F. J. VONDRACEK.

FLOOR SCRAPER.

APPLICATION FILED AUG. 16, 1911.

1,016,720. Patented Feb. 6, 1912.

Fig. 1.

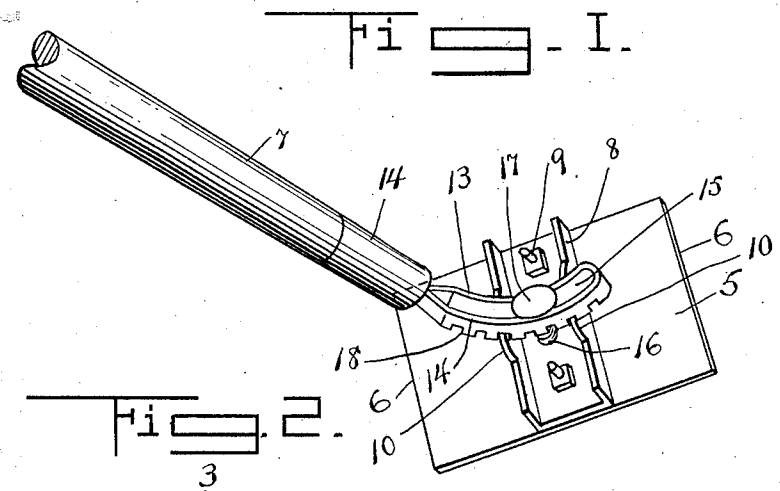


Fig. 2.

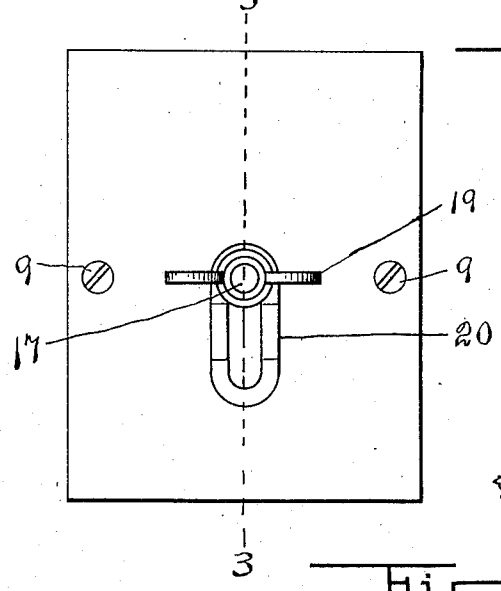


Fig. 3.

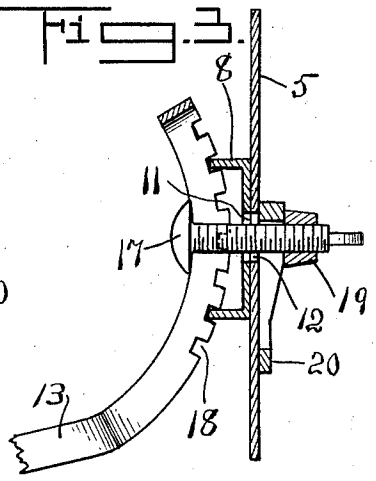
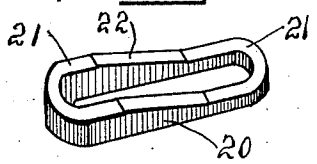


Fig. 4.



WITNESSES

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FLOOR-SCRAPER.

1,016,720. Specification of Letters Patent. Patented Feb. 6, 1912.

Application filed August 16, 1911. Serial No. 644,364.

To all whom it may concern:

Be it known that I, FRANK J. VONDRACEK, a citizen of the United States, and residing at Cedar Rapids, in the county of Linn and State of Iowa, have invented certain new and useful Improvements in Floor-Scrapers, of which the following is a specification.

This invention relates to improvements in floor scrapers.

In this class of devices, it is important that the blade be positioned in proper adjustment with respect to the surface to be operated upon and the primary object of the present invention is the provision of an adjustable blade provided with a secure locking means therefor in the form of a peculiar construction of handle tang.

A still further object of the device is to provide such an implement with a blade attachment in such a manner that the blade may assume the same operative angle with the handle thereof positioned in different degrees of inclination.

With these general objects in view and others that will appear as the nature of the invention is better understood, the same consists in the novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings and pointed out in the appended claims.

In the drawings forming a part of this application and in which like numerals of reference designate corresponding parts throughout the several views: Figure 1 is a perspective view of the device. Fig. 2 is a bottom plan view thereof. Fig. 3 is a longitudinal section taken upon line 3—3 of Fig. 2, and, Fig. 4 is a perspective view of the take-up washer employed with the adjusting means.

Referring in detail to the drawings, the blade 5 having the opposite edges 6 and 7 thereof and either of which may be employed for scraping an object is illustrated as secured to an operating handle 7 by an arrangement of adjusting elements. Upon one face of the blade 5 and extending substantially the entire width thereof is mounted a trough-shaped bracket 8 which is secured to the blade by appropriate hold-fast devices 9. The curved projections 10 are oppositely positioned upon the respective sides of said member 8 being accurately positioned mid-way of the lengths thereof, while there is also provided through said member a perforation 11 alining with the central perforation 12 of the blade. Secured within the end of the handle 7 there is positioned a tang member 13 and which is secured therein by a ferrule 14 or any desired means. The essential features of this tang are that the same is curved throughout its length and is provided between its sides 14 with a longitudinal opening or slot 15 adapted for the reception of the adjusting bolt 16 which passes therethrough and through the alining openings 11 and 12 hereinbefore described. A head 17 upon said bolt member engages the smooth upper or outer faces of said sides 14 while the inner faces of said sides are provided with opposite alining cut-out teeth 18 substantially equally-spaced apart upon the entire lengths of said sides. The teeth or slots 18 being provided properly positioned for receiving the curved portions 10 of the member 8, said tang 13 will be securely held in a desired adjusted position upon said curved members by reason of the engagement of the winged set nut 19 upon the outer end of the bolt.

Interposed between the outer face of the blade 5 and the winged nut 19 there is provided an elongated washer 20 of the form shown in Fig. 4. This washer being provided with flattened end portions 21, the same may be employed as equivalent to separate washers of two differing widths while the intermediate portion thereof 22 being inclined or tapered, such latter-named portions are designed for engagement by the nut 19 in taking up different lengths of the said bolts while being also capable of positioning the latter at a slight angle through the perforations 11 and 12 when the nut 19 flatly engages said sloping portions 22. In this manner different inclinations of the respective members may be made as will be evident from an inspection of the drawings.

While the forms of the invention herein shown and described are what are believed to be preferable embodiments thereof, it will nevertheless be understood that changes may be made in the form, proportion or minor details of the parts without departing from the spirit and scope of the invention as set forth in the appended claims.

Having thus fully described my invention and in what manner the same is designed for use, what I claim as new and desire to secure by Letters Patent of the United States is:—

1. A scraper comprising a blade and a

handle, a channel member secured transversely of said blade member, a longitudinally-slotted tang secured to said handle, and means coöperating therewith for adjusting said tang upon said channel member at different angles.

2. A scraper comprising a handle and a blade, a trough-shaped member equal in length to the breadth of said blade and secured transversely upon one face of the latter, opposite alining curved projections centrally positioned upon the sides of said trough-shaped member, and means for securing said handle in an adjusted position upon said curved portions.

3. A scraper comprising a handle and a blade, a trough-shaped member equal in length to the breadth of said blade and secured transversely upon one face of the latter, opposite alining curved projections centrally positioned upon the sides of said trough-shaped member, a toothed tang secured in one end of said handle and provided with a longitudinal slot through substantially the entire length thereof, and means including a member projecting through said slot adapted for adjustably positioning said tang upon said rounded portions.

4. A scraper comprising a handle and a blade, a trough-shaped member equal in length to the breadth of said blade and secured transversely upon one face of the latter, opposite alining curved projections centrally positioned upon the sides of said trough-shaped member, a toothed tang secured in one end of said handle and provided with a longitudinal slot through substantially the entire length thereof, said tang being curved its entire length, equally-spaced-apart teeth provided upon the convex side of said tang, said blade and trough member provided with alining perforations therethrough, and a bolt member positioned through said slot and said alining perforations.

5. A scraper comprising a handle and a blade, a trough-shaped member equal in length to the breadth of said blade and secured transversely upon one face of the latter, opposite alining curved projections centrally positioned upon the sides of said trough-shaped member, a toothed tang secured in one end of said handle and provided with a longitudinal slot through substantially the entire length thereof, said tang being curved its entire length, equally-spaced-apart teeth provided upon the convex side of said tang, said blade and trough member provided with alining perforations therethrough, a bolt member positioned through said slot and said alining perforations and adapted for seating said teeth upon said rounded portions, an oblong washer of varying widths and a winged set nut positioned upon the outer free end of said bolt and adapted for securing the parts in locked arrangement.

6. A scraper comprising a blade and a handle, a longitudinally-slotted serrated tang secured to said handle, a channel member secured to said blade, a bolt member projecting through said tang, channel member, and blade, and an inclined washer and winged set nut provided upon the free end of said bolt for securing said handle to the blade providing only two points of contact intermediate thereof.

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

FRANK J. VONDRACEK.

Witnesses:

L. J. PALDA,

MILO L. WOLRAB.