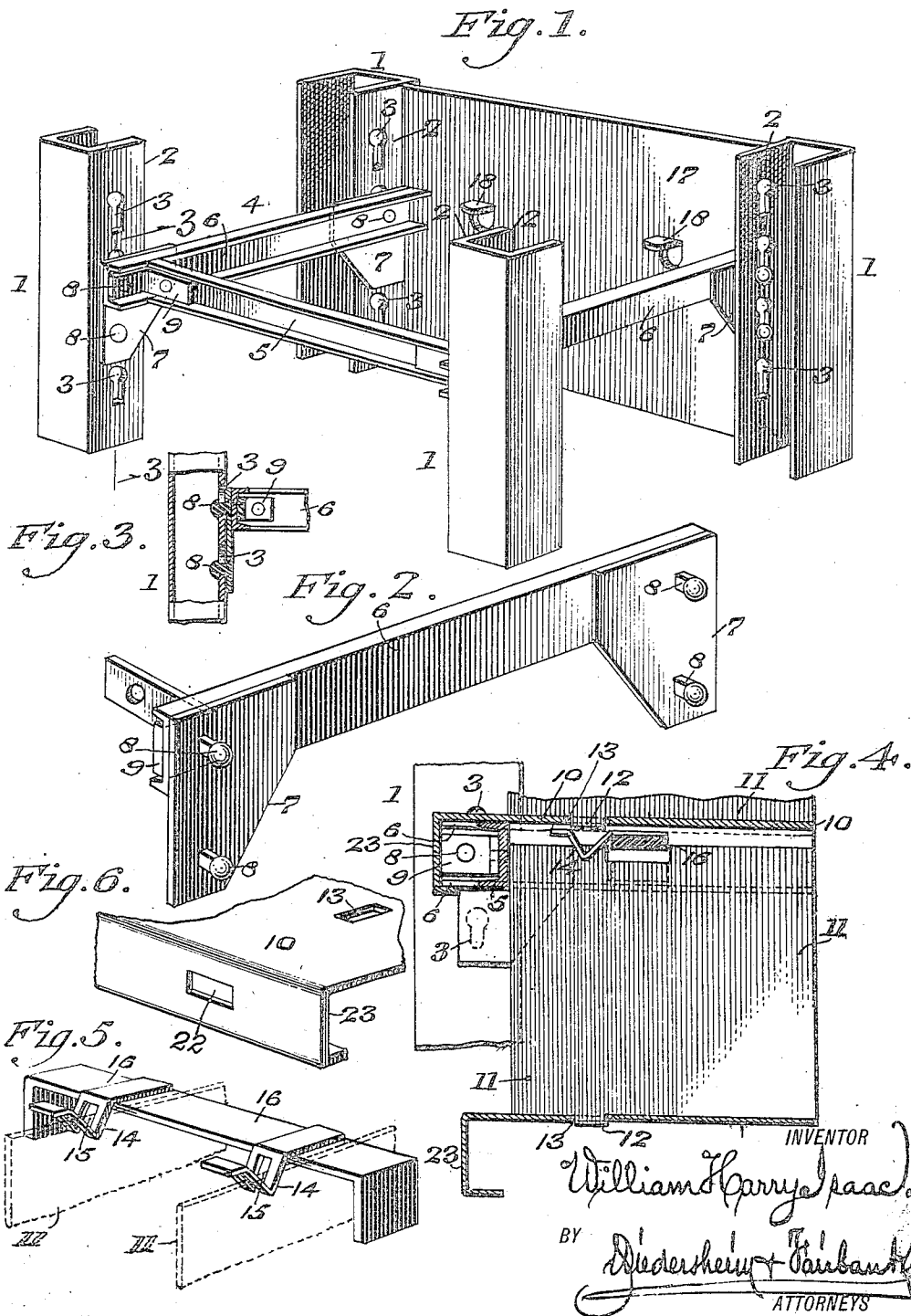


W. H. ISAAC.
SHELF BRACKET.
APPLICATION FILED JULY 6, 1918.

1,288,010.

Patented Dec. 17, 1918

3 SHEETS—SHEET 1.



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 3 SHEETS—SHEET 3.

Fig. 12.

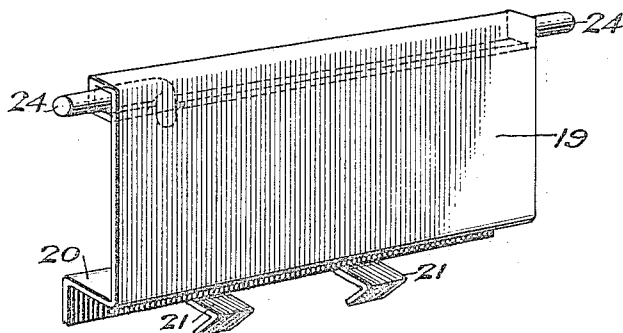


Fig. 11.

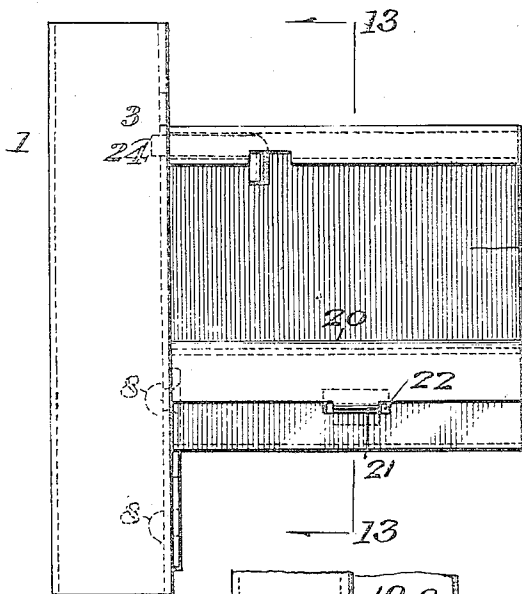


Fig. 13.

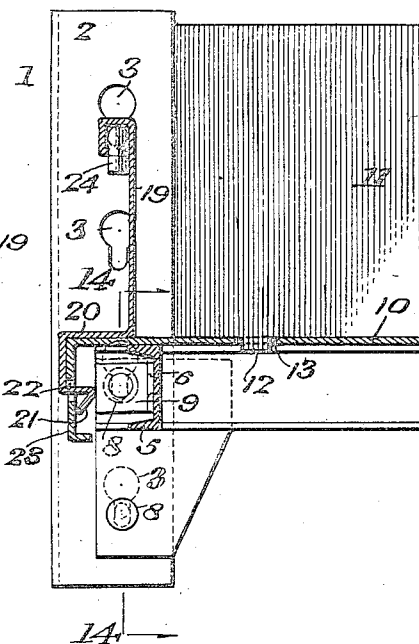
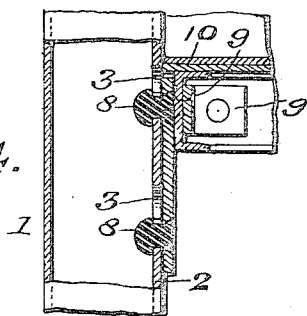


Fig. 14.



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SHELF-BRACKET.

1,288,010.

Specification of Letters Patent.

Patented Dec. 17, 1918.

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To all whom it may concern:

Be it known that I, WILLIAM H. ISAAC, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Shelf-Bracket, of which the following is a specification.

My invention consists of the construction of a support for a shelf for a store, factory, etc., the same embodying a bracket, a frame with which the latter is connectible and columns on which said frame may be sustained and adjustable in a convenient manner in vertical direction.

It consists also in adapting the shelves to support partitions whereby the shelf-space may be formed into divisions.

It consists also in adapting the shelves proper to support closures which convert the shelf-spaces into bins.

The invention is satisfactorily illustrated in the accompanying drawing, but the important instrumentalities thereof may be varied, and so it is to be understood that the invention is not limited to the specific details shown and described, as long as they are within the spirit or scope of the claims.

Figure 1 represents a perspective view of a metallic shelf embodying my invention.

Fig. 2 represents a perspective view of a detached member thereof.

Fig. 3 represents a vertical section of a portion on line 3—3 Fig. 1.

Fig. 4 represents a transverse section of a portion of the frame employed, and a side elevation of a partition supported thereon.

Fig. 5 represents a perspective view of a portion of Fig. 4 removed therefrom.

Fig. 6 represents a perspective view of the front portion of a shelf proper.

Fig. 7 represents a perspective view of a modification of the bracket employed.

Fig. 8 represents a side elevation of a portion of Fig. 7 including a modification of the column.

Fig. 9 represents a vertical section on line 9—9 Fig. 8.

Fig. 10 represents a horizontal section on line 10—10 Fig. 8.

Fig. 11 represents a side elevation of another embodiment of my invention.

Fig. 12 represents a perspective view of a member shown in Fig. 11.

Fig. 13 represents a vertical section of said member, Fig. 12, including the shelf

frame and column of the device on line 13—13 Fig. 11.

Fig. 14 represents a vertical section of a portion on line 14—14 Fig. 13.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings,

1 designates a series of vertically arranged columns formed of channeled metal having in the inner walls 2—2 thereof the keyhole slots 3 properly spaced-apart in the vertical direction thereof.

4 designates a frame composed of the front longitudinally-extending beams 5 and the transversely extending beams 6, all of channel metal.

To the ends of the side beams 6 on the outer sides thereof are riveted the brackets 7 to which are secured the headed studs 8 which are adapted to enter the slots 3 and have their shanks seated on the lower walls of the latter, thus firmly sustaining said brackets and consequently the beams 6, it being noticed that there are a plurality of studs at different heights on said brackets, and said studs are adapted to occupy a plurality of slots in said column whereby the brackets are prevented from turning or twisting on the columns.

The ends of the front beam 5 are seated in the channels of the side beams 6 and connected firmly with the latter by the angle irons 9 which are attached to said beams 5 and 6, and consequently to the brackets 7, thus forming a strong structure for said frame 4.

It is evident that owing to the studs 8 and the keyhole slots 3, the frame 4 may be raised and lowered on the columns 1 and placed in various vertically adjusted positions according to requirements, and firmly supported thereat. Prior to applying the frames on the columns, the beams 5 and 6 are separate. Then when the columns are set-up, the beams 6 are fitted to the columns and the studs introduced into the respective slots thereof. Then the beam 5 has its ends applied to the ends of the beams 6 in the channels of the latter. Each of the angle bars 9 has one limb riveted to the adjacent beam 6 and the other limb bolted to the beam 5, thus assembling the frame and firmly connecting it with the brackets and consequently with the columns. The frame may be removed by disconnecting the beam 5 from the angle bars, or vice versa, leaving

the beams 6 free to be raised and withdrawn from the columns, as is evident.

The frame 4 is adapted to have the shelf proper 10 placed thereon and so supported, and as is evident, said shelf may be vertically adjusted by the relative adjustment of said frame. In order that the space above the shelf 10 may be divided into vertical sections, I employ the partition 11 and provide the same in its lower end with the tongue 12 and form in the shelf the recess 13 into which said tongue is seated and so sustained in the shelf. The upper end of the partition is fitted in the holders 14 which are V-shape and formed with slots 15 in the angles thereof, said holders being connected with the cross bar 16 which is supported on the frame 4, the upper end of said partition having therein a slot which is below said cross bar, see Fig. 4, said slot permitting the partition to be raised in applying and removing the latter to and from a shelf.

The rear columns 1 have connected with them the wall 17 which forms the back of the shelf-space, and said wall has therein the horizontal lugs or ledges 18 which are punched out of said wall so as to extend in horizontal direction and form a support for the rear portions of the shelf 10, said portions being adapted to rest flat upon said horizontal ledges.

In Figs. 7, 8, 9 and 10, I show a plurality of brackets 7 connected with the beam 6, portions of said brackets being above the beam, and other portions below the same, each portion being provided with a stud 8 the studs thus being at different heights and the columns are formed with a plurality of keyhole slots 3, the latter and said studs being staggered, providing additional support for the beam in the columns.

In order to form a closure as a bin for the front of the shelf space, referring to Figs. 11, 12 and 13 inclusive, I employ the wall 19 which is supported on its lower end on the front portion of the shelf 10 and has on said end the elbow 20 depending therefrom, the lower limb whereof has thereon angular catches 21 which are adapted to be seated in slots 22 in the limb 23 on the front end of the shelf, thus connecting said wall 19 with the shelf. The upper end of said wall is provided with the bolts 24 which are adapted to enter the keyhole slots 3 in the adjacent columns 1, thus connecting said wall with the latter, the wall being thus firmly retained in position and being removable therefrom when so desired.

The depending elbow 23 of the shelf proper 10 is adapted to cover the beam 5 in front of the same, as plainly shown in Fig. 4, said shelf proper having been omitted from Fig. 1 for the purpose of clearness of the construction in said Fig. 1.

In Figs. 8, 9 and 10, the columns are of

T-shape in which case the slots 3 are in the vertical limbs 25 of said columns instead of the sides 2 of the channel shape columns of the previous figures.

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

1. A column having slots in a side thereof, a bracket provided with studs adapted to occupy any of said slots, a frame formed of transverse and longitudinally extending beams, the transverse beam being firmly connected with said bracket, the longitudinally extending beam being adapted to engage said transverse beam, and an angle bar at the corner of the frame, one limb being adapted to engage the transverse beam and to be secured thereto, and the other limb thereof being adapted to have the longitudinal beam connected therewith.

2. A column having slots in a side thereof, brackets provided with studs adapted to occupy either of said slots, a frame formed of angle-beams connected with each other, and with said brackets, the ends of one beam being adapted to enter the channel of the contiguous beam, and angle bars on said beams at the corners of the frame adapted to firmly connect the beams at said corners.

3. In a support for a shelf, a shelf proper, a frame adapted to sustain said shelf, and a column on which said frame is rested, and a rising and lowering partition adapted to occupy the space above said shelf, the latter having therein a recess, and said partition having at the bottom a depending tongue which is adapted to be lowered into said recess and interlocked therein.

4. In a support for a shelf, a frame on which the latter is adapted to be rested, a rising and lowering partition adapted to be supported on said shelf, and a cross bar adapted to be supported above said partition, said partition having therein at the top a slot which is adapted to receive the adjacent portion of said cross bar and permit the partition to be raised.

5. In a support for a shelf, a frame on which the latter is adapted to rest, a partition adapted to be supported on said shelf, a cross bar adapted to be supported above said partition, and a guide and holding member for said partition on said cross bar, said member having therein a vertical slot in which the upper end of said partition is movable and retainable.

6. In a supporting device for a shelf, a frame on which a shelf may be supported, a column adapted to support said frame and admit of the vertical adjustment of said frame thereon, and a closure for the front of said space above said shelf adapted to be seated on and connected with said frame, and means on said closure for connecting it with said column.

7. In a supporting device for a shelf, a metallic frame formed of beams, means for supporting the latter, and a shelf adapted to be supported on said frame, said shelf
5 having on an end a depending elbow, the vertical limb of which is adapted to embrace the vertical side of a beam of the frame, and the horizontal limb of which is adapted to embrace the under side of said
10 beam, said shelf having a recess therein and a vertical partition adapted to be seated on said shelf and having a depending tongue which is adapted to lockingly occupy said
15 said beam and interlocked by the elbow with

the latter, and said partition being supported on said shelf and interlocked by the tongue and recess with the same.

8. In a supporting device for a shelf, a frame, means for supporting the same, and
20 a vertical bin wall adapted to be supported on the front of said shelf, said shelf having a depending limb with a slot therein, said wall having thereon an angular catch which is adapted to be seated in said slot.

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Witnesses:

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