Jan. 18, 1927. 1,614,680

R. C. ODELL

FLOOR POLISHER

Original Filed April 18, 1922

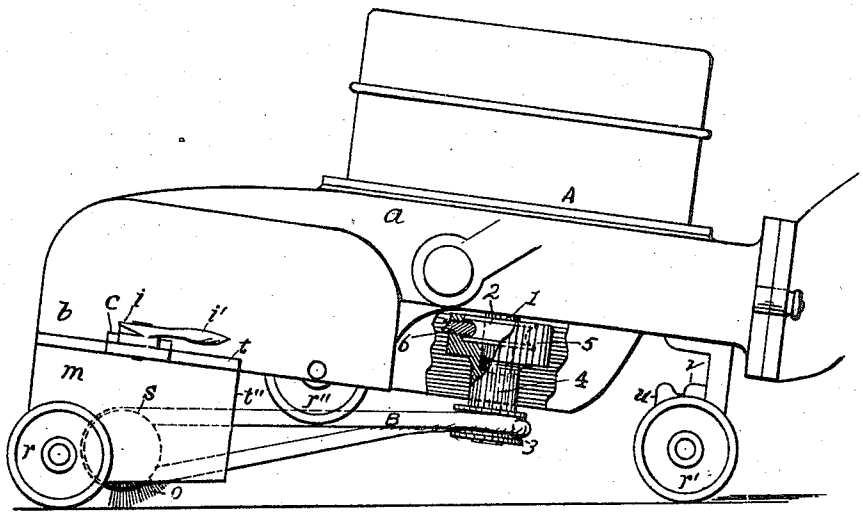


Fig. 1

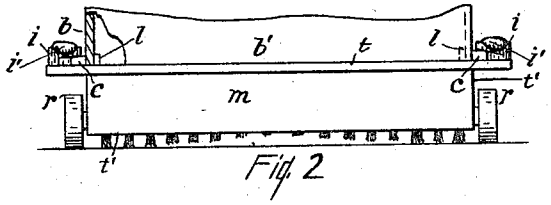


Fig. 2

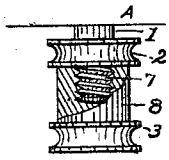


Fig. 5

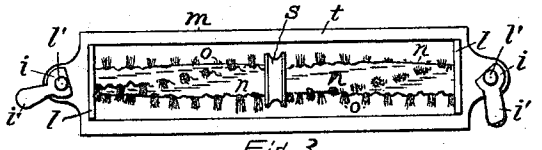


Fig. 3

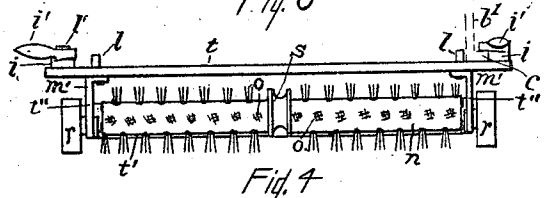


Fig. 4

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UNITED STATES PATENT OFFICE.

RODMAN C. ODELL, OF PEEKSKILL, NEW YORK.

FLOOR POLISHER.

Application filed April 18, 1922, Serial No. 554,494. Renewed July 28, 1926.

This invention relates to the polishing of hard wood floors, and has for its object an adaptation of vacuum cleaners to floor polishers. The object is attained by the means set forth in the following specification and the accompanying drawings, in each of which like letters and numerals refer to similar parts throughout the several views.

Fig. 1 of the drawings represents a vacuum cleaner, partly in section, with this invention attached. Fig. 2 is a front elevation of the attachment and a portion of the front of the vacuum cleaner. Fig. 3 is a plan of the attachment. Fig. 4 is a rear elevation of the attachment. Fig. 5 is a plan, partly in section, for a pulley extension.

In Fig. 1, A, *a*, *b*, represent a motor driven vacuum cleaner, that normally rides upon the rollers *r'*, *r''*, the roller *r'* being adjustable upon a sliding arm *v* fastened by means of the thumbnut *u*. The motor is enclosed in the casing A, and its shaft 1 extends downwards and carries a pulley 2 that is used to drive an element in the vacuum cleaner.

Upon the sides of the part *b* of the cleaner are lugs *c*, that are used for securing thereto by a clamping means of devices belonging to the vacuum cleaner. This invention consists of an attachment *m* to be clamped to the said lugs *c* by means of the cam-clamps *i i'*, the attachment containing a brush *n o* which is driven by a belt B from the motor pulley.

A plan of the said attachment is given in Fig. 3, and, together with the elevations given in Figs. 1, 2 and 4, show it to comprise a casing with a top frame *t* to which are attached end plates *t''*, Figs. 1 and 4, and a side, front plate *t'* as in Figs. 2 and 4. Projecting above the frame *t* are lugs *l l*, Figs. 2, 3 and 4, that project inside of the vacuum cleaner front, as in Fig. 2, the parts *b b'* constituting a section of the vacuum cleaner.

A brush *n* with staggered bristles *o* is rotatably suspended within the casing. This brush has a pulley *s* at its center, to range in line with the motor driving pulley. The brush requires no particular bristle formation, although one with the bristles spirally arranged is shown in Fig. 3, and one with straight rows of bristles in Fig. 4.

Plans of the clamps *i i'* are shown in Fig. 3, and elevations in Fig. 4, while in Fig. 2 they are shown holding the attachment to the lugs *c c* that are on the vacuum cleaner. Nothing new is claimed in the forms of these clamps.

The attachment is provided with rollers *r r*. When the attachment is on the vacuum cleaner, the cleaner front is elevated as in Fig. 1, by the height of the attachment. The adjustable roller *r'* on the vacuum cleaner is employed to adjust the relation of the brush to the floor.

In placing this attachment on the vacuum cleaner the belt that is used on the pulley 2, for vacuum cleaning purposes, is removed and can be used for the attachment, or a special belt can be used. To obtain a motor pulley in position to drive the attachment brush, a pulley 3 is provided, as in Fig. 1. This pulley comprises a hub 4 and a sleeve 5, the sleeve adapted to slip over the pulley 2, to which the sleeve is secured by means of a set screw 6. The pulley 3 is below the casing of the vacuum cleaner, and is belted to the brush pulley as shown. The application of these elements, namely, the attachment, the pulley and the belt are quickly made. The motor revolves the brush, and the combination make an admirable floor polisher.

Fig. 5 illustrates a modified form of extension pulley for the motor drive. The motor shaft 1 is provided with a threaded end 7 and a threaded pulley hub 8 is applicable to the threaded shaft.

Having described my invention, what I claim and desire to secure by Letters Patent, is—

1. In a detachable floor polishing attachment for vacuum cleaners of the kind having a cleaning brush in its suction nozzle, a central vertical motor shaft and a belt drive therefrom to the brush, the combination of a casing detachably connected to the vacuum cleaner nozzle, a polishing brush within the casing, a pulley central of the polishing brush, an extension pulley detachably connected to the motor shaft, a belt

connecting the extension pulley to the polishing brush-pulley, and rollers on the casing, substantially as set forth.

2. In a floor polishing attachment for vacuum cleaners comprising a casing adapted to be mounted on the suction nozzle of a motor operated vacuum cleaner, a rotatable polishing brush in the casing, a pulley positioned centrally of the brush, a driving belt extending around the pulley and means adapted to be connected to the motor shaft of the vacuum cleaner for driving said belt.

Signed at Peekskill, in the county of Westchester and State of New York, this 15th day of April, A. D. 1922.

RODMAN C. ODELL.