

March 4, 1924.

1,486,055

J. F. STRANAHAN ET AL

INNER TUBE FOR PNEUMATIC TIRES

Original Filed April 10, 1922

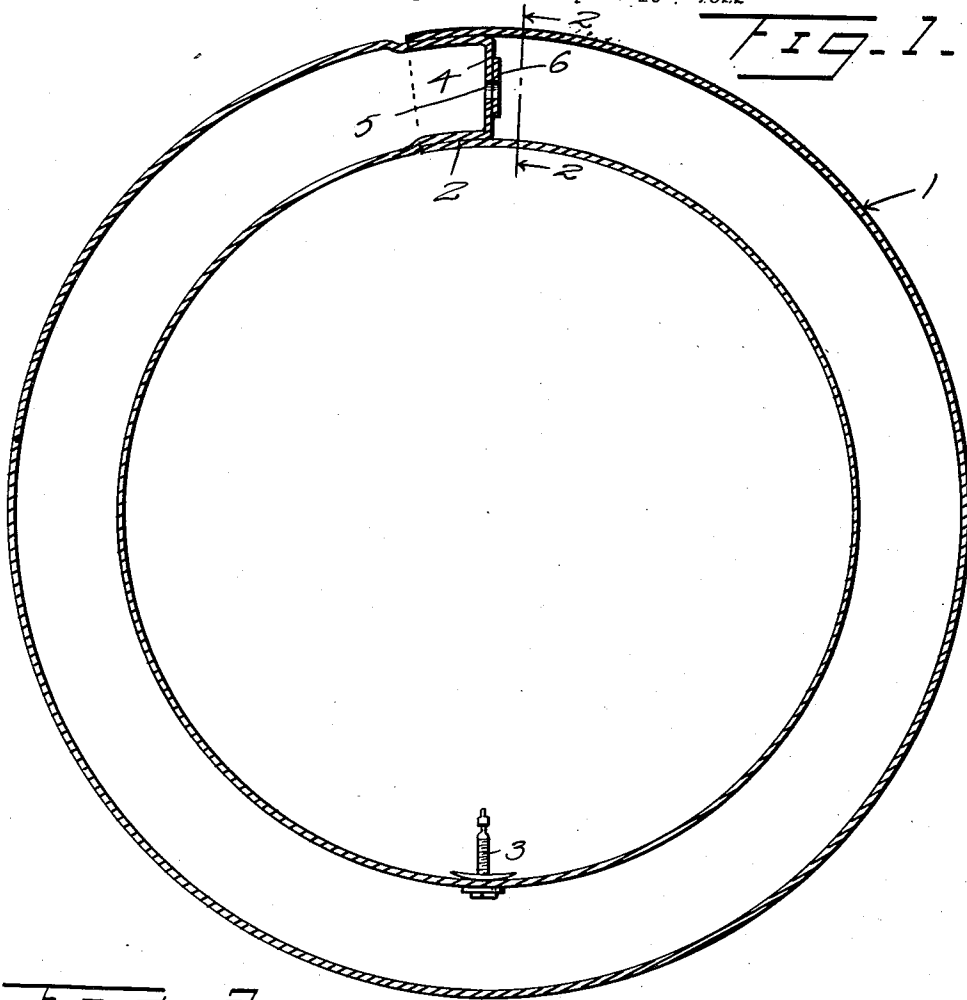
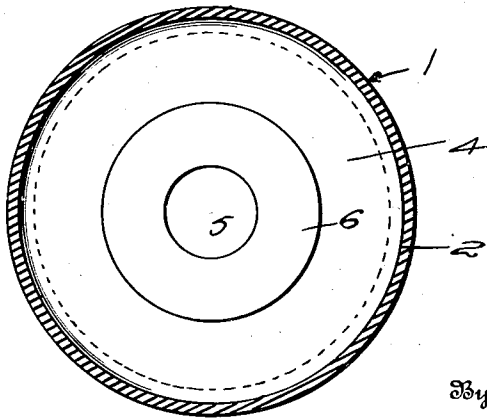


FIG. 2



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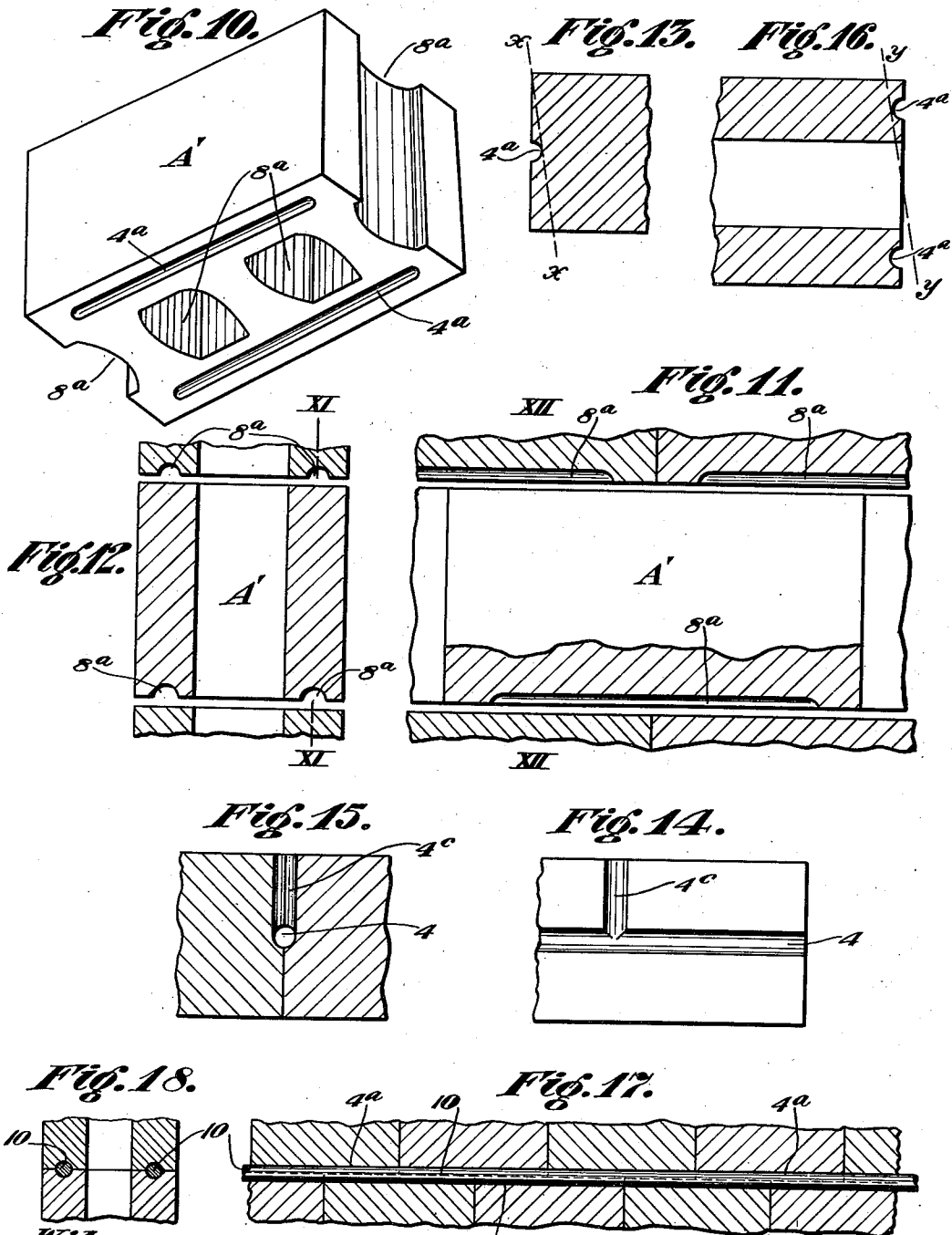
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PALLET FOR BLOCK MAKING MACHINES

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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE.

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PALLET FOR BLOCK-MAKING MACHINES.

Application filed December 11, 1920. Serial No. 429,890.

To all whom it may concern:

Be it known that I, FRANCIS J. STRAUB, a citizen of the United States, residing at New Kensington, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Pallets for Block-Making Machines, of which the following is a specification.

My invention relates to the manufacture of building or other blocks, and particularly to an improvement in pallets used in connection with the pressing and transporting of the blocks.

In this art, it is customary to form the block of any suitable mixture, as concrete, clay, cinder, etc., within a suitably shaped mold by pressure, either with or without a core, and to support the block upon a bottom plate or pallet which is utilized as a support for transporting it to any suitable point for drying or further handling.

The present invention has in view to provide a pallet having one or more upwardly projecting ribs adapted to form one or more corresponding groove or grooves on the under face of the block, which rib or ribs greatly increase the stability of the pallet to prevent it from bending under the weight of the block when carried, and permit the use of comparatively thin sheet metal, thereby greatly reducing its weight.

Ordinarily, pallets for molding blocks have been made of continuously flat cast metal, but these are objectionable on account of their weight, and involve considerable additional labor in the work of carrying away large numbers of molded heavy cast iron pallet. On the other hand, if cast iron pallets are made sufficiently thin for lightness, they frequently break under the load or in handling, and are a constant source of expense.

My invention is designed to overcome these various objections, and also to provide means for forming one or more grooves upon the under face of the molded block and adapting it to more efficient usefulness when set in place in the manner hereinafter described.

Referring to the drawings, which illustrate the invention and its method of application,

Fig. 1 is a perspective view of one form

of pallet provided with a centrally arranged continuous groove forming and strengthening rib;

Fig. 2 is a similar view showing a modified construction as used in connection with space forming cores;

Fig. 3 is a partial plan view showing one end of such form of pallet, but with the forming rib extended clear to the end;

Fig. 4 is a transverse section on the line IV—IV of Fig. 3;

Fig. 5 is a view similar to Fig. 3 showing the metal bent up at the end to provide a hand hold;

Fig. 6 is an view of Fig. 5;

Fig. 7 is a view of the same in side elevation;

Fig. 8 is a transverse sectional view showing a pallet of Fig. 1 in position within a molding flask as used;

Fig. 9 is a perspective view of one of the blocks made with such form of pallet;

Fig. 10 is a similar view showing a cored block as made with the pallet shown in Fig. 2;

Fig. 11 is a diagrammatic view showing a series of blocks as arranged in a wall, partly in section indicated by the line XI—XI of Fig. 12;

Fig. 12 is a transverse sectional view on line XII—XII of Fig. 11;

Fig. 13 is a detail sectional view illustrating the operation of removal of a portion of the block as assisted by the presence of a molded groove;

Fig. 14 is a partial plan view of a block showing a branch groove intersecting the main groove;

Fig. 15 is a partial sectional view of two abutting blocks with a lateral connecting groove;

Fig. 16 is a view similar to Fig. 13 illustrating the partial removal from one edge of the block; and

Figs. 17 and 18 are longitudinal and cross sectional views respectively of a wall structure showing the embodiment therein of reinforcing anchoring bars laid in the molded grooves.

Referring to the drawings, the simplest form of pallet illustrated in Fig. 1 is a rectangular piece of comparatively thin sheet metal 2, provided throughout its length and centrally of its width with a pressed up ridge 3 adapted to form the

resulting groove 4 in the molded block A. Said block, as shown in Fig. 8, is supported upon the pallet 2^o within the cavity of any suitable mold 5 and provided with the usual plunger bottom 6, upwardly above which the pallet is supported by projections 7. The formation of the mold of whatever material is used is one familiar to those skilled in the art, and need not be described. When the block has been sufficiently pressed and molded to shape, and removed from the mold, it may be lifted by the workmen grasping each end of the supporting pallet and carried away to any drying position, as is ordinarily done. The presence of the rib 3 extending upwardly through the middle portion of the pallet greatly stiffens it against buckling, enabling the use of a comparatively thin section of sheet metal, as steel, and the resulting block is provided with the longitudinally formed groove, as shown.

In the form shown in Fig. 2, the pallet 2^a is of generally rectangular form, but provided at intervals with suitable core openings or clearance spaces 8 through the body portion of the pallet or through its ends, or both. The upwardly pressed rims 3^a are at each side, midway between the inner core opening edge and the outer edge of the pallet 2^a. These ribs terminate within a short distance of each end, as shown, so that when the pallet is used in molding, it will form corresponding grooves 4^a along each main side portion of the block A', as clearly shown in Fig. 10. The block is also provided with the corresponding transverse openings 8^a which are common features of such blocks, contributing to ventilation and lightness. An especial advantage of the grooves 4 or 4^a is that when the blocks are built into a wall or other construction, as indicated in Figs. 11 and 12, the cavities 4^a will become filled with the intervening mortar or cement, and will operate to anchor the blocks fixedly in position against lateral or other movement, thereby greatly increasing the bond between the several blocks, as will be readily understood.

In the form shown in Figs. 3 and 4, the ribs 3^b are shown as extended clear to the end of the pallet 2^b, but it will be understood that they may be made of either form as to length, as preferred.

In the construction of Figs. 5, 6 and 7, the pallet 2^c is provided with the groove forming ribs 3^c and the core openings 8^c, and the metal at each end adjacent the endmost opening is pressed upwardly, as indicated

at 9, to provide a convenient hand hold for insertion of the fingers in lifting and carrying the pallet and the supported molded block.

In connection with the formation of the grooves 4 or 4^a, there is an incidental important advantage in that the face of the block may, when necessary, be chipped or cut off, as indicated by the line *x-x*, the base of the groove providing a convenient guide so that the approximate depth may be easily gauged, either in making a cut of continuous depth or a chamfered cut, as in providing a keystone or otherwise changing the rectangular form of the block.

The same general effect is secured by cutting away one side portion of the block, as indicated by the line *y-y*, Fig. 16, down to the base of the laterally arranged groove 4^a.

In Figs. 14 and 15, I show the manner in which one of the grooves 4 may be utilized as a conducting space for wires, pipes, etc., by placing two of the blocks together. A branch connection may also be provided by cutting away a lateral channel 4^c for connection with the main channel.

When desired, a wall or other structure may be readily reinforced by inserting at suitable intervals one or more anchoring bars 10 laid between the blocks in the grooves 4 or 4^a, as clearly shown in Figs. 17 and 18, by which the stability of the wall is greatly increased, when required.

The construction and manner of operation of the invention will be readily understood and appreciated from the foregoing description. It greatly simplifies and cheapens the ordinary pallet while increasing its efficiency and reducing its weight. The resulting advantage of the grooved block greatly adds to the stability of the wall or other structure in which it is used, and the invention materially contributes to the efficiency of the workmen in molding the blocks, while reducing their labor as to the aggregate weight to be carried throughout an entire day's work.

Having described my invention, what I claim is:

A molding pallet made of comparatively thin sheet metal and provided with an upwardly extending rib at each side and with transverse core openings, and upwardly pressed hand-engaging portions.

In testimony whereof I hereunto affix my signature.

FRANCIS J. STRAUB.