No. 753,636. PATENTED MAR. 1, 1904.

F. SCHMITT.

SYSTEM FOR PREVENTING COLLISIONS, ACCIDENTS, &c., BY RAILWAY TRAINS.

APPLICATION FILED OCT. 14, 1903.

NO MODEL.

Fig. 1.

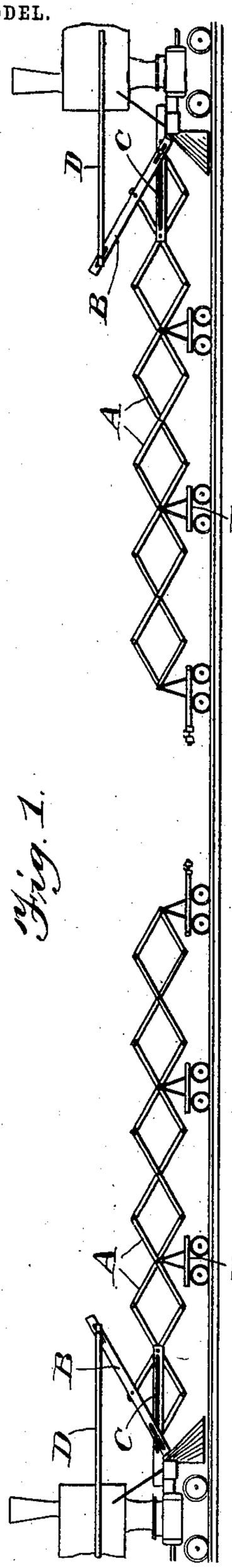


Fig. 3.

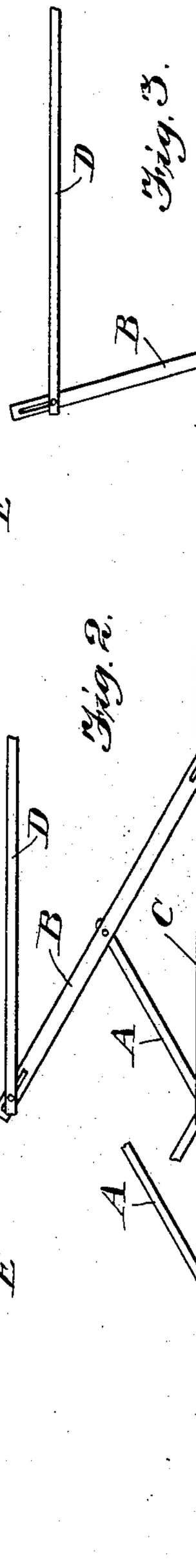


Fig. 2.

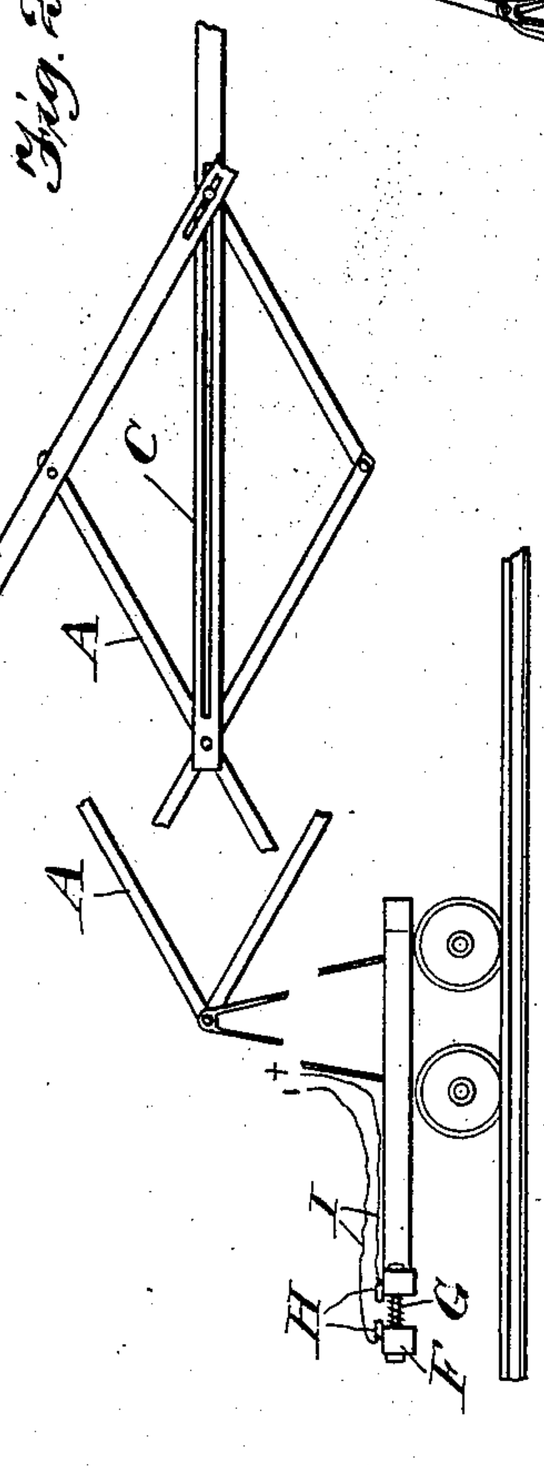
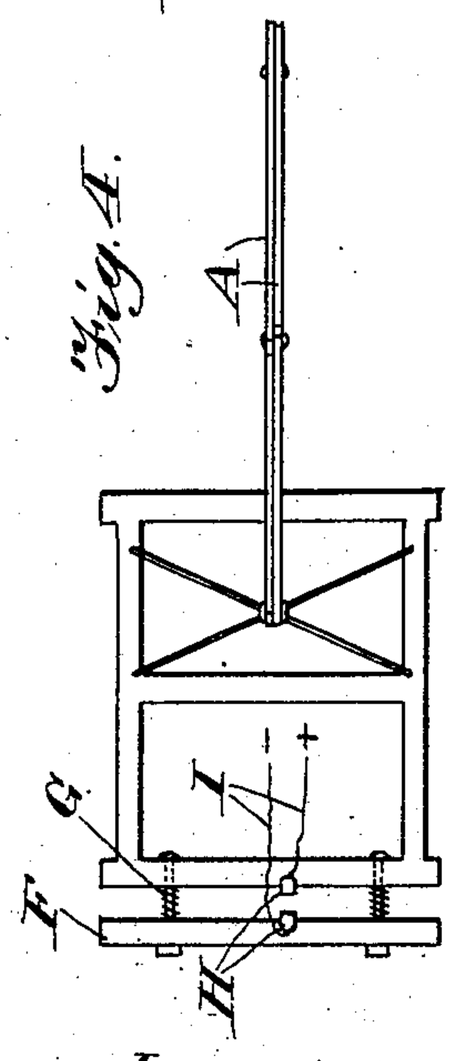


Fig. 4.



Witnesses:
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No. 753,636. Patented March 1, 1904.

UNITED STATES PATENT OFFICE.

FRANK SCHMITT, OF PHILADELPHIA, PENNSYLVANIA.

SYSTEM FOR PREVENTING COLLISIONS, ACCIDENTS, &c., BY RAILWAY-TRAINS.

SPECIFICATION forming part of Letters Patent No. 753,636, dated March 1, 1904.

Application filed October 14, 1903. Serial No. 176,936. (No model.)

To all whom it may concern:

Be it known that I, FRANK SCHMITT, a subject of the Emperor of Austria-Hungary, residing at Philadelphia, State of Pennsylvania, have invented a certain new and useful Improvement in Systems for Preventing Collisions, Injury by the Falling in of Bridges, or the Running Over of Persons and Cattle, &c., by Railway-Trains, of which the following is a specification.

My invention relates to a new and useful improvement in systems for preventing collisions, injury by the falling in of bridges, or the running over of persons and cattle, &c., by railway-trains, and has for its object to provide a device of this description which will travel a considerable distance ahead of the train and notify the engineer electrically whenever it comes in contact with a resisting-body.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side elevation of a portion of two locomotives having my improvement applied thereto; Fig. 2, a side elevation of the device, the middle of the same being broken away; Fig. 3, a similar view to Fig. 2, showing the device partially closed; Fig. 4, a plan view of the forward truck of the device.

This device consists, essentially, in a folding framework known as a "lazy-tongs" and represented by the letter A. The rearward end of this framework is connected to a lever B and a slot-bar C. The lever is connected, by a link D, with a suitable motor in the locomotive, and by pulling rearward upon this lever the framework can be folded close to the locomotive, and by pushing forward upon the lever the framework will be extended, so that the forward end will be a considerable distance ahead of the train. At intervals the framework is supported by trucks E, which are secured to the pivotal points of the levers making up the framework. The forward truck is provided with a buffer-bar F, springs G being interposed between the bar and the truck-frame. H represents two contact-points, one located upon the truck-frame and the other upon the buffer-bar, so that if the buffer-bar is pressed inward by coming in contact with a resisting-body the contacts will touch one another and establish an electrical circuit through the wires I, sounding an alarm within the engine.

Thus it will be seen that by the use of my device the engineer may be notified of any obstruction upon the track a considerable time before the engine has reached the same, and he will then be able to stop the locomotive before it reaches the obstruction.

This device would be extremely valuable in foggy weather, dark nights, and upon curves.

Of course I do not wish to be limited to the exact construction here shown, as slight modifications could be made without departing from the spirit of my invention.

Having thus fully described my invention, what I claim as new and useful is—

1. In a device of the character described, a lazy-tongs framework, a lever to which the rear members composing the framework are secured, the lower end of said lever being pivoted to the locomotive, means for operating said lever from the locomotive, the framework extending a considerable distance ahead of the train, trucks for supporting the framework at intervals, a buffer-bar arranged in front of the forward truck, springs interposed between the forward truck and the buffer-bar, electrical contact-points carried by the forward truck and buffer-bar adapted to come in contact with one another when an obstacle is struck, electrical wires connected to said contact-points and extending to the cable of the locomotive, as and for the purpose specified.

2. In a device of the character described, a folding framework adapted to be folded close to the locomotive or extended a distance forward of the same, trucks supporting said framework at intervals, a lever pivoted to the locomotive to which the rearward members of the framework are connected so as to operate said framework to fold or extend the same,

means for operating said lever from the cab of the locomotive, means for sounding an alarm for operating an indicating device in the cab of the locomotive when the forward portion of the framework strikes an obstacle, as and for the purpose specified.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

FRANK SCHMITT.

Witnesses:
MORRIS M. MOSKOWITZ,
H. B. HALLOCK.