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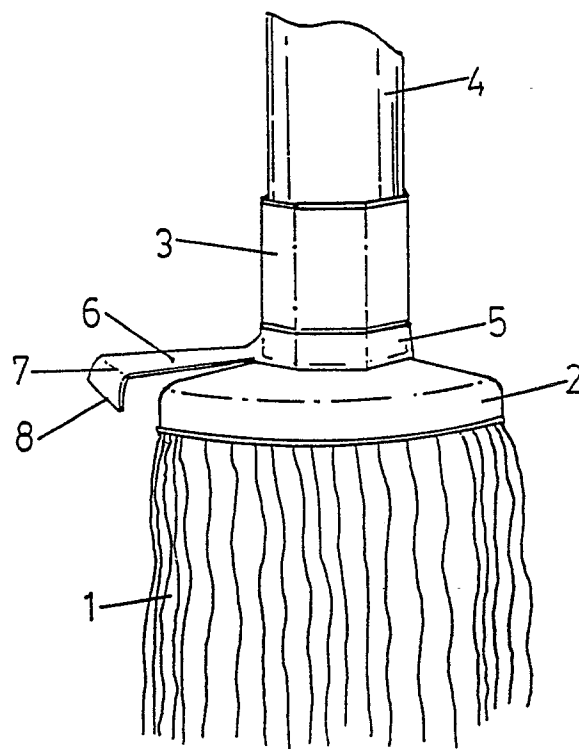
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(54) **Scraping device for a floor cleaning tool.**

(57) The scraping device is constituted by a flat spatula 6 with a front edge 7, eventually provided with a fold 8. The piece 6 is united with an annular body 5 adaptable to the connector of the head 2 supporting a mop 1. The semirigidity of the spatula 6 and the fold 8 provided by the material permits that they do their work without excessive deformation when the head of the cleaning tool is applied to a surface to be scraped.

FIG. 2



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Scraping Device for the Application to Floor Cleaning Tools

The present invention refers to a scraping device adapted to be applied to a floor cleaning tool, the utilisation of which considerably improves the range of application of the aforementioned cleaning tool.

Floor cleaning tools as known until now and provided with threads forming mops for cleaning floors have the inconveniency that when encountering certain kinds of dirt on the floor, like smudge, debris, dry food residues and the like, the removal of such material by rubbing it with the mop is practically impossible. A device is needed which permits scraping such dirt formations from the floor to terminate the operation by washing the respective location.

The scraping device applicable to a floor cleaning tool and being subject matter of the present invention eliminates the aforementioned inconveniency by providing means for scraping the very dirty surfaces and eventually incrustated by various materials to prepare the respective surfaces by means of the tool for their later cleaning in order to obtain a total cleanness. The application of the device at a floor cleaning tool is attained very easy without affecting the specific function of the cleaning tool.

In order to facilitate the explanation, the present description is accompanied by some drawings in which as an illustrative and not limiting example an embodiment of a scraping device is shown which is applicable to a mop, in accordance with the principles of the claim .

In the drawings:

Fig. 1 shows a floor cleaning tool provided with a scraping device of the described type.

Fig. 2 shows in increased scale the proper cleaning tool incorporating the scraping device disposed for its use.

The elements designated by numerals in the drawings in the following correspond to the indicated parts.

The floor cleaning tool, conventionally constituted by a mop 1 formed by a plurality of parallel threads supported by a head 2 to which at an upper connector 3 thereof, an actuation rod 4 is affixed, comprises in the zone where the connector adjoins the head an element 5 in form of a ring associated to the body of said device constituted by a flat piece 6 preferably of triangular spatle-like shape defining a rectilinear side 7 in the most salient zone and a fold 8 in prolongation thereof.

The ring 5 and the spatle 6 are integrally formed from a rigid or semirigid plastic material.

The ring 5 adapts easily to any type of connector 3 of the different floor cleaning tool models

available in the market. When made from an at least semirigid material, it adapts to prismatic or circular shapes presented by the connectors of usual floor cleaning tools.

For its part, the semirigidity provided to the spatle 6 and to the fold 8 by the material results in that they do their work perfectly without excessive deformation when said head of the cleaning tool is applied at a surface to be scraped.

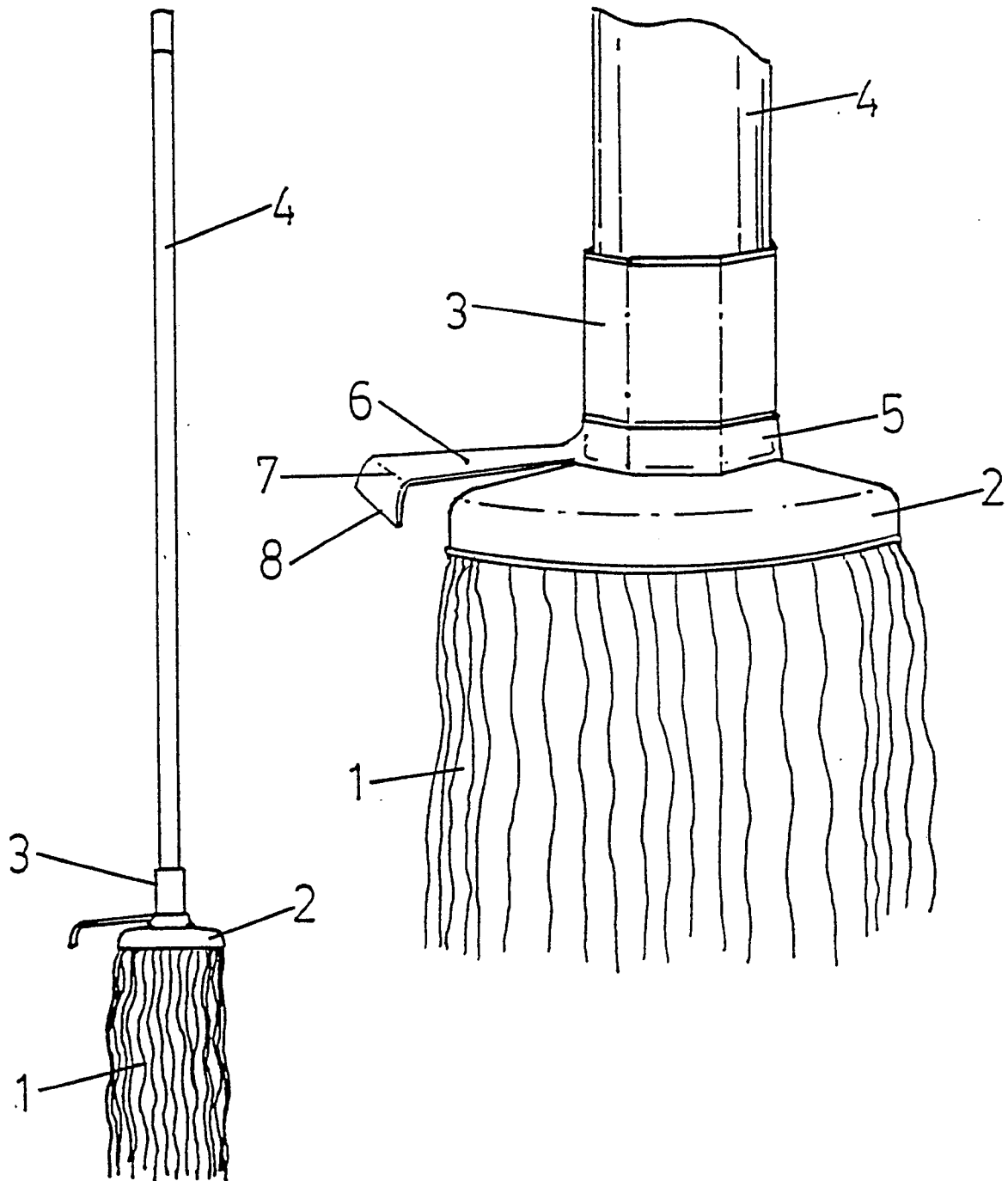
The form of the spatle 6 should preferably be isosceles triangular or the like, and particularly its elongation, i.e. the height of the isosceles triangle formed in this case is larger than the diameter of the head 2 in order that the device protrudes therefrom and the fold 8 remains external so that it can efficiently operate to scrape without any interference by the threads of the mop 1.

Claims

Scraping device adapted to be applied to a floor cleaning tool, essentially characterized in that it comprises a flat body in form of a triangular spatle with a front edge eventually provided with a fold, and comprising means for coupling to a mop supporting head of a floor cleaning tool, said means being constituted by an annular body adaptable to the connector of the head, and in particular the radius of the ideal circumference defined by the scraper edge being larger than the radius of the mop supporting head.

FIG. 1

FIG. 2





DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X	US-A-2 163 979 (JUDSON) * Whole document *	1	A 47 L 13/12 A 47 L 13/20 A 46 B 17/06
X	GB-A-2 150 015 (DYMOTT et al.) * Whole document *	1	
A	CH-A- 176 598 (A. STALDER S.A.) * Whole document *	1	
A	GB-A- 774 405 (HENDERSON) * Whole document *	1	
A	FR-A- 466 418 (BENZ-SCHÖNENBERGER) * Whole document *	1	
A	US-A-3 094 728 (WHITE) * Whole document *	1	
A	US-A-3 084 369 (HAWKINS) * Whole document *	1	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			A 47 L A 46 B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 21-03-1990	Examiner VANMOL M.A.J.G.
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