April 14, 1931. J. H. GANZER 1,801,076

STEEL NAIL BIN

Filed April 16, 1929

Fig. 1.

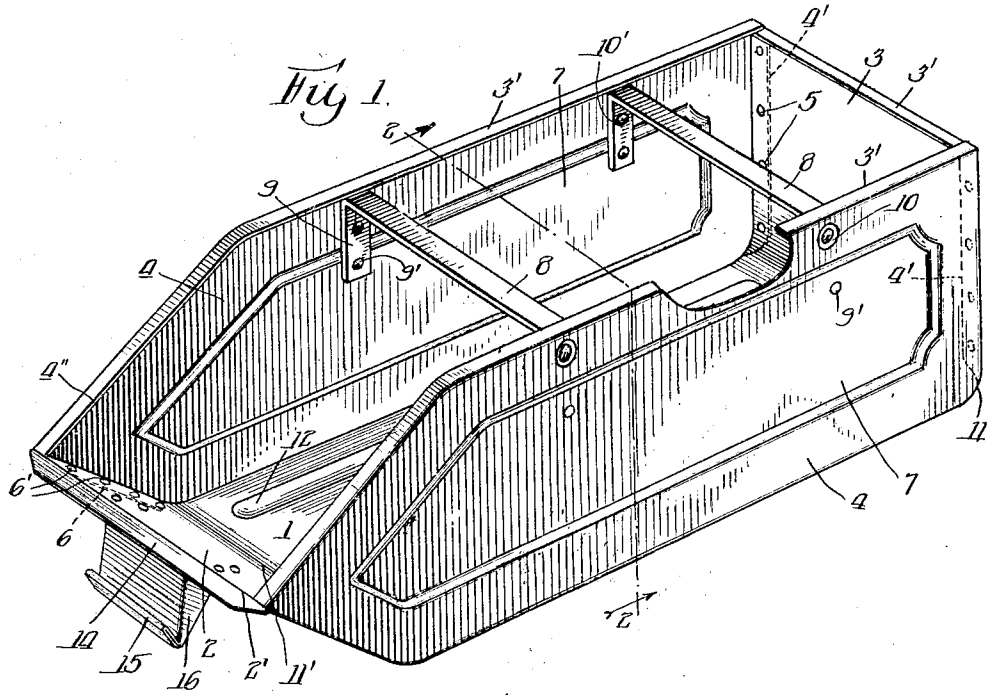
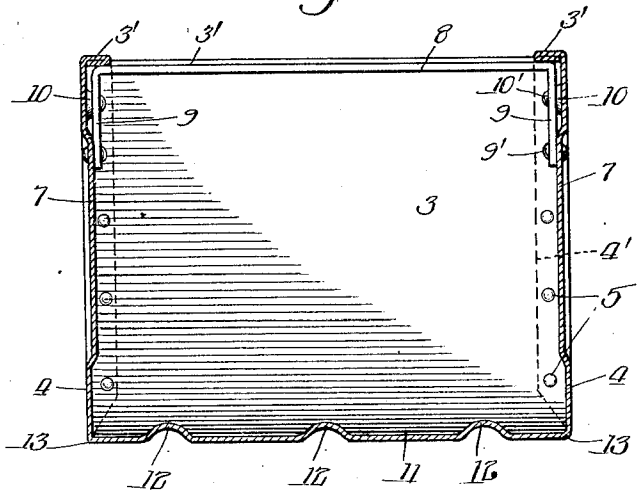


Fig. 2.



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Patented Apr. 14, 1931 1,801,076

UNITED STATES PATENT OFFICE

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STEEL NAIL BIN

Original application filed March 28, 1927, Serial No. 178,847. Divided and this application filed April 16, 1929. Serial No. 355,505.

This invention relates to novel and practical construction of steel nail bins which have a large storing capacity, which are light in construction and which are particularly adapted for use in hardware stores, store rooms and the like where large quantities of nails are stored or used and where a minimum amount of space only can be utilized for that purpose.

Heretofore nails have been stored in their original containers or kegs and placed on the floor which greatly distracted from the appearance of the store or room and which were troublesome to handle, or the nails were emptied into large and cumbersome bins which took up considerable space.

The present invention eliminates these disadvantages and its primary object is to provide an all metal nail bin formed from a single sheet of metal, which is light in construction, easily and economically manufactured, which is strong and durable, and which is capable of being placed in racks and tiers to conserve the maximum amount of space.

A further object thereof is to provide a steel nail bin in which the nails may be easily and quickly emptied into from the ordinary container or keg in which they are usually shipped.

A further object thereof is to provide a steel nail bin which is manufactured from a single sheet of metal, which is rigidly braced, which will readily slide upon shelves or racks upon which they may be placed, and to allow ready access to the nails without pulling the bin from the rack or removing any covers.

Other objects and advantages will hereinafter appear.

The preferred and practical embodiment of the bin shown in the accompanying drawings is of the type disclosed in my co-pending application Serial No. 178,847, filed March 28, 1927, of which this application is a division.

Referring to the drawings;

Fig. 1 is a front, perspective view of the improved bin; and

Fig. 2 is a transverse section of the bin taken on line 2—2 of Fig. 1.

The invention comprises in general a bottom 1 having the outer ends thereof extending upwardly to form a front end wall 2 and a back wall 3, and sides 4 extending upwardly substantially at right angles to the bottom and formed integrally therewith.

The rear ends of the side walls 4 are bent inwardly at substantially right angles to form flanges 4′ which are attached to the back 3 by means of rivets 5. The front wall 2 is sloped by inclining it upwardly at an angle to the bottom and the sides have their bottom forward edges correspondingly inclined upwardly to coincide with the angle of the front end wall.

These inclined edges have flanges 6 which are bent inwardly substantially at right angles to the sides and which are fastened to the front wall 2 by means of rivets 6′.

The forward top edges 4″ of the bin are inclined downwardly to meet the top edge 2′ of the front wall 2. The sides 4 and the back 3 have their top edges 3′ bent inwardly at substantially right angles to finish off the top edges of the bin and to form stiffening flanges which prevent distortion of the sides. The side walls are further re-inforced by inset panels 7 stamped therein the edges of which serve as ribs to strengthen the side walls and add rigidity thereto.

Cross braces or members 8, preferably formed or flat metal bars, have their ends bent downwardly to form legs 9 which are securely connected to the side walls of the bin on the inner faces thereof. The lower end of each leg is riveted at 9′ to the faces of the panels 7. The side walls above the panels have inwardly projecting protuberances or bosses 10 stamped therein to form filters for the spaces between the legs 9 and the walls. These bosses provide surfaces flush with the inside faces of the panels to which the upper portions of the legs 9 are attached by rivets 10′. The bends in the cross braces are positioned against the underside of the top flanges 3′. The braces are slightly below the top edges of the side walls so that they do not interfere with the racks or shelves when the bins are moved in or out. The braces also serve as

convenient handles by which the bins may be lifted or carried about.

The bottom 1 wall where it bends upwardly to form the back 3 wall is rounded as at 11 to enable the bin to slide more easily. The front bend 11′ in the bottom 1 and the side wall bends 13 are also rounded for the same purpose.

The bottom 1 wall is provided with grooves or corrugations 12 protruding upwardly from the bottom and forming stiffening ribs which strengthen the bottom wall of the bin and facilitates the sliding the bin on the shelves or racks.

The upper edge of the front wall is strengthened by the integral flange 14 outwardly and downwardly therefrom substantially at right angles thereto. This flange 14 also serves in conjunction with an upturned flange 15 on a handle member 16 to hold a label, as set forth in my co-pending application hereinbefore referred to.

These boxes are generally stored in racks (not shown) and placed side by side and above each other in tiers. The sloping front ends of the box protrude outwardly from the racks at a line perpendicular to the beginning of the downwardly inclined edge of the side, thus exposing the open ends of the bins and providing easy access to the contents without the necessity of pulling the bins out.

From the foregoing description it will be seen that a bin is provided that is light in weight, exceptionally strong and durable in construction, and occupies a minimum amount of space. The bin is entirely self-contained, and its outside walls are entirely smooth. Since there are no irregularities or projections on the outside walls the bins may be placed side by side against each other with no waste space between them. When they are moved in or out of the racks they will freely slide against the side walls adjacent bins.

It is apparent that changes in form, construction, and arrangement of parts may be made without departing from the spirit and without sacrificing the advantages of the invention and the right is reserved to make all such changes as may fairly fall within the scope of the following claims.

I claim:

1. A steel nail bin comprising a grooved bottom, paneled sides integrally connected thereto, a forwardly inclined front integrally connected to said bottom, a back, said front and back having the bottom edges thereof rounded and integrally connected to said bottom, cross ties having down turned legs connected to said sides on the inside thereof, and means connecting the front and back to said sides, the upper edges of said sides being turned inwardly and abutting the top of said cross ties.

2. A steel nail bin formed of sheet metal comprising a bottom wall, paneled side walls integral with said bottom, an integral, upwardly sloping, front wall, an integral back wall, said side walls having integral flanges riveted to said front and back walls, cross braces extending between the side walls at the top edges thereof and having downwardly extending legs riveted to the side walls and inturned flanges on the top edges of the side walls overlying said cross braces.

3. A steel nail bin formed of sheet metal comprising a bottom wall, paneled side walls integral with said bottom, an integral, upwardly sloping, front wall, an integral back wall, said side walls having integral flanges riveted to said front and back walls, cross braces extending between the side walls at the top edges thereof and having downwardly extending legs riveted to the side walls, inturned flanges on the top edges of the side walls overlying said cross braces, and an integral outstanding flange on the upper edge of the front wall.

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