachable from the car, so that in case of accident or a wreck the imprisoned passengers can readily escape from the car through the openings in the roof.

I do not limit myself to any particular construction in regard to the arrangement or number of removable sections C, for these may be arranged at will, and there may be any desired number of them.

To each end of each of the sections C is fast-

ened a staple or catch, D, of any suitable construction, and placed under the end of each section C is a suitable spring, E, which, as the section is left free to move, throws or moves the section entirely out of its position upon the car, so as to at once open a passage for the escape of the imprisoned passengers. These springs are here shown located in grooves formed in the top of the sides of the car; but it is evident that these springs may be of different shapes and applied in any manner that will best answer the purpose.

Secured to each side of the body of the car is a spring, F, which is provided with a suitable stud or projection, G, for catching in the staple D, and thus locking the ends of the movable sections in position. This spring is preferably flat, and has its upper end to project outwardly from the body of the car, so as to forcibly hold the projection G inside of the staple, and thus lock the end of the section in position, so that it cannot possibly become disengaged until the operating mechanism is brought into play. If it is desired to place an operating mechanism inside of the car, so that the sections C can be thrown off in case the cars are upset into water, the lever H will be placed inside of the car and connected at one end to the springs F by means of connecting-rods. By operating this lever the spring F will be drawn backward at its upper end, so as to withdraw the projection G from the staple D, when the spring E will at once move the end of the section C out of position.

Passing through the outside of each end of the body of the car are the two endwise-moving rods or levers I, which have one of their ends bent so as to form the curved guard J, which projects outward beyond the edge of the roof any suitable distance. These ends are preferably curved, as shown, and have attached to them the broad plates K, which form bearings to be struck or operated in case the car upsets. The outer free ends of each of these rods is turned backward, so as to bear against the outer side of the spring F, so that when the rod is forced endwise the spring F will be forced backward, so as to disengage the projection G from a staple or catch, D, on the under side of the section C.

In order to have both ends of the sections C released at once, to the opposite end of each

rod is loosely connected a lever, N, which is journaled or pivoted at O upon the side of the car, and which has its longer or free end to bear against the outer side of the spring F. At 5 the same time that the plate K strikes against some object when the car is upset the other end of the rod operates the spring F upon the opposite side of the car, so as to detach the movable sections C at each end. In order to 10 guide the ends J of the rods I, a guide, P, is placed across the upper end of each of the springs F and the ends J move through suitable perforations made in the guides P, as shown. These guides are bent outward at 15 their centers, so as to pass over the outer sides of the springs F without interfering with their operation in any manner.

In case of accident and the car is upset into water, so that the automatic releasing apparatus is not operated so as to detach one or both 20 of the sections C, then the passengers can readily throw off those sections by operating the levers H, of which there will be two in each end of the car. Should the car upset and 25 strike against the ground or any object, the ends J of the rods I will be operated so as to detach the projections G from the staples D, and then the springs E will displace the section or sections, forming a ready escape for the 30 imprisoned passengers. Should there be a wreck and the ends of the cars be jammed together, then the ends J and the springs can be operated from the outside of the car either by direct pressure against them or against the 35 ends J of the rods I.

Having thus described my invention, I claim—

40 1. The combination of the stationary portions of the roof of a car with the movable sections, springs for displacing the movable sections when they are left free to move, and an automatically operating detaching mechanism

by which the movable portions of the roof are held in position upon the top of the car, substantially as shown. 45

2. The combination of the movable sections of the roof, fastening devices secured to the ends of the sections, spring-actuated projections for engaging with the fastening devices, and endwise-moving rods which detach the 50 projections from the fastening devices, substantially as described.

3. The combination of the movable sections of the roof of a car, springs for moving the sections, catches upon the ends of the movable sections, spring-actuated projections for 55 engaging with the catches, endwise-moving rods, and the pivoted levers N, connected to the ends of the rods, substantially as set forth.

4. The combination of the movable sections 60 of the roof of a car, fastening devices attached to their ends, spring-actuated projections to engage with the fastening devices, and endwise-moving rods which detach the projections from the catches, substantially as 65 specified.

5. The combination of a movable section of a car-roof, the fastening devices connected thereto, spring-actuated projections for engaging with the catches, two endwise-moving rods 70 which move in opposite directions and which have their curved ends to project beyond opposite sides of the car for the purpose of detaching the spring-actuated projections from the catches, and pivoted levers connected to 75 the ends of the rods, substantially as shown and described.

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

WESLEY KLINKER.

Witnesses:

JACOB WATLAND,
DAVID VAIL.