Dec. 14, 1926. 1,610,657

E. D. BURGEE

COMBINED MOP AND SCRAPER

Filed July 29, 1925

Fig. 1.

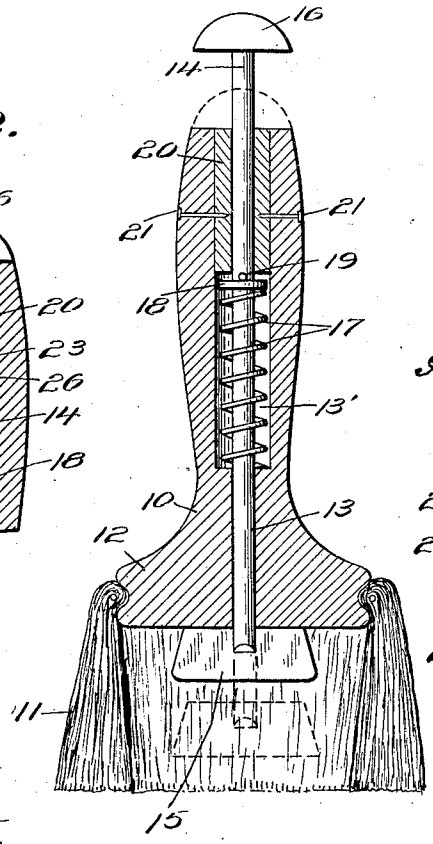


Fig. 2.

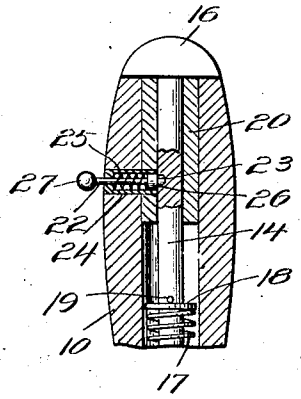


Fig. 3.

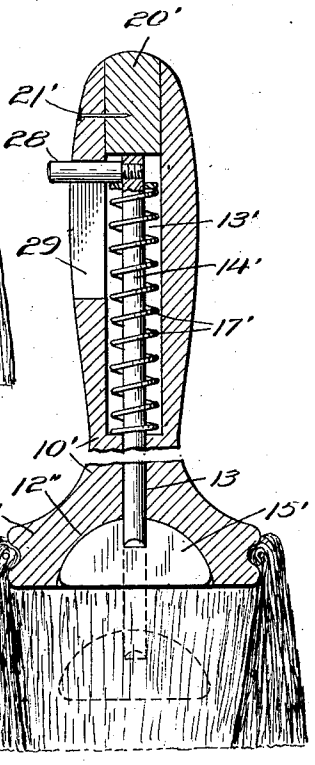


Fig. 4.

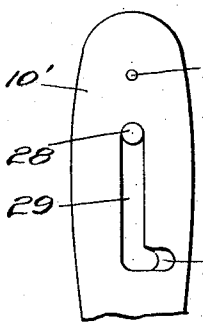
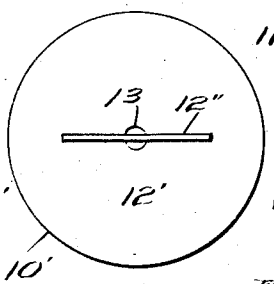


Fig. 5.



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UNITED STATES PATENT OFFICE.

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COMBINED MOP AND SCRAPER.

Application filed July 29, 1925. Serial No. 46,820.

This invention relates to improvements in cleaning and washing devices or implements generally, and has for its principal object to provide for a combined mop and scraper device or implement for use in household or kitchen cleaning and washing operations.

Another object of the invention is to provide for a device or implement of the class mentioned, and one wherein the scraper part of the same is normally positioned free from any and all interference with the mop head during the use of the latter in the usual washing operations therewith, while, when abnormally positioned, the scraper part or blade is available for desired scraping operations simultaneously with the continued cleaning or washing operation of the mop head.

A further object of the invention is to provide for a device or implement of the character set forth, and one of a comparatively simple and inexpensive construction and arrangement of parts, such as will be highly efficient in operation, and capable of being manipulated with a facility equal to that of the ordinary forms of household or kitchen mops now in use.

With the foregoing and other equally important objects in view, the invention resides in the certain new and useful constructions and arrangements of parts as will be hereinafter more fully described, set forth in the appended claims, and illustrated in the accompanying drawings, in which:—

Figure 1 is a verticle sectional view of a preferred embodiment of the invention,

Figure 2 is a fragmentary sectional view of the handle portion of a slightly modified form thereof,

Figure 3 is a view similar to that of Figure 1, but showing another slightly modified form of the same,

Figure 4 is a fragmentary elevation of the handle portion of the latter form of the invention, and,

Figure 5 is a bottom plan view of the mop handle of either one of the several forms of the said inventions.

Referring to the drawings, and more particularly to Figure 1 thereof, the numeral 10 indicates a conventional form of mop handle having an ordinary form of mop head 11 attached to its lower cylindrical end 12 in any suitable or usual manner. Extending longitudinally through the handle 10 is a bore formed to provide a lower end portion 13 and an upper end portion 13′ of a greater diameter than that of the lower portion 13, the upper portion 13′ being in effect a counter-bore with respect to the bore portion 13, and extending inwardly of the upper end of the handle. Mounted for sliding movements in the aligned bores 13 and 13′ is a push rod 14 having a scraper member or blade 15 attached or otherwise secured to its lower end, and its upper end formed to provide an operating knob 16. Seated within the upper bore 13′ is a coiled spring 17 which surrounds the push rod 14 and has its upper end abutting a collar 18 to tension the same against a pin 19 passed through the push rod substantially as shown. The upper end of the larger bore 13′ is closed by a plug 20, which is fastened in position by means of the nails 21, or similar fastenings. This plug 20 has a bore 13″, of a diameter corresponding to that of the lower bore 13 in the handle, through which the push rod 14 operates.

In this form of the device, and in the normal position of the push rod 14, the spring 17 is expanded and forces the pin 19 upward into abutting relation against the inner end of the plug 20, so that the push rod 14 is maintained in raised position, when the scraper blade 15 is held in abutting relation against the lower side of the cylindrical portion 12 of mop handle 10. Thus, the scraper blade 15 is held free from interference with the mop head 11 during its use for washing operations. When it is desired to bring the scraper blade 15 into play, the push rod 14 is depressed against the tension of the coiled spring 17, by exerting the pressure of the hand on the knob 16, with the result that the scraping blade 15 will be disposed in proper position with respect to the free end of the mop head 11 to be effective for desired scraping operations. When the scraping operation is completed, the scraper blade 15 will be retracted to its inoperative position by relieving the pressure of the hand on the knob 16 of the push rod 14, when the spring 17 will expand in an upward direction to raise the latter until the pin 19 again abuts the inner or lower end of the plug 20.

In Figure 2, I have shown a means for maintaining the push rod 14 in its depressed or lowered position during continued use of the scraper blade 15, so as to relieve the

hand of the operator from the strain incident to the expansive action of the spring 17 during the periods of its compression. This means, in its illustrative embodiment, comprises a detent 22, operating through one side of the handle 10 and the plug 20 in right angular relation to the push rod 14, so as to have its inner end engage with a recess 23 formed in the push rod 14, when the latter is moved to its lower position for the effective use of the scraper blade. The detent 22 is mounted in a tubular sleeve 24 which is fitted into aligned bores formed in the handle 10 and the plug 20, substantially as shown. A coiled spring 25 is housed within the sleeve 24 and is interposed between the outer closed end of the latter and an enlargement 26 formed adjacent the inner end of the detent 22, in a manner to tension the detent at all times for instant engagement with the recess 23, whenever the push rod 14 is fully depressed. An operating knob 27 is provided at the outer end of the detent 22 to facilitate its withdrawal from engaged position and against the tension of the spring 25.

In Figure 3, the push rod 14′ is made considerably shorter than in the first instance of the invention, and, in its normally raised or inoperative position has its upper end disposed in abutting relation to the inner or lower end of a solid plug 20′ fitted into the upper end of the enlarged bore 13′, while the scraper blade 15′, at the lower end of the push rod 14′, seats in a slotted recess 12″ formed for its reception in the lower face of the cylindrical portion 12′ of the handle 10′, with its working edge flush in the plane of the said lower face. The push rod 14′ is held normally retracted by means of the coiled spring 17′, substantially as shown, while the same is to be manipulated to operative position, against the tension of the spring 17′, by means of a finger piece 28 which is secured in any suitable manner to the extreme upper end of the rod 14′ and projected therefrom at right angles outwardly of a slotway 29 extending longitudinally of the intermediate portion of the handle 10′. Formed at the inner or lower end of the slotway 29 is an offset slotway or angular recess 29′ to be engaged by the finger piece 28, when the push rod 14′ is depressed to the operative position of the scraper blade 15′, and the same is given a slight turn in the proper direction for the purpose. Thus, the scraper blade 15′ will be maintained in its operative position, without effort on the part of the operator, and until it is again desired to use the mop only, when, by turning the push rod 14′ in the reverse direction, the finger piece 28 will enter the slotway 29 and will then be forced upwardly thereof by the action of the spring 17′, with the result that the parts will be returned to normally inoperative position, i. e., the push rod 14′ in its fully raised position and the scraper blade 15′ seated in the slotted recess 12″. The slotway 29 is preferably of a length corresponding to the desired movement of the push rod 14′ and the distance of projection of the scraper blade outwardly from the lower end of the handle 10′.

This scraper attachment for mops will be found to have many uses in general household work, particularly in the cleaning of floors, as in the loosening up of hardened accumulations of dirt, especially in the corners of a room, and in the cleaning of cooking utensils and the like where the washing operation is to be facilitated by the loosening up of hardened accumulations of food-stuffs, grease, etc.

From the foregoing, it will be readily apparent that, while preferred embodiments of the devices or implements have been described and illustrated herein in specific terms and details of construction, arrangement and operation, such changes in and modifications of the same may be resorted to as do not depart from the spirit of the invention, and the scope of the claims appended hereto.

Having thus fully described the invention, what is claimed, is:—

1. In an implement of the class described, a handle, a mop head at one end of said handle, a movable scraper blade in said mop head provided with means for constantly urging the same to inoperative position, and positive operating means movable in said handle to force the scraper blade to operative position.

2. In an implement of the class described, a handle, a mop head at one end of said handle, a movable scraper blade in said mop head, means to constantly urge the scraper blade to inoperative position, positive operating means for the scraper blade slidably mounted in the handle and projecting therefrom, and means to detachably lock the last noted means to hold the scraper blade stationary when the same is forced to operative position.

In testimony whereof I affix my signature.

ELIZABETH D. BURGEE.