

(No Model.)

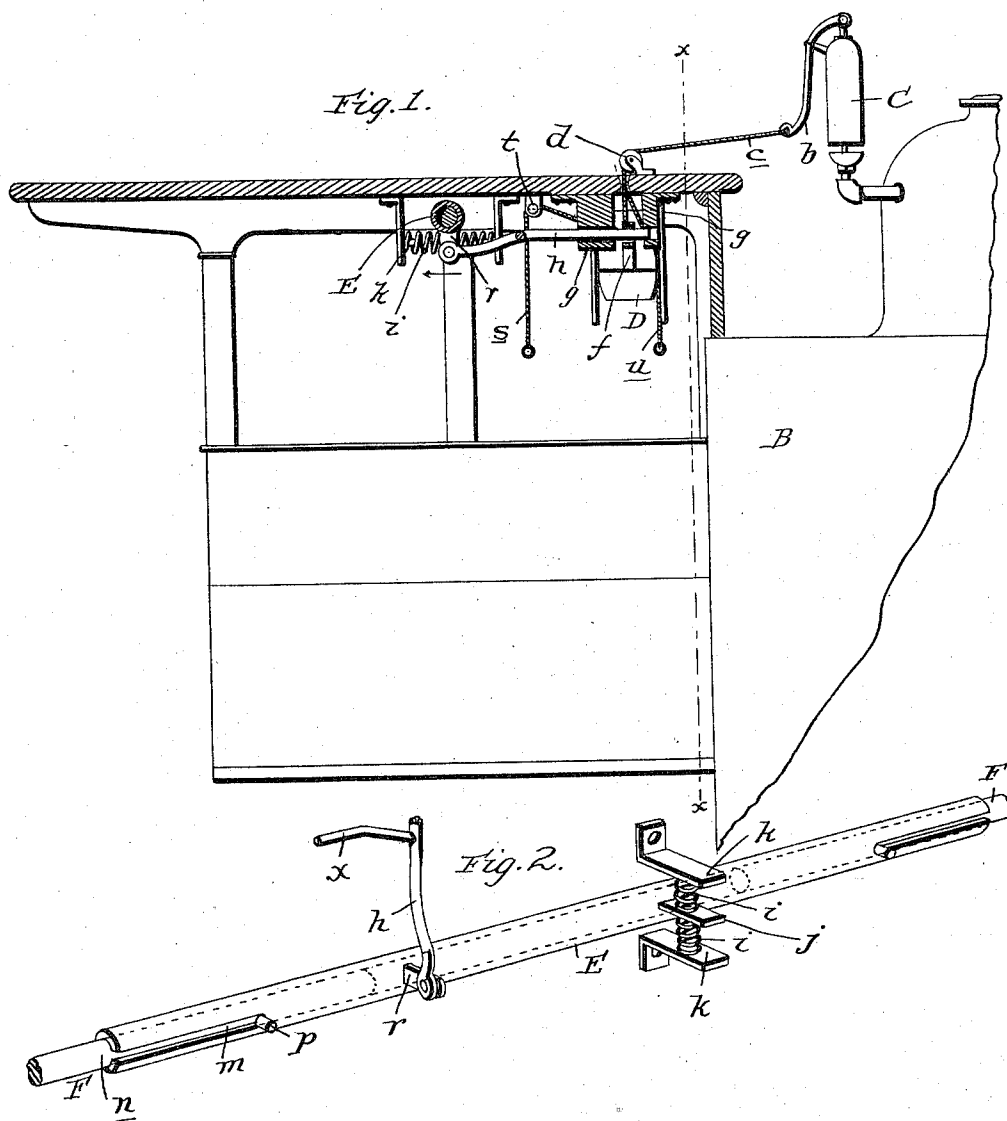
2 Sheets—Sheet 1.

J. PILAUD.

RAILWAY SIGNAL OR WHISTLE BLOWING ATTACHMENT FOR
LOCOMOTIVES.

No. 579,281.

Patented Mar. 23, 1897.



Witnesses:
E. H. Gaider
W. A. James

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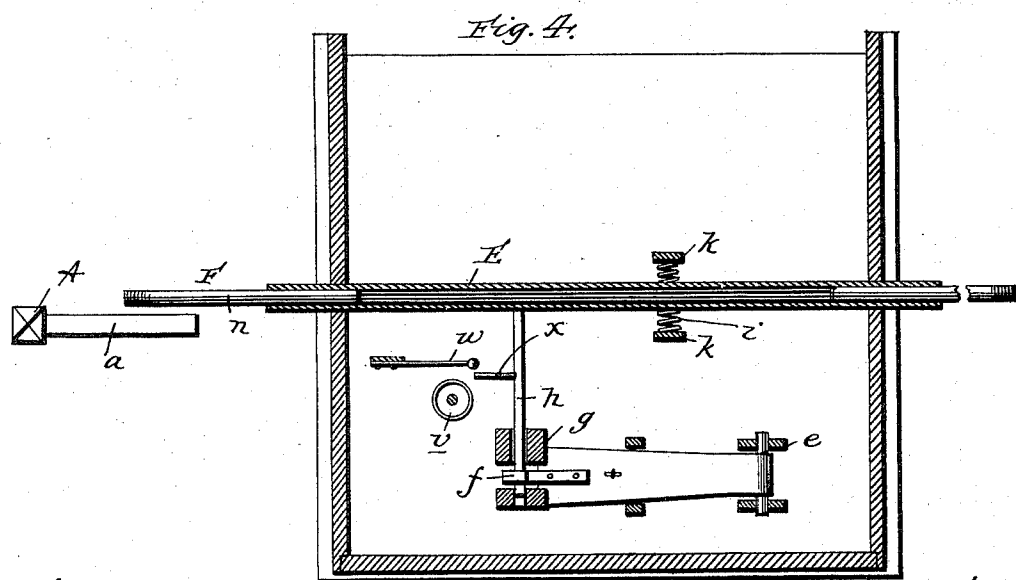
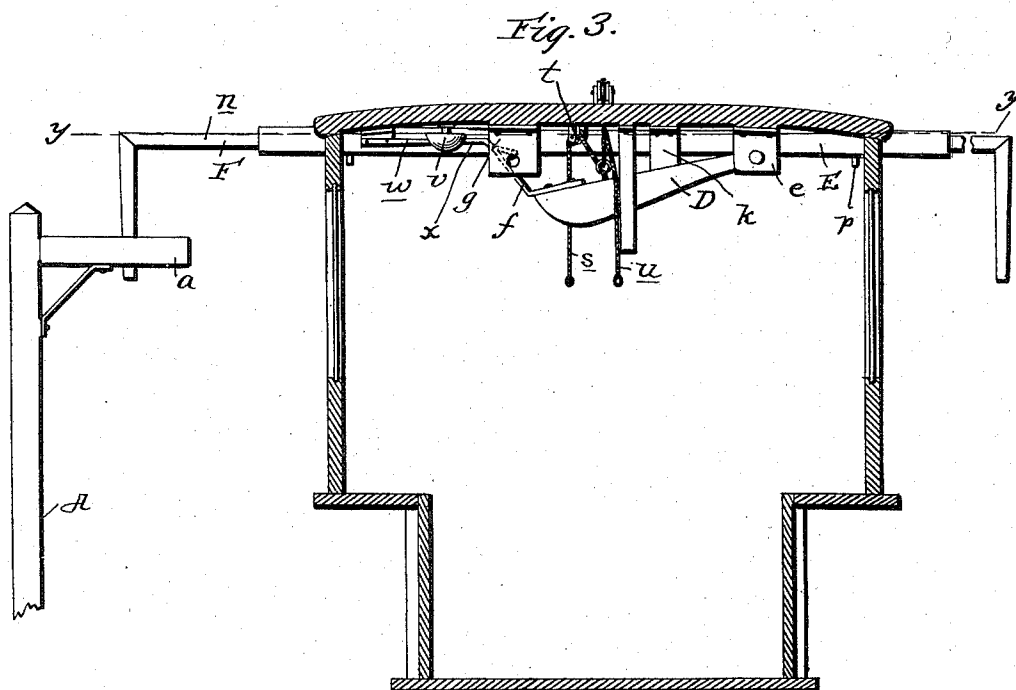
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2 Sheets—Sheet 2.

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RAILWAY SIGNAL OR WHISTLE BLOWING ATTACHMENT FOR
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Witnesses:
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UNITED STATES PATENT OFFICE.

JOSEPH PILAUD, OF COVINGTON, LOUISIANA.

RAILWAY-SIGNAL OR WHISTLE-BLOWING ATTACHMENT FOR LOCOMOTIVES.

SPECIFICATION forming part of Letters Patent No. 579,281, dated March 23, 1897.

Application filed September 24, 1896. Serial No. 606,909. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH PILAUD, a citizen of the United States, residing at Covington, in the parish of St. Tammary and State of Louisiana, have invented certain new and useful Improvements in Whistle-Blowing Attachments for Locomotives; and I do 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 appertains to make and use the same.

My invention relates to improvements in apparatus for automatically blowing a locomotive-whistle as a train approaches a crossing or other point where an alarm should be sounded; and its novelty and advantages will be fully understood from the following description and claims when taken in conjunction with the annexed drawings, in which—

Figure 1 is a detail view, partly in section and partly in elevation, of a locomotive equipped with my improved apparatus. Fig. 2 is a detail sectional perspective view of the rock-shaft. Fig. 3 is a vertical transverse section taken in the plane indicated by the line *xx* of Fig. 1, and Fig. 4 is a horizontal section taken in the plane indicated by the line *yy* of Fig. 3.

In the said drawings similar letters designate corresponding parts in all of the several views, referring to which—

A indicates a post which is designed to be arranged at the side of a railway-track in proximity to a crossing or other point where an alarm should be sounded, and is provided with a lateral arm *a*.

B indicates a locomotive which in general may be of the ordinary construction, and C indicates the whistle, which may have the usual lever *b* and may otherwise be of the ordinary construction.

D indicates a weight which is connected by a cord *c*, which passes over a sheave *d*, with the whistle-lever *b*, and is designed, when released and allowed to drop, to open the whistle, so as to sound an alarm. This weight D in the preferred embodiment of my invention is pivotally connected at one end with two lugs *e*, depending from the top of the locomotive-cab, and it is provided at its opposite end with a hook *f*, which is preferably shaped as shown and formed of spring-steel or other

resilient metal. The said hook *f* of the weight D is designed to take between two apertured lugs *g*, which are connected to the top of the cab and engage the slidable bolt *h*, which extends loosely through said lugs, as shown, and by reason of said hook being formed of resilient material and shaped as shown it will be seen that when the bolt *h* is in the position shown in Fig. 4 and the free end of the weight is raised the hook will give and spring into engagement with the bolt, as illustrated in Fig. 3.

E indicates a hollow rock-shaft which is journaled in suitable bearings in the side walls of the cab, adjacent to the top thereof, and is arranged transverse of the cab, as shown. This hollow shaft E is normally held in and returned to position shown in Fig. 1 by the coiled springs *i*, which are connected to and interposed between an arm *j* on the shaft and hangers *k*, depending from the cab-top, as shown. Said hollow shaft E is provided with longitudinal slots *m*, and it is designed to loosely receive the horizontal portions *n* of angular arms F, which horizontal portions *n* are provided with lugs *p*, arranged in the slots *m* of the shaft, whereby it will be seen that the said arms F are free to be adjusted outwardly and inwardly with respect to the shaft E, but can only turn or move in a vertical direction with the shaft. The shaft E is further provided with an arm *r*, which is loosely connected with one end of the bolt *h*, whereby it will be seen that the bolt *h* will be normally held in the position shown in Fig. 4 to support the free end of the weight D, and will be returned to such position by the springs *i* after the shaft E has been rocked to blow the whistle.

In practice the posts A are arranged at suitable distances in advance of the crossings or other points where it is desired to blow the whistle and in close proximity to the track, and consequently it will be seen that when the engineer of a moving train adjusts the arm F, which is on the same side of the track as the posts, outwardly, said arm will, when it reaches a post A, engage the arm *a* of said post. This will rock the shaft E in the direction indicated by arrow (see Fig. 1) and will draw the bolt *h*, and consequently release the weight D and permit it to fall and open the

whistle, so as to sound an alarm. As soon as the arm *F* passes a post *A* the springs *i* will return the rock-shaft and the parts connected therewith to the position shown in Fig. 1, so that the arm *F* will be in readiness to engage the arm *a* of the next post *A*. The weight *D*, however, must be returned to its normal position by the engineer, and in order to facilitate the raising of the same I prefer to provide the cord *s*, which is connected to the weight and passes over a pulley *t* at the top of the cab and has the pendent end for the grasp of the engineer. By drawing downwardly on such end of the cord *s* the engineer is enabled to readily raise the weight into engagement with the bolt *h*. I also prefer to connect a cord *u* with the whistle-lever *b*, as shown, and carry the same into the cab, so as to enable the engineer to conveniently blow the whistle when desired.

In order to apprise the engineer of the fact that the train is approaching a crossing, I prefer to employ the gong *v*, the spring-hammer *w*, adapted to strike the gong, and the arm *x* on the bolt *h*, all arranged as better shown in Fig. 4. In virtue of this construction it will be seen that when the shaft *E* is rocked by the arm *F* the gong *v* will be struck and an alarm will be sounded. The said gong *v*, the hammer *w*, and the arm *x* on the bolt *h* may be used in conjunction with the weight for blowing the whistle, or when desired the weight may be dispensed with and the whistle may be blown by the engineer after he is apprised of the fact that the train is approaching a crossing by the ringing of the gong *v*. On the other hand, the gong *v*, hammer *w*, and arm *x* may be dispensed with and the weight employed to automatically blow the whistle, in the manner first described.

It will be observed from the foregoing that in virtue of my improvements the whistle will be blown as the train approaches each

crossing, and it will also be seen that the apparatus is very simple and durable and embodies no complicated parts which are likely to get out of order after short use.

Having described my invention, what I claim is—

1. The combination of a hollow rock-shaft arranged on a locomotive and having a longitudinal slot, an arm adjustable lengthwise in the rock-shaft and having a lug engaging the slot in said shaft, said arm being adapted to engage a stationary obstruction in its path, a bolt connected with the rock-shaft, and an alarm adapted to be actuated by the movement of the bolt, substantially as and for the purpose set forth.

2. The combination of a rock-shaft arranged on a locomotive and adapted to engage a stationary obstruction, a weight, a bolt arranged in bearings and connected with the rock-shaft and adapted to normally support the weight, a steam-whistle having a lever, and a connection between the weight and lever, substantially as and for the purpose set forth.

3. The combination of a hollow rock-shaft arranged on a locomotive and having a longitudinal slot, and also having an arm *j*, an arm adjustable lengthwise in the rock-shaft and having a lug arranged in the slot thereof, springs arranged on opposite sides of and engaging the arm *j*, of the rock-shaft, a weight pivoted at one end and having a resilient hook at its opposite end, a bolt connected with the rock-shaft and arranged in bearings and adapted to engage the hook of the weight and support said weight, a steam-whistle having a lever, and a connection between said lever and the pivoted weight.

JOSEPH PILAUD.

Witnesses:

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