

F. PÉLISSIER.
SAFETY DERAILING DEVICE.
APPLICATION FILED JULY 11, 1908.

910,847.

Patented Jan. 26, 1909.

2 SHEETS—SHEET 1.

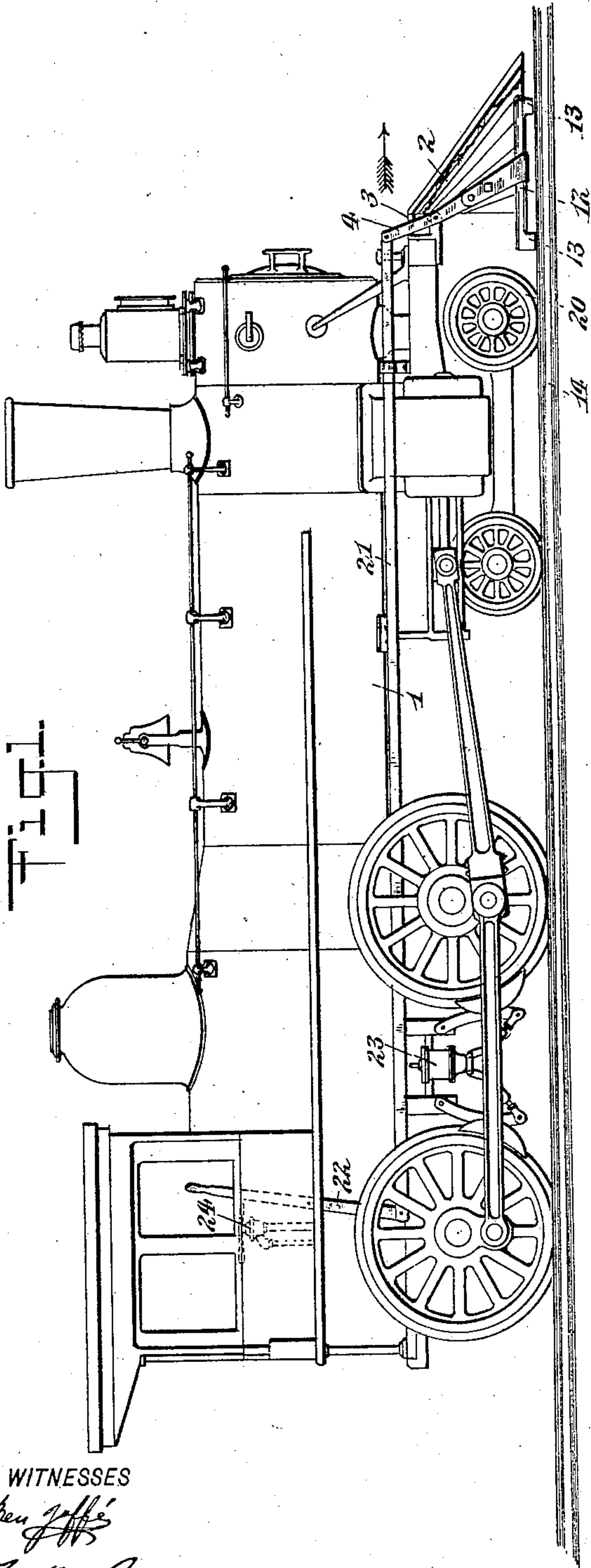
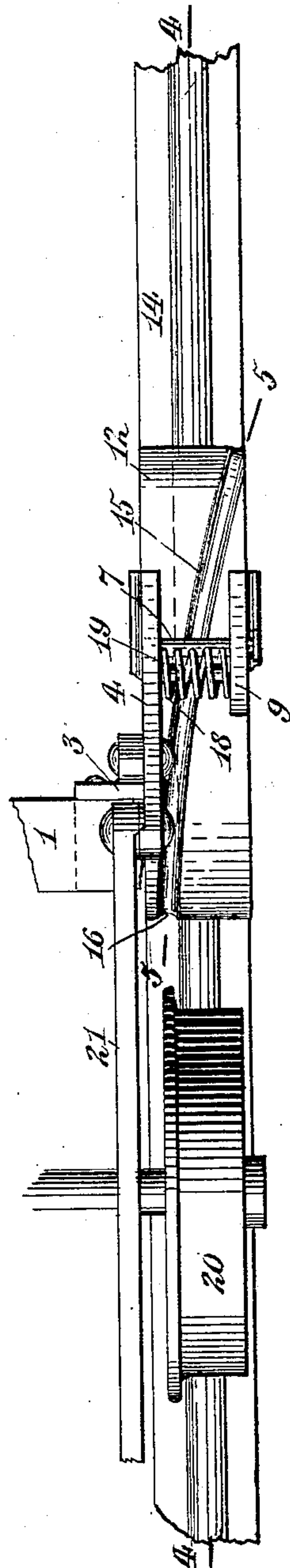


Fig. 1.

WITNESSES

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Fig. 2.



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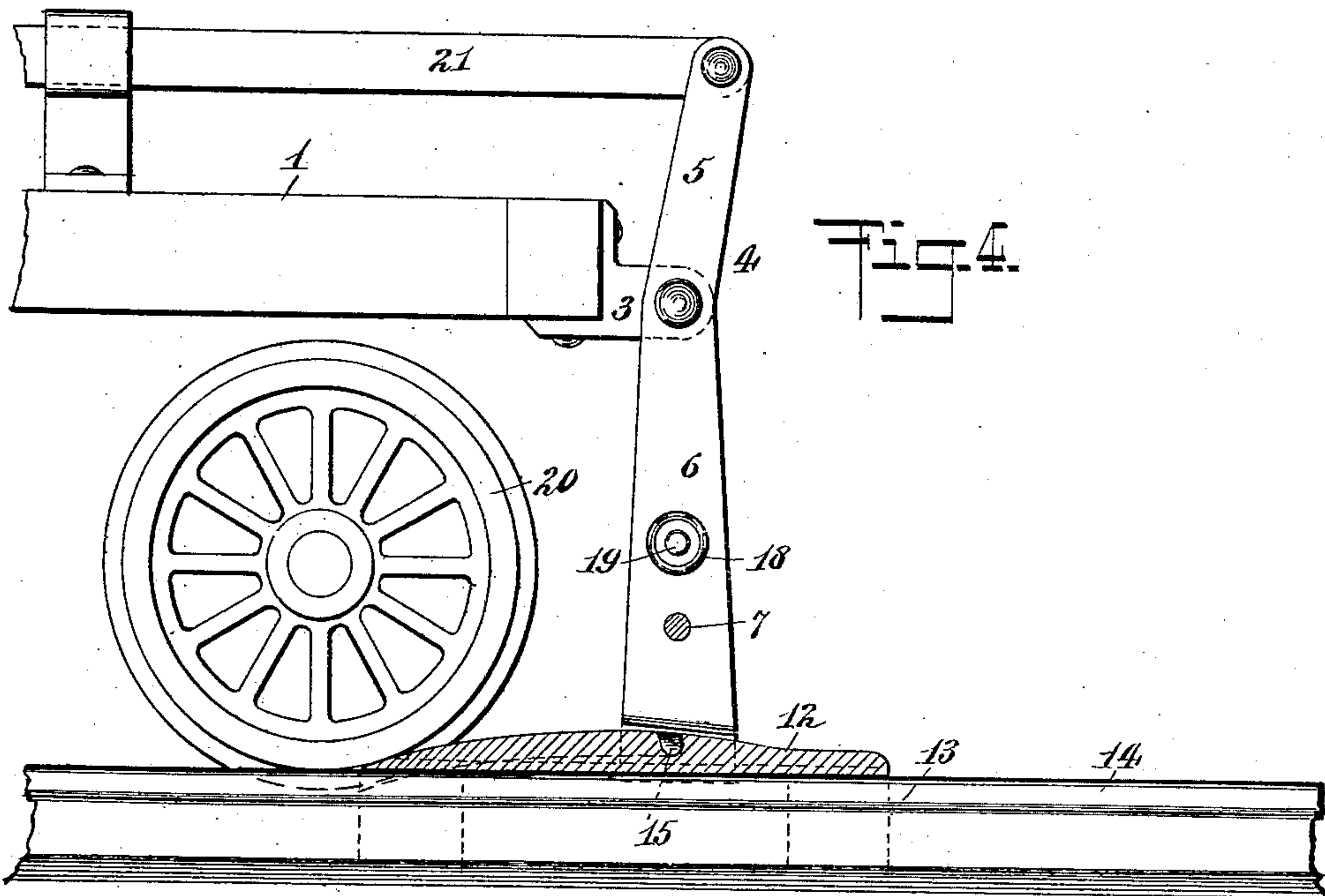
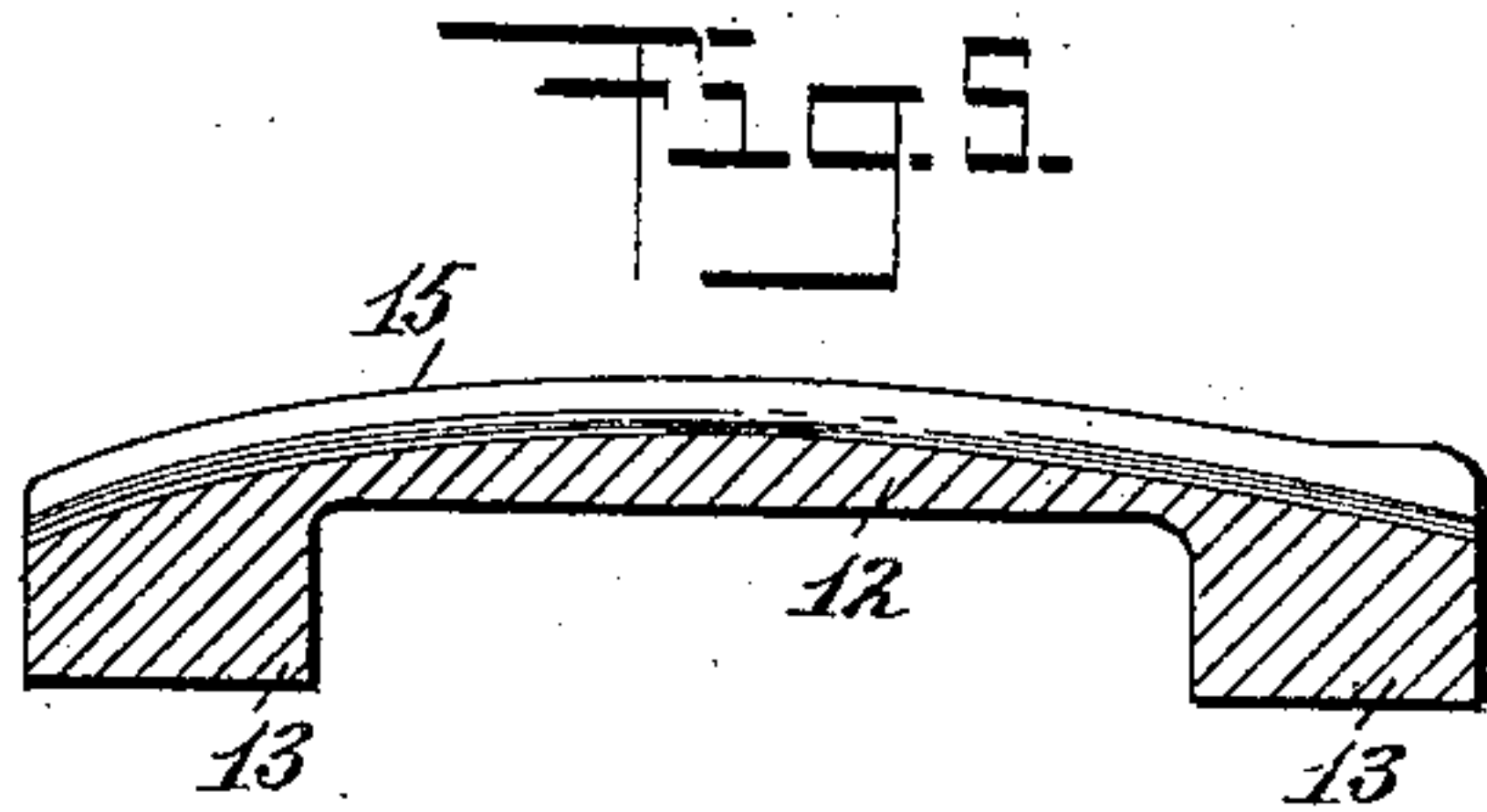
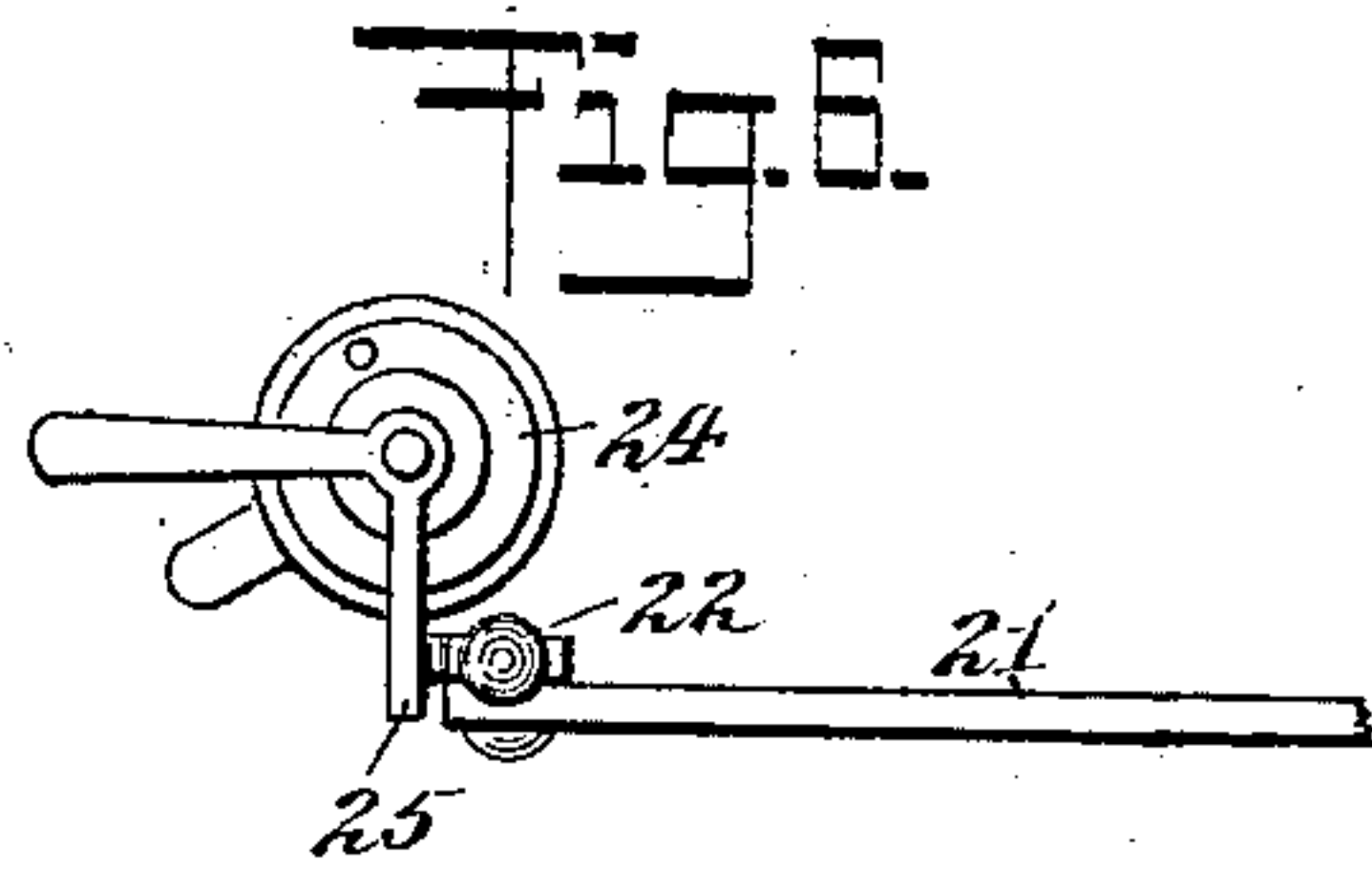
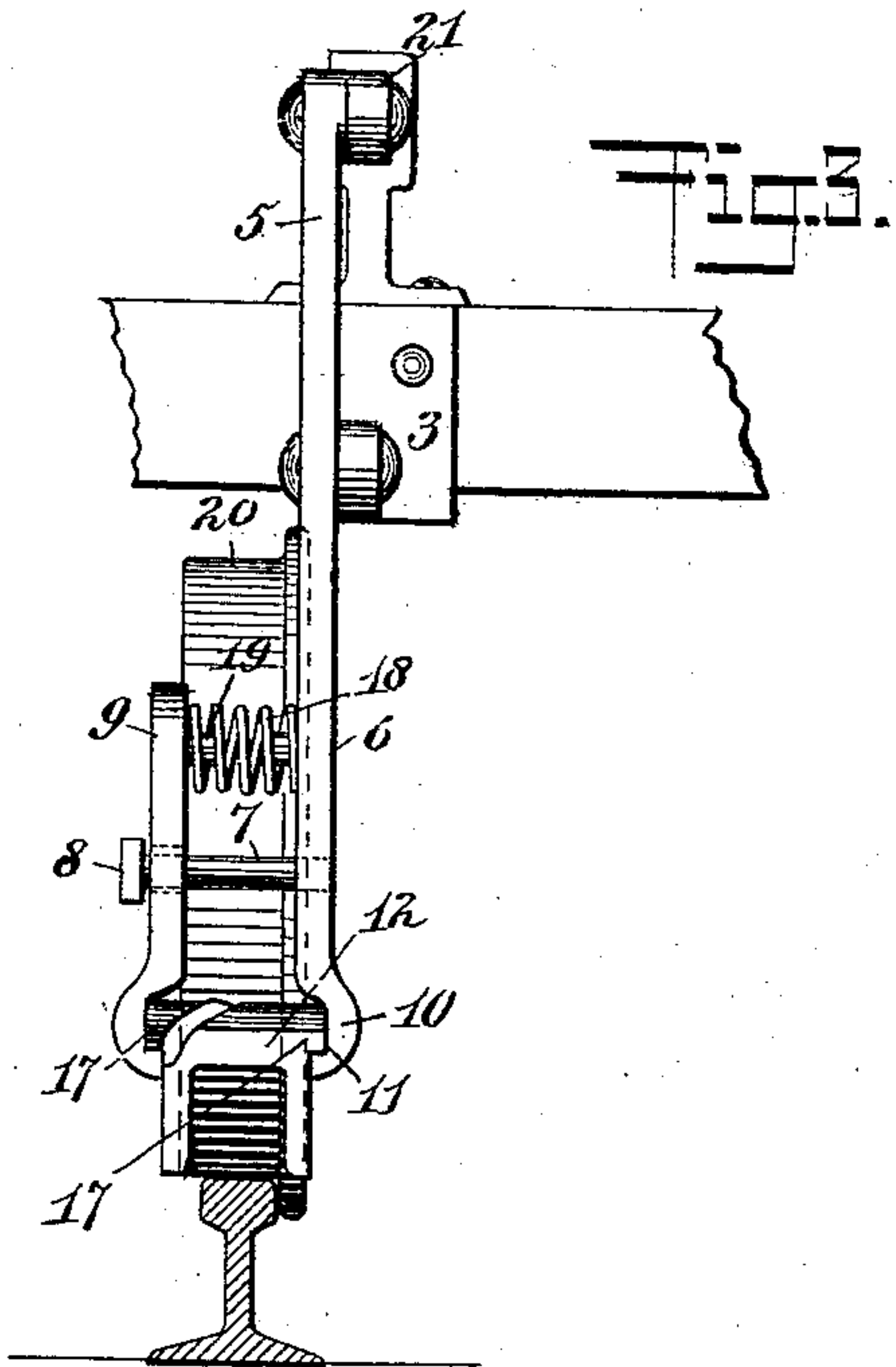
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WITNESSES.

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UNITED STATES PATENT OFFICE.

FÉNELON PÉLISSIER, OF GONAIVES, HAITI.

SAFETY DERAILING DEVICE.

No. 910,847.

Specification of Letters Patent.

Patented Jan. 26, 1909.

Application filed July 11, 1908. Serial No. 443,019.

To all whom it may concern:

Be it known that I, FÉNELON PÉLISSIER, a citizen of the Republic of Haiti, and a resident of Gonaives, Haiti, have invented a new and Improved Safety Derailing Device, of which the following is a full, clear, and exact description.

This invention relates to safety devices such as carried by locomotives or cars for preventing accidents from collisions.

The object of the invention is to produce a simple device which will operate to derail a car or locomotive to which it is attached.

In its construction the invention embodies an arrangement for normally supporting a derailing skid near the rail just in advance of the forward truck.

When the device operates, the skid is depressed until it rests upon the rail and becomes detached from its support. The wheels of the truck then move up on the skid and derail the car or locomotive.

The invention consists in the construction and combination of parts to be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of a locomotive to which the invention has been applied; Fig. 2 is a plan showing the parts of the device and illustrating the relation of the device to the wheel which it derails; Fig. 3 is a front elevation of a part of the mechanism, further showing its relation to the wheel which it derails and showing its position with respect to the rail, which is shown in cross section; Fig. 4 is a side elevation upon an enlarged scale, showing certain parts of the mechanism and illustrating the manner in which the skid is moved into position; this view may be considered as a vertical section on the line 4—4 of Fig. 2; Fig. 5 is a section taken on the line 5—5 of Fig. 2, passing through the skid in a vertical plane; and Fig. 6 is a plan, showing the engineer's brake valve which applies the brakes to the locomotive and which is adapted to be operated by the same lever which throws the derailing skid into operation.

Referring more particularly to the parts, 1 represents a locomotive of any common form. To the forward bumper of this locomotive a cowcatcher 2 of common form, is attached by means of a suitable bracket 3. On the

bracket 3, under the upper part of the cowcatcher, a hanger or lever 4 is pivotally attached. This lever has a short arm 5 which extends upwardly, as shown in Fig. 4, and a long arm 6 which extends downwardly. Near the lower end of the long arm 6, a stud 7 projects outwardly, said stud having an enlarged head 8 which retains a floating clamp 9, which is loosely mounted on the stud, as shown. This floating clamp extends longitudinally with the lower end of the arm 6, and the lower ends of both the arm and clamp are formed into jaws 10 which are undercut so as to form recesses 11 on their adjacent faces. This device is mounted at the right side of the locomotive, as indicated in Fig. 1.

In the recesses or grooves 11 of the jaws 10, the derailing skid 12 is mounted. The form of this skid is very clearly shown in Figs. 2 and 5. It consists of an elongated block which is formed at its ends into saddles 13 which are adapted to seat upon the rail 14. On its upper side the skid is provided with a derailing groove 15 which has its origin at the point 16 just within the inner side of the rail head, as shown in Fig. 2. As indicated in Fig. 5, this groove 15 has its greatest elevation near the middle of the block and extends completely across the rail so that a wheel running on the rail will be guided by means of its flange upwardly over the skid and off the rail.

As indicated in Fig. 3 the skid is provided on its sides with longitudinally disposed ribs 17 which are received in the grooves 11 of the jaws in such a way that the clamp will support the skid in position just above the rail. The normal position of the skid is shown in Fig. 1.

In order to maintain the jaws in engagement with the skid as shown, I provide a helical spring 18 which is disposed between the floating clamp 9 and the arm 6 just above the stud 7. This spring is held in position by pins 19 which project toward each other from the adjacent faces of the clamps. The skid tapers downwardly toward its rear end, as indicated in Fig. 4 so as to facilitate the wheel 20 of the truck in its over-riding movement.

To the upper arm 5 of the lever 4, a link 21 is attached, and this link extends rearwardly along the side of the locomotive and to it is attached a lever 22 which extends upwardly into the cab, as shown in Fig. 1.

This lever 22 affords means for moving the arm 6 of the lever 4 rearwardly when the locomotive is to be derailed.

The locomotive is provided with the usual
5 compressed air brake mechanism 23 which is adapted to be controlled by the engineer's valve 24 disposed in the cab. The lever 25 of this valve 24 has an arm which projects into the path of the lever 22, so that when
10 the lever 22 is actuated to derail the train the brakes will be automatically applied.

The mode of operation of the derailing device will now be described: The skid 12 is normally carried in the position shown in
15 Fig. 1 just above the right-hand rail 14. When it is desired to derail the train or locomotive, the lever 22 is pulled rearwardly. This movement forces the lower arm 6 of the lever 4 rearwardly so that the skid descends
20 onto the rail, being facilitated in its movement by the saddles 13 at its ends. The rearward movement of the skid is sufficient to bring its tapered rear end under the tread of the wheel 20, as shown in Fig. 4, and as
25 soon as the wheel is struck by the skid it begins to ride up on the skid and holds it firmly upon the rail; the advancing movement of the locomotive operates to disengage the skid from the jaws 10, which clamp
30 it resiliently by the means described above. The flange of the wheel 20 coming into the groove 15, moves the wheel upwardly and carries it across the rail and off the track. Simultaneously with the operation of the
35 skid, the air brake is applied through the medium of the valve 24, which is operated through the arm of the valve lever 25 lying in the path of the lever 22, as described. The skid remains on the rail and derails all
40 the wheels which follow behind.

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

1. A car or locomotive having a hanger
45 mounted thereupon, a skid, said hanger having means for resiliently holding said skid, and means for moving said hanger to deposit said skid on the rail before a wheel.

2. A car or locomotive having a movable
50 hanger mounted thereupon, a skid, said hanger having jaws engaging said skid and

normally supporting the same, and means for actuating said hanger to deposit said skid on the rail just before the wheel and touching the wheel.

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3. A car or locomotive having a hanger mounted thereupon, said hanger having a pair of oppositely disposed jaws, a spring forcing said jaws together, a skid normally held between said jaws and disposed over
60 the rail, and means for actuating said hanger so as to move said skid rearwardly onto the rail and under the wheel.

4. A car or locomotive having a wheel adapted to run upon a track, a hanger
65 mounted in advance of said wheel, a skid disposed over the rail of said wheel, said hanger having resilient means for normally supporting said skid, and means for actuating said hanger to force said skid under the
70 tread of said wheel.

5. A car or locomotive having a derailing skid, a lever connected with said skid for throwing the same into operation, brake mechanism for said locomotive, and means
75 for actuating said brake mechanism through the medium of said lever.

6. A car or locomotive, a skid adapted to derail the same, a hanger normally supporting said skid in an inoperative position, a
80 lever connected with said skid and adapted to throw the same into operation, an air brake mechanism, and means for applying the air brakes actuated by said lever.

7. A car or locomotive in combination
85 with a lever mounted thereupon, said lever having an arm projecting downwardly toward the rail and having a jaw, a floating clamp mounted on said arm and having a jaw opposite said first jaw, and means for
90 resiliently pressing said jaws toward each other, a skid normally engaged by said jaw and disposed over the rail, and a lever connected with said first lever for forcing said skid onto the rail and under the wheel.

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In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FÉNELON PÉLISSIER.

Witnesses:

F. D. AMMEN,
JOHN P. DAVIS.