Oct. 9, 1934. D. U. KAUFFMAN 1,976,565

SANDER DRUM

Filed July 9, 1931

Fig. 1.

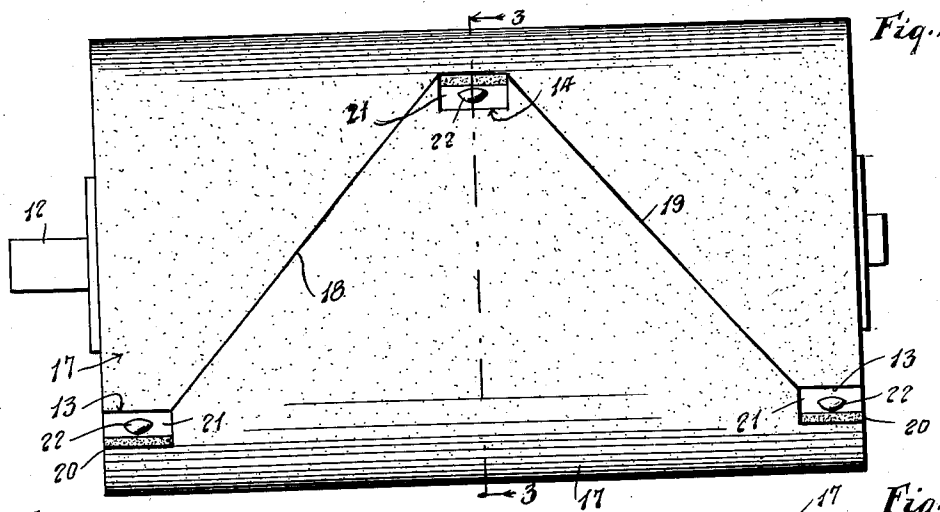


Fig. 2.

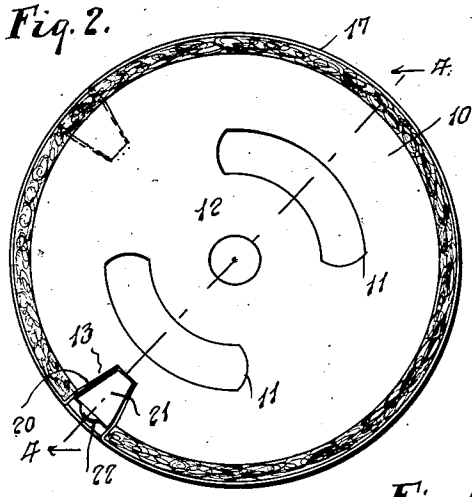


Fig. 3.

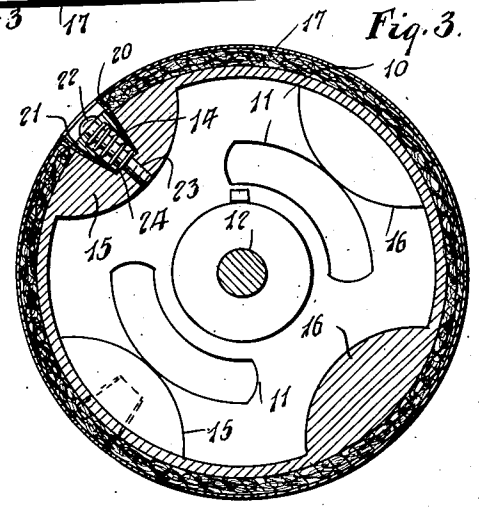


Fig. 4.

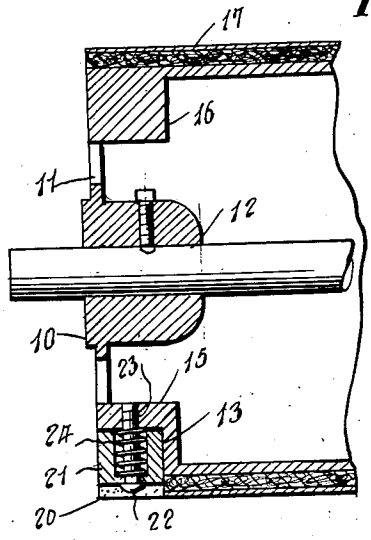
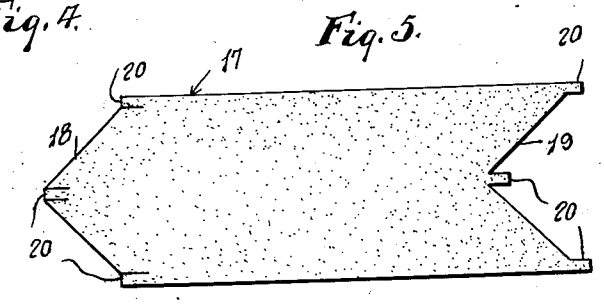


Fig. 5.



Inventor

D. U. Kauffman.

By L. F. Randolph Jr.

Attorney

Patented Oct. 9, 1934

1,976,565

UNITED STATES PATENT OFFICE

1,976,565

SANDER DRUM

David U. Kauffman, Nampa, Idaho

Application July 9, 1931, Serial No. 549,766

1 Claim. (Cl. 51—194)

This invention relates to a sander drum construction and particularly aims to provide a means whereby "waves" on the floor or the like in connection with which the sander is used, will be avoided.

A particular object is to provide a construction which does not require the use of a split drum since the latter invariably causes the "waves" effect, and to employ a novel construction of abrading sheet and means for fastening the same to the drum, the sheet enabling utilization of the abrading material to a greater extent than in existing constructions.

The more specific objects and advantages will become apparent from a consideration of the description following taken in connection with accompanying drawing illustrating an operative embodiment.

In said drawing:—

Figure 1 is a view in plan showing a sander constructed in accordance with the invention,

Figure 2 is an end elevation of the sander,

Figure 3 is a cross sectional view taken on the line 3—3 of Figure 1,

Figure 4 is a fragmentary longitudinal sectional view taken on the line 4—4 of Figure 2, and

Figure 5 is a plan view of the abrading sheet.

Referring specifically to the drawing, the drum is shown at 10, being preferably cast in a single piece of metal or other suitable material. Said drum at the ends has vent openings 11 therethrough and the same is mounted on a shaft 12 adapted for connection in a sanding machine as usual.

A pair of recesses are provided in longitudinal alinement on the periphery of the drum as at 13 and a similar recess is provided at 14 out of alinement therewith. The drum has enlargements at 15, in which said recesses are provided and also has enlargements as at 16 for balancing purposes.

On the periphery of the drum or roller, a facing of felt or the like 17 is secured.

The abrading or sanding sheet is shown in plan at 17, such sheet being of any suitable material as for instance sand paper, emery cloth or the equivalent. One end of the sheet is pointed at 18 and the opposite end is notched at 19 so that the point will interfit therein when rolled around the drum, as shown in Figure 1. At each corner of the sheet and at each end on a central longitudinal line, a fastening tab 20 is provided. When the sheet 17 is rolled around the drum, the tabs 20 are located in the recesses 13 and 14. Hollow wedges 21 are fitted in the recesses so that they engage the tabs 20 and thus securely fasten the sheet in place. The wedges 21 are anchored against displacement by means of screws 22 passing therethrough and having threaded engagement at 23 with the portions 15. Expansive springs 24 surround the screws 22 and are located within the hollow wedges 21, serving to expand and automatically eject the wedges upon loosening the screws 22.

It will be realized that practically the entire periphery of the drum is covered by means of the invention, those portions represented by the wedges 21 being so small as not to cause the "waves" referred to.

Various changes may be resorted to provided they fall within the spirit and scope of the invention.

I claim as my invention:—

In a device of the character stated, a drum having an inwardly tapered opening therein to receive tongues on an abrading sheet mounted on the drum, a hollow wedge member received in said opening and engaging said tongues, a threaded member rotatably mounted in said wedge member and engageable with the drum at the base of said opening, and an expansible coil spring mounted on said threaded member and in the hollow of the wedge member and compressible between the wedge member and the base wall of the opening when the wedge member is secured in position to lift it when the threaded member is unscrewed.

DAVID U. KAUFFMAN.