

No. 850,602.

PATENTED APR. 16, 1907.

G. RADER.
DUMB WAITER SHAFT.
APPLICATION FILED MAY 4, 1906.

Fig: 1.

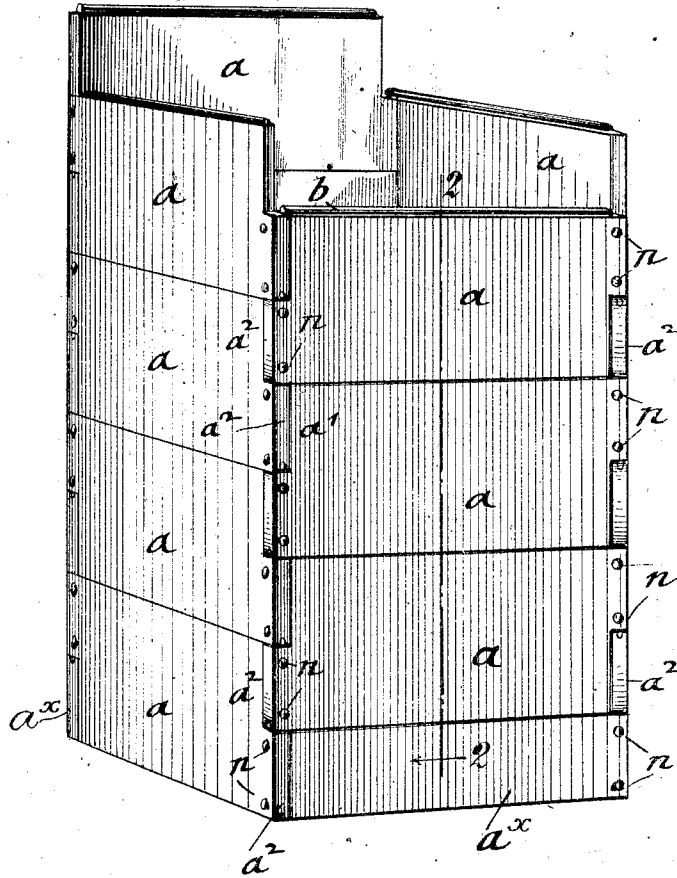


Fig: 2.

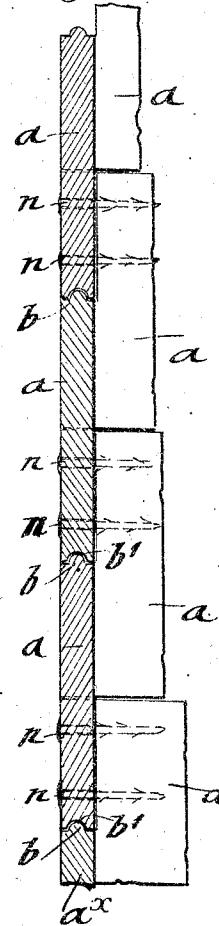


Fig: 3.

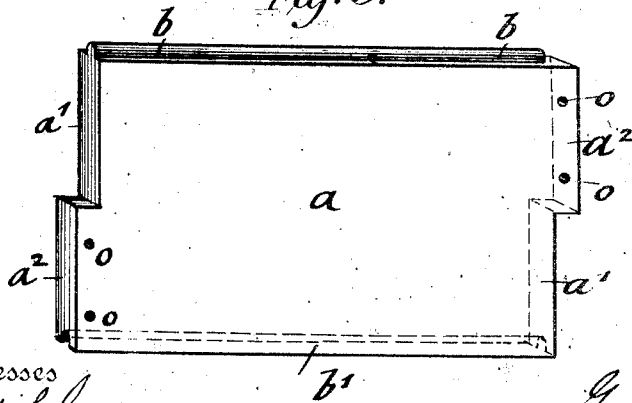


Fig: 4.



Witnesses
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GUSTAVE RADER, OF MONTCLAIR, NEW JERSEY.

DUMB-WAITER SHAFT.

No. 850,802.

Specification of Letters Patent.

Patented April 16, 1907.

Application filed May 4, 1906. Serial No. 315,126.

To all whom it may concern:

Be it known that I, GUSTAVE RADER, a citizen of the United States, residing in Montclair, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Dumb Waiter Shafts, of which the following is a specification.

This invention relates to an improved dumb-waiter shaft which is made of blocks or plates that are made up in a mold and which can be assembled directly into a hollow shaft in such a manner that the blocks form the side walls of the dumb-waiter and are made to interlock with each other into a substantial shaft; and the invention consists in the novel features of construction and combinations of parts to be hereinafter described and claimed.

In the accompanying drawings, Figure 1 represents a perspective view of my improved dumb-waiter shaft, showing the manner of building up the same from individual blocks or plates. Fig. 2 is a vertical transverse section on line 2-2, Fig. 1. Fig. 3 is a perspective view of one of the plates or blocks employed for the dumb-waiter shaft, and Fig. 4 is an enlarged side view of one of the barbed-wire nails employed for attaching the blocks forming the walls of the dumb-waiter to each other.

Similar letters of reference indicate corresponding parts in the different figures of the drawings.

Referring to the drawings, *a* represents blocks or plates from which my improved dumb-waiter shaft is made. The blocks are made of plaster-of-paris mixed with fiber or other suitable material and are formed in molds of the required size. Plates or blocks of the same size are used if a square shaft is required, but of different sizes for the front and rear and for the sides when an oblong shaft is required. Each block *a* is recessed at its ends *a'* for one-half of its height at diagonally opposite corners, the remaining unrecessed portions *a''* of the sides being provided with holes *o* for the insertion of the connecting-nails *n*. The upper edge of each block *a* is provided with a tongue *b*, and the lower edge with a groove *b'*, so that all the blocks interlock with each other at their adjacent top and bottom edges, as shown in Fig. 2.

The dumb-waiter shaft is built up from

the blocks *a* by using a half-block *a^x* for the front and rear wall and full-sized blocks *a* for the side walls and connecting the blocks by driving wire nails *n*, which are provided with barbed shanks *n'*, as shown in Fig. 4, said nails being driven through the holes *o*, which are provided for this purpose at the diagonally opposite sides of the blocks *a*. Full-sized blocks are then placed on the half-blocks *a^x* at the front and rear and on the blocks *a* of the side walls and again nailed together, course by course, by the barbed-wire nails *n*. This is continued until the entire shaft is built up. The front and rear blocks thus break joint with the side blocks. When oblong shafts are to be made, the front and rear walls are made longer and the side walls are made shorter. When the shaft is completed, the blocks forming the front, side, and rear walls of the same are all interlocked by the tongue-and-groove joints at the top and bottom edges and rigidly connected with each other by their recessed portions and the wire nails which are driven through the openings in the unrecessed side portions of the blocks.

As the blocks are made in the factory ready for use, they can be quickly assembled into a shaft by being connected in the manner described, forming thereby a strong yet comparatively inexpensive dumb-waiter shaft.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

A dumb-waiter shaft of rectangular cross-section each wall of which is formed of a plurality of superposed blocks having cut-away portions or recesses at diagonally opposite upper and lower corners, and projections formed by said recesses, the recesses and projections of the blocks of each wall interlocking respectively with the projections and recesses of the blocks of the adjacent wall, the front and rear blocks breaking joint with the side blocks.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

GUSTAVE RADER.

Witnesses:

PAUL GOEPEL,

HENRY J. SUHRBIER.