Jan. 13, 1970 J. L. PALMATEER 3,489,305

GEAR HANDLING DEVICE

Filed July 10, 1967

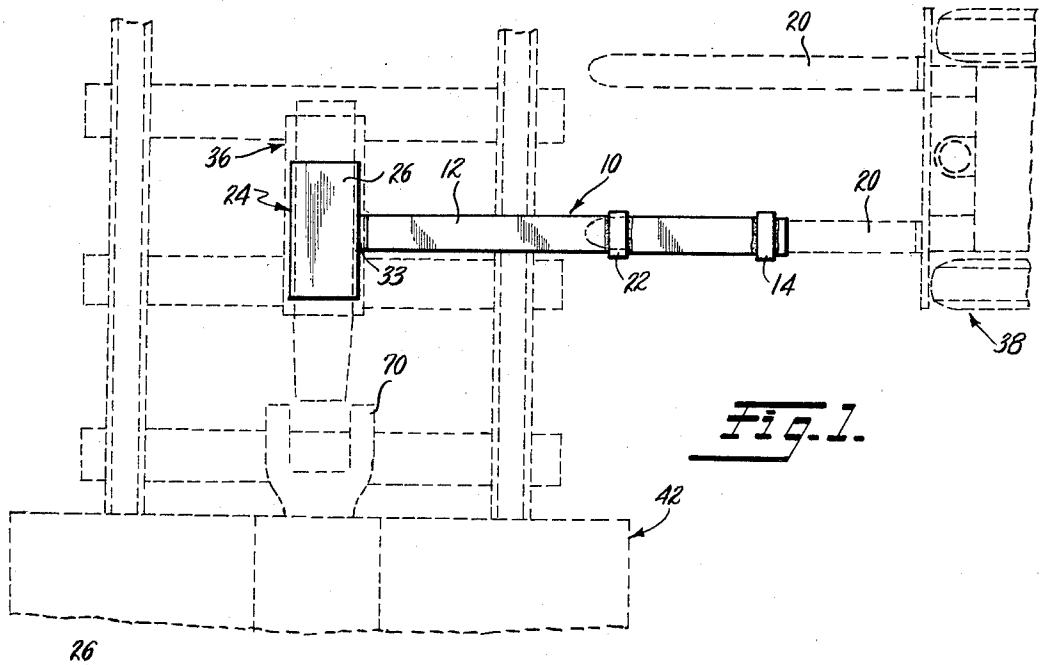


Fig. 1.

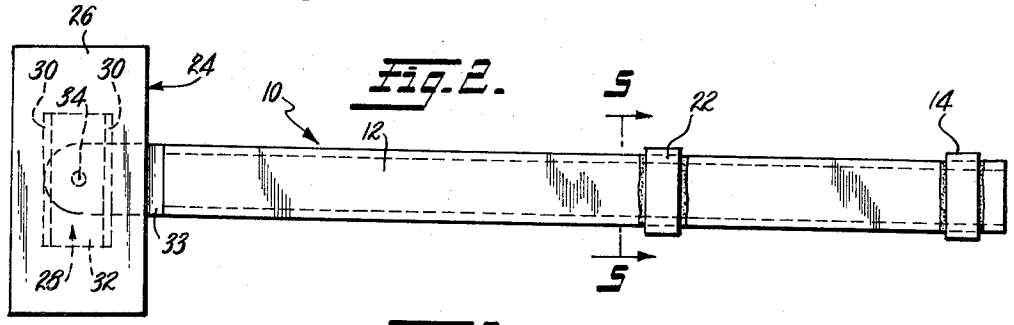


Fig. 2.

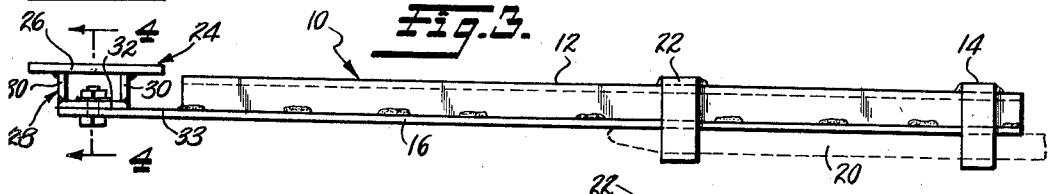


Fig. 3.

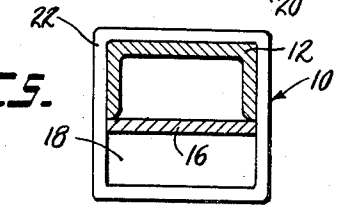


Fig. 5.

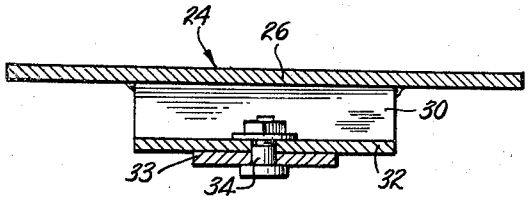


Fig. 4.

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GEAR HANDLING DEVICE

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U.S. Cl. 214—620 1 Claim

ABSTRACT OF THE DISCLOSURE

Apparatus to facilitate the installation of draft gears into sills of railroad cars comprising an elongate member having means thereon adapted to receive a fork lift tine. A rotatable platform on one end thereof to support a draft gear or the like while the fork lift manipulates the draft gear into position adjacent the sill of a railroad car.

BACKGROUND

In the past, the operation of installing draft gears in the sills of railroad cars has been a time consuming, dangerous one requiring the labor of three men. The conventional manner of installing draft gears is to use a derrick to lift the gear. The end of the railroad car is jacked up and the trucks rolled out from under the car body. A worker must manually guide the gear into position adjacent the sill while the derrick operator lowers the gear into place. During this operation, the gear and derrick boom are at times above the worker creating a hazard to the worker. Once the gear is in place in the sill the trucks are moved back beneath the car body which is then lowered. In the event the draft gear is not positioned properly, it cannot be secured and the above operation must be repeated. This operation generally requires the service of three men.

With the present invention the procedure is simplified greatly. The attachment is secured to a single tine of a fork-lift vehicle. The draft gear is placed on the platform and maneuvered into position by the vehicle. The platform can swivel about its support so the draft gear may be positioned precisely adjacent the sill. In this manner the workman is at no time in danger and the operation is performed quickly and easily.

The object of this invention is to provide a device to facilitate the installation of draft gears in the sills of railway cars.

This object, as well as others, will become apparent from the following specification illustrated by the accompanying drawings in which:

FIG. 1 is a plan view of the invention in place on a fork lift truck adjacent the end of a railroad car;

FIG. 2 is a plan view of the invention;

FIG. 3 is a side elevational view of the invention on a tine of a fork lift truck, shown in broken lines;

FIG. 4 is a cross sectional view taken on line 4—4; and

FIG. 5 is a cross sectional view taken on line 5—5.

Referring now to the drawings for a more specific description of the invention, the draft gear handler **10** is comprised of an elongated beam **12**, which is illustrated as a box beam. At one end thereof, a stirrup **14** is secured to the beam **12**. The stirrup **14** is rigidly secured thereto by welding or other suitable means. The stirrup **14** extends below the beam **12** and forms, with the bottom wall **16**, an opening **18** sufficiently large to receive the tine **20** of a conventional fork lift truck.

A second stirrup **22** is secured to the beam **12** in the same manner and spaced from the stirrup **14**.

A support member **24**, which is rotatably mounted on the beam **12** at the end opposite the stirrups, is adapted to receive a draft gear or the like. The support member **24** comprises a flat plate **26** having a bearing member **28** secured thereto. The bearing member **28** is illustrated as U-shaped with the legs **30** thereof secured to the plate **26** and the bight portion **32** resting on an extension **33** of the bottom wall **16**.

A pivot pin **34** rotatably secures the support member **24** to the beam **12**.

In this manner a draft gear **36** may be placed on the support member **24** after the handler **10** has been attached to the tine **20** of a fork lift truck **38**. The truck may be moved to maneuver the gear **36** in position adjacent the sill **40** of a railroad car **42**. The rotational movement of the support member **24** permits accurate and easy alignment of the gear **36** relative to the sill **40** to facilitate installation therein. The fork lift elevating means provides the necessary vertical movement.

It will be thus understood that the invention provides a means for safe and easy handling of heavy equipment such as railroad draft gears.

While the invention has been described in a certain embodiment, it is recognized that variations and changes may be made therein without departing from the invention.

Having thus described the invention, what is claimed is:

1. In combination with a self-loading vehicle having a vertically movable carriage carrying horizontally extending fork tines, a rigid beam having a top, bottom, and side walls, a first U-shaped stirrup having its legs secured to the bottom wall of said beam and extending outwardly therefrom adjacent one end of said beam, a second stirrup similarly secured to said beam spaced along the longitudinal axis of said beam, said stirrups defining with the bottom wall of said beam openings for slidably receiving a single tine of said vehicle to support said beam in a horizontal position on said single tine only, said bottom wall of said beam being of a greater length than the other walls so that a portion extends beyond said other walls, a substantially planar support member, means rotatably mounting said substantially planar support member on the upper side of said portion, said mounting means having substantially the same height as said other walls so that said support member can rotate freely above said beam and in a plane adjacent the top wall of said beam.

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