

C. W. JOHNSON.

FLOOR SCRAPER.

APPLICATION FILED SEPT. 5, 1907

923,271

Patented June 1, 1909.

Fig. 1

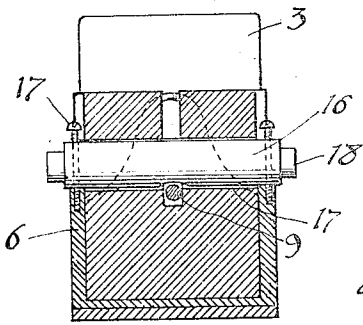
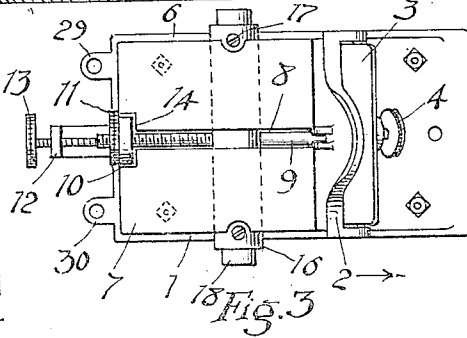
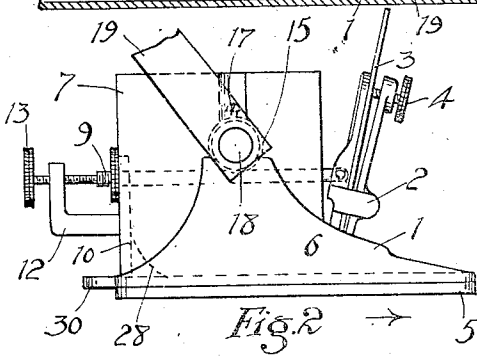
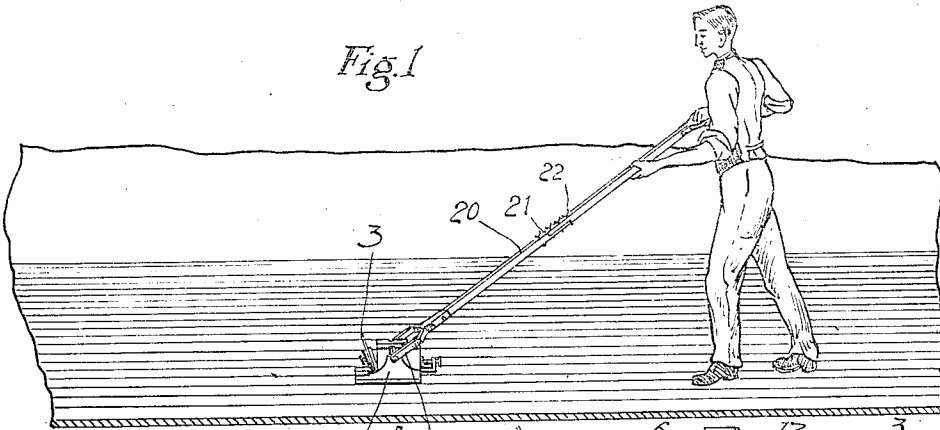


Fig. 4

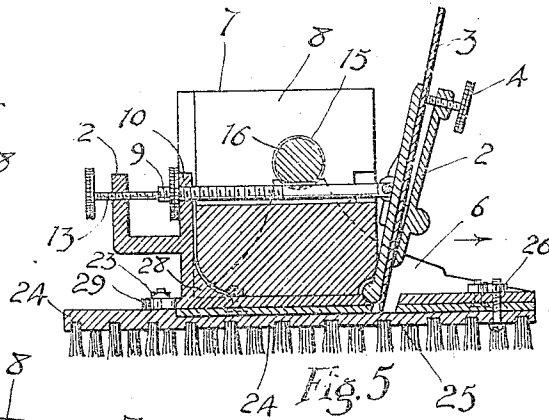


Fig. 5

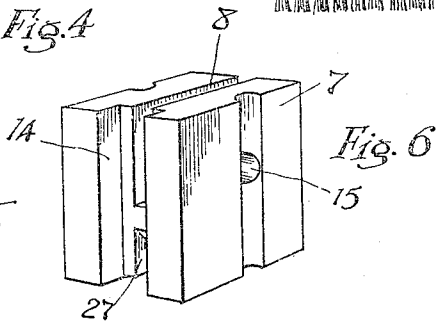


Fig. 6

WITNESSES:

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UNITED STATES PATENT OFFICE.

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FLOOR-SCRAPER.

No. 923,271.

Specification of Letters Patent.

Patented June 1, 1909.

Application filed September 5, 1907. Serial No. 391,537.

To all whom it may concern:

Be it known that I, CHARLES W. JOHNSON, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented new and useful Improvements in Floor-Scrapers, of which the following is a specification.

The object of the present invention is to provide an improved floor scraper, which can be used by the operator in an erect position, and without the necessity of his working on his hands and knees, as is at present the practice, and will thus enable a much longer stroke to be taken with the scraper, so that the work is performed not only with greater convenience and ease, but also more quickly.

A further object of the invention is to provide a device of this character which can be readily converted into a brush.

In the accompanying drawing, Figure 1 is a perspective view showing the scraper in use; Fig. 2 is a side view of the scraper proper and a portion of the handle; Fig. 3 is a plan view of the same, the handle being omitted; Fig. 4 is a cross section; Fig. 5 is a longitudinal central section, showing also a brush attached to the device; Fig. 6 is a perspective view of the weight detached.

Referring to the drawing, 1 indicates the frame of the scraper, which in general resembles the ordinary Stanley floor scraper, having a holder 2 for the bit 3, held in said holder by means of the screw 4.

5 indicates a wooden shoe secured upon the bottom of the holder.

In the recess behind said bit holder formed by the side walls 6 is placed a weight 7, of lead or other heavy metal. Said weight has a longitudinal recess 8 to permit of the passage therethrough of the adjusting screw 9, which is secured at its front end to the bit holder, and at its rear end passes through a post 10. In the Stanley floor scraper this screw is adjusted longitudinally, so as to adjust the slope of the bit, by means of two nuts, one on each side of said post, but in my improvement I remove the front nut and retain only the rear nut 11, which prevents the bit holder moving forward. To hold it in place against backward movement there is provided an elbow 12 on the post 10, through which passes a screw 13, the point of which bears against the end of the screw 9 and thus prevents backward movement

of said screw. I find that the screw 13 and nut 11 furnish a better means of adjusting the screw to prevent longitudinal movement thereof in either direction, as the front nut now dispensed with was unsatisfactory on account of its slipping on the screw. The weight also has recesses 14 in its rear side to receive the post 10, and a recess 27 to receive a rib 28 on the frame 1. The weight is also formed with a transverse hole 15, to receive an axle 16 which is secured by screws 17 to the side walls, and has reduced ends or trunnions 18 to enter the apertured ends of a yoke 19 secured at the lower end of the handle 20. For convenience of transportation, said handle is preferably made in two sections having rabbeted adjoining ends 21 secured together by the thumb screws 22, or in any other convenient manner.

The use of this device will be readily apprehended from the foregoing description. The weight 7 is made sufficiently heavy to cause the scraper to press against the surface of the floor with a pressure not less than that imparted thereto by the hand of the operator in the old style of using the scraper. At the same time the labor of exerting said pressure during the forward movement of scraping is removed. Since the operator now works in an erect position instead of on his hands and knees, he can work more rapidly and for a longer time than before without any increase in fatigue. An important advantage is that the length of the stroke is greatly increased. With the old style of scraper an average length of stroke would be three feet six inches, but with the present scraper the average length of the stroke is about six feet, so that from this cause alone the work can be performed nearly twice as rapidly as formerly.

My improved construction also enables the device to be conveniently used as a brush, when desired. For this purpose, the frame of the device is formed with two rearwardly extending lugs 29, 30, through which screws 23 pass into the back 24 of the brush 25. A screw 26 is also screwed into said back through the forward end of the frame.

I claim—

1. A floor scraper comprising a frame having a rear post, a shoe secured to said frame, and slidable on a floor, a bit holder, a bit held therein, inclined rearwardly and downward, a weight on said frame, between said

post and bit holder, said weight having a transverse perforation and a longitudinal perforation, an axle extending through said transverse perforation, means for removably securing the ends of said axle to the frame, an adjusting screw secured to said bit holder and passing through said longitudinal perforation and also through said post, and a nut on the rear end of said screw, substantially as described.

2. A floor scraper comprising a frame having a rear post, having also a fixed part extending behind said post, a shoe secured to said frame, and slidable on a floor, a bit holder, a bit held therein, inclined rearwardly and downward, a weight on said frame, between said post and bit holder, said weight having a transverse perforation and a longitudinal perforation, an axle extending through said transverse perforation, means for removably securing the ends of said axle to the frame, an adjusting screw secured to said bit holder and passing through said longitudinal perforation and also through said post, a nut on the rear end of said screw, and a screw screwed through said rearwardly extending part and adapted

to abut against the rear end of the adjusting screw, substantially as described.

3. A floor scraper comprising a frame having a rear post, a shoe secured to said frame, and slidable on a floor, a bit holder, a bit held therein, inclined rearwardly and downward, a weight on said frame between said post and bit holder, a handle, a yoke secured upon the lower end thereof and having apertured ends, means extending from the sides of said weight and adapted to enter said apertured ends, means for detachably securing the first named means to the yoke or frame, said weight having a longitudinal groove, an adjusting screw secured to said bit holder and passing through said longitudinal groove and also through said post, and a nut on the rear end of said screw, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

CHARLES W. JOHNSON.

Witnesses:

FRANCIS M. WRIGHT,
D. B. RICHARDS.