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F. DAVIS

2,223,554

STACKING HANDLE FOR PIN BOARDS AND CONE BOARDS

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Fig. 1.

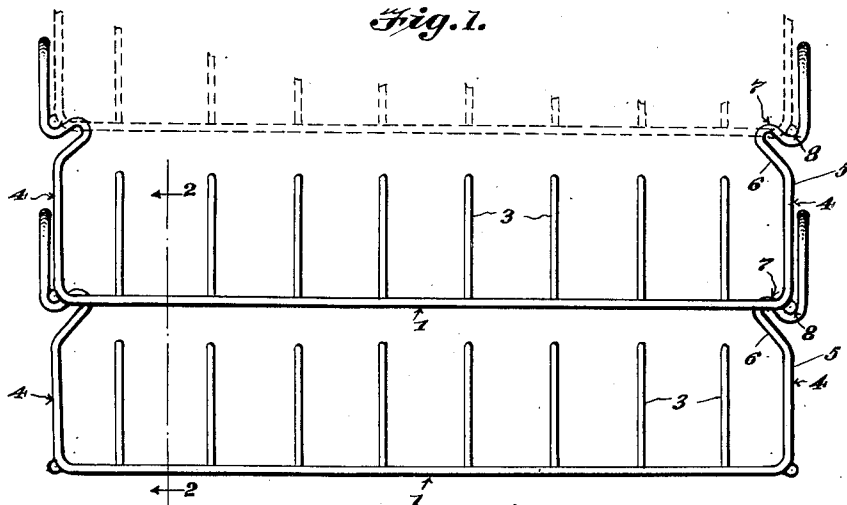


Fig. 2.

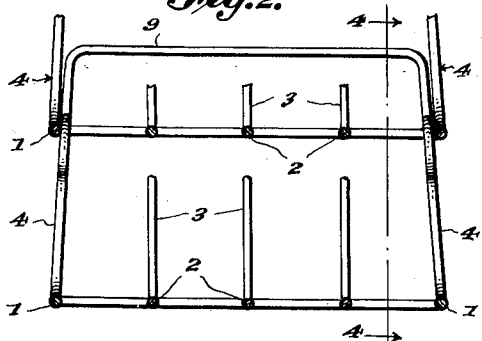


Fig. 4.

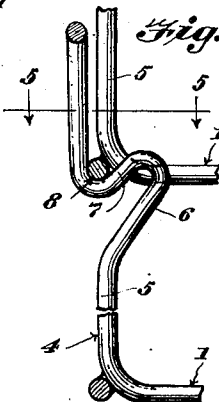


Fig. 5.

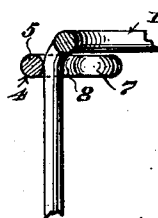


Fig. 7.

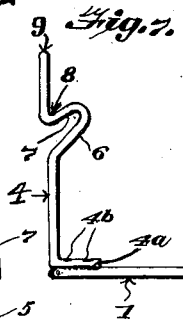


Fig. 3.

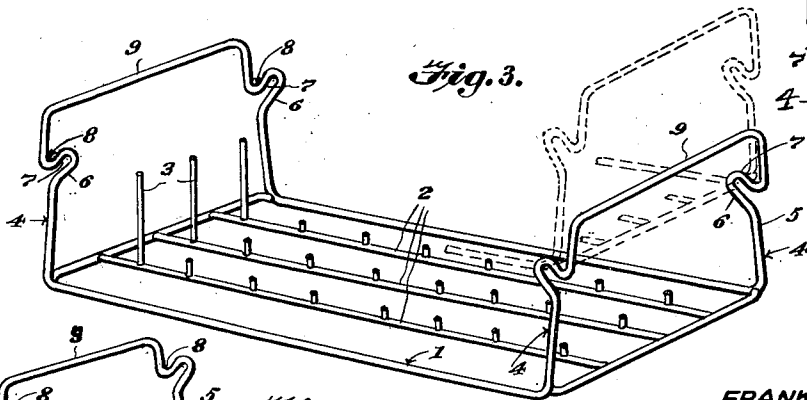
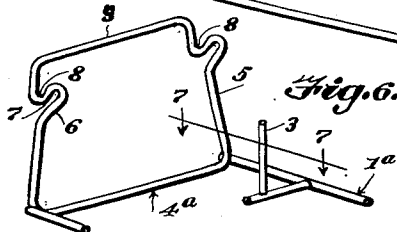


Fig. 6.



Inventor,

FRANK DAVIS.

By *E. C. Brooman & Co.*
Attorneys

UNITED STATES PATENT OFFICE

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STACKING HANDLE FOR PIN BOARDS AND
CONE BOARDS

Frank Davis, Pawtucket, R. I., assignor to Frank
Davis Manufacturing Company, Incorporated,
Pawtucket, R. I., a corporation of Rhode Island

Application November 15, 1938, Serial No. 240,598

3 Claims. (Cl. 220—97)

This invention relates to stacking handles for pin boards and cone boards.

The object of the invention is the construction of novel handles for pin or cone boards, which will facilitate the handling and stacking of said boards.

Another object of the invention is the provision of efficient means on the legs of the handles for receiving another board in stacked relation, whereby the yarn on the bobbins or spools, carried by the board, will be very efficiently protected.

A still further object of the invention is the construction of handles with socket-like units so placed that there is no weight on the transverse cross pieces, thereby greatly increasing the durability of the improved board as well as its efficiency.

With the foregoing and other objects in view, the invention comprises certain novel constructions, combinations, and arrangements of parts as will be hereinafter fully described, illustrated in the accompanying drawing, and more particularly pointed out in the appended claims.

In the drawing:

Figure 1 is a view in side elevation of a plurality of the devices in stacked position.

Figure 2 is a sectional view taken on line 2—2, Fig. 1, and looking in the direction of the arrows.

Figure 3 is a perspective view of the device, showing some of the pins thereof in section.

Figure 4 is an enlarged sectional view taken on line 4—4, Fig. 2, and looking in the direction of the arrows.

Figure 5 is a sectional view taken on line 5—5, Fig. 4, and looking in the direction of the arrows.

Figure 6 is a fragmentary perspective view of a modified form of the device including the handle.

Figure 7 is an elevated fragmentary view of another embodiment of the invention.

Referring to the drawing, in which the preferred embodiments of the invention are shown, 1 designates the frame of any preferred construction. The frame 1 includes preferably longitudinally extending rods or bars 2 on which are secured in any suitable manner vertical pins 3. These pins are for receiving and holding bobbins or spools in position upon the frame. The use and purpose of these pins is well known to the art.

The frame 1 is provided at its ends with the improved handles 4. Each handle comprises a

vertical upright or leg 5 that is bent inwardly at 6 and thence outwardly at 7, producing socket 8 (Fig. 5). These sockets 8 are on the uprights or legs 5 and are not formed on the cross piece 9. The cross piece is formed by extending upwardly the two bent portions 7, with the cross piece integral therewith and in a horizontal position.

In the embodiment shown in Figures 1 to 5, the handle units are shown as an integral part of the outer rod portions of the frame 1 (Fig. 3). In the embodiment shown in Figure 6, each handle unit 4a is formed in one piece, with the side unit of the frame 1a welded, or otherwise fastened to the handle units. Otherwise, the handle units of the embodiment, per Fig. 6, are similar in construction, to the handle units shown in the embodiment of Figures 1 to 5. Therefore, it is to be understood that I reserve the right to construct the frame and its handles by welding or otherwise securing the several parts in a unitary structure.

As has been hereinbefore pointed out, the socket structures for receiving a pin board or cone board are located on the uprights or legs for producing a sturdy structure, with the cross piece 9 of each handle well above the sockets, whereby the operator can more readily grip the cross pieces, in handling or manipulating the devices. In other words, the cross pieces 9 are placed in an open or free position (Fig. 1), at approximately the middle of the pin board which is being supported by the under board; this permits the operator to speedily handle the devices constructed in accordance with this invention. It is also to be noted that the sockets 8 are somewhat near the center of the handle, being decidedly below the cross piece 9, and above the transverse cross piece constituting the end of frame 1. These features produce a more efficient device, which is durable, and a marked improvement on anything known to the prior art.

It is also to be understood that the devices or boards can be stacked and with the use of the skid can be moved to any part of the mill, which eliminates the use of racks or any other sort of carrying device. Another advantage of this improved device, in having the handle and frame all of one piece, is the fact that by having such structure there is no chance of a handle coming off, whereas if the handles were in two pieces, that is, if the handles were put on separately, there would be a chance of them breaking off in use or rough handling.

As shown in the drawing, when the devices are stacked, the upper device or devices, rests on the under device, with the transverse end portions of the frame resting in the sockets 8. This prevents the nesting device from moving laterally or longitudinally upon its supporting device. In other words, when stacked, the devices are efficiently secured in their assembled positions.

In Figure 7, the handles are shown put on separate; that is, the frame 1 is made in one piece and then the handles 4 are made complete and spot welded onto the frame 1 as at 4b; they may also be arc welded as at 4a.

While I have described the preferred embodiments of my invention and illustrated same in the accompanying drawing, certain changes or alterations may appear to one skilled in the art to which this invention relates during the extensive manufacture of same, and I, therefore, reserve the right to make such changes or alterations as shall fairly fall within the scope of the appended claims.

What I claim is:

1. In a device of the class described, a carrier having a bottom and upstanding handle units at its ends, each handle unit including uprights spaced from each other transversely of the bottom and a cross piece connecting upper ends of the uprights, and each upright being crimped in spaced relation to its ends to form an inwardly extending upwardly inclined substantially U-shaped member disposed above the bottom of the carrier, the upper leg of the U-shaped member constituting receiving means for a stacked carrier and the bight of the U-shaped member constituting a lateral abutment for engaging the side

of the stacked carrier and bracing the stacked carrier against transverse shifting movement.

2. In a device of the character described, a carrier having a bottom provided with end bars and side bars, handle units formed integral with the side bars, each handle unit having uprights at its sides united to the side bars and a cross bar connecting upper ends of its uprights, the uprights being each crimped in spaced relation to its upper and lower ends to form an inwardly extending upwardly projecting U-shaped member disposed above the bottom of the carrier, the upper legs of the U-shaped members of said uprights constituting means for engaging under the end bars of a stacked carrier and the bights of the U-shaped members constituting lateral abutments for engaging the side bars of the stacked carrier and bracing the stacked carrier against transverse shifting.

3. In a device of the character described, a carrier having a bottom and upstanding handle units at ends thereof, pins extending upwardly from said bottom, each handle unit including two uprights and a cross piece connecting upper ends of the uprights, and each upright being crimped in spaced relation to its ends to form an upwardly extending upwardly inclined substantially U-shaped member disposed above the plane of upper ends of said pins, the upper leg of the U-shaped member constituting receiving means for a stacked carrier and the bight of the U-shaped member constituting a lateral abutment for engaging the bottom of the stacked carrier and bracing the stacked carrier against transverse shifting.

FRANK DAVIS.