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[21] Appl. No. **852,658**

[22] Filed **Aug. 25, 1969**

[45] Patented **Oct. 5, 1971**

[32] Priority **Aug. 29, 1968**

[33] **Switzerland**

[31] **13 027/68**

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[54] **STORAGE STRUCTURE**
 10 Claims, 4 Drawing Figs.

[52] U.S. Cl. **211/126,**
 312/107

[51] Int. Cl. **A47b 87/00,**
 A47f 3/14

[50] Field of Search **211/126,**
 88, 113, 99, 170, 184, 94, 94.5, 70; 312/184, 183,
 198, 111, 107, 117, 123

ABSTRACT: The invention relates to a storage structure comprising juxtaposed, forwardly open boxes, being divided by separator sheets into compartments lying above each other and capable of receiving material, e.g., fittings. The whole structure being made substantially of sheet metal parts joined to each other by dismountable horizontal rod-fastening means.

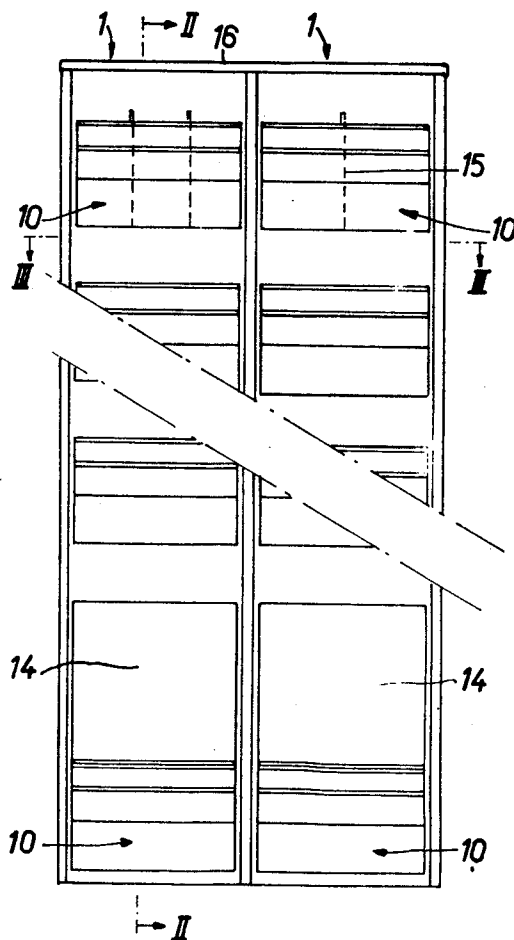


Fig. 1

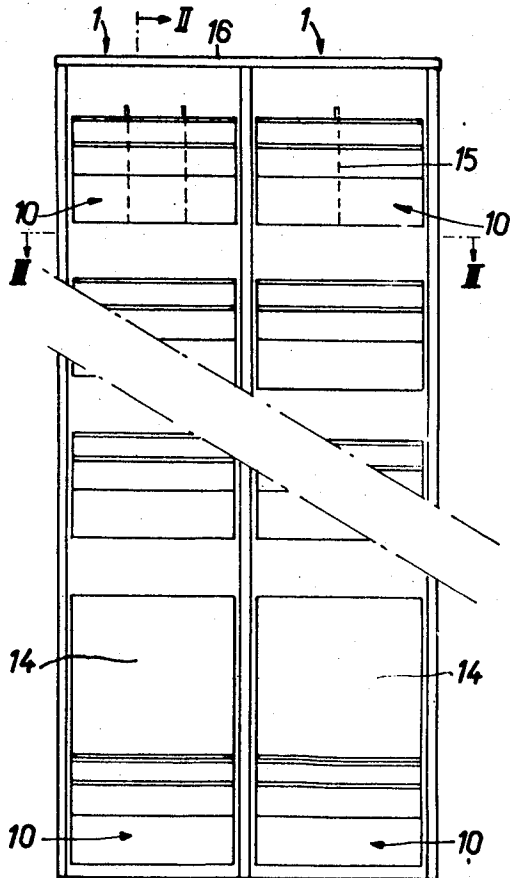


Fig. 2

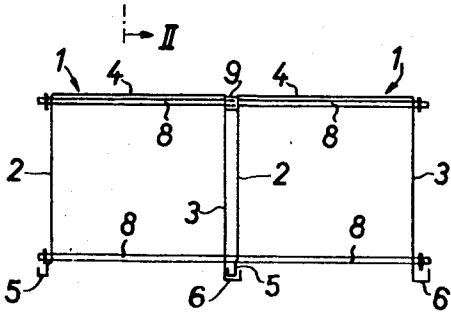
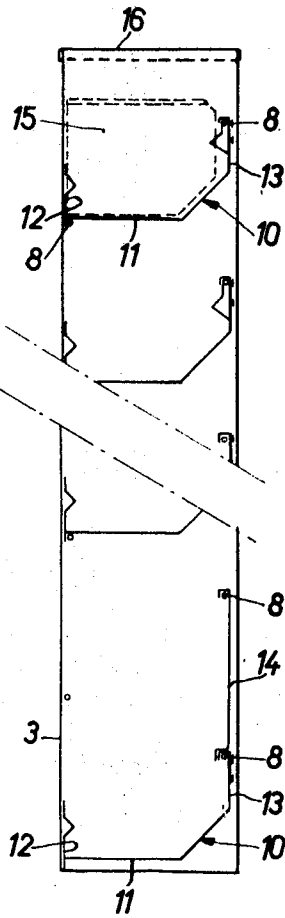
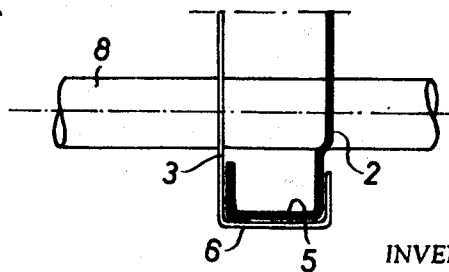


Fig. 3

Fig. 4



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STORAGE STRUCTURE

The present invention relates to a storage structure comprising juxtaposed, forwardly open boxes consisting of vertically oriented U-bent sheets, the adjacent vertical edges of which engage one another in clamping manner, further comprising horizontal rods extending through all boxes, said rods being arrested against a longitudinal shift and separator sheets dividing the boxes to form containers, said separator sheets being adapted to be suspended on the rods.

The invention will be apparent from the following detailed description, reference being made to the accompanying drawings, in which

FIG. 1 is a front elevation of a bearing support;

FIG. 2 is a section along II—II of FIG. 1;

FIG. 3 is a section along III—III of FIG. 1 with separator sheets removed and

FIG. 4 is a section of FIG. 3 on a larger scale.

The storage structure shown is provided with juxtaposed boxes 1 which are connected with one another. In the embodiment shown, the storage structure is composed of two boxes, but more boxes may of course be used. Each box 1 has two sidewalls 2, 3 and a rear wall 4, which are formed from a U-bent metal sheet. The vertical edge portions 5, 6 of the 5, 6 2, 3 are firstly bent outwardly and then, at a distance therefrom, rearwardly through 90° and thereby form a rearwardly open channel. As may be seen from FIG. 4, the arrangement is such that the edge portion 6 of the sidewall 3 of one box may be inserted in clamping manner over the edge portion 5 of the sidewall 2 of the adjacent box. FIG. 4 shows that the sidewall 2 is outwardly offset in the region of the edge portion 5, so that the rearwardly bent edge part of the edge portion 6 is in alignment with the sidewall 2. Of course, on the one hand the rear walls and on the other hand the sections on the edge portions 6 parallel thereto are also in alignment with respect to one another, in the case of adjacent boxes the edge portions of which are engaging each other. The sidewalls 2, 3 have aligned bores adjacent the rear wall 4 and the edge portions 5, 6, through which rods 8 extending through all boxes are inserted. A rear and a front row of rods is thereby formed. In each row, the rods are lying above each other at regular distances, both rows of rods being offset with respect to one another. At their two ends projecting outwardly with respect to the sidewalls of the boxes, the rods 8 carry end discs abutting the sidewalls or arranged at a short distance therefrom, which end discs are secured on the outside. Furthermore, spacer sleeves 9 which abut on the sidewalls 2, 3 are arranged (see FIG. 3) on the rods 8, at points located between the sidewalls 2, 3 of the adjacent boxes 1. The individual boxes 1 may be divided into superposed containers by bent separator sheets 10 which are supported on the rods 8 (see FIG. 2). The separator sheets 10 have a horizontal base part 11 to a rear end of which is connected a vertical rear part 12 projecting upwardly and downwardly with respect to the base part, and a front end of which is bent obliquely upwardly and passes into a vertical front part 13, which at its upper end is bent to form a downwardly open U. When inserted, each separator sheet 10 extends with its base part 11 and its front part 13 to the immediate vicinity of the sidewalls 2, 3 and the rear part 12 abuts on the rear wall 4 of the box in question. The rear region of the base part 11 of each separator sheet, with the exception of the lowermost separator sheet, lies on a rear rod 8, the downwardly projecting section of the rear part 12 gripping behind this rod. The upper bent end of the front part 13 of each separator sheet grips over a front rod 8 and is supported thereon.

Should one container be of greater depth, a front plate 14 is inserted which, with its bent lower end, lies on the upper end of the front part 13 of the separator sheet 10 and, by its bent upper end, is suspended from the next highest front rod 8 (see

FIG. 2).

The separator sheets 10 may also be constructed to receive vertical separator walls 15 (see uppermost container) and to divide the containers into compartments.

A cover sheet 16 is detachably arranged on the upper end of the storage structure.

The storage structure described is particularly suitable for holding small parts, for example fittings, etc.

It may easily be assembled and disassembled. Weldings or screw connections are not necessary either in the production of the individual constructional elements or when assembling the storage structure. When assembled, the storage structure is very rigid although it is constructed of sheet metal parts. The separator sheets, 10 front sheets 14 and separator walls 15 may be inserted or removed according to requirements.

I claim:

1. Storage structure comprising juxtaposed, forwardly open boxes consisting of vertically oriented U-bent sheets forming continuous sidewalls and rear walls, the adjacent forward vertical edge areas of which engage one another in clamping manner, wherein the engaging edge areas of said boxes are bent laterally outwardly and rearwardly and each edge area forms in cross section an outward extending rearwardly open channel, one edge area of one box embracing an adjacent edge area of a laterally adjacent box, further comprising horizontal rods extending through all boxes, said rods being arrested against substantial longitudinal shift, and separator sheets dividing the boxes to form containers, said separator sheets being adapted to be suspended on the rods.

2. Storage structure as defined in claim 1 wherein one sidewall of each said box is laterally outwardly offset in a region of its bent edge area, said sidewall being substantially in alignment with a rearward directed portion of the edge area of the adjacent wall of the adjacent box.

3. Storage structure as defined in claim 1, wherein the rods are horizontal and extend through the sidewalls adjacent the rear walls and adjacent interengaging edge areas of said boxes thereof.

4. Storage structure as defined in claim 1, further comprising spacer sleeves, said sleeves being arranged on sections of rods lying between adjacent walls of adjacent said boxes near rear walls of the boxes.

5. Storage structure as defined in claim 3, wherein the rods are superposed at equal distances, rods near the rear walls being vertically offset with respect to corresponding rods near the edge areas, the latter rods being higher than corresponding rods near the rear walls.

6. Storage structure as defined in claim 5, wherein the separator sheets dividing said boxes to form containers have horizontal base parts which lie on rear rods near the rear walls, and have front parts which are suspended from front rods near the edge areas to form superposed containers with the sidewalls and the rear wall of the corresponding box.

7. The storage structure of claim 6, wherein the separator sheets extend to opposite sidewalls and from front edges to rear walls of the boxes.

8. The storage structure of claim 6 further comprising vertical separators positioned on the separator sheets parallel to the walls and spaced therefrom.

9. The storage structure of claim 1 further comprising cover sheets resting on top of the U-bent sheets and extending downward about upper edge areas thereof.

10. The storage structure of claim 1 wherein the separator sheets comprise a horizontal base part to a rear end of which is connected a vertical rear part projecting upwardly and downwardly with respect to the base part, and a front end of which base part is bent obliquely upwardly and integrally forms a vertical front part which at its upper end is bent to form a downwardly open U.