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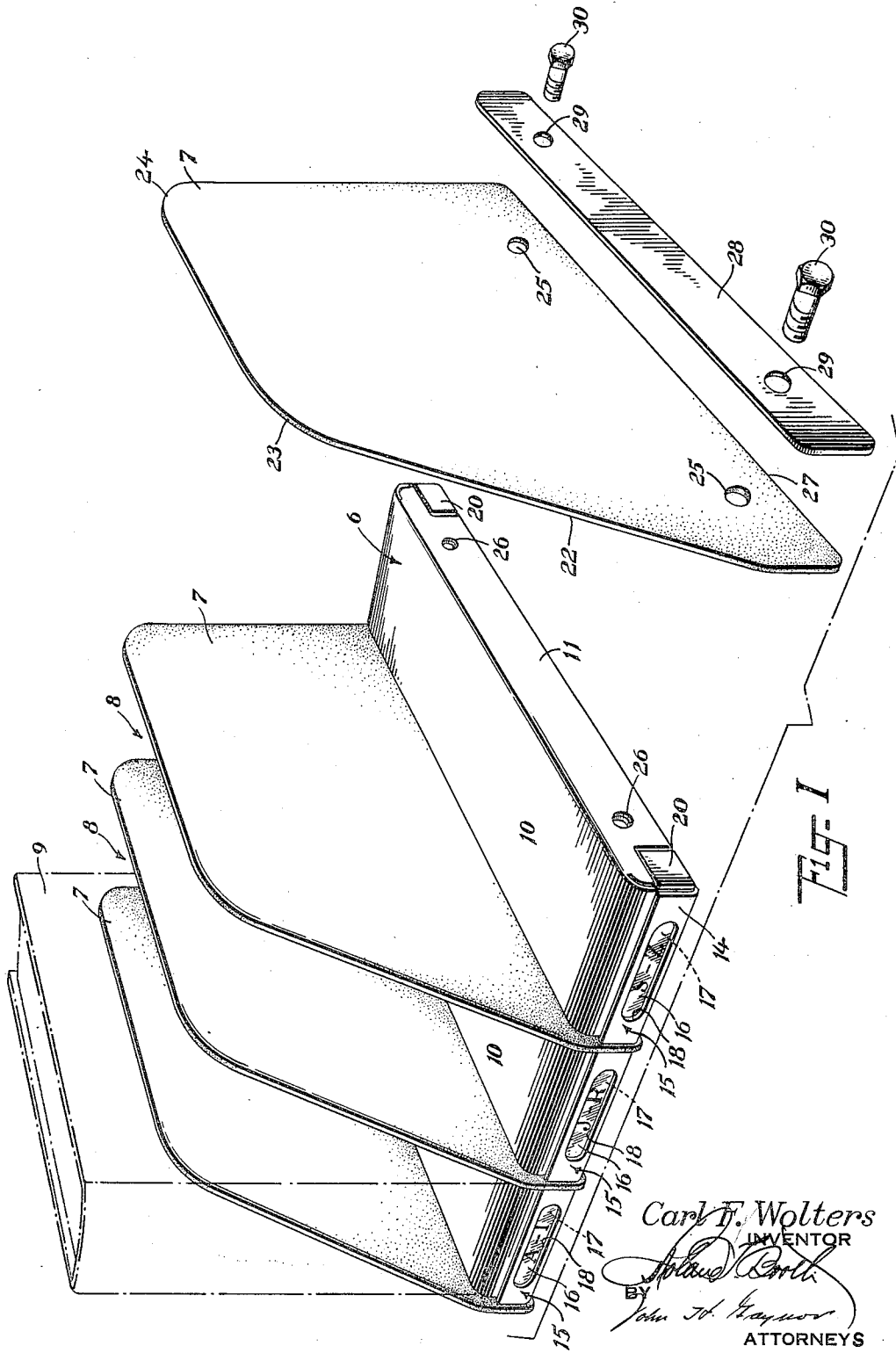
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2,537,565

BOOK UNIT RACK

Filed Oct. 29, 1948

2 Sheets-Sheet 1



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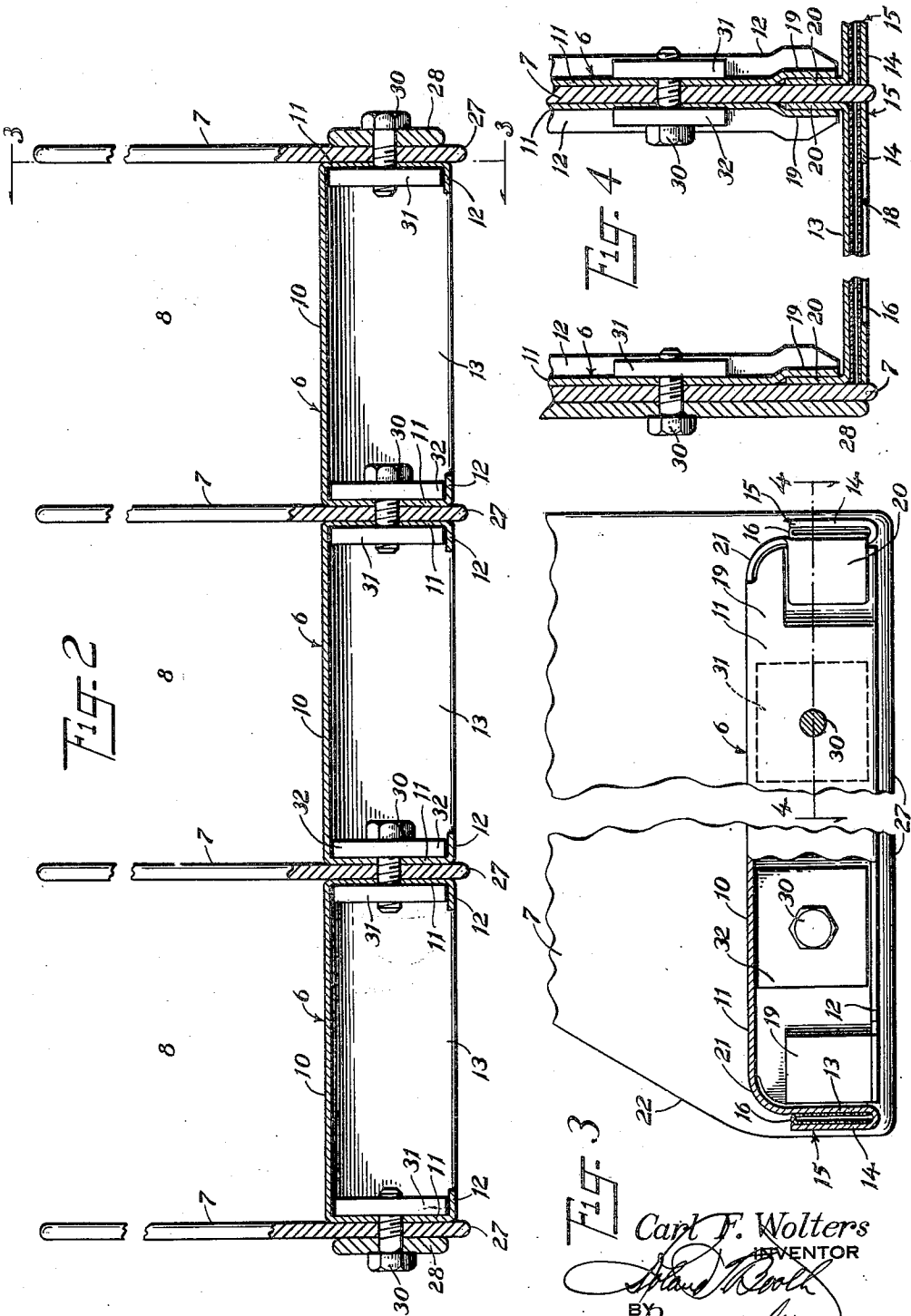


Fig. 3
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BOOK UNIT RACK

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1 Claim. (Cl. 211—11)

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The invention relates generally to an improvement in desk racks, particularly to racks of the type used in offices and which customarily are placed on the top of a desk or stand to hold a plurality of books, files or the like. It relates more specifically to a flexible rack of this character based upon a single base unit which permits expansion of the racks to any desired length by the addition of similar base units.

The prior art discloses numerous desk racks of the above general description, arranged in various ways to permit subdivision of the rack into separate pockets or compartments. However, all known racks, without exception, have at least one very objectionable common feature; the overall length is determinable by a base member or by a tie rod, and the partition separators influence the flexibility of the rack at most only in the ability to rearrange the width of the individual pockets. Where conditions of work or space require a rack of greater or lesser length than available, a new rack having a different base length is required or the old rack must be adjusted by means of fixed-length rods since none of the present racks provide for expansion or contraction of the overall length by means of the separator units directly.

The present invention contemplates the provision of a rack of the character described in which this objectionable feature is eliminated. It provides a rack in which each separate compartment is a complete unit having a base formed from a single piece of metal to which the partition members are attached. This base is symmetrical about its axes, and is provided at each of its ends with individual label holders to indicate and identify the contents of the compartment.

The invention further contemplates a flexible capacity rack which may be formed by joining together by concealed bolts a plurality of said units, the individual bases becoming spacers for the individual pockets. Thus, means are provided by which the ultimate consumer may secure a rack of a length adaptable to his own requirements of filing or space.

The present invention contemplates an expandable rack requiring a relatively small number of parts and in which a single base unit may be assembled with other similar base units by an unskilled worker to form a composite rack of varying lengths, using but few additional, and no replacement parts.

In the drawings:

Fig. 1 is a perspective of an expanded rack formed by joining several base units of the in-

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vention, one of the end partitions being shown disconnected from a base unit to illustrate the method of assembly.

Fig. 2 is a vertical cross-section through the assembled rack shown in Fig. 1 illustrating the manner in which the base units act as separators and the method of detachably interconnecting the separate units, the partitions being shown partly in elevation.

Fig. 3 is an end elevation of one of the base units, part of the structure being broken away and shown in section to illustrate its single piece construction, taken substantially on line 3—3 of Fig. 2.

Fig. 4 is a horizontal cross-section through an individual base unit, particularly illustrating the connection of the end and side flanges, taken substantially on line 4—4 of Fig. 3.

Referring now to the drawings, the rack illustrated in Figs. 1 and 2 comprises a plurality of unit bases 6, all of which are of like dimensions. Each base unit 6 is symmetrical about its respective axes and extends laterally between a pair of vertical partitions 7, spacing said partitions 7 to define a compartment or pocket 8 therebetween, in which papers, documents or other material, as for example, the book indicated in dot and dash lines at 9, may be placed to be supported by the said partitions.

Base unit 6 is made from a single piece of metal formed generally to define a channel section having a relatively wide rectangular central area or deck section 10 provided with depending flanges 11 along each longitudinal side edge, each flange 11 terminating in an inwardly directed lip 12 disposed in spaced parallel relation with central area deck section 10. The channel section thus formed provides a deck section 10, which serves as a support for the books or files, and flanges 11 which will abut partition members 7 for the attachment thereof in assembly of the rack.

Since the ends of base unit 6 are symmetrical, it will be sufficient to describe only one end, it being understood that in assembly the ends being duplicates may be arranged with either end at the front of the rack.

Each flange 11 is cut away at its ends to permit the end portion of area 10 to be turned downward to form an end wall 13 in a plane normal to plane of flanges 11. Marginal portion 14 formed as return bent portion on end wall 13 in spaced parallel relation therewith provides a label holder 15 in combination with end wall 13 to receive a flexible transparent strip 16

which provides a shield for a label or other indicia bearing member 17.

The indicia upon said label is observable through an elongated aperture 18 formed in marginal portion 14.

A portion of each flange 11 and lip 12 adjacent their respective ends is offset inwardly, as shown at 19, to engage a pair of overlapping ears 20 on end walls 13 and disposed normal to the plane of said end walls. When flanges 11 and ears 20 are assembled in this manner, as shown in Fig. 4, they are suitably welded together to produce a rigid box-like structure in which all possibility of spreading is eliminated. The marginal edge between deck portion 10 and end wall 13 is curved, as shown at 21, to add to the appearance of the base and to facilitate insertion of material into the pocket 8.

Planiform partitions 7 may be formed of any suitable sheeting, such as Masonite, plastic or metal. The length of a partition 7 is such that its front and rear edges will extend outwardly beyond the end walls 13 of base unit 6. The front edge may be conveniently tapered, as shown at 22, and the top corners 23 and 24 are rounded, as shown in Fig. 1.

For clamping the assemblage of base unit and partitions together, the base unit and partitions are each provided with registering spaced holes, such as the holes 25—25 in partition 7 and the holes 26—26 in base unit 6. Since the rack is supported on the rounded bottom edges 27 of the partitions, holes 25—25 will be spaced above bottom edge 27 a distance sufficient to permit base 6 to be carried by said partitions with lips 12 spaced above the supporting desk or stand.

The numeral 28 designates an elongated flat retainer bar. Bar 28 is arranged with a pair of spaced holes 29—29 registering with the holes 25—25 and 26—26 in partitions 7 and base unit 6, respectively.

As has been pointed out, the rack of the invention may be assembled as a single unit, or extended into a composite rack combining several base units. In assembling a single unit, a pair of threaded hex-head cap screws 30 are passed successively through the registering holes 29—29 and 25—25 of a retainer bar 28 and a partition member 7, respectively, and then passed through the registering holes 26—26 in one of the flanges 11 to be screwed into a pair of square threaded nuts 31 positioned below deck section 10, and each nut 31 having one of its boundaries resting on lip 12. It will be noted that the axial diameter of nut 31 is substantially equal to the distance between area 10 and lip 12 so that rotation of the nut is prevented and partition 7 will be secured rigidly on one side of base unit 6. Another partition 7 is similarly assembled on the other flange 11 by means of similar screws 30, a retainer bar 28 and nuts 31. A rack having a single pocket or compartment 8 is thus assembled.

To add extra compartments it is necessary only to remove the screws 31 and retainer bar 28 from one end partition whereupon additional base

units 6 and partitions 7 may be added in the manner already described, a square unthreaded washer 32, similar in size to nut 31 and similarly disposed between area 10 and lip 12, being substituted in the described assembly procedure for the retainer bar 28 between the separate units. When the rack has been extended to include the desired number of compartments, the end partition 7 and retainer bar 28 are reassembled on the end base unit 6 in the manner described.

It should also be noted that the unique construction of base unit 6 permits expansion of an individual compartment 8. A rack having a multiple-width compartment is readily accomplished by omitting the interposed partition 7 and bolting abutting flanges 11 of adjacent base units 6 in the manner heretofore described for making an expanded rack.

The invention claimed is:

A desk file of the class described comprising an assemblage of a plurality of base units and a plurality of partitions respectively extending vertically upward at each end of said assemblage of base units and from between adjacent base units, said base unit and said partition having registering openings extending therethrough, clamping means, including a plurality of screws, washers and nuts, for clamping said partitions and said base units in assembled relation, each said base unit comprising a box-like structure symmetrical about its axes and having a centrally disposed rectangular supporting area arranged with circumscribing depending flanges along its marginal edges, said depending flanges along the shorter marginal edges terminating in integral ears normal to the plane thereof and overlapping the ends of said depending flanges along the longer marginal edges and welded thereto, said longer depending flanges having the aforementioned registering openings formed therein and terminating in inturned lips supporting the nuts and washers of the clamping means below the plane of said supporting area, said shorter depending flanges terminating in an end portion folded upon itself defining a laterally extending label holder, and a plurality of retaining bars, one retainer bar abutting each end partition and being provided with openings registering with the openings of said partition, said retainer bars being carried on the clamping means securing said end partitions to said end base units.

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