No. 762,459. PATENTED JUNE 14, 1904.

B. YCRE.

BAKING RACK.

APPLICATION FILED APR. 15, 1903. RENEWED FEB. 16, 1904.

NO MODEL. 3 SHEETS—SHEET 1.

Fig. 1.

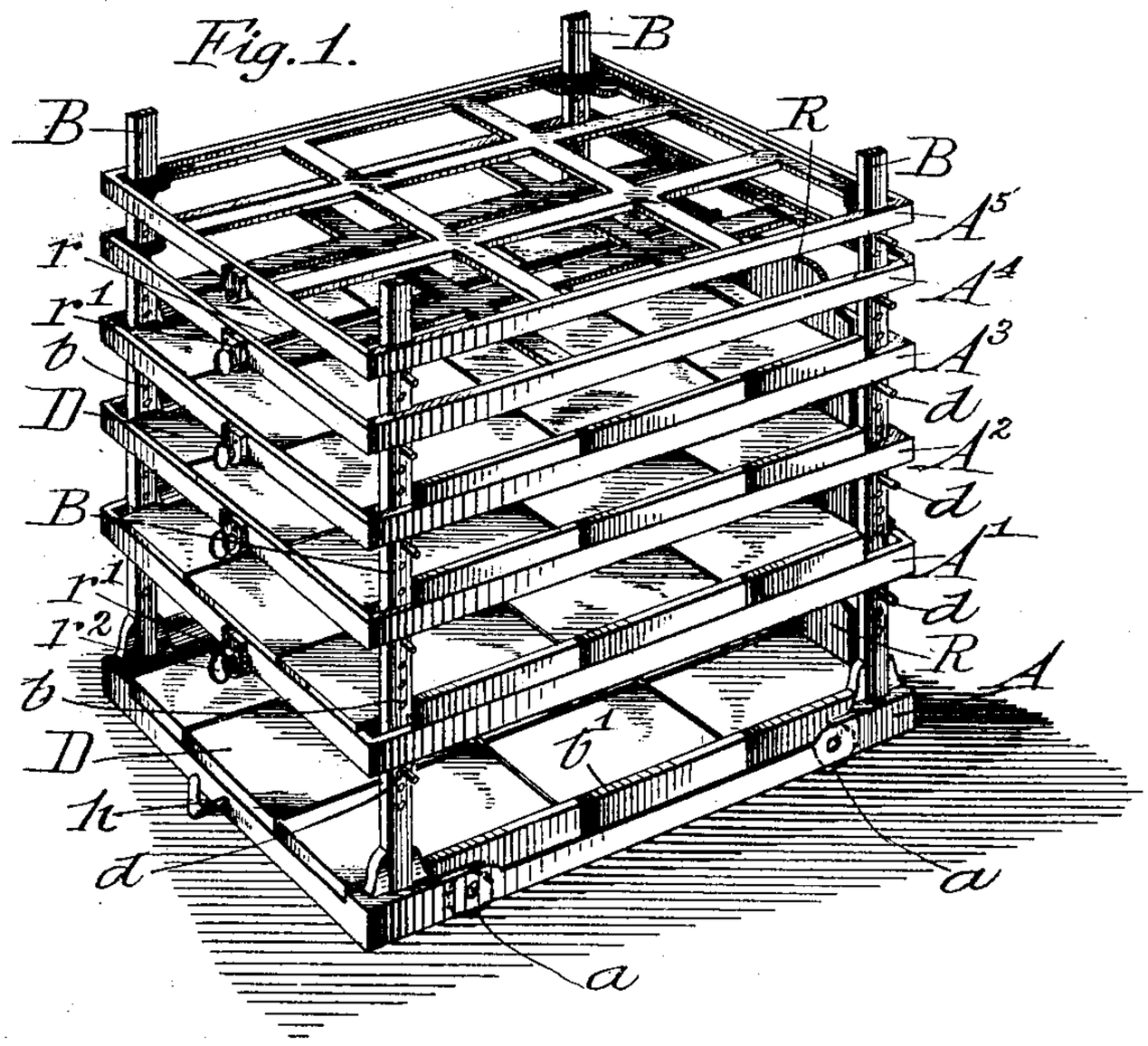
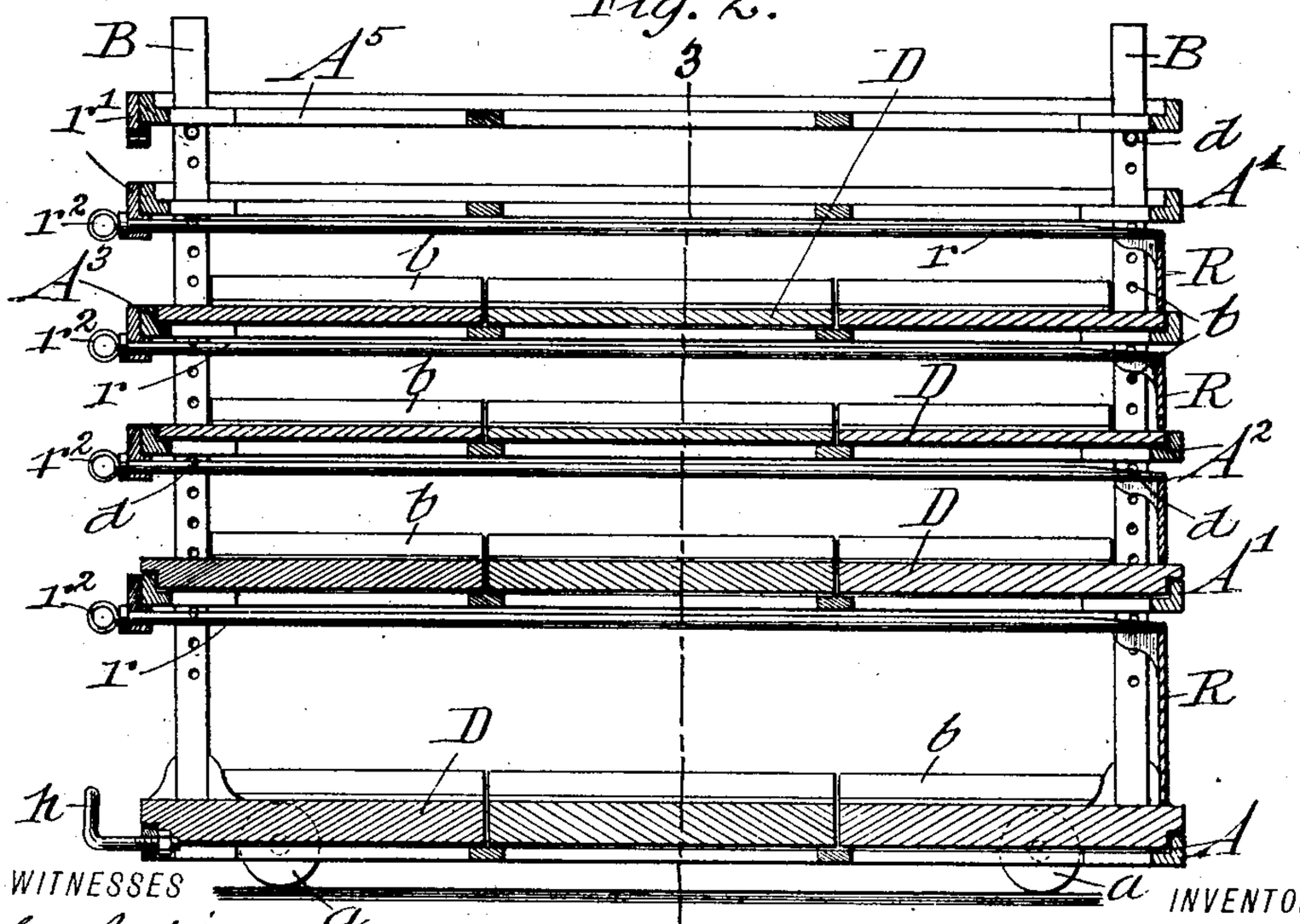


Fig. 2.



WITNESSES

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NO MODEL. 3 SHEETS—SHEET 2.

Fig. 3.

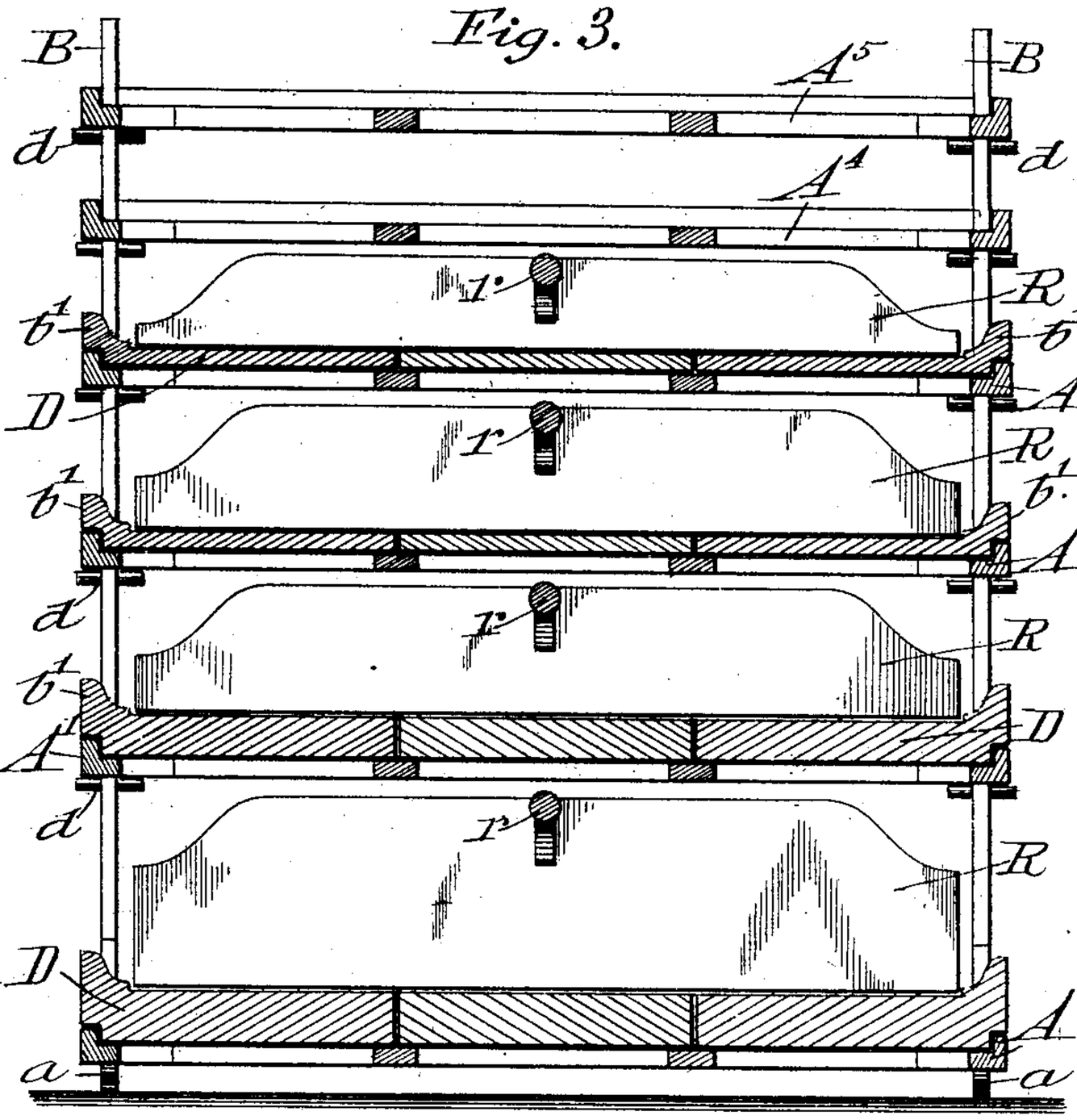
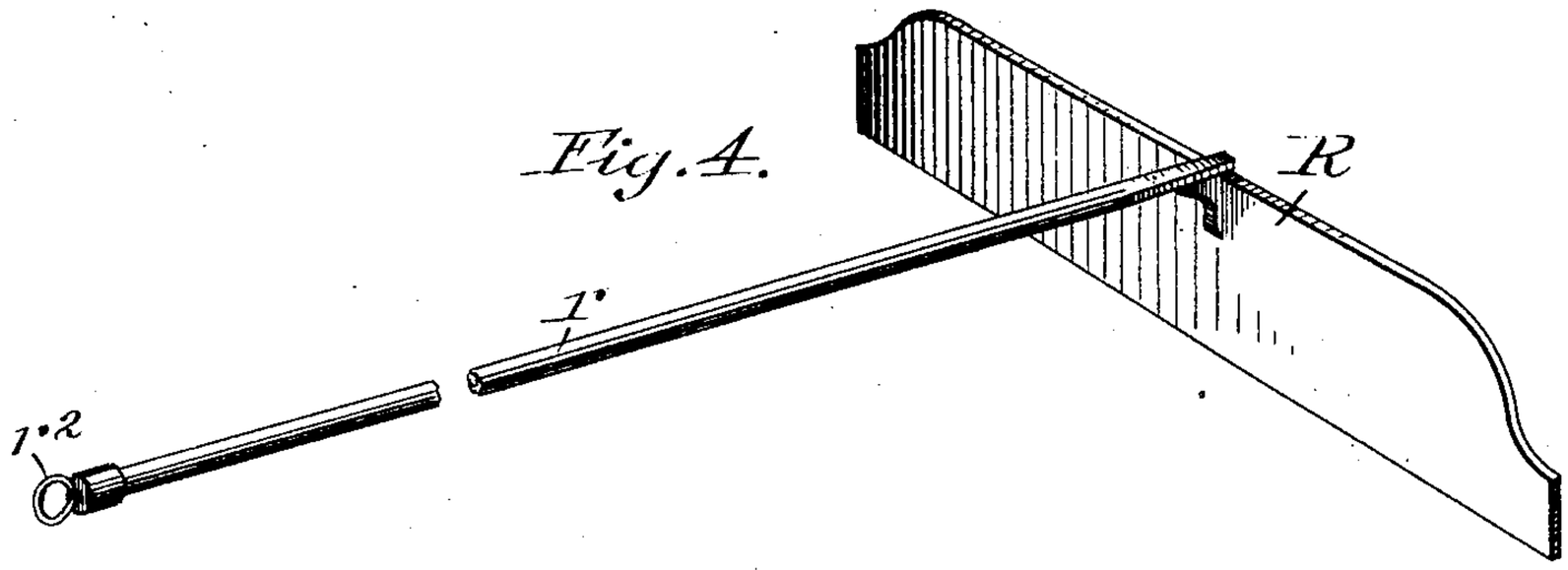


Fig. 4.



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NO MODEL. 3 SHEETS—SHEET 3.

Fig. 5.

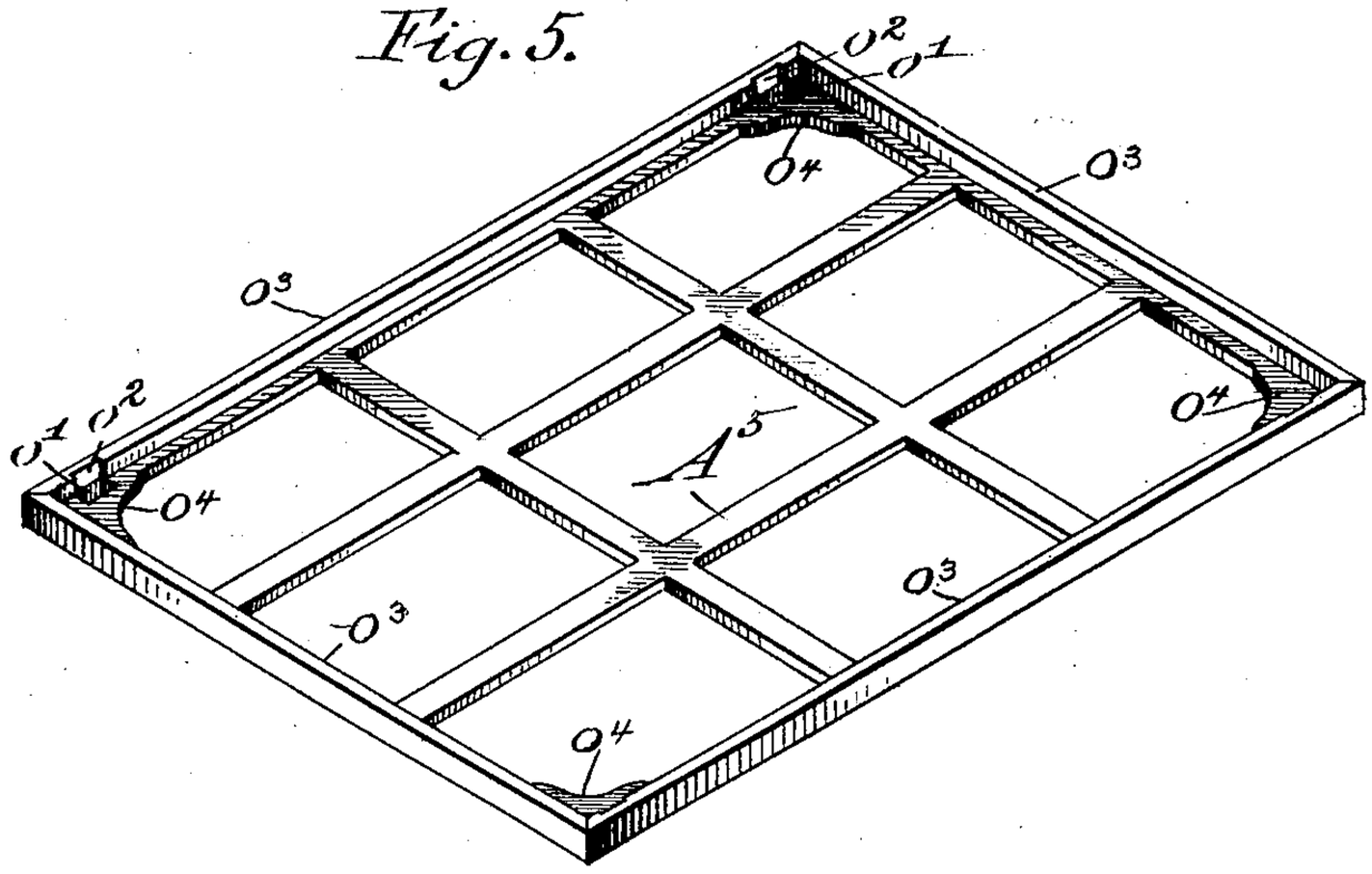


Fig. 7.

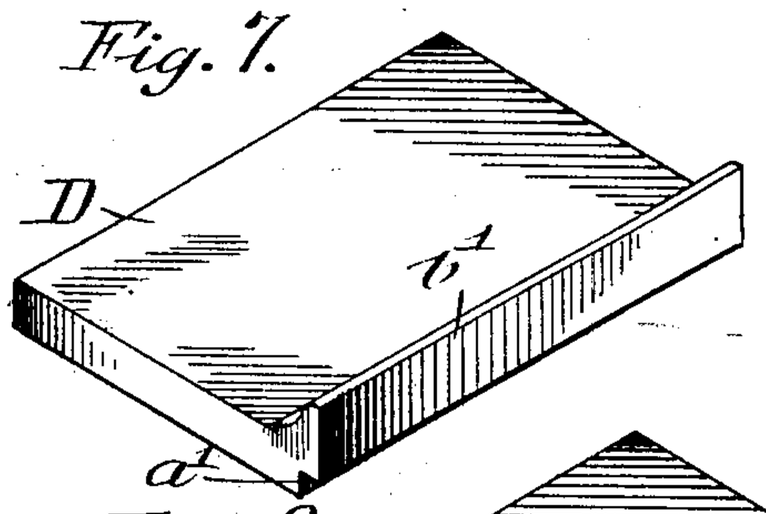


Fig. 8.

Fig. 6.

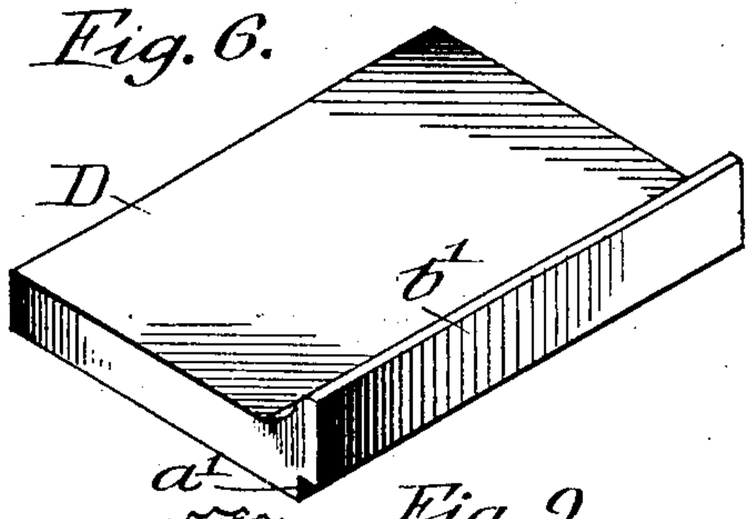
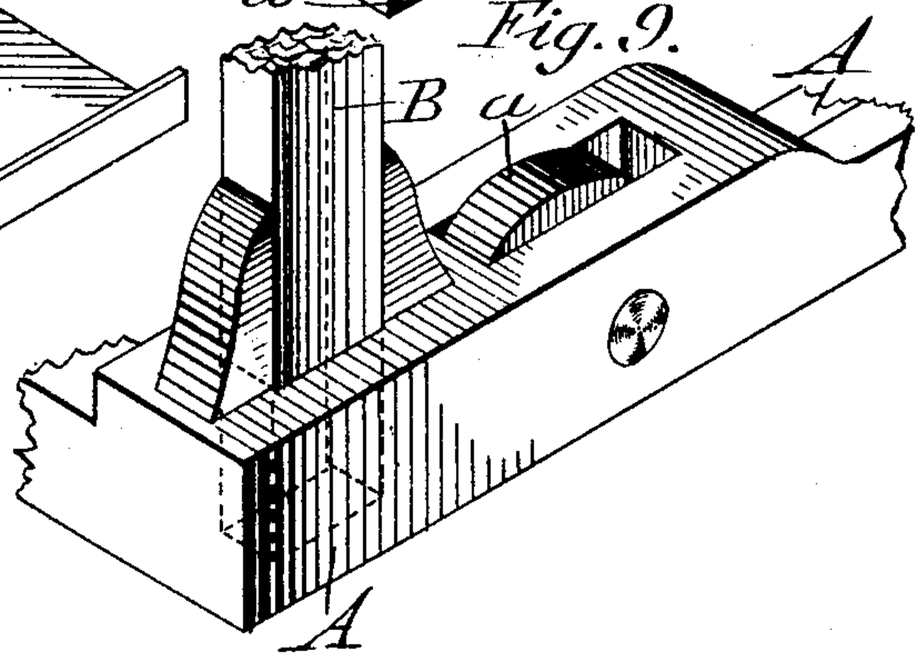


Fig. 9.



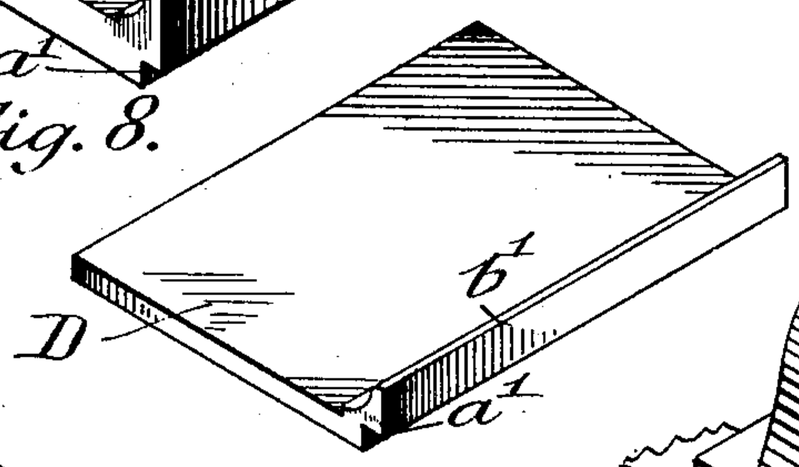
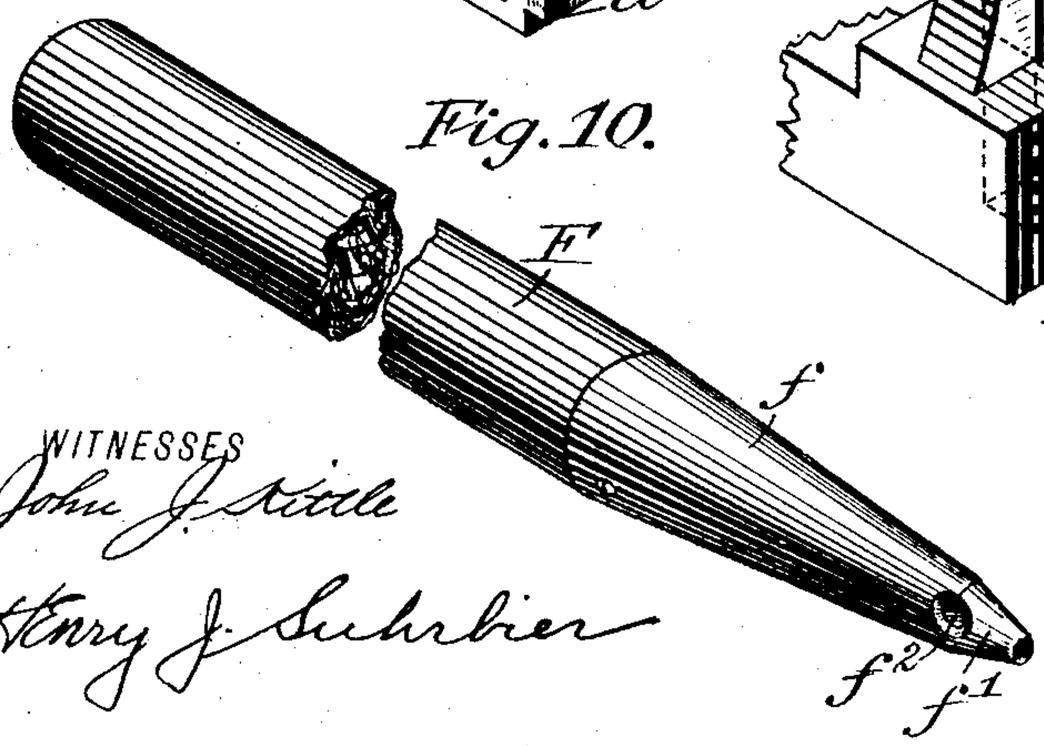


Fig. 10.



WITNESSES

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No. 762,459. Patented June 14, 1904.

UNITED STATES PATENT OFFICE.

BAPTISTE YCRE, OF NEW YORK, N. Y.

BAKING-RACK.

SPECIFICATION forming part of Letters Patent No. 762,459, dated June 14, 1904.

Application filed April 15, 1903. Renewed February 16, 1904. Serial No. 193,884. (No model.)

To all whom it may concern:

Be it known that I, BAPTISTE YCRE, a citizen of the Republic of France, residing in New York, borough of Manhattan, in the State of New York, have invented certain new and useful Improvements in Baking-Racks, of which the following is a specification.

This invention relates to an improved baking-rack to be used in connection with a baker's oven, so that the baking-space of the same is multiplied to a considerable extent, and thereby one oven may be used in place of a plurality of ovens, as heretofore, the baking-racks permitting the quick charging of the oven with the articles to be baked and the quick and convenient removal of the articles after they are baked; and for this purpose the invention consists of a rack for bakers' ovens which comprises a movable bottom frame provided with heavy tiles, uprights supported on said bottom frame, and a plurality of shelves supported at variable distances on pins placed through perforations of the uprights, said shelves being covered with tiles of gradually-increasing thickness toward the lower part of the frame, the articles to be baked being placed upon the various tiles.

The invention consists, further, in the combination, with the individual shelves, of horizontally-reciprocating rakes by which all the baked articles from one shelf can be quickly removed without the use of a peel when the entire rack is removed from the oven.

The invention consists, further, of the construction of the individual shelves and their supporting-frames and the tiles supported on the same; and the invention consists, lastly, of certain additional details of construction and combinations of parts, which will be fully described hereinafter and finally pointed out in the claims.

In the accompanying drawings, Figure 1 represents a perspective view of my improved baking-rack, showing the superposed shelves of the same. Fig. 2 is a vertical longitudinal section of the same on a larger scale. Fig. 3 is a vertical transverse section on line 3 3, Fig. 2. Fig. 4 is a detail perspective view of one of the rakes arranged on the shelves, by which the removal of the baked articles from the shelf is accomplished. Fig. 5 is a perspective view of a supporting-frame forming part of one of the shelves. Figs. 6, 7, and 8 are perspective views of the large tiles used for different shelves. Fig. 9 is a perspective view of the lower corner of the bottom shelf of the rack, showing the connection of the supporting uprights and rollers with the bottom frame; and Fig. 10 is a perspective view of the rod by which the racks are moved and shifted into proper position in the oven for the baking operation and removed when the baking operation is completed.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents the bottom frame of my improved baking-rack. The bottom frame is provided at its corners with oblong socket-openings for inserting four uprights B, which are provided with transverse perforations *b*. The bottom frame is placed on rollers *a*, so as to be easily moved over the bottom or sole of the oven. On the uprights arranged at the four corners of the bottom frame are supported a plurality of shelves A' A^2 A^3 A^4 A^5, which rest on transverse pins *d*, that are placed at certain distances from each other in the transverse openings of the uprights, the lower shelves being arranged at greater distances apart, so as to provide for baking larger articles, such as loaves of bread, &c., while the upper shelves are arranged closer together, so as to provide for baking rolls and the like. The frames are provided with raised flanges o^3 at their sides and with corner-pieces o^4 at their corners, having oblong openings o' and recesses o^2 in the raised flanges of the same, as shown in Fig. 5, so as to provide for the proper placing in position on the uprights B. They are constructed in the nature of grids with longitudinal and transverse intersecting bars, on which a number of tiles D are placed, the inner tiles being simply of oblong shape with straight overlapping sides, while the outer or side tiles are provided with rabbets a' at their outer sides and raised side portions b', so as to prevent the baking from dropping sidewise over the shelves. The shape of the side tiles is clearly shown in Fig. 6. The

tiles of the upper shelves are preferably of less size and weight than the tiles of the lower shelves, the tiles gradually increasing in size toward the lower part, partly for the reason that the tiles of the lower shelves keep the heat longer for the larger articles placed thereon than the tiles of the upper shelves, on which the smaller articles are baked.

On each shelf is arranged a rake R, which extends transversely across the shelf and which is held in position at the rear end of the shelf, it being provided with a central forwardly-extending rod r, which is guided in a keeper r' at the front end of the shelf, the front end of each guide-rod being provided with a ring-shaped handle r^2, that permits the forward and backward movement of the rake over the shelf for clearing the baked articles on the entire shelf at one forward movement into a basket placed below the rack and then the return of the rake into its normal position at the rear end of the shelf, so as to supply the same with new articles to be baked. The reciprocating rakes R serve also for the purpose of preventing the dropping of the articles to be baked beyond the rear edge of the shelves, as they form, so to say, a rear wall for the shelves. The shelves are made of sheet metal, while the rods are made of wrought-iron and welded, riveted, or otherwise fastened to the body of the rakes. The construction of the rakes is clearly shown in Fig. 4.

The front end of the bottom shelf is provided with a central hook h, that serves for the purpose of moving the rack forward thereon into and out of the charging-opening of the oven. The moving of the entire rack is accomplished by means of a rod F, which is of a length for reaching through the charging-opening to the farthest corner of the oven and which rod is provided at its front end with a tapering metallic point f, having a conical front end f' and a tapering socket f^2, that passes through the point of the same, as shown in Fig. 1. The tapering point f serves for the purpose of being inserted below the front edge of the rack and producing the warping of the same to the right or left, while the transverse socket or opening f^2 serves for being placed in position on the hook h when the rack is to be moved in a straight direction forwardly or backwardly in the oven. With some practice the attendant can readily warp the rack into its proper position in the oven or withdraw the same by means of the warping-rod. Each baker's oven is provided with a plurality of baking-racks, which are charged with the articles to be baked and placed sidewise of each other in the oven, said racks being all built of wrought-iron and glazed tiles. The number of shelves supported in each rack can be multiplied, according to the size of the articles to be baked, the rack shown in the drawings being composed of six shelves—namely, a bottom shelf and five superposed shelves. As in an oven of medium size about from twenty to thirty racks can be arranged, each having six shelves, the baking-surface of the oven can thereby be increased from five to six times over the ordinary oven-surface, and consequently a much larger output of baked articles can be produced and at comparatively small expense.

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

1. A baking-rack, consisting of a wheeled bottom frame provided with upright corner-standards, and a plurality of shelves supported at suitable distances from each other on said standards, each shelf being composed of longitudinal and transverse intersecting bars, and tiles supported by the same, substantially as set forth.

2. A baking-rack, consisting of a wheeled bottom frame provided with upright corner-standards, and a plurality of shelves supported at suitable distances from each other on said standards, each shelf being composed of longitudinal and transverse intersecting bars, and tiles supported by the same, the thickness of the tiles of each shelf varying inversely as the height of the rack, substantially as set forth.

3. A baking-rack, consisting of a wheeled bottom frame provided with upright standards secured in corner-sockets of the bottom frame, and a plurality of superposed shelves supported at suitable distances from each other on said standards and each formed of a frame having raised flanges, corner-pieces at the corners of said frame having openings, and recesses in the raised flanges in proximity to the openings, substantially as set forth.

4. A baking-rack, consisting of a wheeled bottom frame, upright standards supported in the corners of said bottom frame, a plurality of baking-shelves supported at different distances from each other on said standards, and a rake for each of said baking-shelves, substantially as set forth.

5. A baking-rack, consisting of a wheeled bottom frame, upright standards supported in the corners of said bottom frame, a plurality of frames superposed at different distances from each other on said standards, and tiles supported on the bottom and superposed frames, the side tiles being provided with raised side ridges, substantially as set forth.

6. A baking-rack, consisting of a plurality of superposed baking-shelves, each composed of a supporting-frame and tiles placed thereon, rakes arranged one for each shelf, said rakes being provided with guide-rods, and means for guiding said rakes forward and backward over the shelves, substantially as set forth.

7. A baking-rack, consisting of a plurality of superposed baking-shelves, each composed

of a supporting-frame and tiles placed thereon, transverse rakes arranged one for each shelf, said rakes being provided with guide-rods, and means at the front part of the shelf for guiding said rods, substantially as set forth.

8. The combination, with a baking-rack provided with a number of superposed baking-shelves, a bottom frame provided with rollers, and a central front hook, of a warping-rod provided with a tapering point having a transverse socket-hole in said point for warping the rack in position by means of the hook, substantially as set forth.

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

BAPTISTE YCRE.

Witnesses:
PAUL GOEPEL,
HENRY J. SUHRBIER.