July 10, 1951 F. F. MATSON 2,560,463

TRUCK LOADER

Filed May 16, 1947

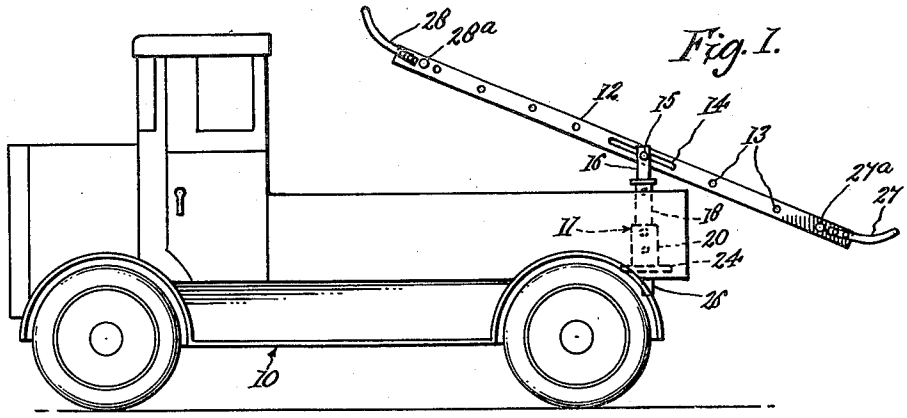


Fig. 1.

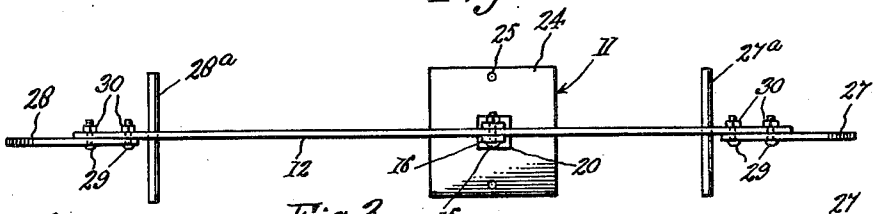


Fig. 2.

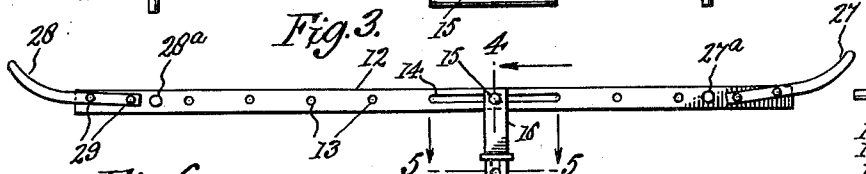


Fig. 3.

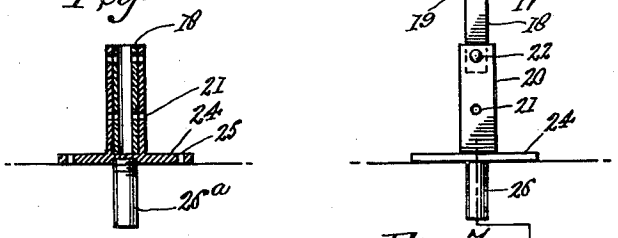


Fig. 6.

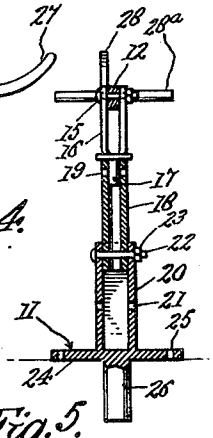


Fig. 4.

Fig. 5.

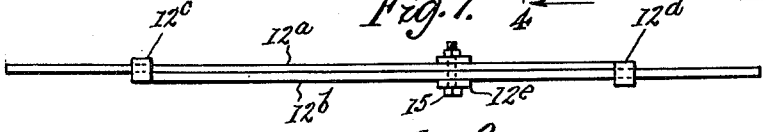


Fig. 7.

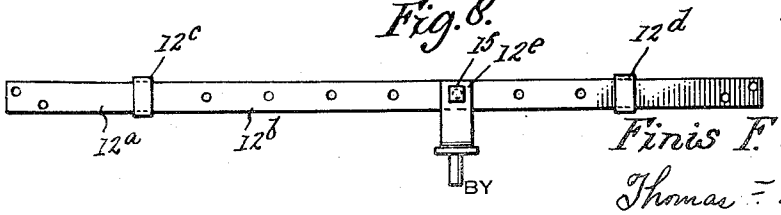
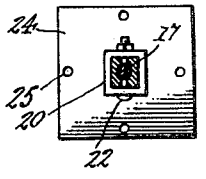


Fig. 8.



INVENTOR.

Finis F. Matson

BY Thomas F. Healy

ATTORNEY

Patented July 10, 1951 2,560,463

UNITED STATES PATENT OFFICE

2,560,463

TRUCK LOADER

Finis F. Matson, Butte, Mont.

Application May 16, 1947, Serial No. 748,520

3 Claims. (Cl. 212—60)

1

The present invention relates to a truck loading device.

The primary object of the present invention is to provide a simple, inexpensive and efficient device for loading objects onto a truck.

Another object is to provide a truck loader including a lever arm and means to adjust said lever arm vertically and horizontally.

A further object is to provide a light-weight portable truck loader which can be readily disassembled or collapsed when not being used.

Another object is to provide a truck loading device comprising, in combination, a lever arm rotatably associated with a vertically adjustable base including a plurality of telescoping segments.

Other and further objects and advantages of the present invention will be apparent from the following description thereof and from the claims appended thereto.

In the drawing wherein like numerals refer to like or corresponding parts throughout the several views,

Figure 1 is a side elevation of a truck illustrating the truck loader in operative position and embodying the features of the present invention,

Figure 2 is a top plan view of the truck loader shown in Figure 1,

Figure 3 is a side elevation of the truck loader,

Figure 4 is a sectional view taken along the line 4—4 of Figure 3 in the direction of the arrows,

Figure 5 is a sectional view taken along the line 5—5 of Figure 3 in the direction of the arrows,

Figure 6 is a sectional view of a slightly modified form of the collapsible base, showing the telescoping segments in collapsed position,

Figure 7 is a top plan view of a modified form of a lever arm, and

Figure 8 is a side elevation of the modified form of the lever arm shown in Figure 7.

Referring now to the drawing the numeral 10 generally represents a truck which can be employed with the truck loader covered by the present invention.

The truck loading device of the present invention is generally designated by the numeral 11, and comprises an elongated lever arm 12, generally about forty-two inches long, or less, provided with a plurality of spaced-apart apertures 13 and a substantially centrally disposed slot 14, which is adapted to receive a bolt 15, engages through suitable apertures disposed in the top portion of a U-shaped swivel element 16 associated with said lever arm. The bolt 15 fits through

2

the apertures disposed in the top portion of the U-shaped swivel element 16 and through the slot 14. The lever arm may be moved generally in a horizontal direction through the distance limited by the size of the slot 14, and can be pivoted in a vertical direction with the bolt 15 as a pivot point. Likewise, the lever arm 12 can be rotated in a generally circular direction as it is secured to the rotatable swivel element 16, which is provided at the bottom portion thereof with a lug 17, which engages in a segment 18 having a circular bore. The segment 18 is provided with an aperture 19 intermediate the ends thereof, which aperture 19 may be employed with additional segments added to segment 18 or generally to adjust the height of the lever arm 12. Segment 18 is telescoped within a second segment 20, which is provided with a plurality of apertures intermediate the ends thereof, as for example 21. The segment 18 is held in vertical position within the segment 20 by means of a bolt 22 which fits through aligned apertures in the top portion of segment 20, and the bottom portion of segment 18, and is locked into position by means of nut 23 or any other suitable means.

The lower portion of the segment 20 merges into a base portion 24 which may be of any suitable shape, as for example square. The base 24 has a plurality of apertures 25 around the marginal edges thereof which are adapted to receive screws or nails to secure the base in position when the truck loading device is being operated.

A rod or standard 26 is secured to the lower portion of the base 24 and is in coaxial alignment with the segments 18 and 20 and the swivel element 16. The rod 26 is adapted to fit into suitable apertures in the floor of the truck, so as to more firmly secure the base in operative position.

In Figure 6 where the telescoping segments are shown in collapsed position, I have shown a slightly modified form of the base structure wherein a rod 26a threadedly engages into the lower portion of the base 24 where it can be readily removed when the truck loading device is not being used.

On each end of the elongated lever arm 12, there is disposed a load engaging element indicated by the numerals 27 and 28 respectively.

Transverse bars 27a and 28a are disposed in lever 12 near the elements 27 and 28 respectively, for the purpose of preventing the rope or chain by which the load is lifted from slipping down lever 12 when it is elevated.

If desired, only one load engaging element may

be provided. These load engaging elements **27** and **28** are secured to the lever arm **12** by means of bolts **29**, locked into position by nuts **30**. The load engaging elements **27** and **28** may be integral with the lever arm **12**, if desired, and may be of any suitable shape depending upon the particular elements which are to be loaded upon the truck **10**.

In Figures 7 and 8, I have shown a modified form of an elongated lever arm comprising two elongated segments **12***a* and **12***b* slidable in brackets **12***c* and **12***d*. The effective length of the modified form of the lever arm shown in Figures 7 and 8 can be changed by altering the relative position of the arm **12***a* with reference to the arm **12***b*. The lever arms **12***a* and **12***b* are secured in a swivel element **12***e* which is adapted to be employed in combination with the base **24** in the same manner as swivel element **16**.

In the operation of the truck loading device, the device is first elevated vertically to a proper height by means of raising the telescoping segments **18** and **20** to a proper height and then locking them into fixed position. The lever arm **12** may then be operated to load elements from the ground onto the truck. It is to be noted that the lever arm can move forward and backward, limited by the length of the slot **14**, and likewise can be moved upward and downward, or in a circular direction. If desired, the bolt **15** can be withdrawn from the slot **14** and placed in any one of the apertures **13**, to increase or decrease the leverage from the arm **12**.

Various modifications of the present invention will be apparent to those skilled in the art without departing from the spirit thereof, and it is desired to be limited only by the scope of the appended claims.

What I claim is:

1. A truck loading device comprising, an elongated lever arm provided with a plurality of spaced-apart apertures extending substantially throughout the major portion of its length and having a centrally disposed slot, said lever arm having a load engaging element at each end thereof, a collapsible base including a plurality of vertically adjustable telescoping segments, a rotatable U-shaped swivel element associated with said lever arm and adapted to engage in the top portion of one of said segments, said U-shaped swivel element being apertured to receive a removable pin adapted selectively to engage in said central slot and said apertures in said lever arm for varying the effective leverage of said lever arm, and a depending rod secured to the bottom of said base in vertical alignment with said telescoping segments and said swivel element.

2. A truck loading device comprising, an elongated lever arm provided with a plurality of spaced-apart apertures extending substantially throughout the major portion of its length and having a centrally disposed slot, said lever arm having a load engaging element on each end thereof, a collapsible base including a plurality of vertically adjustable telescoping segments, a rotatable U-shaped swivel element associated with said lever arm and engaging in the top of one of said segments, said U-shaped swivel element being apertured to receive a removable pin adapted to selectively fit in said central slot and said apertures in said lever arm for varying the effective leverage of said lever arm, and a depending externally threaded rod adapted to engage in the bottom of said base and in vertical alignment with said telescoping segments and said swivel element.

3. A truck loading device comprising, an elongated lever arm provided with a plurality of spaced-apart apertures extending substantially throughout the major portion of its length and having a centrally disposed slot, said lever arm having a load engaging element at each end thereof, and a collapsible base including a plurality of vertically adjustable telescoping segments, a rotatable U-shaped swivel element associated with said lever arm and engaging in the top of one of said segments, and said U-shaped swivel element being apertured to receive a removable pin adapted selectively to fit in said central slot and said apertures for varying the effective leverage of said lever arm.

FINIS F. MATSON.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
252,083	Dickinson	Jan. 10, 1882
310,090	Slagle	Dec. 30, 1884
428,841	Harrison et al.	May 27, 1890
450,695	Lindsey	Apr. 21, 1891
546,088	Clancey et al.	Sept. 10, 1895
827,543	Lewis	July 31, 1906
839,479	Howe	Dec. 25, 1906
966,433	Erickson	Aug. 9, 1910
1,977,823	Hall	Oct. 23, 1934

FOREIGN PATENTS

Number	Country	Date
9,999/27	Australia	Feb. 23, 1928