

No. 865,287.

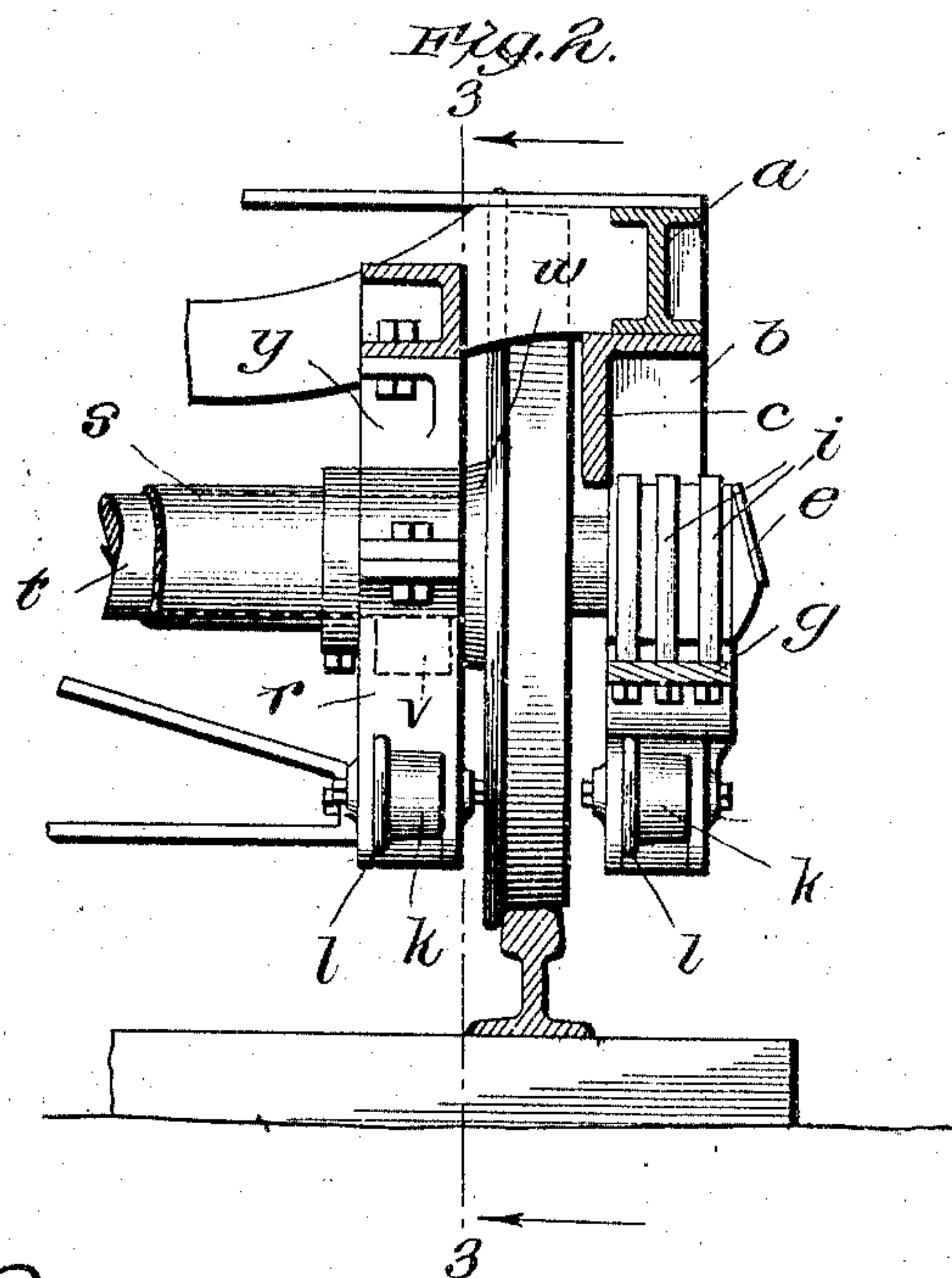
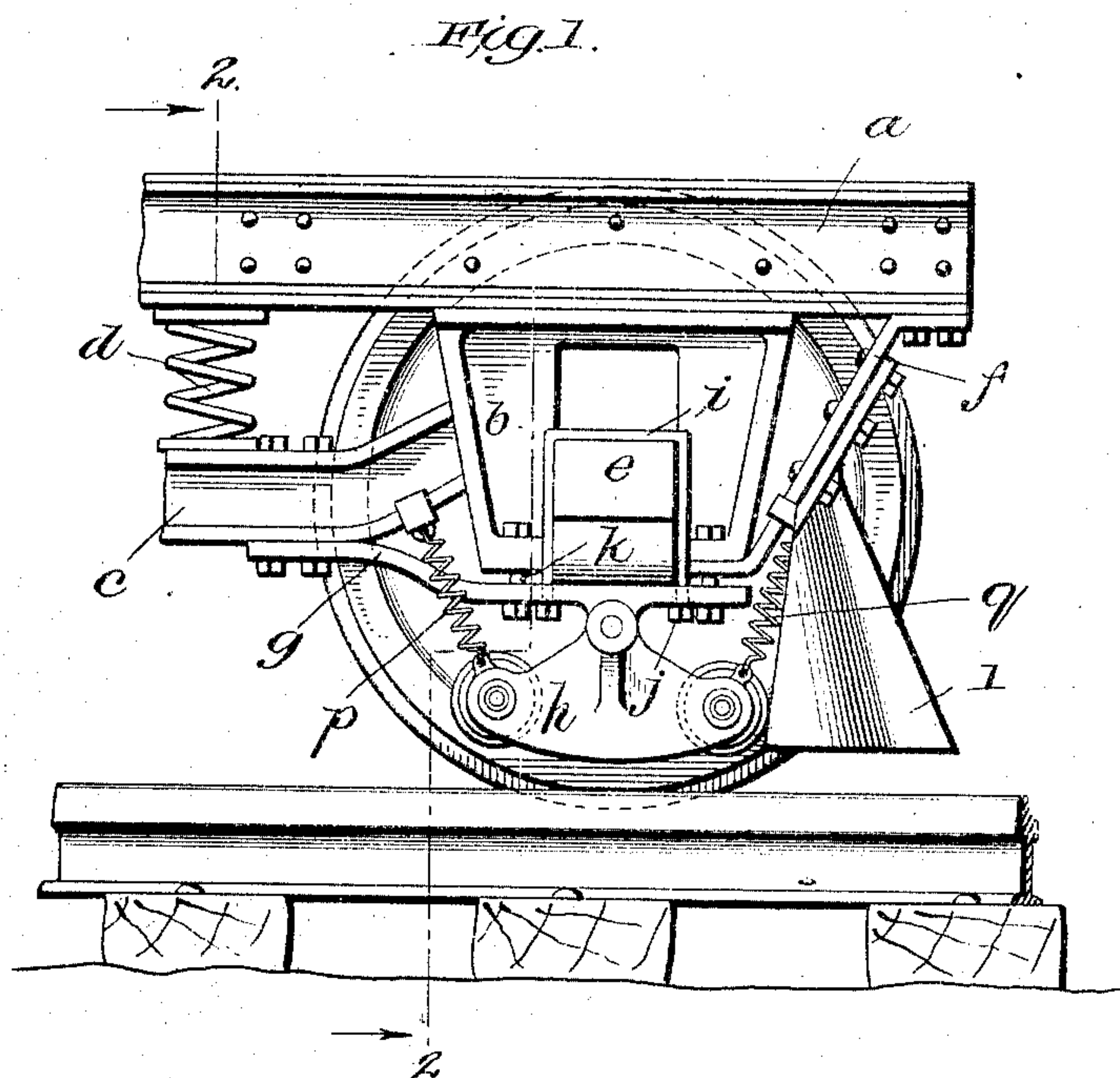
J. T. ANDREW.

PATENTED SEPT. 3, 1907.

SAFETY APPLIANCE FOR RAILROAD CARS.

APPLICATION FILED MAR. 18, 1907.

2 SHEETS—SHEET 1.



Witnesses
Geo. A. Byrne.
A. W. Neale Jr.

Inventor
J. T. Andrew.
By Wilkinson & Fisher,
Attorneys,

No. 865,287

PATENTED SEPT. 3, 1907.

J. T. ANDREW.
SAFETY APPLIANCE FOR RAILROAD CARS.

APPLICATION FILED MAR. 18, 1907.

2 SHEETS—SHEET 2,

Fig. 3.

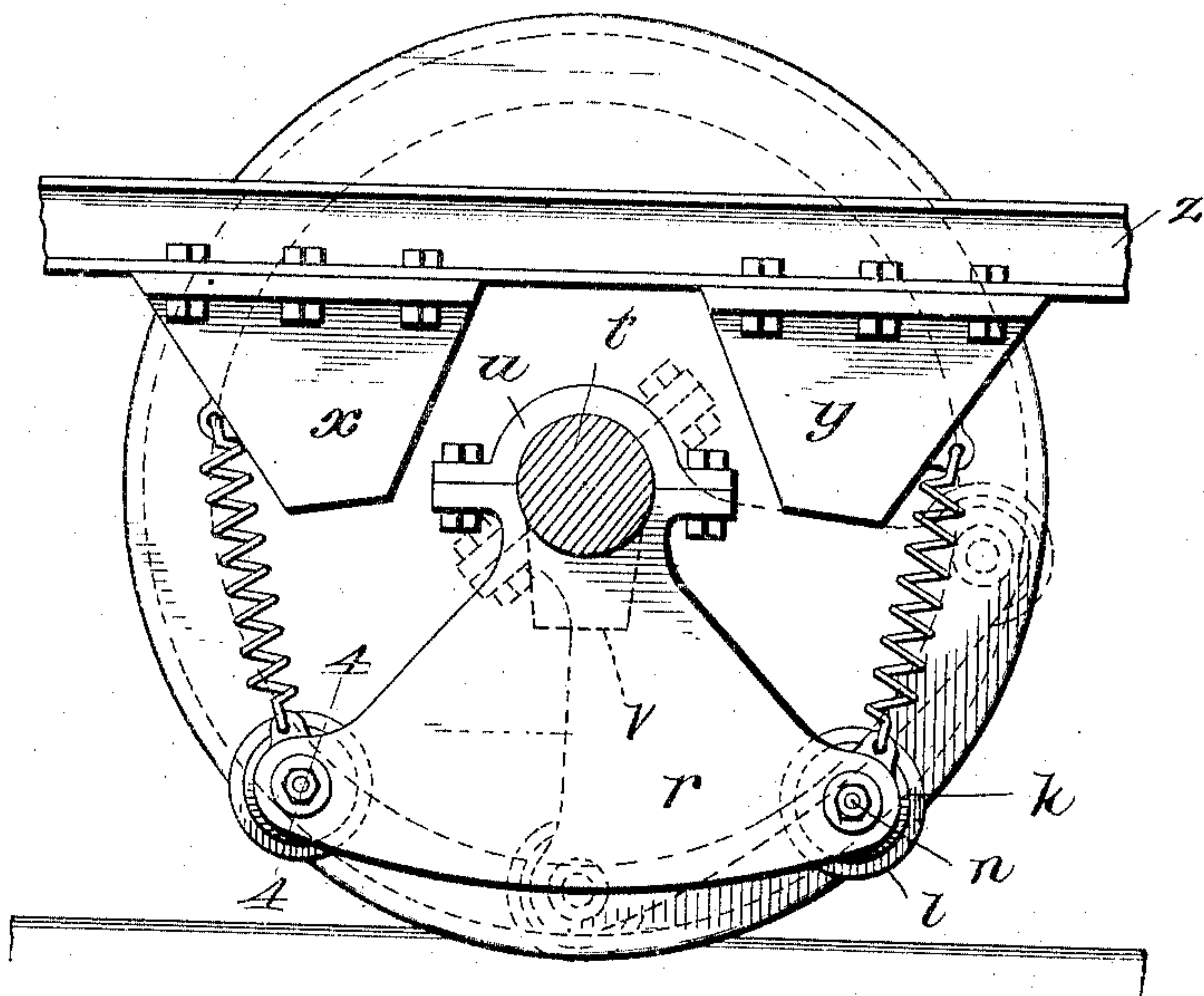


Fig. 4.

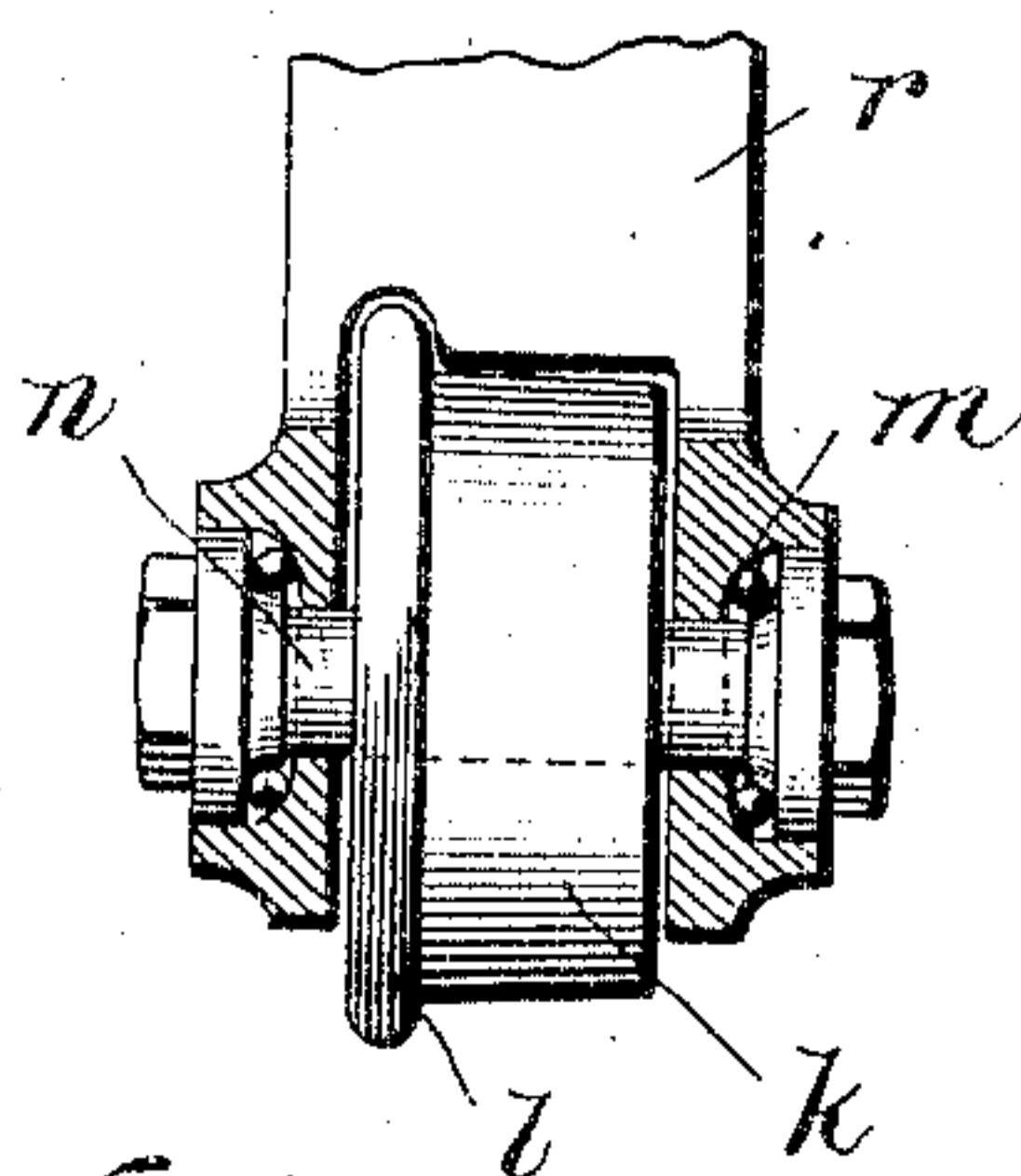
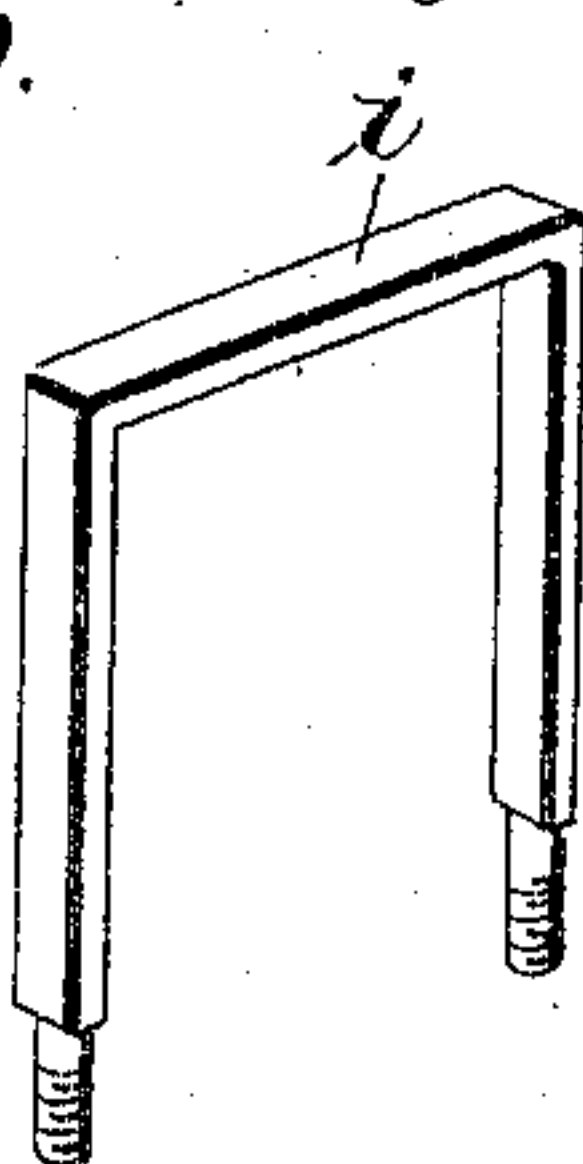


Fig. 5.



Witnesses

Geo. A. Byrne.
A. W. Neale Jr.

Inventor

J. T. Andrew.
By Wilkinson & Fisher,
Attorneys.

UNITED STATES PATENT OFFICE.

JAMES T. ANDREW, OF MONTGOMERY, ALABAMA.

SAFETY APPLIANCE FOR RAILROAD-CARS.

No. 865,287.

Specification of Letters Patent.

Patented Sept. 3, 1907.

Application filed March 18, 1907. Serial No. 362,975.

To all whom it may concern:

Be it known that I, JAMES T. ANDREW, a citizen of the United States, residing at Montgomery, in the county of Montgomery and State of Alabama, have invented certain new and useful Improvements in Safety Appliances for 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 appertains to make and use the same.

My invention relates to improvements in safety devices for railroad cars, and the object of my invention is to provide means whereby derailment of a train, with the injurious effects resulting therefrom, shall be rendered practically impossible, this application being an improvement upon my former patent No. 844,288 dated February 12, 1907, and my former application, Serial No. 349,727 dated December 27, 1906.

My invention is applicable not only to railroad cars, but also to electric cars of all descriptions, and to locomotives.

With this object in view, my invention consists in the construction and combinations of parts as hereinafter described and claimed.

In the accompanying drawings; Figure 1 is a side view of a portion of a passenger truck showing my invention applied thereto and also showing part of the track. Fig. 2 is a cross section, taken on the line 2—2 of Fig. 1, and looking in the direction of the arrows. Fig. 3 is a cross section on the line 3—3 of Fig. 2, looking in the direction of the arrows. Fig. 4 is a cross section, on an enlarged scale, taken on the line 4—4 of Fig. 3, and Fig. 5 is a perspective view of one of the supporting straps.

a represents the truck side frame, *b* the pedestal, *c* the equalizer bar, *d* one of the supporting springs, *e* the journal box and *f* a brace, all of these parts being of the ordinary construction.

Firmly bolted to the equalizer bar is a frame *g* which carries the shoe *h*. The outer shoe of each pair is pivoted on a frame, such as *g*, and this frame is firmly secured to the journal box by U shaped hangers *i* secured at the ends by bolts *j*, so that the equalizer bar, shoe frame, shoe and journal box are all connected together and move together. Bolts *k* pass through the shoe frame *g* and loosely through the lower part of the pedestal *b*.

Near each end of each of the shoes is mounted a roller *l*, provided with an enlarged rim *l'*, which is supported in bearings at the end of the shoe, as shown in Figs. 3 & 4, friction balls *m* being located between the axle end of the roller and ends of the shoe, so that said rollers move with the greatest ease.

Springs *p* and *q* are connected to the roller and to the equalizer bar and brace *f* respectively, which springs normally keep the shoe *h* suspended in its proper position as shown in Fig. 1.

The inner shoe *r* of each pair is substantially similar in construction to the outer shoe but is supported directly on the car axle *t*, the sleeve *s* preventing its movement in one direction while the enlargement *w* of the hub of the car wheel prevents its movement in the other direction longitudinally of the axle.

The shoe *r* is supported on the axle *t* by means of a divided bearing *u* and the shoe is cut away as shown in dotted lines in Fig. 3, for the reception of oily waste for the purpose of lubrication. In other respects the inner shoe *r* is the same as the outer shoe *h*.

To limit the upward movement of the shoe *r* in either direction I have provided downwardly extending brackets *x* and *y* attached to the beam *z* forming a part of the car frame-work.

The particular improvements covered by the present application are the means for suspending the shoes and the provision of anti-friction rollers in each shoe.

Snow shields *1* are provided as in my application Serial No. 349,727 to prevent the shoe from being operated by snow or other obstructions along the track.

The movement of the shoes is adapted to set the brakes as described in my former patent No. 844,228.

Having thus described my invention, I claim:—

1. In a safety appliance for cars and locomotives, the combination of trucks and means carried thereby for automatically lifting said trucks and applying the braking action in case of accident, said means including spring supported shoes and anti-friction rollers located near each end of said shoes, substantially as described.

2. In a safety appliance for cars and locomotives the combination of trucks having side beams, pedestals and equalizers, of a pair of spring-controlled shoes for each wheel, on either side thereof, said shoes being each provided with anti-friction rollers near their ends, substantially as described.

3. In a safety appliance for cars and locomotives the combination of the car frame, pedestals, equalizer bars, car axle and journal box with a pair of shoes for each wheel each shoe being provided with anti-friction rollers near each end, one of said shoes being mounted on the car axle inside the car wheel, and a shoe frame bolted to the equalizer bar and carrying the other of said shoes, and hangers passing through said shoe frame and around said journal box, substantially as described.

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

JAMES T. ANDREW.

Witnesses:

E. WAGNER,
E. J. HIGGINS.