L. P. THOMPSON.

FLOOR SCRAPER.

APPLICATION FILED AUG. 17, 1914.

1,241,577. Patented Oct. 2, 1917.

Fig. 4

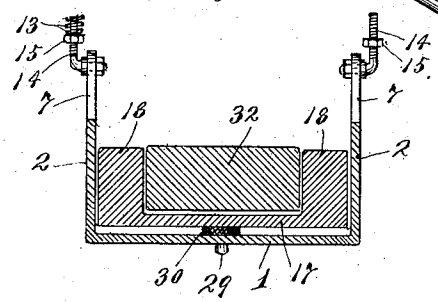


Fig. 3

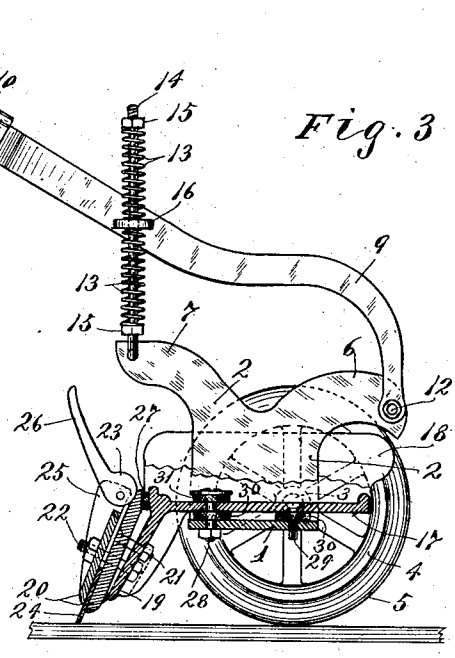


Fig. 2

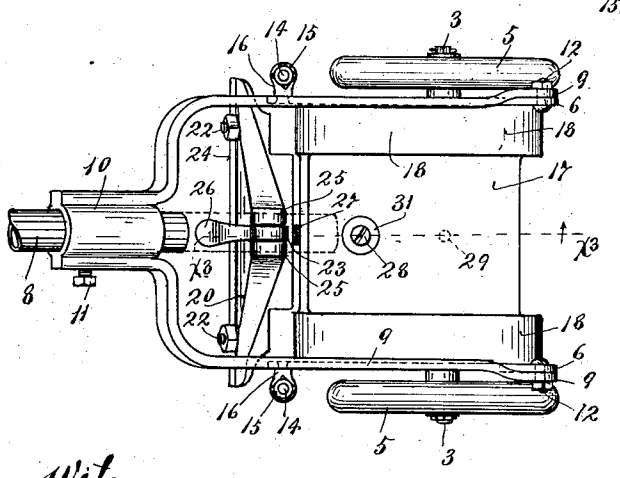
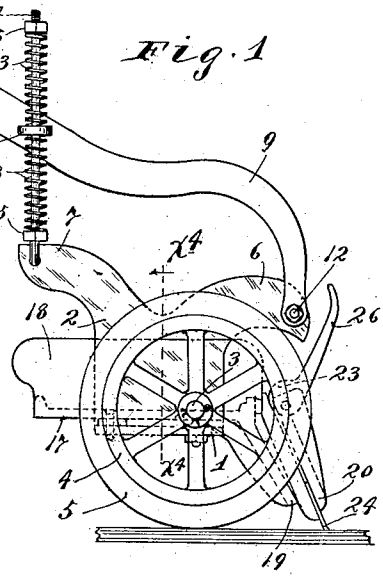


Fig. 1



Witnesses.
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UNITED STATES PATENT OFFICE.

LEWIS P. THOMPSON, OF MINNEAPOLIS, MINNESOTA.

FLOOR-SCRAPER.

1,241,577. Specification of Letters Patent. Patented Oct. 2, 1917.

Application filed August 17, 1914. Serial No. 857,155.

To all whom it may concern:

Be it known that I, LEWIS P. THOMPSON, citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Floor-Scrapers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to provide an improved floor-scraper, for use in finishing hardwood floors; and, to this end, it consists of the novel devices and combinations of devices hereinafter described and defined in the claims.

In the accompanying drawings, which illustrate the invention, like characters indicate like parts throughout the several views.

Referring to the drawings:—

Figure 1 is a side elevation of the improved floor-scraper adjusted to be pulled over the work;

Fig. 2 is a plan view of the improved floor-scraper adjusted to be pushed over the work;

Fig. 3 is a view partly in side elevation and partly in vertical section, taken on the line x^3 x^3 of Fig. 2; and

Fig. 4 is a transverse vertical section, taken on the line x^4 x^4 of Fig. 1.

The numeral 1 indicates a main truck frame having integrally formed therewith a pair of laterally spaced, upwardly projecting side flanges 2. A pair of axially alined trunnions 3 is secured to the side flanges 2. Journaled on these trunnions 3 is a pair of truck wheels 4 equipped with rubber tires 5. Each side flange 2 has an upwardly and forwardly projecting extension 6 and an upwardly and rearwardly projecting extension 7.

The improved floor-scraper is either pushed or pulled over the floor by a hand-piece-equipped handle-bar 8 pivotally connected to the extensions 6 by a fork 9, for vertical swinging movement. The inner end of the bar 8 is telescoped into a sleeve 10 formed on the fork 9, and is secured thereto in different longitudinal adjustments by a set screw 11. As best shown in Fig. 2, the prongs of the fork 9 embrace the extensions 6, and are pivotally secured thereto by nut-equipped bolts 12. The handle-bar 8 is supported in an intermediate position by pairs of opposing coiled springs 13 telescoped on upright rods 14 anchored, at their lower ends, in the extensions 7. These springs 13 are compressed between pairs of nuts 15 and perforated ears 16 secured to the prongs of the fork 9. The rods 14 work longitudinally through the perforations in the ears 16.

Detachably and reversibly mounted on the main truck frame 1, between the side flanges thereof, is a supplemental frame 17, having integrally formed therewith a pair of heavy upwardly projecting flanges 18. These flanges 18 are provided to give the necessary weight to the truck to hold the scraper-blade to its work. The supplemental frame 17 is also provided with a downwardly and outwardly projecting flange 19, which extends transversely of the truck and affords a support for a scraper-blade clamp.

This clamp comprises a pair of opposing jaws 20, the inner of which is secured to the flange 19 by nut-equipped bolts 21 having their heads counter-sunk in said jaw. The jaws 20 are connected, for opening and closing movements, by a pair of nut-equipped bolts 22 located slightly below the longitudinal centers of said jaws. An eccentric 23 is provided for clamping the jaws on the scraper-blade 24. This eccentric 23 is pivoted to a pair of lugs 25 on the upper longitudinal edge of the outer jaw 20 and bears against the adjacent portion of the inner jaw 20. Integrally formed with the eccentric 23 is a hand-piece 26, by which said eccentric is oscillated. Interposed between the upper longitudinal edge of the inner jaw 20 and the supplemental frame 17, is a resilient spacing block 27.

The supplemental frame 17 is detachably and reversibly secured to the main frame 1 by a nut-equipped bolt 28, passed through alined perforations in said frames, and a depending stud 29 rigidly secured to said supplemental frame and extending through a perforation in the main frame. Obviously, by removing the nut of the bolt 28, the supplemental frame 17, and parts carried thereby, may be lifted bodily from the main frame and turned from the position shown in Fig. 1 to the position shown in Fig. 3, or vice versa.

Resilient spacing blocks 30 are interposed between the main and supplemental frames, and are secured in position by the

bolt 28 and stud 29. A spacing block 31, also of resilient material, is interposed between the head of the bolt 28 and the supplemental frame 17. The two spacing blocks on the bolt 28 yieldingly support the supplemental frame 17 in an intermediate position. These spacing blocks 27, 30 and 31 take up slight vibrations in the scraper blade 24, and prevent trembling of the same, thereby increasing the efficiency of the device.

Preferably, it is desirable to push the scraper-blade 24 over the work, and, in so doing, more or less downward pressure may be applied to the scraper-blade, to hold the same to its work. Figs. 2 and 3 show the device adjusted for pushing the scraper-blade over the work. In some instances, however, it is necessary to pull the scraper-blade over the work, in which case a removable weight 32 is placed on the supplemental frame 17, between the flanges 18, to add the necessary weight to hold said scraper-blade to its work. Fig. 1 shows the device with the scraper-blade adjusted to be pulled over the work.

The above described device has, in actual usage, proven highly efficient for the purpose had in view.

What I claim is:—

1. In a floor scraper, the combination with a wheel-supported main frame, of a supplemental frame resiliently supported on the main frame at its transverse center and having its ends out of contact therewith, a scraper blade clamp carried by the supplemental frame, and means for propelling the scraper.

2. In a floor scraper, the combination with a U-shaped main frame having a pair of axially alined trunnions on its side members, and wheels journaled on said trunnions, of a supplemental frame resiliently supported on the main frame at its transverse center and having its ends out of contact therewith, a scraper blade clamp carried by the supplemental frame, and means for propelling the scraper.

3. In a floor scraper, the combination with a wheel-supported frame having a downwardly and outwardly projecting flange, of a scraper blade clamp having its lower edge portion bearing on the lower edge portion of said flange, a resilient device interposed between the upper edge portion of said flange and clamp and located intermediately of the ends thereof, and means for propelling the scraper.

4. In a floor scraper, the combination with a wheel-supported main frame, of a supplemental frame resiliently supported on the main frame at its transverse center and having its ends out of contact therewith, said supplemental frame having a downwardly and outwardly projecting flange, a scraper blade clamp having its lower edge portion bearing on the lower edge portion of said flange, a resilient device interposed between the upper edge portions of said flange and clamp and located intermediately of the ends thereof, and means for propelling the scraper.

In testimony whereof I affix my signature in presence of two witnesses.

LEWIS P. THOMPSON.

Witnesses:

ALICE L. KING,

HARRY D. KILGORE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."