Oct. 9, 1962 F. KENNEDY 3,057,307

RAIL-CAR TRUCK MOUNTING

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FIG. 1

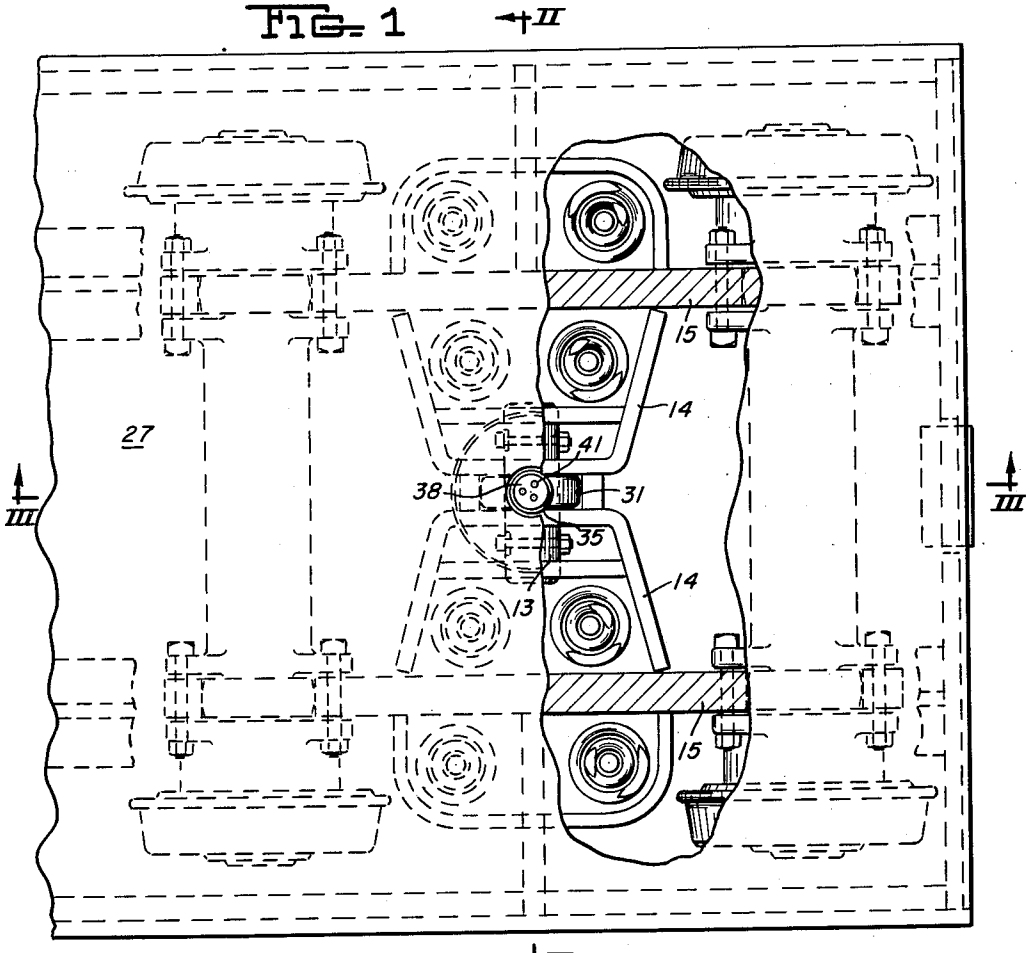
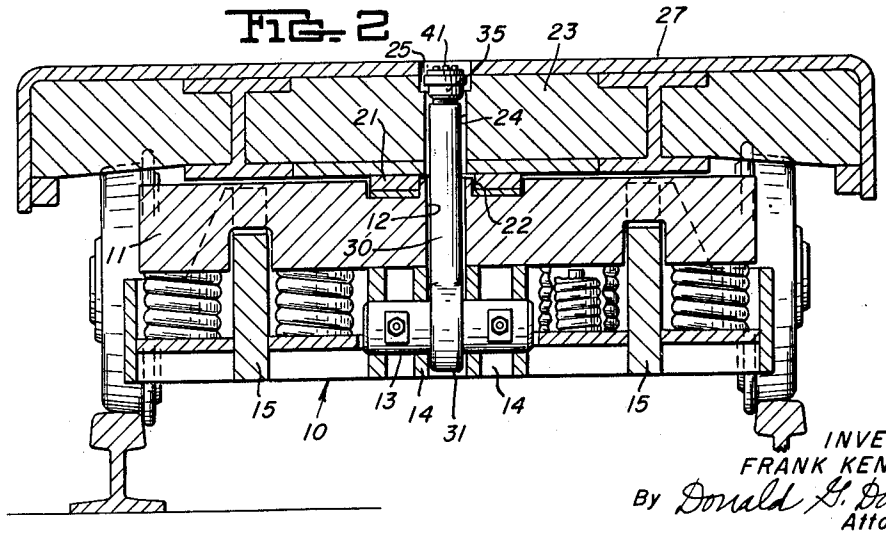


FIG. 2



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FIG. 3

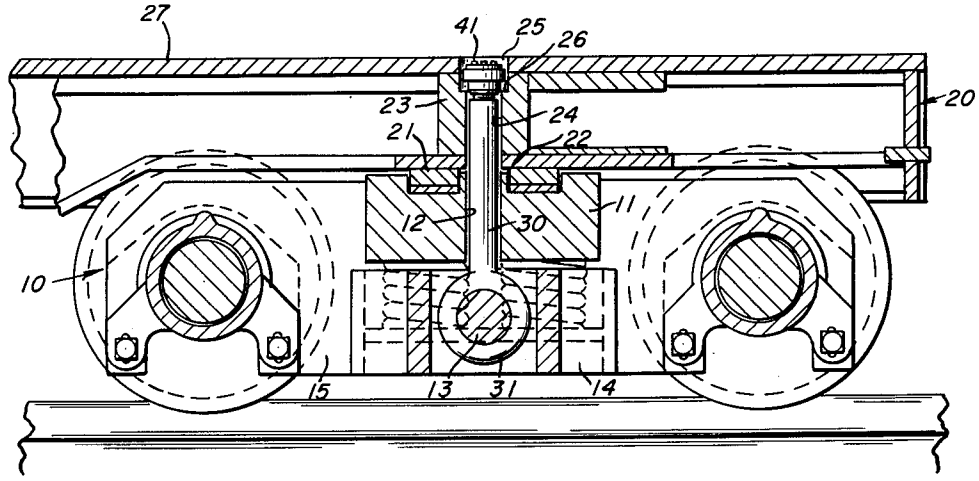
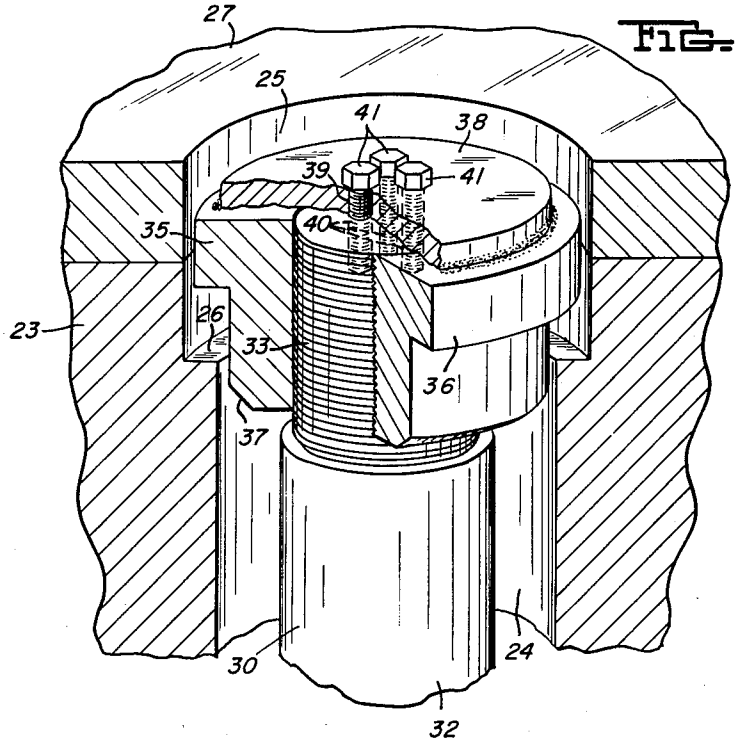


FIG. 4



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RAIL-CAR TRUCK MOUNTING

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2 Claims. (Cl. 105—200)

This invention relates generally to railway cars, and more particularly to devices for fastening railway trucks and bodies. This invention is particularly suited for use in heavy-duty railway cars used in the steel industry for transporting ingot molds or other heavy objects.

It is a principal object of this invention to provide a fastening device which will prevent the separation of railway trucks and bodies in case of accidents.

A more particular object of this invention is to provide a device for fastening railway trucks to bodies which is easily replaced and removed, yet which will provide a positive lock against separation of the truck and bodies.

Other objects will appear and a fuller understanding of this invention may be had by reference to the following description and drawings, in which:

FIGURE 1 is a plan view of a railway truck fastened to a body according to this invention;

FIGURE 2 is a sectional view taken along the plane designated by line II—II of FIGURE 1;

FIGURE 3 is a longitudinal sectional view taken along the plane designated by line III—III of FIGURE 1; and

FIGURE 4 is a perspective view of one end of the fastening device.

Referring now to the drawings, a heavy-duty railway truck is designated by the reference character **10**. The truck includes a truck bolster **11** which has a vertical opening **12**. The truck also includes a rocker pin **13** spaced below the truck bolster **11** which holds together a pair of brackets **14** mounted on side sills **15**.

A body **20** is supported on the truck **10** by a body bearing **21** which provides for relative horizontal rotation between the truck **10** and the body **20**. This type of mounting accommodates movement of the body relative to the truck when the car passes around a curve or over uneven track. The bearing **21** has a vertical opening **22** aligned with the opening **12** in the truck bolster. A body bolster **23** is provided and has a vertical opening **24** aligned with the openings **12** and **22**. The opening **24** is counter bored as shown at **25** at the upper end which counter bore terminates at a shoulder **26** spaced below the flood bed **27**.

The fastening device of this invention includes a king pin **30**. The king pin **30** has an eye loop **31** formed at one end thereof which loop surrounds the rocker pin **13**. The pin **30** has a shank **32** extending through the openings **12**, **22** and **24**, and terminating at an end portion **33** disposed in the counter bore **25**. The end portion **33** is threaded for the reception of a cap **35**.

The cap **35** is threadedly engaged on the end portion **33**. The cap **35** includes a flange **36** which is normally spaced from the shoulder **26** when the cap is threaded on the king pin. The flange **36** is positioned to abut the shoulder **26** upon relative separation movement of the body **20** and the truck **10**. The spacing of the flange **36** from the shoulder **26** provides for limited movement between the body and the truck due to weight variations on the body, but prevents separation of the body and the

truck. Thus, upon an accident, which would tend to separate the body from the truck, such separation will be prevented by the abutting of the flange **36** and the shoulder **26**.

The cap is beveled at its lower end as shown at **37**. This bevel will provide a clearance between the lower portion of the cap **35**, and the shoulder **26**, thus preventing any seating of the bottom of the cap on the shoulder **26** as a result of an accident.

Constant jarring and movement of the truck and body often tends to loosen the cap; hence, a locking device for the cap is provided. The locking device includes a plate **38** welded to the top of the cap, and which is a part thereof. The plate **38** has three circumferentially spaced apertures **39**. Three threaded holes **40** are similarly spaced on the end of the king pin and are aligned with the apertures **39** when the cap is threaded on the king pin. Three cap screws **41** project, one through each aperture, and are threaded into the holes **40**. This secures the cap **35** firmly in place and prevents unintended loosening of the cap. Preferably, the tops of the cap screws **41** lie below the floor bed **27** of the body. For maintenance and repairs the cap screws **41** may be removed by any conventional wrench, and a special three pronged tool (not shown) is used to remove the cap **35**.

While one embodiment of this invention has been shown and described, it will be apparent that other adaptations and modifications may be made without departing from the spirit and scope of the following claims.

I claim:

1. In a railway car having a body and a truck and a bearing rotatably supporting the body on the truck, a body bolster carried by said body and a truck bolster carried by said truck, a rocker pin carried by said truck below said truck bolster, the truck bolster, the bearing, and the body bolster having vertically aligned openings therethrough, the opening in said body bolster being counter bored at its upper end, said counter bore terminating at a shoulder, the combination therewith of a king pin, said king pin having an eye loop around said rocker pin, said king pin having a shaft extending through said openings and terminating at a threaded end portion disposed in said counter bore, a cap threadably engaged on said end portion of the king pin, said cap having a flange disposed in said counter bore, said flange being selectively positionable with respect to said shoulder by rotation of said cap on said king pin, said cap having an end plate, said end plate having a plurality of apertures and the end portion of said king pin having a like number of threaded holes therein, said apertures and said holes on the king pin being aligned, and a screw passing through each aperture and threadably engaged in the aligned hole to prevent rotation of said cap whereby the selected spacing of said flange is maintained, said cap having a lower end normally positioned below said shoulder, said lower end being beveled to prevent seating of the lower end of the cap on the shoulder when the body moves with respect to said king pin.

2. In a railway car having a body and a truck and a bearing rotatably supporting the body on the truck, a body bolster carried by said body, a bearing on the bottom of said body and a truck bolster carried by said truck, a rocker pin carried by said truck below said truck bolster, the truck bolster, the bearing, and the body bolster having vertically aligned openings therethrough,

the opening in said body bolster being counter bored at its upper end, said counter bore terminating at a shoulder, the combination therewith of a king pin, said king pin having an eye loop around said rocker pin, said king pin having a shaft extending through said openings and terminating at a threaded end portion disposed in said counter bore, a cap threadably engaged on said end portion of the king pin, said cap having a flange disposed in said counter bore, said flange being selectively positionable with respect to said shoulder by rotation of said cap on said king pin, and at least one screw passing

through said cap and threadably engaged with said king pin to prevent rotation of said cap, whereby the selected spacing of said cap is maintained.

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