W. N. CARY.

BRICK CARRYING FRAME.

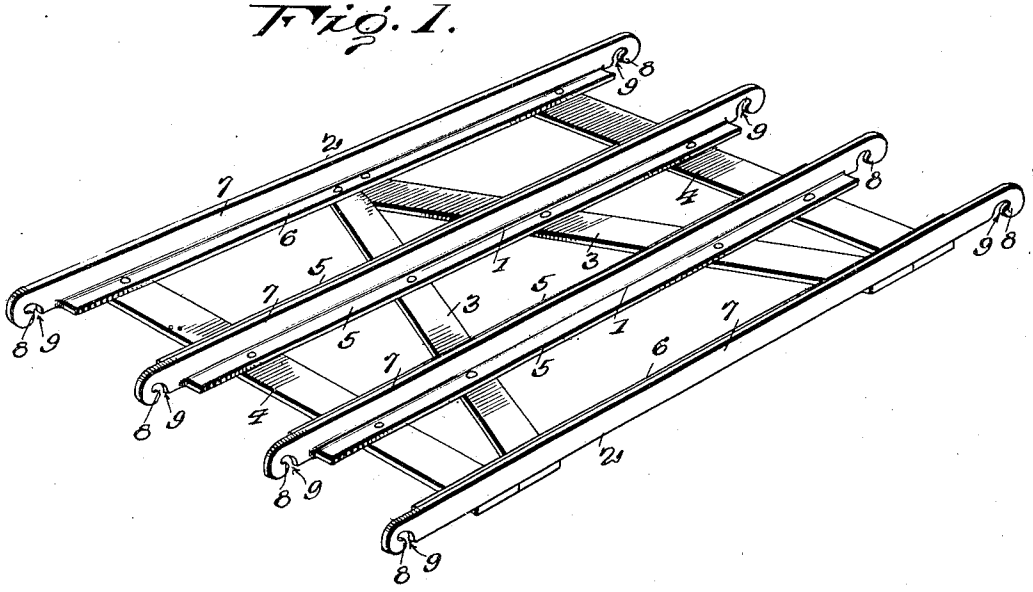
APPLICATION FILED MAR. 3, 1920.

1,377,667.

Patented May 10, 1921.

2 SHEETS—SHEET 1.

Fig. 1.



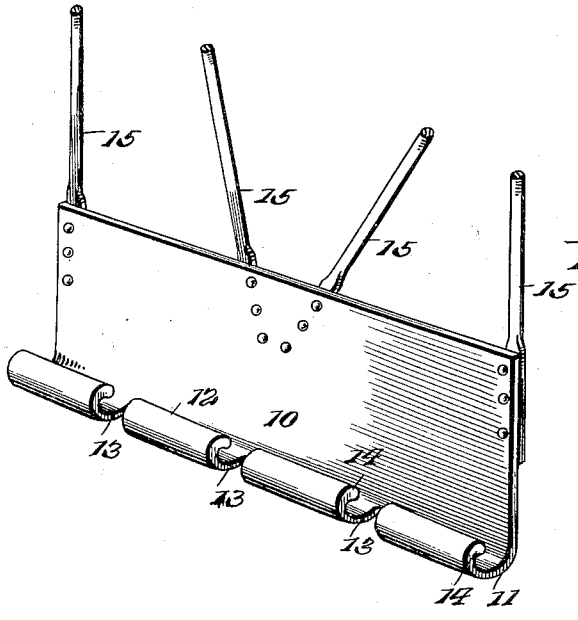


Fig. 2.

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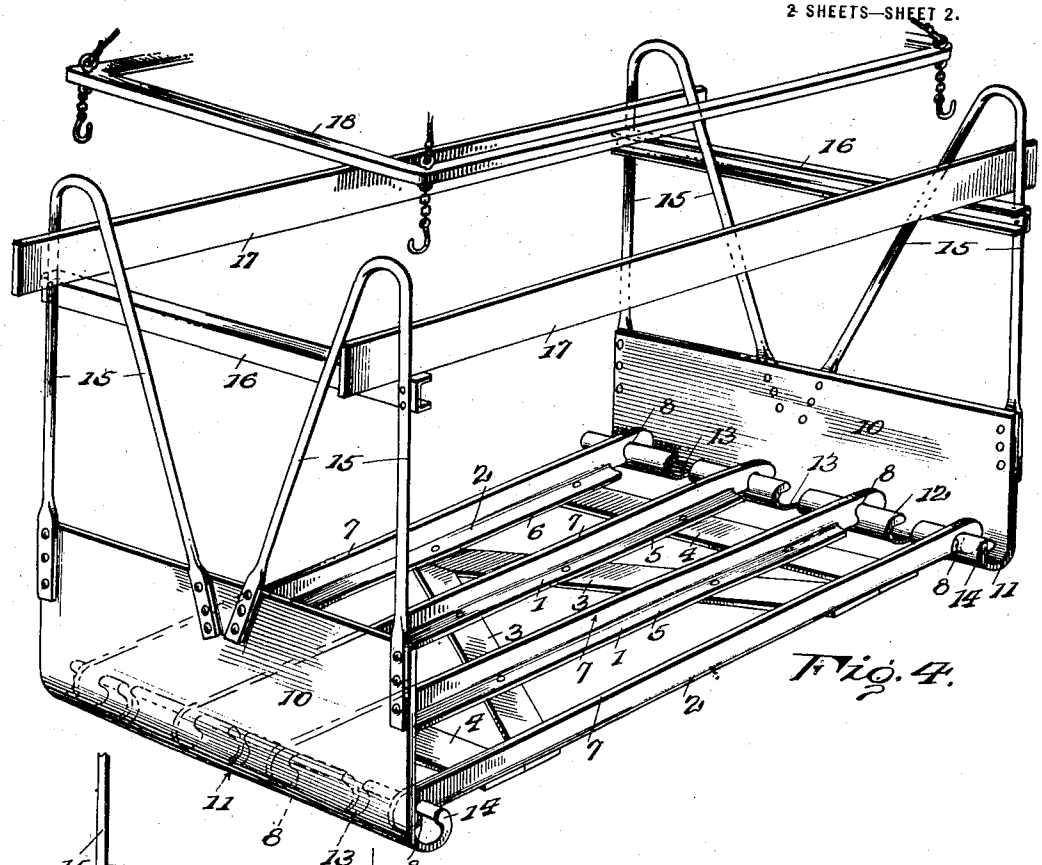


Fig. 4.

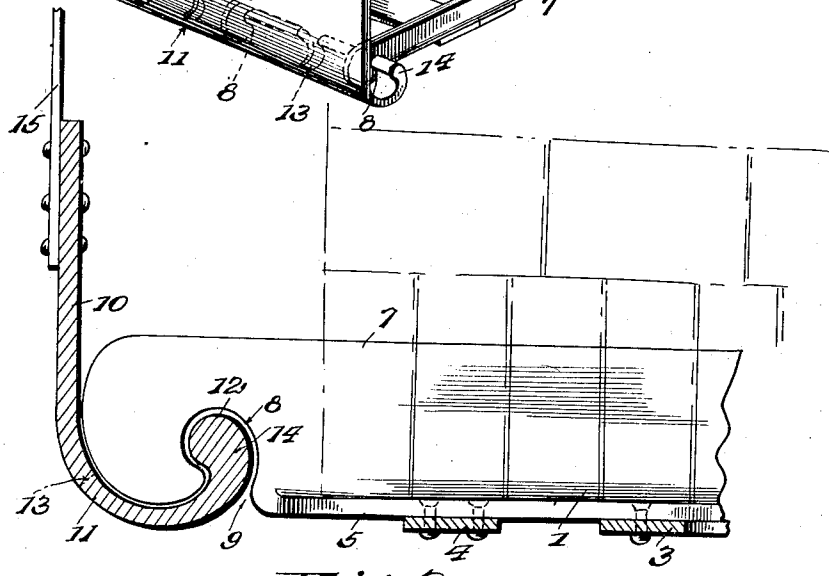


Fig. 3.

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UNITED STATES PATENT OFFICE.

WILLIAM N. CARY, OF ALBANY, NEW YORK, ASSIGNOR TO THE AMERICAN EQUIPMENT COMPANY, A CORPORATION OF OHIO.

BRICK-CARRYING FRAME.

1,377,667. Specification of Letters Patent. Patented May 10, 1921.

Application filed March 3, 1920. Serial No. 362,954.

To all whom it may concern:

Be it known that I, WILLIAM N. CARY, a citizen of the United States, residing at 1080 Madison Ave., in the city of Albany, in the county of Albany and State of New York, have invented certain new and useful Improvements in Brick-Carrying Frames, of which the following is a specification.

This invention relates to an improvement in brick carrying frames, being more particularly directed to a framework made up of parts so formed, and related as to evenly and properly support a predetermined number of brick, arranged in superimposed rows.

The improved frame may thus be utilized and is particularly contemplated for use as a unit as a brick carrier, in that the frame may be designed to support a particular number of brick so that a certain number of such units may be individually and separately handled in making up a load of brick for transportation, the number of units readily indicating the total number of brick in the load, and the independence of the units providing for their ready and convenient handling for loading and unloading purposes, without the necessity of handling and piling the separate brick.

The invention further contemplates the provision of end frames, arranged for ready and convenient connection to or disconnection from the carrying frame, to thereby form temporary end walls for the carrying frame to prevent displacement of the brick from the carrying frame while moving the frame for loading, as from a wharf to a scow. The end frames are formed for convenient connection with a derrick or other hoist to thereby facilitate loading or unloading of the units, and such end frames are also arranged for a swinging or hinged connection with the carrying frame, so that when desired, one end frame may be removed and an upward pull given the other, as by the derrick or the like, to thereby discharge the bricks from the carrying frame.

In the drawings:—

Figure 1 is a perspective view of the carrying frame alone.

Fig. 2 is a perspective view of one of the end frames.

Fig. 3 is an enlarged sectional detail illustrating the connection between the end frame and carrying frame.

Fig. 4 is a view of the carrying frame with the end frames in place.

The improved carrying frame is made up in skeleton form comprising a number of inverted T-form angle bars, 1 constituting the intermediate bars of the frame and L-form angle bars 2, constituting the side bars of the frame. These bars 1 and 2 are connected by transverse and diagonal base bars 3 and 4, so that the flanges 5 and 6 of the respective angle bars are in the same horizontal plane, and wholly free of obstruction from end to end.

The relative spacing between the respective intermediate bars 1 of which there may be any desired number in accordance with the size of the required frame, and between such bars 1 and the bars 2, is such that the uprights of the angle bars will receive a brick lengthwise between them, such brick being of course thus supported on the horizontal flanges of the bars. The brick are piled upon the frame, preferably on edge, as shown, and arranged in close order in the rows defined by the bars 1 and 2. A successive series of rows of bricks are piled on the first row, arranged successively in cross relation as shown in Fig. 3, until the required number of bricks for the particular frame capacity are in place. As the first row of bricks are substantially held, it is apparent that the frame load constitutes a stable unit which may be handled with little liability of displacement of the load under ordinary care.

The respective bars 1 and 2 have their upright or wall portions extending beyond the angle portions, as at 7, preferably by cutting away the angle portion. These ends on each formed with rounded recesses 8 having narrow openings 9 through the lower edges of the ends. End frames 10 are provided for the carrying frame, such end frames each comprising a rounded bottom bar 11 having an upper free edge 12 arranged inwardly of the end frame. The bottom bar 11 is cut away at 13 throughout the greater transverse portion of said bar, and particularly including the free edge 12. The cutaway portions 13 provide for the convenient application and removal of the end frames, as such frames may be positioned with the cut out portions 13 receiving the ends 7 of the carrying frame, whereupon the end frame is moved laterally until the intact portions of the free edge 12 are seated in the respective recesses 8. If desired the free edge 12 may be enlarged at 14 to more or less accurately fit the enlarged por-

tion of the recess 8, whereupon it will be apparent that the end frames have a pivotal or swinging movement on the carrying frame, for a purpose which will later appear.

The end frames also include uprights 15 connected if desired by an intervening section 16 to overlie the ends of the bricks. The uprights 15, when the end frames are in position are arranged slightly beyond the ends of the brick pile, so that a board or other strip 17 may be slipped down behind the uprights to cover the sides of the pile. The uprights 15 extend above the normal brick pile and are provided with means as 18, whereby the hooks of a hoisting cable may be connected.

The brick carrying frames are designed more particularly for the transportation of brick in quantity.

Under these conditions the bricks will be loaded on the frames at the brick kiln, similar frames carrying the same number of brick. A desired scow load can thus be readily arranged for by taking the requisite number of units. In loading the scow for example, end frames are applied to the particular unit with or without the side strips. By means of a derrick or the like the unit is picked up and deposited on the scow, and placed in position with the other units for proper loading. The end frames are removed and used with other and succeeding units during the loading operation.

If it is desired when unloading to discharge the bricks on a frame, as for example dumping them into a wagon, the unit with the end frames applied are lifted by the hoist into the wagon, one of the end frames removed, and the other drawn upward by the hoist. The pivotal connection between the end frame and carrying frame will cause an upward tilting of the carrying frame to discharge the bricks thereon over the end from which the end frame has been removed.

The improved caarrying frame thus facilitates the handling of brick in unit groups of a predetermined number of brick, and also facilitates the discharge of the brick of any frame in a simple expeditious manner.

Claims:

1. A brick carrying frame of skeleton form having removable end frames formed for interlocking connection with the carrying frame.

2. A brick carrying frame having removable end frames adapted for swinging interlocking connection with the carrying frame.

3. A brick carrying frame, and end frames therefor, there being means provided between the frames for permitting connection and disconnection of the end frames from the carrying frame by lateral movement of such end frames.

4. A brick carrying frame comprising spaced side bars of L-form and intermediate spaced bars of inverted T-form, and end frames having removable interlocking connection with the end of said bars.

5. A brick carrying frame comprising spaced side bars of L-form and intermediate spaced bars of inverted T-form, the ends of the bars being formed with recesses, and separable end frames adapted to engage in said recesses.

6. A brick carrying frame comprising spaced side bars of L-form and intermediate spaced bars of inverted T-form, the ends of the bars having recesses, and separable end frames having bottom bars with edges to engage in said recesses.

7. A brick carrying frame comprising spaced side bars of L-form and intermediate spaced bars of inverted T-form, the ends of the bars having recesses, and end frames having bottom bars with edges to engage in said recesses, the walls of the recesses and said edges being formed to permit a swinging connection.

8. A brick carrying frame comprising spaced side bars of L-form and intermediate spaced bars of inverted T-form, the ends of the bars having recesses, and end frames having bottom bars with edges to engage in said recesses, said edges being cut away to permit positioning the ends of the carrying frame bars to aline their recesses with the intact portions of said edges, whereby the end frame may be connected to the carrying frame by a lateral movement.

9. A brick carrying frame comprising spaced brick-supporting bars, end frames, and means for connecting the carrying frame and end frames to provide for swinging the end frames relative to the carrying frame.

10. A brick carrying frame comprising side bars of L form, intermediate bars of inverted T form, the horizontal flanges of said bars being in the same plane, the vertical webs being extended beyond the horizontal flanges and formed in such extensions with recesses, and end frames having means to engage in said recesses to swingingly connect said end frames to the carrying frame.

11. A brick carrying frame and end frames having swinging connection therewith, the end frames being limited in movement in one direction to positions at substantially right angles to the brick carrying frame.

12. A brick carrying frame and end frames having swinging connection therewith, the end frames being limited in movement in one direction to positions at substantially right angles to the brick carrying frame, the opposite movement of the end frames permitting their arrangement in the plane of the brick carrying frame.

In testimony whereof I affix my signature.

WILLIAM N. CARY.