Dec. 15, 1931. R. D. JONES 1,836,173

CLOTHES DRIER

Filed Jan. 8, 1930

Fig. 1.

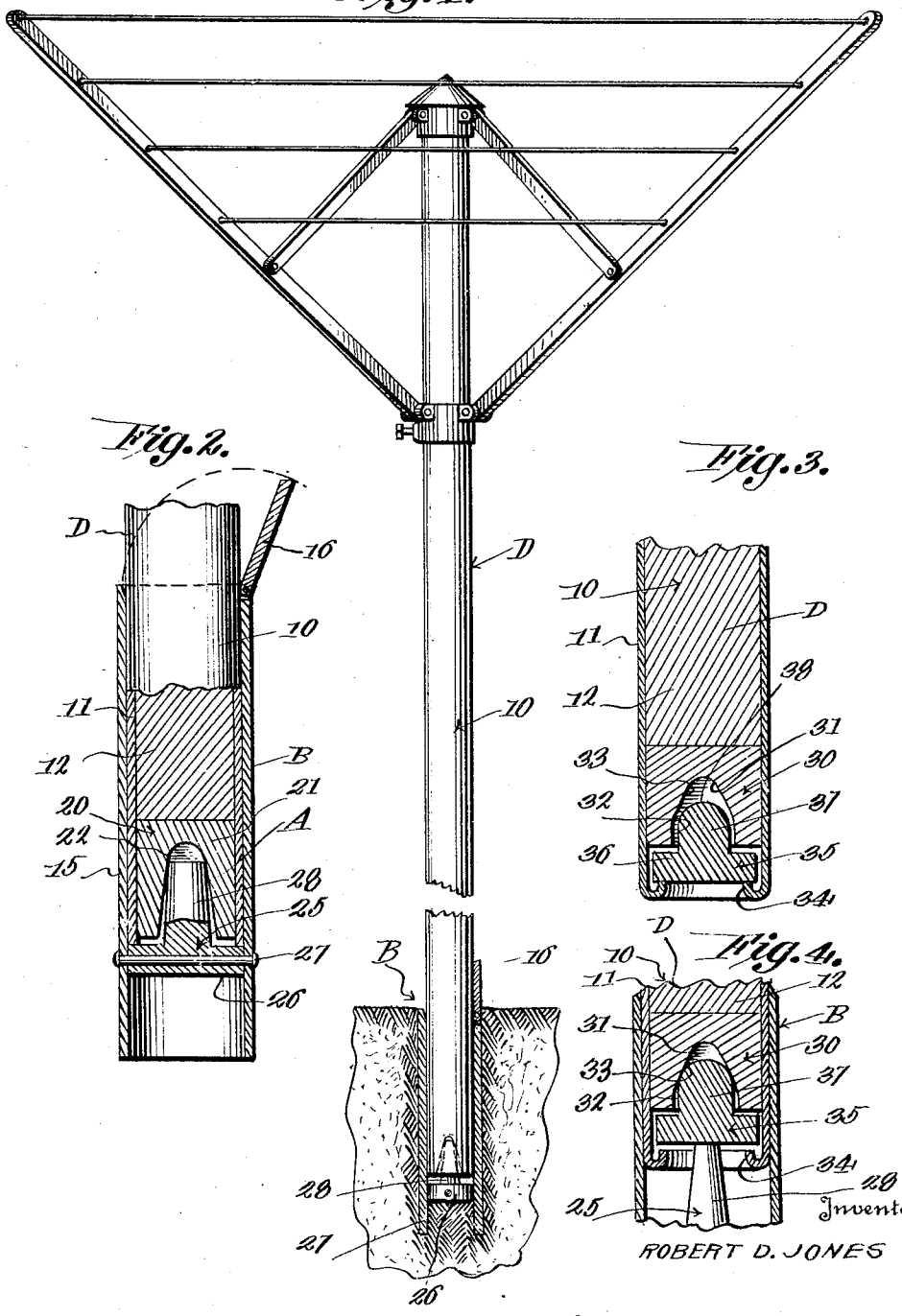


Fig. 2.

Fig. 3.

Fig. 4.

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CLOTHES DRIER

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This invention appertains to laundry and more particularly to clothes driers of the type embodying a revolving supporting standard.

One of the primary objects of my invention is to provide a novel bearing for receiving the lower end of the supporting standard of the clothes drier, whereby the standard can freely revolve so as to reduce the drying period of the clothes and to also allow the user to stand in one place while filling all four sides with clothes.

Another important object of my invention is the provision of a ground box imbedded in the ground for receiving the lower end of the clothes drier standard with novel means for rotatably supporting the standard, said means embodying cooperating bearing parts carried respectively by the box and standard, so formed as to permit the ready association of said bearing parts upon the insertion of the standard in the box, the bearing parts cooperating together so as to permit the free rotation of the standard without binding and with a minimum amount of friction.

A further object of my invention is the provision of a novel bearing carried by the lower end of the standard of the clothes drier embodying a pair of bearing members carried directly thereby, one of which is movable longitudinally relative to the other and which is adapted to be moved into bearing contact with the other upon insertion of the post or standard in the ground box, the construction of the bearing permitting the free revolving of the post or standard and also the quick removal of the post or standard from the ground box without sticking of the bearing parts together.

A further object of my invention is the provision of novel means for forming the supporting standard, whereby the same will be of a light yet strong and durable character, the same embodying a light metal sleeve or tube and a wood filler.

A still further object of my invention is to provide a novel bearing for clothes driers of the above character, which will be durable and efficient in use, one that will be simple and easy to manufacture, and one which can be placed upon the market at a reasonable cost.

With these and other objects in view, the invention consists in the novel construction, arrangement and formation of parts, as will be hereinafter more specifically described, claimed, and illustrated in the accompanying drawings, in which drawings:

Figure 1 is a side elevation of my improved clothes drier, showing the ground box therefor in vertical section.

Figure 2 is an enlarged longitudinal section through the lower end of the post or standard of the clothes drier and through the ground box.

Figure 3 is an enlarged detail longitudinal section through the lower end of the post or standard of the clothes drier showing a slightly modified form of bearing.

Figure 4 is a similar view showing the lower end of the post inserted in the ground box with the movable bearing member in its raised supporting position.

Referring to the drawings in detail, wherein similar reference characters designate corresponding parts throughout the several views, the letter A generally indicates my improved bearing for the clothes drier D, which is adapted to be supported by the ground box B.

The drier D may be of any preferred or conventional character and embodies the supporting post or standard 10, which in the present instance consists of the hollow metal pipe or tube 11, and a wood or other filler 12. The construction of the standard is important, as by this construction I am enabled to make a smaller, lighter yet more durable standard.

The ground box B may comprise a metal sleeve 15 which is buried in the ground the desired distance with its upper end protruding therefrom, which end can be closed by a hinged cover 16. When the clothes drier B is removed from the box the cover 16 is moved to its closed position so as to prevent the collection of débris in said box. When the clothes drier is associated with the box the cover is raised and the post 10 is inserted therein.

As shown in Figures 1 and 2, my improved bearing A comprises a bearing member 20 and a bearing member 25, the bearing member 20 being carried by the lower end of the post 10 and the bearing member 25 being carried by the lower end of the ground box B.

The bearing member 20 can be formed of any desired material and consists of a cylindrical block 21 inserted within the pipe 11, the upper end engaging the filler 12. This block 21 at its axial center is provided with a substantially conical shaped recess or bearing opening 22.

The bearing member 25 may include a flat disc 26 which can be secured to the sleeve 15 by means of a bolt, rivet or the like 27. Formed on the axial center of the disc 26 is the upwardly extending substantially conical shaped bearing portion 28, which bearing portion 28 is of a greater taper than the taper of the conical recess 22, so that the lower wall of the recess will only rest upon and engage the lower surface of the bearing portion 28, whereby to permit of the free rotation of the post or standard 10. By this construction, it can be seen that the post is free to rotate and that the same can be readily and quickly removed from the box.

In Figures 3 and 4 I have shown a slightly modified form of my invention and in this form I provide a bearing block 30, which is arranged inward of the lower end of the pipe 11 and this bearing block is provided at its axial center with a substantially conical bearing recess 31, it being noted that the recess 31 includes a substantially cylindrical wall 32 and the tapering wall 33. The lower end of the pipe 11 in the form shown in Figures 3 and 4 is rolled inward to provide a supporting flange 34 on which normally rests the lower bearing member 35 which bearing member may include the disc 36 and the axial bearing portion 37 which may have a rounded substantially semi-spherical upper face 38. As stated, normally the bearing member 35 rests upon the flange 34 and below the bearing member 30 with the bearing portion 37 out of engagement with the walls of the bearing member 30.

However, when the post D is inserted within the ground box B the movable bearing member 35 rests against the bearing member 25 carried by the ground box which acts as a stop and a support and moves the bearing member 35 off of the flange 34 with the bearing portion 37 in engagement with the inclined wall 33 of the bearing recess 31. It is to be noted that the bearing portion 37 only contacts with the inclined bearing wall 33 at one point which effectively prevents binding of these parts and reduces friction so as to permit free rotation of the post on said bearing portion 37. Likewise this construction facilitates the easy removal of the post from the ground box as there is no tendency for any of the bearing parts to bind or stick.

If desired, the bearing members can be in the nature of a ball and socket.

The bearing is so constructed that friction will be reduced to a minimum whereby the standard can freely revolve under the action of wind on the clothes supporting arms, so that the clothes will be quickly dried and so that the bearing will be of a durable construction embodying a minimum number of parts which are not liable to become disarranged and in which rust will have a minimum affect on the operating part of the bearing.

Changes in details may be made without departing from the spirit or the scope of this invention, but what I claim as new is:

1. In a supporting standard for a clothes drier, a tubular sleeve, a filler for the sleeve terminating short of the lower end thereof, a bearing block fitted in the sleeve in engagement with the filler having an axial bearing recess including a cylindrical wall and a tapering wall, the lower end of the sleeve being provided with an inturned supporting flange, a bearing member normally resting on said flange and including a bearing portion having its inner end of tapered formation, said last mentioned bearing member being slidably confined in the sleeve between the flange and the bearing block.

2. In a supporting standard for a clothes drier, a tubular sleeve, a bearing block fitted in the sleeve and having an axial bearing recess including a cylindrical wall and a tapering wall, the lower end of the sleeve being provided with an inturned supporting flange, a bearing normally resting on said flange, said bearing provided with a tapered end and being slidably confined in the sleeve between the flange and bearing block.

In testimony whereof I affix my signature.

ROBERT D. JONES.