

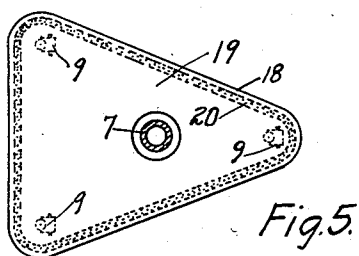
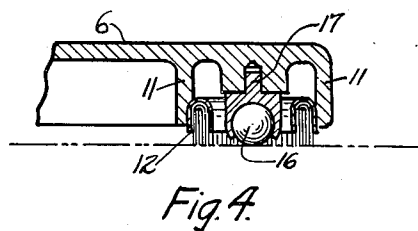
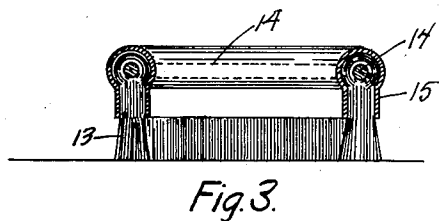
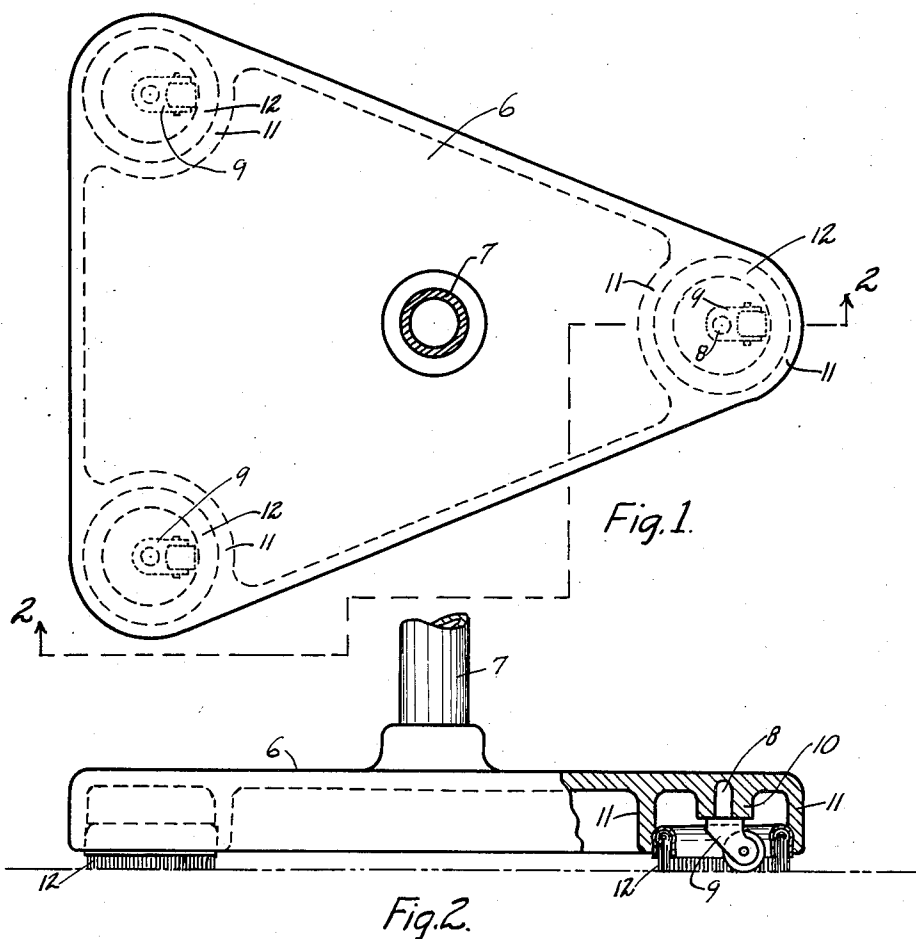
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DIRTPROOF CASTER

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DIRTPROOF CASTER

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7 Claims. (Cl. 15—160)

This invention relates to a dirt-proof caster or movable support for the bases or mountings of portable machines, apparatus, chairs or other objects. It is especially useful for the equipment of beauty parlors and barber shops, which equipment must be moved about for use from one location to another over a floor often littered with hair. The present type of caster or movable support, under such circumstances, becomes so clogged after use, that it ceases to function, requiring the piece of equipment which it supports to be literally dragged and scraped over the floor. Owing to the high center of gravity of many of these pieces of equipment they tend to tip over as they are moved by an operator, when their bases are not free to roll over the floor.

It is an object of my invention completely to enclose the caster means, providing the enclosing means at the bottom with a sweeping material, which surrounds the caster means and presses down against the floor. Various substances may be used for the sweeping material, such as rubber and felt, but I prefer to use a brush as my sweeping material. I use the term "brush" in the commonly accepted sense, where substantial lengths of hair or other fiber extend freely from a place of support.

In my preferred form, the caster is set in a compartment and surrounded on all sides with a brush lining the lower edge of the compartment and contacting with the floor. No matter in which direction the caster is moved, the brush prevents entanglement with the bearings of the caster by sweeping the hair in its path to one side.

Other objects and advantages will become apparent upon further study of the description and drawing, in which:—

Fig. 1 is a plan view of a base of a machine, the supporting standard being in section.

Fig. 2 is a partial elevation and section taken approximately along the line 2—2 of Fig. 1.

Fig. 3 is a section of a circular brush shown removed from the base, and to an enlarged scale.

Fig. 4 is a partial section of the base showing my construction with a ball type of caster, and

Fig. 5 is a plan view, as in Fig. 1, but to a smaller scale, showing a modification of my construction in which one protecting compartment with its brush surrounds all the moving parts supporting the base.

The invention is described herein in connection with a three caster stand, but it will be understood that it can be used with other constructions having moving parts riding over a floor or other

surface, said parts requiring protection from dirt, especially fibrous dirt.

A triangular base 6 is provided with a standard 7 which can be used to support a given apparatus such as say a permanent-wave machine for beauty parlors. Near each corner of base 7, a caster 9 is mounted, with its pivot pin 8, set in a journal 10 projecting below the bed of said base. Surrounding each journal 10 is a flange 11 projecting downwardly from the bed of base 7. Said flange extends to within a short distance of the floor. Each flange 11 forms a compartment containing its corresponding caster 9. Mounted, so as to project below the lower edge of the compartment formed by flange 11, is a brush or broom denoted in its entirety by the numeral 12. The lower edge of brush 12 contacts with the floor over which the caster operates completely closing the compartment formed by flange 11. The fibers of the brush are closely packed for the substantially complete exclusion of dirt. It is thus seen that each caster is shut off from its surroundings. As the base is moved about, brush 12 sweeps aside whatever hair, fiber or other dirt there is that lies in the path of its corresponding caster preventing it from entering under the edge of the compartment and fouling the bearings of the caster.

In my preferred form of brush, the brush fibers 13, are looped over a wire 14, and with the fibers thus mounted, a channel shaped sheet metal strip 15 is set over them and crimped below the wire. Long lengths of the brush can be constructed in this way. A suitable length of the brush, thus formed, is cut off and bent into a ring and mounted with a forced fit on the inside of the ring formed by flange 11.

With the pivoted type of caster, as in Fig. 2, the inside diameter of the chamber or compartment formed by flange 11, is sufficiently large to permit the caster to swing on its pivot pin 8 and clear the brush.

Fig. 4 shows a ball type of caster. A ball 16 is rotatably mounted in a support 17 fastened underneath the bed of base 6. Surrounding the caster, as with the one previously described, is a flange 11 forming a compartment fringed on its lower edge with a brush 12.

Instead of providing each caster or other type of movable support that may be used, with an individual compartment and brush, a compartment and brush sufficiently large to encompass all the moving parts may be used as shown in Fig. 5. Base 19, in this case, is provided with an encir-

cling flange 18, having a brush 20 mounted within it.

The term "caster" as used in the claims is intended to be broad enough to include other movable supports which are suitable for carrying a mounting or base and enabling it to be moved over a floor or similar surface, except where the construction of the caster is specified.

I claim:—

1. A device of the character described, comprising a mounting for supporting an object, a plurality of casters mounted upon said mounting for enabling said object to be moved over the floor, and individual sweeping means mounted upon said mounting and surrounding each caster by itself, said means contacting with the floor and having a texture close enough to prevent substantially the passage of dirt therethrough, said mounting forming a closed cover over each caster, said mounting together with the sweeping means forming a closed chamber with the floor about each caster thereby preventing dirt from reaching same.

2. A device of the character described, comprising a mounting for supporting a piece of equipment, a plurality of casters mounted upon said mounting for rolling contact with the floor, said mounting being provided on its underside with compartments open at the bottom within which said casters are located, and a plurality of brushes surrounding the casters, a brush for each compartment, having closely packed fibers for preventing the passage of dirt therethrough, said brushes being mounted in tight contact with said compartments and extending from the compartments into contact with the floor for preventing dirt from reaching the casters.

3. A device of the character described, comprising a mounting for supporting a piece of equipment, a plurality of casters having swivel pins supported on said mounting, said mounting having portions forming a pocket about each caster, the minimum diameter of the pocket being greater than that of the circles described about the swivel pin by the portions of the caster within said pocket, and a brush in the form of a ring set upon said mounting at each pocket and surrounding the caster in the pocket, said brush, having closely mounted fibers preventing the passage of dirt therethrough, extending downwardly from the mounting, having tight contact with the pocket, into contact with the floor for preventing dirt from entering the pocket.

4. A device of the character described comprising

a mounting for supporting a piece of equipment, caster means mounted upon said mounting for rolling contact with the floor, flanges extending downwardly from said mounting and surrounding the caster means, said flanges extending to within a short distance of the floor, and sweeping means mounted on the flanges in tight contact therewith completely surrounding said caster means and contacting with the floor, said sweeping means closing off the space between the flanges and the floor, substantially excluding the passage of dirt through said space to the caster means.

5. A device of the character described, comprising a mounting for supporting a piece of equipment, a plurality of casters mounted upon said mounting for enabling said piece to be moved over the floor, flanges extending below the bed of said mounting in a plurality of rings, a caster being set in each flange ring, and a brush formed into a ring mounted upon each flange ring, each brush extending from its corresponding flange ring into contact with the floor, and adapted to prevent the passage of dirt into the inside of the flange ring.

6. A device of the character described, comprising a mounting for supporting a piece of equipment, a plurality of casters mounted upon said mounting for enabling said piece to be moved over the floor, said mounting having downwardly extending portions forming a pocket about each caster, and a brush for each pocket having a backing in the form of a ring fitting inside the pocket, the fibers of the brush extending from the backing down into contact with the floor and adapted to prevent the passage of dirt into the inside of the pocket.

7. A device of the character described, comprising a mounting for supporting a piece of equipment, a plurality of casters mounted upon said mounting for rolling contact with the floor, said mounting being provided with compartments open at the bottom within which said casters are located, and a plurality of sweeping units of close enough texture to prevent substantially the passage of dirt therethrough surrounding the casters, a unit for each compartment, each unit being mounted at its upper portion in tight contact with its compartment and extending therefrom down into tight contact with the floor for preventing dirt from reaching the casters.

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