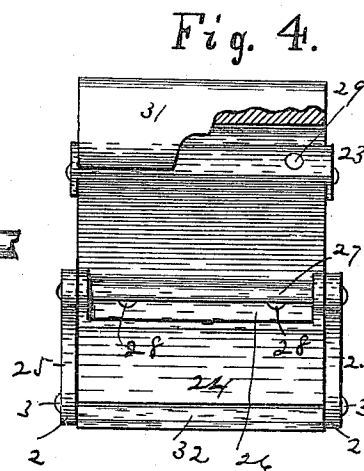
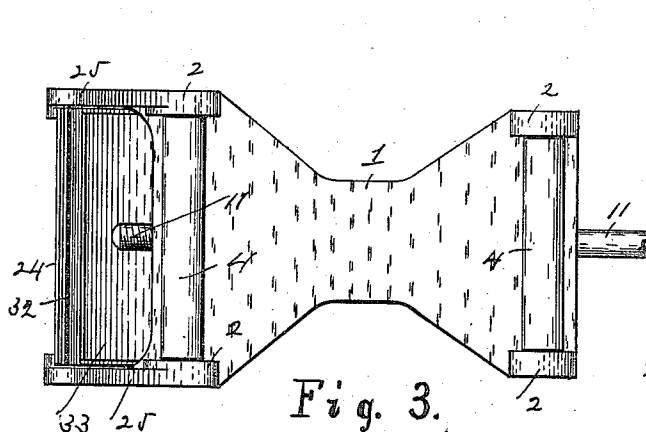
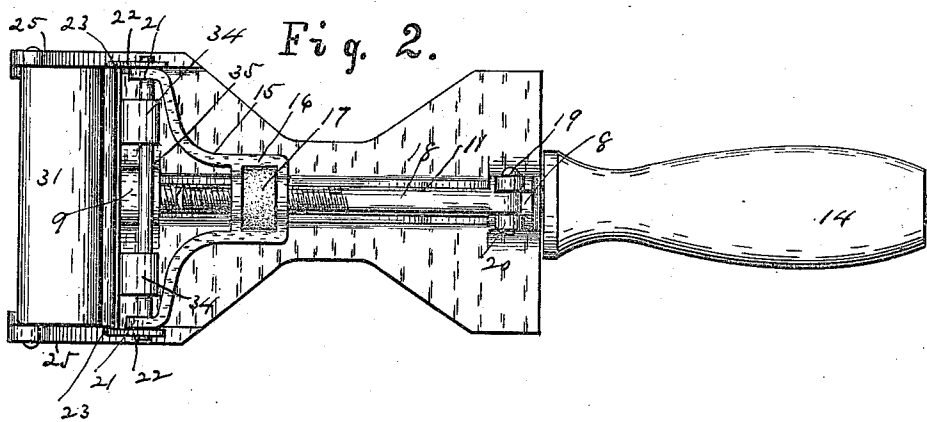
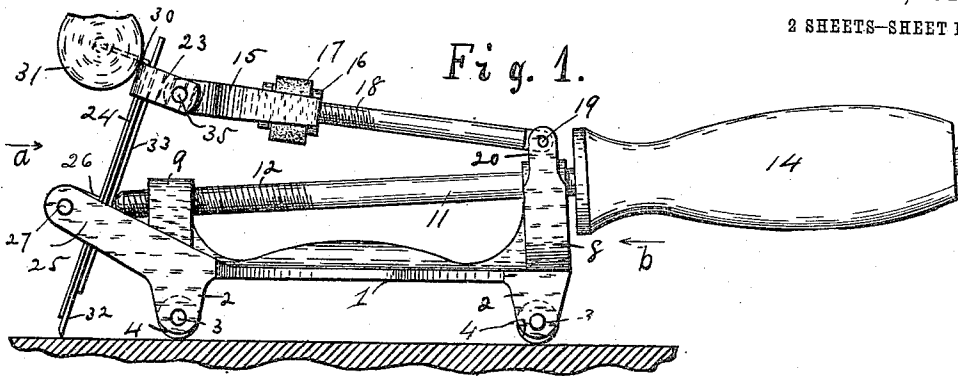


S. DREW.
FLOOR SCRAPER.
APPLICATION FILED MAR. 18, 1910.

987,706.

Patented Mar. 28, 1911.

2 SHEETS-SHEET 1.



Attest:
A. M. Whitmore.
H. L. Whitmore

Inventor:
Samuel Drew,
by E. B. Whitmore, Atty.

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2 SHEETS—SHEET 2.

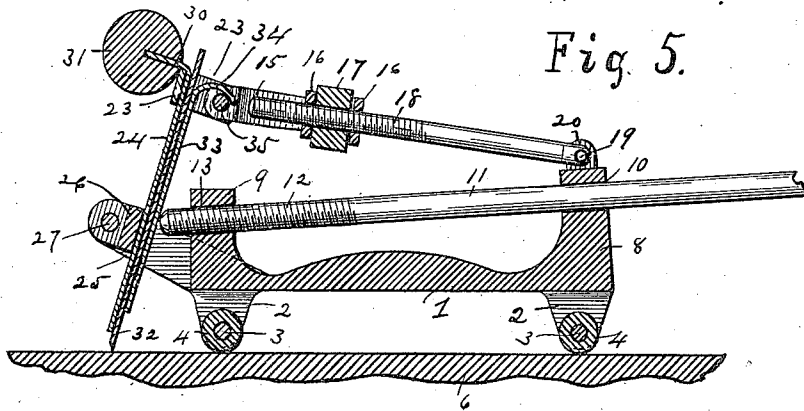


Fig. 5.

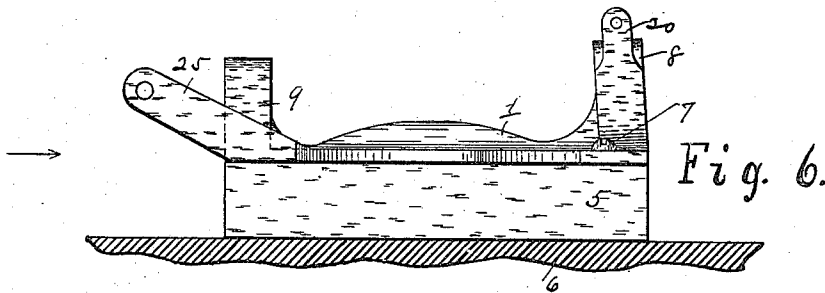


Fig. 6.

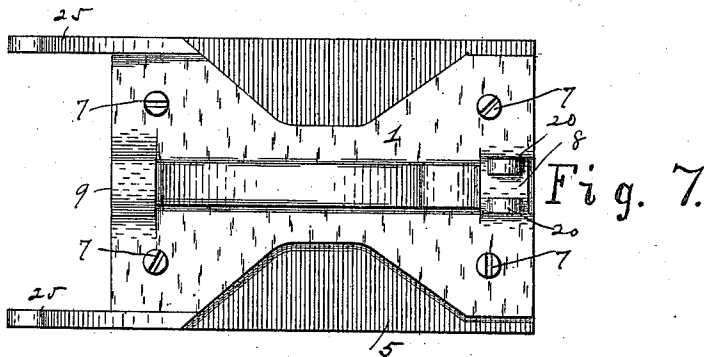


Fig. 7.

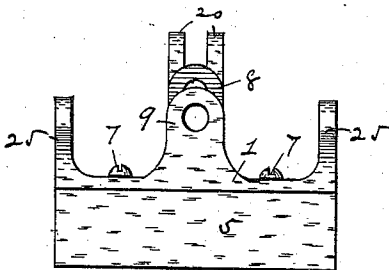


Fig. 9.

Attest:
A. M. Whitmore.
H. L. Whitmore.

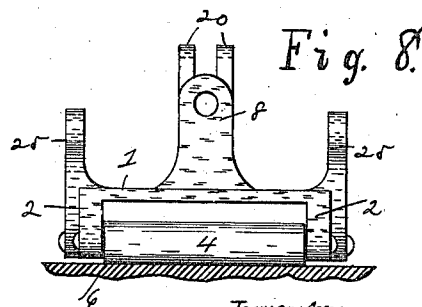


Fig. 8.

Inventor:
Samuel Drew,
by E. B. Whitmore, Atty.

UNITED STATES PATENT OFFICE.

SAMUEL DREW, OF ROCHESTER, NEW YORK.

FLOOR-SCRAPER.

987,706.

Specification of Letters Patent.

Patented Mar. 28, 1911.

Application filed March 18, 1910. Serial No. 550,118.

To all whom it may concern:

Be it known that I, SAMUEL DREW, of Rochester, in the county of Monroe and State of New York, have invented a new and useful Improvement in Floor-Scrapers, which improvement is fully set forth in the following specification and shown in the accompanying drawings.

This invention relates to certain new and useful improvements in hand scrapers designed primarily for leveling and smoothing off floors. The device forming the subject-matter of the present invention, however, is applicable for other uses, such, for instance, as finishing the decks of boats or vessels, finishing hard wood floors when first laid, as in new buildings, smoothing old floors, as well as cabinet and other work where it is desired to smooth or scrape the material.

The present invention has for its objects among others to provide a simple, yet durable and efficient tool of this character composed of few parts and having provision for quick and ready adjustment of the inclination of the scraping tool, as well as for its removal or adjustment for sharpening or filing when it becomes dull. I provide for the mounting of the tool upon rollers, or upon a block of wood or the like when it may be so desired.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the numerals of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a side elevation of the implement as in use. Fig. 2 is a plan. Fig. 3 is a plan of the implement inverted, with the operating handle omitted and a part of the rod broken away. Fig. 4 is a front elevation seen as indicated by arrow *a* in Fig. 1, a part of the hand rest being broken away. Fig. 5 is a central longitudinal section of the tool or implement, with the handle omitted and a part of the rod broken away. Fig. 6 shows, in side elevation, a modification, the body of the implement being mounted upon a wooden block, with the removable parts omitted. Fig. 7 is a plan of the construction shown in Fig. 6. Fig. 8 is a rear end elevation of the tool or implement

seen as indicated by arrow *b* in Fig. 1 with the upper removable parts omitted. Fig. 9 is a front-end elevation seen as indicated by arrow in Fig. 6.

Like numerals of reference indicate like parts throughout the several views.

Referring to the drawings, 1 designates the body of the device, it being preferably a single piece of metal and in the form shown in all of the figures except 6, 7 and 9, it is provided with the depending lugs or the like 2 in which are supported the shafts 3 carrying the rollers 4. In the form seen in Figs. 6, 7 and 9, these depending lugs or ears 2 are omitted, leaving the under face of the body 1 in a continuous plane, as seen in said Figs. 6, 7 and 9, and in this case the said body is secured to the upper face of a block 5 rectangular in form and designed to slide directly upon the floor 6. In this case, the body is secured to the block by screws or the like 7. Whichever form of support, however, is employed, the construction above the lower face or horizontal portion of the body 1 is the same. A description of these parts, therefore, in connection with the one form will suffice for both.

Referring then to Figs. 1 to 5, and 8, it will be seen that the body 1 is provided with upwardly projecting parts 8 and 9, one at each end. The part 8 has an aperture 10 through which loosely moves a rod 11, the opposite end of which is screw-threaded, as at 12, and engages in a screw-threaded opening 13 in the upwardly projecting lug or part 9. This rod is arranged at an inclination and is provided with an overhanging handle 14 projecting a considerable distance beyond the end of the body 1, this handle being rigid with the rod 11.

15 is a yoke or a branched hanger, see Fig. 2, in the cross portion 16 of which is held a knurled cylindrical body or nut 17 mounted upon the screw-threaded rod 18 pivotally mounted, as at 19, between the upwardly extending lugs or ears 20 on the upwardly extending portion 8 of the body 1. The yoke or hanger 15 has its ends bent, as at 21, and disposed within the rearwardly bent ends 22 of a horizontal bar or holder 23 projecting obliquely forward. The yoke 15 and the rod 18 are coaxial and inclined reversely from the inclined hand rod 11, as seen best in Figs. 1 and 5.

24 is a sheet metal plate bent obliquely

forward at its upper edge and held between the bent ends of the member 23; said plate extends obliquely downward between the forwardly projecting arms 25 of the body 1 with its lower edge near the floor and substantially parallel therewith. 26 is a horizontal body held on a rod 27, which rod is supported between the forward ends of the said arms 25, the said body being held between said arms and bearing at its rear surface against the metal plate 24, to which it is secured by rivets or the like 28, as seen in Fig. 4, this plate also being secured to the member 23 by similar rivets or the like 29, as shown also in Fig. 4. The upper end of the plate 23 is bent obliquely forward over the front upper edge of the member 23, as seen at 30 in Fig. 5, and upon this forwardly turned edge of said plate is mounted a hand rest 31, preferably of wood.

32 is the cutting blade or scraper mounted immediately back of the plate 24, as seen in Figs. 1 and 5, and held between said plate and a similar plate 33 having extended parts 34, as shown in Fig. 2, bent over the rod 35, which serves to join the yoke 15 and the member 23 pivotally together. The construction is such that the cutting or scraping blade 32 is firmly pinched between the plates 24 and 33 by the end of the handle rod 11 threaded in the upwardly extended member 9 of the body 1 for this purpose, it being noted that the end of said rod is constructed to bear against said plate 33 and the inclination of the handle rod 11 is such as to cause the free end of said rod to press the plate 33 at a point back of and opposite the bar 26, the rod being turned by means of the handle 14, which, as before described, is rigid with the handle rod, so that by turning of the rod by means of the handle, the cutting or scraping blade 32 may be tightened or loosened.

By means of the knurled nut 17 on the rod 18, the inclination of the scraping or cutting blade 32 may be varied, a slight rocking or tilting of the cutting blade taking place on account of the pivotal nature of the rods 27 and 35. As the edge of the cutting blade is worn away, by use, it is loosened by unscrewing the rod 11 by means of the handle 14 and the cutting or scraping blade pressed or driven downward by pressure upon its upper slightly projecting edge, when it is again tightened by screwing up the handle rod 11. The rod may be turned so as to loosen the cutting or scraping blade 32 sufficient to allow of its entire removal or of sufficient movement thereof to permit of its being filed or sharpened if necessary.

In using this device, the handle 14 is grasped by either hand of the operator, as may be most convenient, the other hand pressing down upon the rest 31, so as to cause the cutting or scraping blade to take hold. In using the implement, it is pulled

toward the right, as will be evident from Fig. 1, the cutting edge of the blade 32 being properly inclined or beveled for this movement of the tool. It is evident, however, that by reversal of the cutting blade, the tool may be operated in the opposite direction, if found most convenient.

The implement may be made in different sizes and it is evident that modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

What is claimed as new is:—

1. In a hand tool for scraping wood, a scraping blade, a support for coöperation with the work arranged entirely to one side of the blade, a hand piece arranged to one side of the blade to produce a drawing action on the latter, and a hand piece arranged substantially over the scraping edge of the blade to place pressure on the latter.

2. In a hand tool for scraping wood, a scraping blade, a support for coöperation with the work entirely to one side of the blade and at widely separated points so that a tilting of the support is prevented, a hand piece arranged to one side of the blade, and a hand piece arranged substantially over the scraping edge of the blade and to one side of the portion of the support engaging the work piece, so that pressure on the latter hand piece is applied to the scraping edge and does not materially increase the friction between the support and the work piece.

3. In a hand tool for scraping wood, a support arranged to bear against the surface to be scraped without tilting, a tool holder arranged at one side of the support and adjustable to vary the inclination thereof, a hand piece carried by the tool holder substantially over the scraping edge of a tool blade carried by said holder, and a hand piece arranged on and in close proximity to said support.

4. In a hand tool for scraping wood, a support arranged to bear against a surface to be scraped without tilting, a tool holder arranged at one side of the support and adjustable to vary the inclination thereof, a hand piece carried by the tool holder substantially over the scraping edge of a tool blade carried by said holder, and a hand piece arranged to the side of the support opposite the first named hand piece but in close proximity to the support and below the horizontal plane of the upper portion of the tool holder.

5. In a hand scraper, the combination with a body portion, and a tool holding member mounted to swing on the body portion at one side thereof, of means for adjusting the inclination of the tool holding member, pivotally connected to the body portion and to the tool holding member, and a handle for the scraper having a screw rod connected there-

to engaging the body portion and also acting to hold a tool against the inner face of the tool holding member.

6. In a hand scraper, the combination
5 with a body portion and a tool holding member mounted to swing on the body portion at one side thereof, of means for adjusting the inclination of the tool holding member pivotally connected to the body portion and
10 having a yoked end pivotally connected to the tool holder, and a handle for the scraper having a screw threaded rod turning in the body portion and having its end arranged to clamp a tool against the pivoted tool holding
15 member.

7. In a tool for scraping wood, the combination with a body portion having a pair of arms extending from one side thereof, of a tool holding member arranged between
20 said arms and having arms extending from its outer side and pivotally connected to the first named arms, means for adjusting the inclination of said tool holding member, and a handle having a rod turning in the body
25 portion and having its end arranged to clamp a tool against the tool holding member.

8. A scraper comprising a body portion having uprights, a screw-threaded rod pivotally mounted on one of said uprights, a nut

threaded on said rod, a yoke carrying said 30 nut, a tool support connected to said yoke and a screw threaded rod mounted to turn in one of the uprights and engage the tool support.

9. A scraper comprising a body portion 35 having uprights, a screw-threaded rod pivotally mounted on one of said uprights, a nut threaded on said rod, a yoke carrying said nut, and a tool support pivotally connected to the yoke, and a screw threaded rod 40 mounted to turn in one of the uprights and engage the tool support.

10. A scraper comprising a body portion arranged to bear on a surface to be scraped without rocking, a tool support pivotally 45 mounted on said body portion to one side thereof and carrying a hand piece, and a screw rod carrying a hand piece on the other side of the body portion and coöperating with the tool support to hold a scraper 50 therein.

In witness whereof, I have hereunto set my hand this 17th day of March, 1910, in the presence of two subscribing witnesses.

SAMUEL DREW.

Witnesses:

E. B. WHITMORE,
J. M. DEYO.