

W. H. FRANCIS.
BRICK HANDLING METHOD AND PALLET.
APPLICATION FILED JULY 8, 1911.

1,005,013.

Patented Oct. 3, 1911.

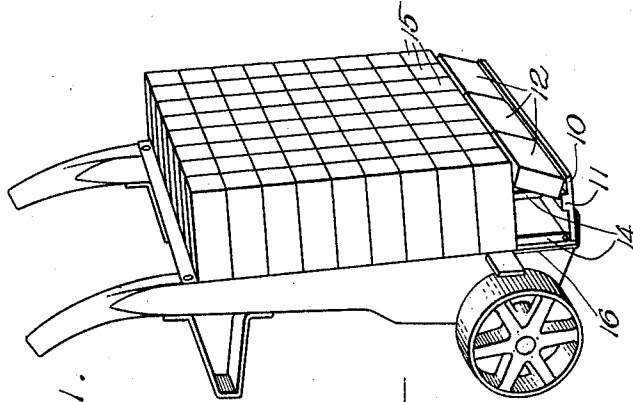


Fig. 1.

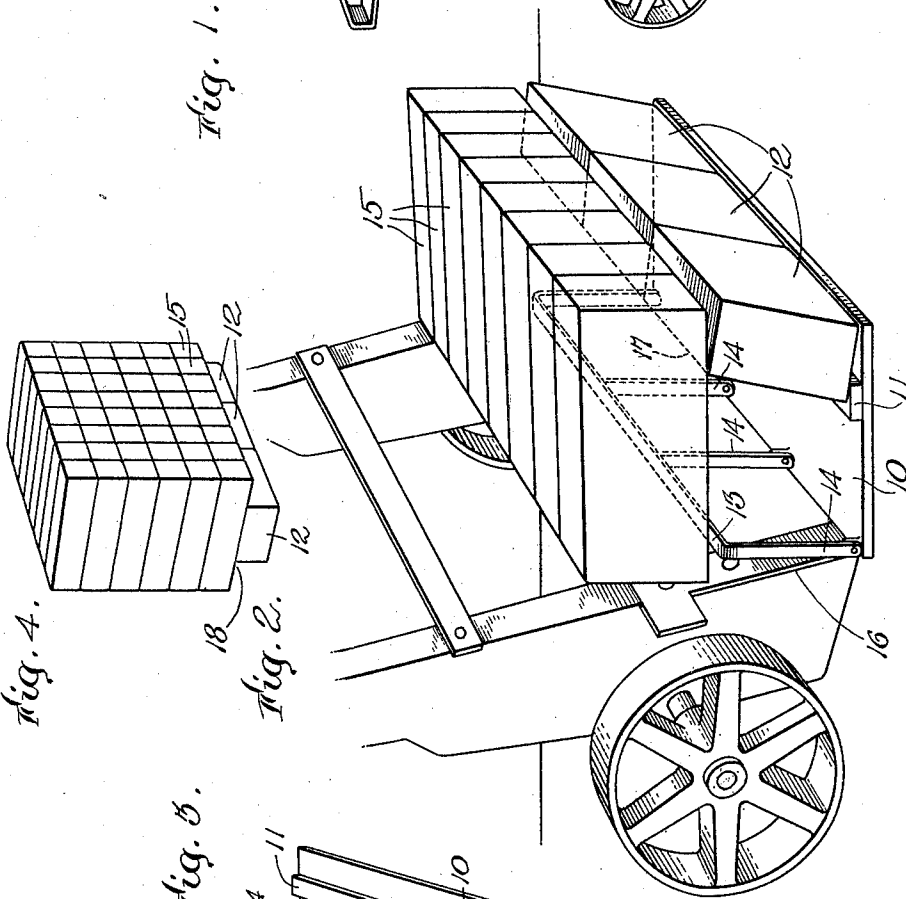


Fig. 2.

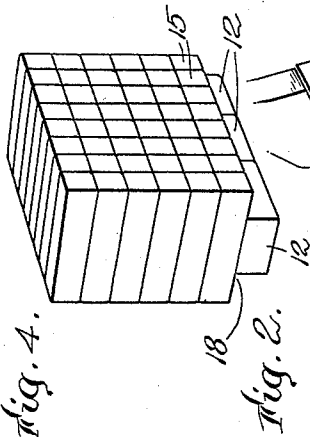
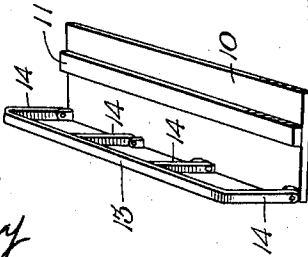


Fig. 4.

Fig. 3.



Witnesses:
C. L. Rogers.
R. G. Hersey

Inventor:
William H. Francis,
by Geo. H. Maxwell
Attorney.

UNITED STATES PATENT OFFICE.

WILLIAM H. FRANCIS, OF CHERRYVALE, KANSAS.

BRICK-HANDLING METHOD AND PALLET.

1,005,013.

Specification of Letters Patent.

Patented Oct. 3, 1911.

Application filed July 8, 1911. Serial No. 637,577.

To all whom it may concern:

Be it known that I, WILLIAM H. FRANCIS, a citizen of the United States, and resident of Cherryvale, in the county of Montgomery and State of Kansas, have invented an Improvement in Brick-Handling Methods and Pallets, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention relates to a method of handling bricks in stacks or piles and to a pallet or the like used in carrying out such method, this pallet being formed so as to enable a stack of bricks to be readily removed therefrom without disturbing the stack formation when used in accordance with the improved method.

While the invention is more applicable to the handling and loading of burned bricks, it is possible to apply it to advantage in some cases for handling dried green bricks since, as will appear more fully hereinafter, the stack is not subjected to any serious shocks or jars in unloading the same from the pallet.

The invention will be more fully understood from the following detailed description, taken in connection with the accompanying drawings, and will be thereafter pointed out in the appended claims.

Referring to the drawings: Figure 1 is a perspective view showing a stack of bricks piled on a pallet formed in accordance with my invention and resting on a barrow or truck. Fig. 2 is a similar enlarged view, with a portion of the truck broken away, and showing the stack in process of formation. Fig. 3 is a detail perspective view of the empty pallet, and Fig. 4 is a perspective of a stack of bricks as it appears after being unloaded from the improved pallet.

In carrying out the invention, a base board or pallet proper 10 is provided of a length corresponding to the width of the brick stack to be produced, and this has fixed thereon to one side of its center a strip 11, extending throughout its length, and forming a ledge on which the inner edge of the bottom row of bricks 12, set lengthwise across the pallet on edge, may rest. This row of bricks 12 is first placed on the pallet with its lower outer edge substantially coincident with the edge of the baseboard 10, and the ledge 11 is formed

of a height so that the bricks so placed are tilted at some little angle, the pallet being set so that this tilting is away from the side on which the workman will operate. The exact degree of this tilting, as determined by the position and height of the ledge 11, is not an essential, since while a relatively small tilting, as shown, is well adapted for carrying out the invention, it is likewise possible for these bricks to be tilted at any angle up to that in which the higher inner edge is directly over the lower outer edge of the bricks.

The inner side of the base board 10 has pivoted thereto a supporting bar 13, this being shown as secured by a series of spaced apart pivot supporting arms 14. This support is of a height so that the inner ends of the next row of bricks 15 resting thereupon are held at the same or a slightly greater height than the other end of this row, which rests upon the up-tilted inner edge of the bottom row 12. This second layer is set in place straight crosswise of the pallet, and is placed upon the first layer so that its outer edge would be about even with the front flat sides of the bottom course, were it swung around to vertical position thereunder; thus as the bottom course is tilted, the next course will then project slightly over the forward tilted edge of the bottom course. The rest of the stack is then built up directly, straight over the second course 15 in the manner shown, or any other which may be preferred, and thus the front end of the stack is supported by the up-tilted inner edge of the crosswise extending bottom layer 12, while the other end of the stack is supported by the pivoted supporting bar 13. The pallet, with its brick stack load, may now be transported to the desired location by an ordinary barrow or truck 16, which is adapted to rest the pallet with its load on a horizontal floor base. The bar 13 may then be pushed forward, causing the bottom tilted course 12 to tilt still farther forward until it finally falls upon its flat side and the entire stack following, the second course simply rests upon the flat side of the bottom course. Since as before explained, the lower front edge of the bottom course 12 was extended to the front edge of the pallet, as it is tipped over to rest on its flat side as described, it escapes from the front edge of the pallet, thus leaving the pallet free and the stack

resting upon the flat side of the transversely extending lower course, as clearly shown in Fig. 4. This lower course is by this means positioned substantially midway between the ends of the stack so as to furnish a stable support therefor,—this for the reason that the bottom layer, when set edgewise, has its inner edge spaced away from the outer ends of the next layer substantially the thickness of a brick, with the result that as the bottom layer collapses it leaves a like space on the next layer projecting from its other side as seen at 18. The stacks of bricks are thus deposited undisturbed in stable formations to be further handled by a mechanical lifter, or otherwise.

While I have shown the improved pallet and method of using the same in connection with an ordinary barrow or truck, it is to be understood that this is merely illustrative, and that the device is likewise adapted for use with any other kind of carrier, such as crane and track conveyers. It is likewise to be understood that the details of the pallet may be widely varied without departing from the spirit of the invention, and I therefore do not desire to be limited as to any of these, the prime essential being a construction enabling a relative movement of the lower part of the brick stack such as to cause the stack to be bodily removable from the pallet without disarrangement. This matter is believed to be broadly new, and I therefore do not desire to be limited to the specific arrangement of the lower layer shown, or in any other respect, except as set forth in the appended claims.

Having described my invention, what I claim as new and desire to secure by Letters Patent is:

1. The herein described method, which consists in piling a stack of bricks on a support with a bottom layer tilted, and moving the stack transversely to turn said bottom layer on its side, and remove the stack from the support.

2. The herein described method, which consists in piling a stack of bricks on a support with a lower layer tilted and extending along the edge of the support, and moving the stack bodily to turn the bottom layer over

on its face off said support, and to furnish a support for the stack.

3. The herein described method, which consists in setting a bottom layer of bricks on edge and end to end in a tilted line, piling a succeeding portion of the stack thereover with the bricks at right angles to said first layer, and resting thereon at one end, and moving the stack bodily to turn said bottom layer with the bricks thereof resting on their flat side faces and furnishing a support for the stack.

4. The herein described method, which consists in arranging the bottom layer of bricks end to end on edge in a tilted line, placing the next layer at right angles to said bottom layer to rest thereupon at one end, supporting the other end of said next layer on a swinging support, and moving the stack bodily to turn said bottom layer over to rest on its flat side face and furnish a support for the brick stack.

5. A device of the kind described, comprising a base adapted to receive a layer of bricks at one side, and a member pivoted to said base at its other side to furnish a support for one end of the stack.

6. A device of the kind described, comprising a base formed to support a line of bricks at one side in tilted position for one end of the stack to rest upon, and a swinging member pivoted to the other side of the base to furnish a support for the other end of the stack.

7. A device of the kind described, comprising a pallet board, having a ledge adjacent one side to receive a line of bricks in edgewise tilted position and furnishing a support for one end of the brick stack, and a swinging support pivoted to the other side of said pallet board and extending upward to support one end of a stack whose other end rests upon said tilted line in the bottom layer.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

WILLIAM H. FRANCIS.

Witnesses:

R. E. BUCKLES,
G. E. MOSHER.