H. H. HUNGERFORD.

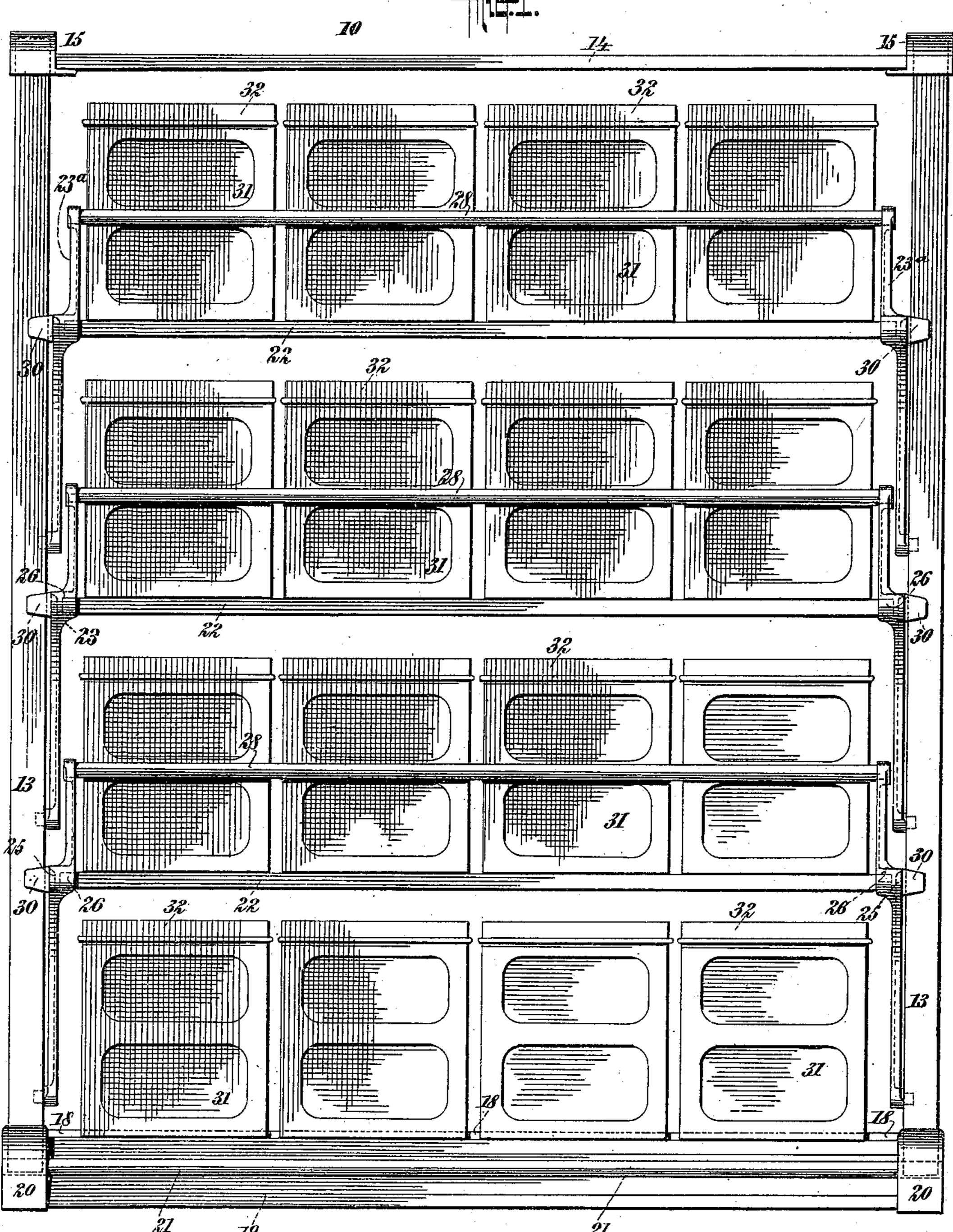
RACK FOR BOXES.

APPLICATION FILED JUNE 11, 1909.

983,824.

Patented Feb. 7, 1911.

2 SHEETS-SHEET 1.



WITNESSES:

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H. H. HUNGERFORD. RACK FOR BOXES.

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UNITED STATES PATENT OFFICE.

HENRY H. HUNGERFORD, OF CHICAGO, ILLINOIS, ASSIGNOR TO FRANK M. PETERS, OF CHICAGO, ILLINOIS.

RACK FOR BOXES.

983,824.

Specification of Letters Patent.

Patented Feb. 7, 1911.

Application filed June 11, 1909. Serial No. 501,520.

To all whom it may concern:

Be it known that I, Henry H. HungerFORD, a citizen of the United States, residing
at Chicago, Cook county, in the State of
Illinois, have invented certain new and useful Improvements in Racks for Boxes, of
which the following is a full, clear, and exact specification.

My invention relates to improvements in supporting devices and the same has for its object more particularly to provide a simple, efficient and reliable means for supporting a number of receptacles in such manner that access may readily be had to the contents thereof.

Further, said invention has for its object to provide a support comprising a series of shelves adapted to receive receptacles, which shelves are so arranged that the receptacles 20 may be opened without removing the same from the support.

Further, said invention has for its object to provide a support comprising a series of shelves adapted to receive receptacles having covers which support is provided with means for maintaining the covers of said receptacles, when raised, to their open positions.

Further, said invention has for its object to provide a support comprising a series of pivotally mounted shelves arranged one above the other, and adapted to receive receptacles, which shelves are adapted to be tilted forwardly in order to support said respectacles thereon in position to permit of their covers being opened and held in said position.

To the attainment of the aforesaid objects and ends, my invention consists in the novel details of construction, and in the combination, connection and arrangement of parts hereinafter more fully described and then pointed out in the claims.

In the accompanying drawings forming part of this specification wherein like numerals of reference indicate like parts, Figure 1 is a front view showing one form of box rack constructed according to and embodying my said invention, and Fig. 2 is an end view thereof, showing in dotted lines certain of the shelves tilted and the receptacles open.

In said drawings 10 designates the apparatus as a whole, comprising a pair of base members 11 11 which are provided 55 upon their upper surfaces midway between their ends with sockets 12 12.

13 13 denote vertical supports or standards having their lower ends secured within the sockets 12 12 of the base members 11 60 11, and 14 denotes a shelf provided at its opposite ends with brackets 15 15 having sockets 16, 16 in their under sides adjacent to their forward edges into which sockets are fitted the upper ends of the vertical sup- 65 ports or standards 13 13.

17 denotes a shelf arranged intermediate the base members 11 11 having an upwardly extending flange 18 at its rear edge, and its front portion provided with a downwardly 70 and forwardly inclined portion 19, which extends to the forward ends of said base

and forwardly inclined portion 19, which extends to the forward ends of said base members 11 11. Upon the upper surface of the base members 11 11, at their forward edges are provided lugs 20 20 into which are 75 secured the ends of a transverse rod or

stay 21.

Intermediate the rigid top shelf 14 and the rigid bottom shelf 17 are arranged a series of pivoted shelves 22 22 22 each com- 80 posed of a pair of end frames 23 23 having depending bracket portions 24 24, which are pivotally secured at their lower ends to the inner sides of the vertical supports or standards 13 13. Each of said frame members 85 23 is provided upon its inner surface intermediate its top rail portion 23a, and the bracket portion 24 with a horizontal member 25 having a horizontal recess 26 therein to receive the opposite ends of a shelf 22 90 which is held firmly in place intermediate said pair of frame members 23 23 by transverse rods or stays 28 28 arranged at the upper front and rear edges of the rail portions 23a of said frame members 23 at points 95 above the shelf 27 therein. Each of said frame members 23 is further provided at its rearwardly overhanging portion with a projection or stop 29, adapted to contact with the rear edge or surface of one of the ver- 100 tical supports or standards 13, whereby to limit the forward movement of the pivoted shelf, and adjacent to its forward edge each frame member is provided with a similar

stop or projection 30 which is adapted for contact with the front surface of one of the vertical supports or standards 13, whereby to limit the inward movement of the piv-5 oted shelf and hold the same to its horizontal position intermediate said vertical sup-

ports or standards 13 13.

31 31 denote boxes or receptacles provided at their upper ends with hinged covers 32 10 32 which receptacles or boxes are arranged upon the pivoted shelves intermediate the transverse rods 28 28 thereof, and also upon the lowermost rigid shelf 17. Normally the receptacles with their covers closed are 15 adapted to be maintained in position upon said shelves 27 27, as indicated in full lines at Fig. 2 of the drawings, in which position the weight of said receptacles and their contents disposed upon said shelves will 20 serve to hold said shelves duly in their horizontal positions owing to the fact that a greater portion of each shelf is arranged in a vertical plane to the rear of its point of support, and is, therefore, overbalanced.

When access is to be had to the receptacles or boxes and their contents, it merely becomes necessary to grasp portion of the pivoted shelves by means of the transverse rod 28 arranged at the forward edge of a 30 shelf and draw the same outwardly until the stops or projections 29 29 at the rear edges of the end frame members contact with the rear surface of the vertical supports or standards 13 13, and arrest the 35 movement thereof, and cause the same to assume the positions indicated in dotted line at Fig. 2. When the shelves are adjusted to the positions indicated in dotted lines the boxes or receptacles 31 will be tilted suf-40 ficiently to cause the covers 32 thereof, when opened, to be maintained by their own weight in position against the rod 28 provided at the forward edge of each shelf. When a shelf and the receptacles thereon 45 are to be restored to their normal positions, it merely becomes necessary to push the shelf backwardly until the same resumes its horizontal position, during which movement the covers 32, 32 will be caused to drop into po-50 sition upon the tops of the boxes or receptacles 31, 31. Further, it is to be noted that where the receptacles are provided without hinged or separate, removable covers having transparent portions, the shelf 55 may be supported in its inclined or tilted

Having thus designated my invention, what I claim and desire to secure by Letters

60 Patent is:—

said receptacles to view.

1. A rack of the character described comprising a frame, a series of overbalanced brackets pivotally mounted in pairs therein, one above the other, shelves secured to 65 said brackets, means for supporting said ward ends thereof and having their lower 130

shelves in their overbalanced positions, and retaining means arranged above the edges of said shelves for confining articles in position upon said shelves, substantially as

specified.

2. A rack of the character described comprising a pair of connected vertical supports, a series of angular brackets pivotally mounted in pairs therein, one above the other, shelves secured to said brackets, 75 retaining means secured to said brackets above said shelves, and means arranged upon said brackets adapted to engage said vertical supports whereby to support said shelves in their overbalanced positions, sub- 80

stantially as specified.

3. A rack of the character described comprising a pair of vertical supports, transverse members connecting the same at their upper and lower ends, a series of overbal- 85 anced brackets comprising horizontal portions and vertical portions depending therefrom having their ends pivotally secured to said vertical supports, shelves secured to the horizontal portions of said brackets, 90 retaining means arranged upon said brackets above said horizontal portions, and stops on said brackets adapted to limit the movement of said brackets and the shelves thereon, substantially as specified.

4. A rack of the character described, comprising a base, a pair of vertical supports secured therein, a transverse member connecting said supports at their upper ends, a series of overbalanced brackets arranged 100 intermediate said supports, one above the other, said brackets comprising horizontal portions and vertical portions depending therefrom adjacent to the forward ends of said horizontal portions and having their 105 lower ends pivotally secured to said vertical supports, upstanding portions arranged upon said horizontal portions, transverse members connecting the ends of said upstanding portions, shelves secured interme- 110 diate the horizontal portions of said brackets, and stops arranged upon said brackets adapted for contact with said vertical supports whereby to support said brackets and the shelves therebetween in either of their 115 overbalanced positions, substantially as specified.

5. A rack of the character described comprising a base composed of a pair of ends, a shelf arranged intermediate said ends 120 position in order to expose the contents of | having an inclined forward portion, a transverse rod connecting said ends, vertical supports having their lower ends secured within said ends, a transverse member uniting the upper ends of said vertical supports, a 125 series of brackets arranged in pairs upon said support, said brackets comprising horizontal portions and vertical portions depending therefrom adjacent to the for-

ends pivotally secured to said vertical supports, upstanding portions extending from horizontal portions of said brackets, transverse rods uniting the corresponding ends of each pair of brackets, shelves secured intermediate the horizontal portions of said brackets, and stops arranged upon said brackets adjacent to the forward and rear edges thereof, adapted to contact with said vertical supports, whereby to support said

shelves in either of their overbalanced positions, substantially as specified.

Signed at the city of New York, in the county of New York, and State of New York, this 13th day of May, in the year one 15 thousand nine hundred and nine.

HENRY H. HUNGERFORD.

Witnesses:

CONRAD A. DIETERICH, LESTER C. TAYLOR.