March 4, 1924. 1,485,372

F. E. DOLE

LAUNDRY SORTING DEVICE

Filed Feb. 15, 1923

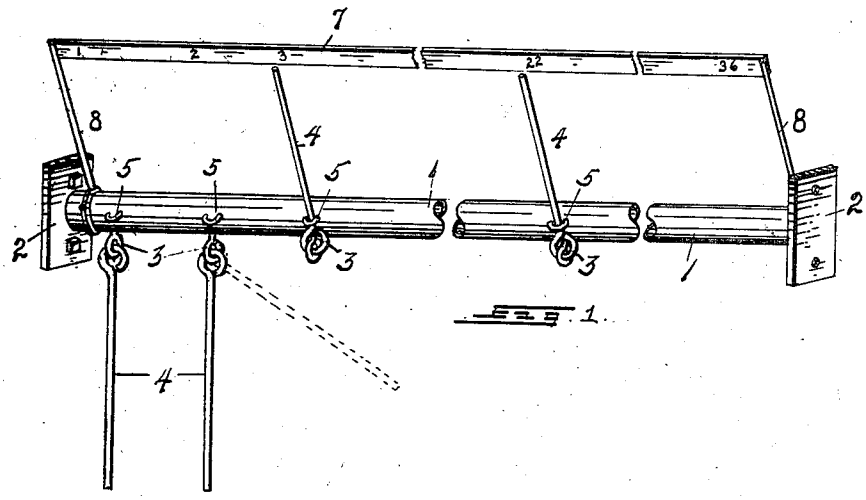


Fig. 1.

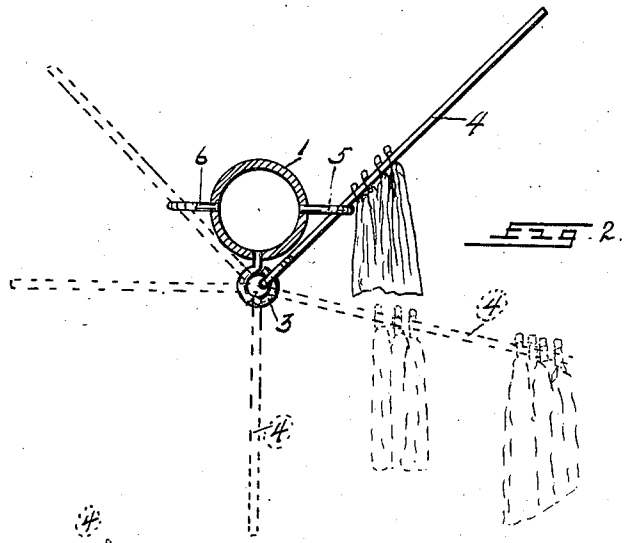


Fig. 2.

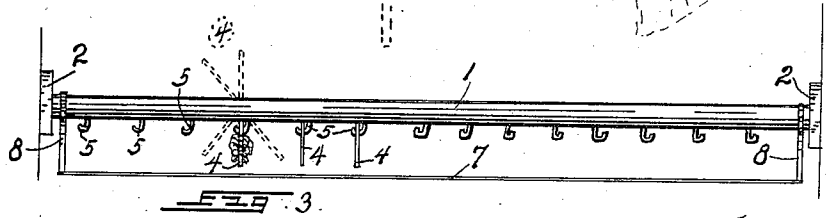


Fig. 3.

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UNITED STATES PATENT OFFICE.

FRANK E. DOLE, OF SALT LAKE CITY, UTAH.

LAUNDRY-SORTING DEVICE.

Application filed February 15, 1923. Serial No. 619,281.

To all whom it may concern:

Be it known that I, FRANK E. DOLE, a citizen of the United States, residing at Salt Lake City, in the county of Salt Lake and State of Utah, have invented certain new and useful Improvements in Laundry-Sorting Devices, of which the following is a specification.

My invention relates to sorting devices, and has for its object to provide a sorting device for "rough dry" and "wet wash" laundry work whereon laundered articles or clothing may be conveniently suspended and assorted, and the marking pins used in such work closely assembled so that when they are removed from the laundered articles said pins may be easily and rapidly placed in their holders, and whereby laundered articles may be assembled and counted, and quickly removed for wrapping and delivery.

A further object is to provide a device on which laundered articles may be closely assembled and assorted, and so suspended that any particular bundle of articles may be counted and removed for wrapping without being entangled in adjacent bundles of suspended laundry.

These objects I accomplish with the device illustrated in the accompanying drawings in which similar numerals of reference indicate like parts throughout the several views, and as described in the specification forming a part of this application and pointed out in the appended claims.

In the drawings in which I have shown a substantial embodiment of my invention, Figure 1 is a view in perspective of my device, parts cut away. Figure 2 is a transverse section adjacent one of the holding rods, with parts shown in elevation, and with different positions of the holding rods shown in dotted lines. Figure 3 is a plan view of the device in place between two walls showing a part of the holding rods and suspension hooks.

In laundries where "rough dry" and "wet wash" work is done, the marking of the articles before laundering, the assorting, assembling and wrapping, after laundering, must be done rapidly, and floor space occupied by the workers must be limited in order to economize, but accuracy in marking, assembling and distributing the articles to the wrappers, and replacing the marking pins in their respective cases must not be lost sight of. In the present invention I have provided a rack on which the laundered articles may be assorted and assembled, and which rack is to be positioned near and parallel with one wall of a room, thereby leaving practically the entire floor space of the room free for the operators within which to assort and assemble the laundered articles. The special purpose of spacing the rack from the wall is that the operator may read the marking pins from the rear of the rack and verify the assorting before taking the pins off of the holding rods and also to have space around the holding rods after releasing them from their respective hooks to turn them in any direction freely in order that the articles on the holding rod will not be entangled with articles on adjacent holding rods and will be free to drop off of the rods when released and their free ends lowered. My construction contemplates the use and operation of other similar racks positioned near other sides of the room in order that the workers may be loading up one rack while other operators are unloading the rack previously loaded, and that when neither rack is in use the holding rods may be vertically suspended and most of the floor space cleared.

The invention consists of the novel construction and association of the rack, holding rods and hooks. Each device is to be used and operated with marking pins and their cases. Each rack consists of a horizontally disposed pipe 1 which is fastened in place in a room by wall plates 2 with which said pipe is connected. The said wall plates are securely fastened to the vertical walls at any desired distance from the floor of the room. The said pipe 1 is parallel with and spaced from a side wall of the room far enough that an operator may work between the wall and the rack, in order to suspend articles on the rack from either side, and to be able to read the numbering on the marking pins from either side to verify the sorting in order that an operator may known that all of the articles of each bundle of laundry are assembled on the rack before unloading it for wrapping and delivery. A plurality of eyebolts 3 are secured in the under side of said pipe 1 in spaced relation to each other, preferably about three inches apart. The laundry holding rods 4 are engaged in said eye bolts 3, one for each bolt, by an eye-hook con-

nection formed of the end portion of each bar, and which is engaged in its respective eye bolt 3. Hook members 5 are inserted in the sides of said pipe 1, one for each of said rods 4, and in which said rods may be engaged to support them above the horizontal in order that when a rod is so engaged on its respective hook that the marking pins may be carried on the rods. If desirable similar hooks 6 may be secured in the pipe 1 opposed in position and direction to the hooks 5, and the rods 4 may be supported and formed into a rack on either side of the pipe 1. The engaging of the rods 4 with their respective eye bolts 3 provide one form of a universal joint or connection, so that each of the rods 4 may be engaged in either of its respective hooks 5 or 6, or its free end portion may be moved around in almost any position relative to its eye bolt for removing the clothes carrying and marking pins with the engaged clothes, and when not in use to carry said pins and clothes that the rods 4 will hang down as shown in dotted lines in Figure 2 and as shown by the rods 4 at the left of the rack shown in Figure 1. The same movements of the rods 4 relative to the eye bolts 3 and hooks 5 can be secured by a ball and socket connection between the rods and hooks, but the eye bolt and eye rods are cheaper and are therefore preferred.

Above and somewhat in front of the free ends of the holding rods 4 when they are engaged in their respective hooks 5, I provided a sign board 7, on which board are posted the case letters or numerals reading consecutively from 1 up, or from A to Z. The said board may be left blank, and on which the operator may write or print any letter or character desired, each numeral or letter to distinguish the adjacent holding rod 4, in order that the marking pins, detachably fastened in the laundered articles, which pins are similarly marked or numbered, may be hung on the holding rod thus designated by the marking on the board as set apart for all articles in that particular bundle or parcel of work. The said sign board is carried on the said pipe 1 by the braces 8. One end portion of each of said braces 8 is given an eye hook form to encircle said pipe, and if the said holding rods should be suspended from the hooks 6 the sign board may be moved or thrown over the pipe 1 and used to indicate the respective rods 4 on that side of the rack.

I use the numbered safety pins now on the market, and used for marking laundry, with their holding boxes and cases, such pins are marked consecutively by numerals or letters, and their cases and boxes are similarly marked, in order that when a bundle of laundry is to be marked each piece has one of said pins secured thereto. The said pins are attached to the articles while the work of laundering is carried out, and are removed when the laundered articles are wrapped for delivery.

The operation of my device is as follows:

The bundle or parcel of laundry is first marked by attaching one of the marking pins to each article of the laundry. The said pins are marked with their case letter or number, and also with other numbers from 1 consecutively upward, and are kept in cases or boxes when not on the articles, arranged to facilitate the counting and assorting of the pins. The number of pins used out of a case indicates the number of articles in each respective bundle of laundry. When the work of laundering the articles is finished, whether "rough dry" or "wet wash," the articles must be assorted or separated into bundles or parcels for wrapping and delivery to the individual owners, and in order that the marking pins will not have to be again assorted before being placed in their separate cases, the pins from each bundle of laundry should be kept together. Also when the pins are again in the respective cases a missing pin will indicate that some article from the particular bunch is missing. And one of the purposes of my invention is to make the one assorting and assembling of each bunch of laundry answer as to the marking pins as well as for the delivery to the owner. When the cleaning of the entire output of each day's "rough dry" or "wet wash" of the laundry is completed, the rods 4 are engaged over the hooks 5. As the laundry is assorted the workers suspend each article of a bundle of laundry on one of said rods 4 by slipping the marking pins on the rods indicated by the sign board corresponding to the numbers of the pins, that is, any article carrying a marking pin with case-number 1 is placed on rod numbered 1, and any article carrying case-number 2 is placed on rod 2 and so continuing until all of "rough dry" work is assorted and closely assembled.

To unload the rack the wrapping operator disengages the particular rod 4 from its hook 5 and withdraws the loaded marking pins from off rod 4 and removes the marking pins from the laundered articles and places the pins in their respective cases. If any article is missing that fact will be readily apparent by that pin not being at hand to take its respective place in the case.

The special features of my invention which distinguish it from other sorting devices are:—

That the peculiar construction of the holding arms with the universal joint connection allows each arm to be unhooked and the free end to drop down, out and away in any direction from the others and the clothing carried thereon, so that the clothes can be

grasped by one or both hands of the operator close up to the marking pins and the pins retained in this close assembled position. The freedom of swinging the rods 4 in unloading allows me to place the rods 4 very close together without any trouble or entanglement when unloading them, saving floor space and operator's space. Also the novel method of placing the sign above and close to the free end of the holding arms leaves a clear vision of the sign at all times, even after each arm is fully loaded.

Having thus described my invention and its operation I desire to secure by Letters Patent and claim:—

1. A sorting device for laundries comprising a longitudinally disposed pipe; a plurality of hooks extending from one side thereof; an equal number of hook eyes secured in and extending at right angles to said hooks; supporting bars having an eye bolt on one end of each engaged within said hook eyes; and means to fasten said pipe rigidly in place.

2. In a sorting device for laundries, the combination with detachable marking pins, of a horizontally disposed pipe having a plurality of spaced apart eye bolts depending therefrom; a like number of supporting rods with an eye bolt on the end of each engaged within the said hook eyes; a like number of spaced apart hooks secured in and extending radially from said pipe at right angles to said eye bolts to engage said supporting rods and on which said marking pins are to be suspended; and a sign board supported on said pipe and to be carried adjacent the ends of said suspending rods when they are engaged within said hooks.

3. A laundry sorting device comprising a horizontally disposed member; a plurality of hooks extending from the sides thereof; a plurality of hook eyes depending from the lower side of said member; an equal number of supporting rods having an eye on one end thereof and engaged within said hooks eyes and adapted for engagement with said hooks; and a sign board supported on said member and carried adjacent the sorting and free end of said rods.

In testimony whereof I have affixed my signature.

FRANK E. DOLE.