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2,470,977

BAG STAND

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2 Sheets-Sheet 1.

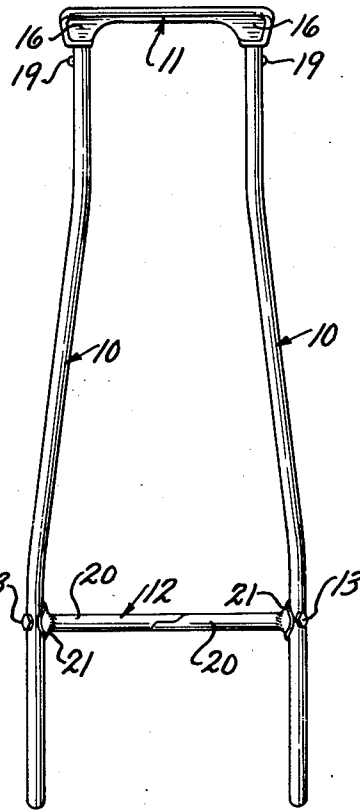
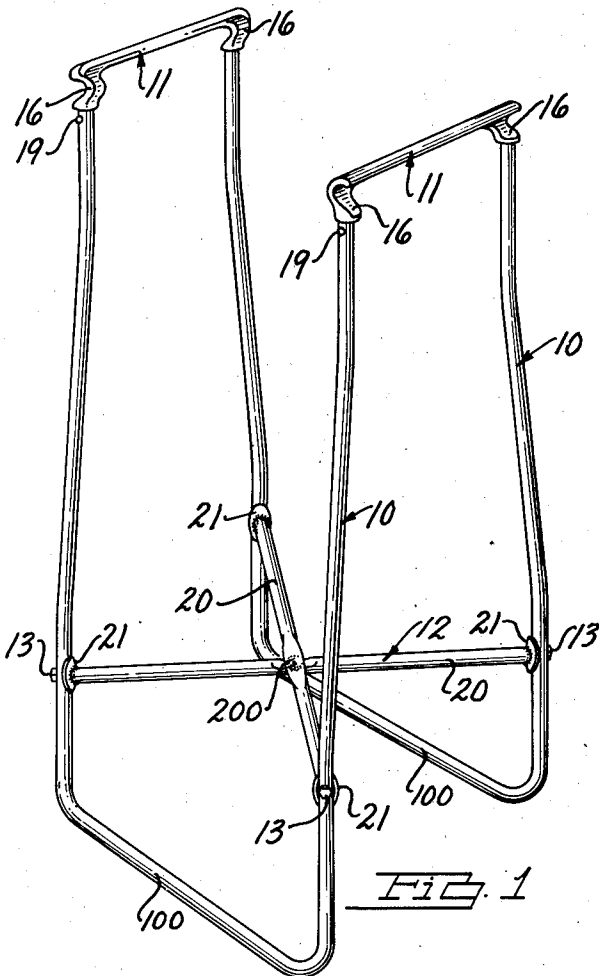


FIG. 2

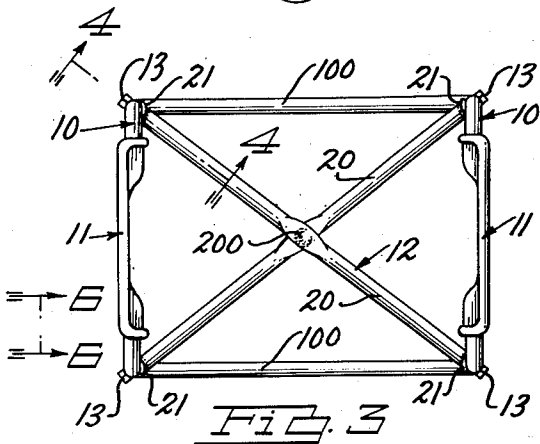


FIG. 3

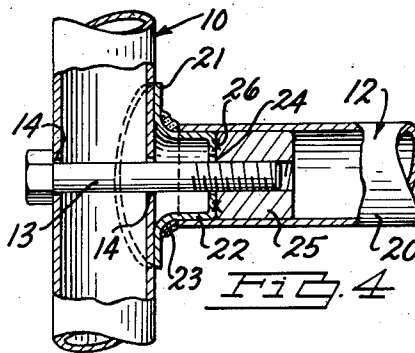


FIG. 4

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2 Sheets-Sheet 2

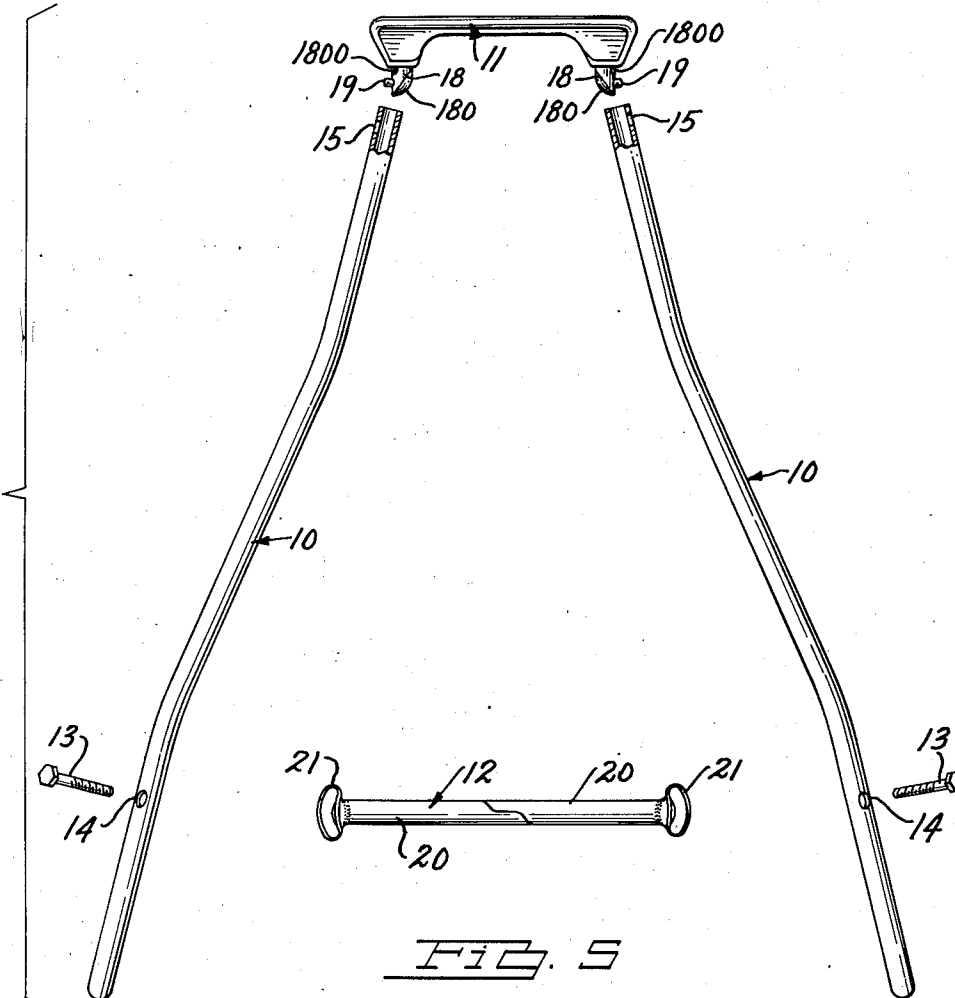


FIG. 5

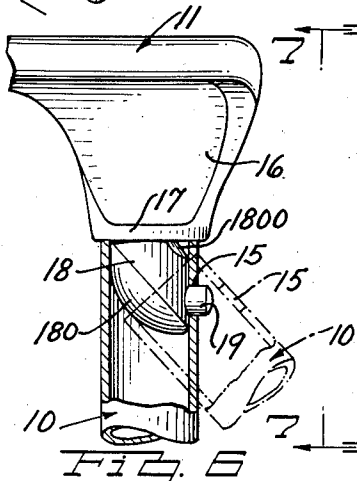


FIG. 6

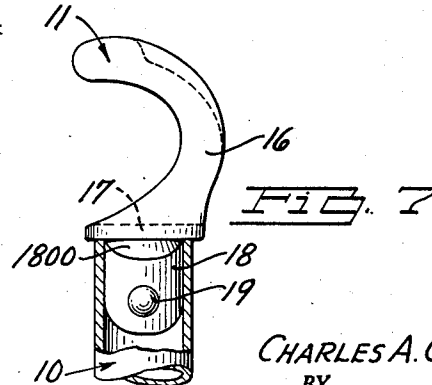


FIG. 7

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BAG STAND

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2 Claims. (Cl. 248—97)

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This invention relates to bag stands and in particular to bag stands of the type having an open front and rear, and at the top thereof a pair of spaced parallel bars formed to receive and hold open the top of a bag set onto the bag stand, and to the method of assembling the said bag stand.

In general, the use of spaced parallel bars formed to receive and hold open the top of a bag set onto a bag stand is old in the art. The shipping of such bag stands in their knocked down or disassembled condition is highly desirable. However, prior art bag stands have been quite difficult to assemble after shipment which makes them either undesirable or requires their shipment in assembled condition which is extremely cumbersome and expensive.

With the foregoing in view, the primary object of the invention is to provide a rigid bag stand of the knock-down type composed of a pair of a frame, upper spaced parallel bag retaining bars and means for supporting a bag in spaced relationship above the floor which is simple and inexpensive to construct, which employs a minimum of parts, and which may be assembled into a rigid unitary whole or disassembled in a very few minutes and with a minimum of securing elements.

Other objects of the invention will become apparent by reference to the following detailed description taken in connection with the accompanying drawings, in which:

Fig. 1 is a view in perspective of a bag stand embodying the invention

Fig. 2 is a side elevational view.

Fig. 3 is a top plan view.

Fig. 4 is an enlarged detailed sectional view taken on the line 4—4 of Fig. 3 showing the means employed for securing the X-type combined flooring and bracing to the U-shaped frame elements.

Fig. 5 is an exploded front elevational view showing the bag stand disclosed in Figs. 1, 2 and 3 disassembled ready for assembly.

Fig. 6 is an enlarged fragmentary elevational view taken on the line 6—6 of Fig. 3 with a portion thereof broken away showing in detail the construction of one end of the bag retaining bar at one of the upper ends of a U-shaped frame element.

Fig. 7 is an elevational view taken on the line 7—7 of Fig. 6 with parts broken away to illustrate the construction more clearly.

Referring now to the drawing wherein like numerals refer to like and corresponding parts

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throughout the several views, the particular bag stand disclosed for the purpose of illustrating the invention comprises, in general, a pair of U-shaped frame elements 10, a pair of bag retaining bars 11 and an X-type combined bag supporting floor and cross bracing element 12, all constructed, assembled and secured together into a rigid unitary whole by four studs 13 as hereinafter described in detail.

Each of the U-shaped frame elements 10 are preferably formed of round tubing to the desired configuration preferably as shown in Figs. 1, 2, 3 and 5 and are provided with diagonally disposed apertures 14 therethrough at the desired distance above the transverse base portion 100 thereof to accommodate the studs 13. The outside of each upper end of each U-shaped frame element 10 is provided with an aperture 15 therethrough to permit the said U-shaped frame elements 10 to be readily and solidly assembled to the bag retaining bars 11 hereinafter described in detail.

The bag retaining bars 11 are preferably formed of cast aluminum alloy for lightness and rustproofness. The bag retaining bars 11 are provided with supporting ends 16 so curved and shaped as to receive and hold the top of a laundry bag or the like in its open position when stretched thereover. The bottom of each supporting end 16 of the bag retaining bars 11 is provided a horizontal annular flange 17 preferably as large or slightly larger in diameter than the outside diameter of the tubular frame elements 10. From the said flange 17 is a depending anchorage element 18 generally cylindrical in shape except that the lower end thereof is formed to provide a semi-spherical heel 180 at the inner side thereof as viewed in Figs. 5 and 6 and is provided with a domed headed anchorage button 19 on the cylindrical outer side thereof which registers with the apertures 15 in the U-shaped frame member 10 when the bag stand is assembled with the tubular ends of the said U-shaped frame members 10 in abutment against the bottom of the flange 17 of the supporting end 16 of the bag retaining bars 11. The upper portion of the cylindrical outer side of the said anchorage element 18 is notched out at 1800 to admit of the assembly of the tubular ends of the U-shaped frame members 10 thereonto in the manner indicated by the dot and dash lines in Fig. 7.

The X-type combined bag supporting floor and cross bracing element 12 is composed of two tubular members 20 complementally flattened at the centers thereof and welded at 200 into a rigid X-shape. Each of the four ends of the said

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X-type combined bag supporting floor and cross bracing element 12 is provided with a flange 21 formed to extend part way around the tubular U-shaped frame members 10. Each flange 21 is preferably formed with a cup shaped element 22 which is telescoped into the outer end of the tubular members 21 of the combined floor and cross bracing element 12 as shown in Fig. 4, and is welded thereto by such means as the welding bead 23 therearound. The central portion of the said cup shape element 22 is preferably apertured at 24 to permit the telescoping of a stud 13 therethrough, which stud 13 is threaded into a nut 25 welded at 26 to the inner side of the said cup shaped element 22 integral with the flanges 21 disposed on each end of the combined bag supporting floor and cross bracing element 12.

To assemble a bag stand embodying the invention is not only simply accomplished but is done in a very few minutes with only the use of a pair of pliers or a wrench. If the studs 13 are formed with a wing head, no tools would be required at all. First, the X-type combined bag supporting floor and cross bracing element 12 is assembled to one of the U-shaped frame members 10 by two of the studs 13 which are inserted through the aperture 14 of the said U-shaped frame member 10 and are each threaded into a nut 25 within the cross bracing element 12, and are tightened. Secondly, both bag retaining bars 11 are hooked into the top of the U-shaped frame member 10 onto which the combined floor and cross bracing element 12 has been assembled with anchorage elements 18 thereof telescoped into the ends of the said U-shaped frame member 10 and the anchorage buttons 19 thereon in registry through the apertures 14 in the said U-shaped frame member 10. Thirdly, the other U-shaped frame member 10 is assembled to the free ends of the said bag retaining bars 11 and is secured to the free ends of the combined bag supporting floor and cross bracing element 12 by the two remaining studs 13 which are inserted through the apertures 14 of the second U-shaped frame member 10 and are each threaded into a nut 25 within the cross bracing element 12, and are tightened.

The construction disclosed provides an extremely rigid bag stand which is easily assembled and disassembled and which admits of handling and shipping without occupying an unreasonable amount of space. Further, the novel construction employed permits bag stands to be manufactured and sold within a price that will satisfy both the consumer and the large user of bag stands, such as laundry companies, restaurants, hospitals, and the like.

Although but a single embodiment of the invention has been disclosed and described in detail and a single method of assembly of a bag stand embodying the invention has been disclosed, it is obvious that many changes may be made in the method steps and in the size, shape, detail and arrangement of the elements thereof without departing from the spirit and scope of the invention as defined by the appended claims.

I claim:

1. A bag stand comprising a pair of tubular U-shaped frame members each having an aperture in the outer side and near the top of the upright portions thereof, a pair of bag retaining

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bars each including a horizontally disposed flange and a depending anchorage element at the outer ends thereof generally cylindrical in shape, an anchorage button extending from the outer side of each anchorage element of each of the bag retaining bars over which anchorage buttons the said outer side of the upright portions of the said U-shaped frame members are engaged when assembled onto the said bag retaining bars with the said anchorage elements thereof telescoped into the said tubular U-shaped frame members and with the said anchorage buttons disposed through the said apertures in the said tubular U-shaped frame members, and an X-type bag supporting floor and cross bracing member disposed and secured between the said pair of tubular U-shaped frame members.

2. A bag stand comprising a pair of tubular U-shaped frame members each having an aperture in the outer side and near the top of the upright portions thereof, a pair of bag retaining bars each including a horizontally disposed flange and a depending anchorage element at the outer ends thereof generally cylindrical in shape, an anchorage button extending from the outer side of each anchorage element of each of the bag retaining bars over which anchorage buttons the said outer side of the upright portions of the said U-shaped frame members are engaged when assembled onto the said bag retaining bars with the said anchorage elements thereof telescoped into the said tubular U-shaped frame members and with the said anchorage buttons disposed through the said apertures in the said tubular U-shaped frame members, the lower end of the inner side of the said cylindrical anchorage elements being formed with a semi-cylindrical heel and the upper end of the outer side of the said cylindrical anchorage elements being notched to admit of ready assembly of the said tubular U-shaped frame elements onto the bag retaining bars, an X-type bag supporting floor and cross bracing member disposed between the said pair of tubular U-shaped frame members, each end of the said X-type bag supporting floor and cross bracing member being flared to partially encompass an upright portion of a tubular U-shaped upright frame element, a nut fixed in each end of the said X-type bag supporting floor and cross bracing member, each upright portion of each of the tubular U-shaped frame members having a diagonally disposed aperture therethrough, and studs inserted through each of the said apertures diagonally through the upright portions of the said U-shaped frame members and threaded into the said nuts fixed into the ends of the said X-type bag supporting floor and cross bracing member whereby to secure the said bag stand elements into a rigid integral unit.

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