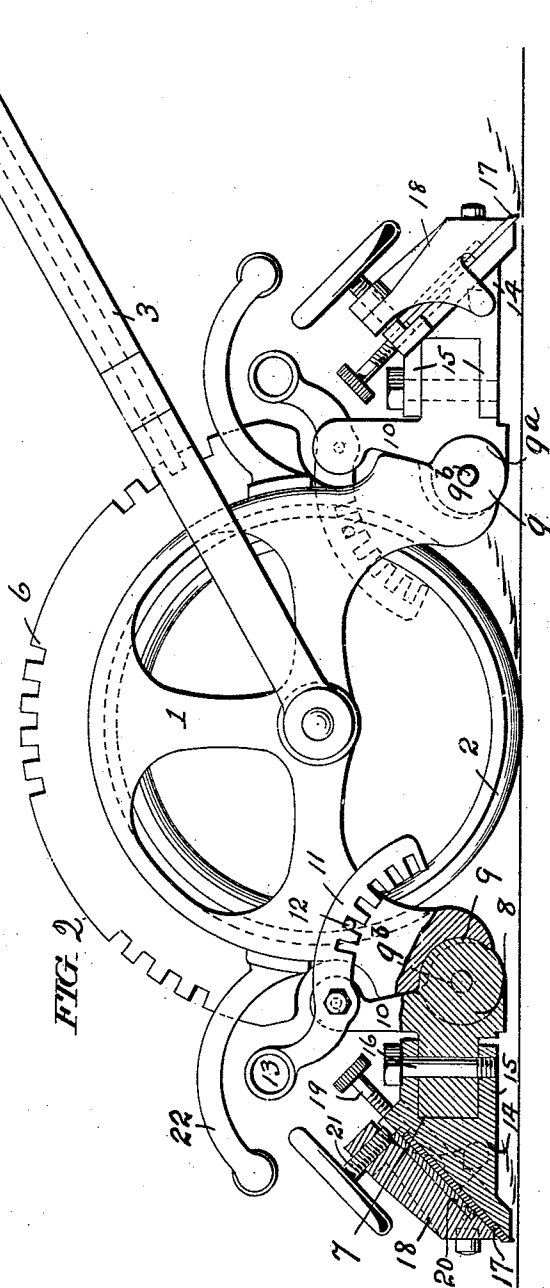
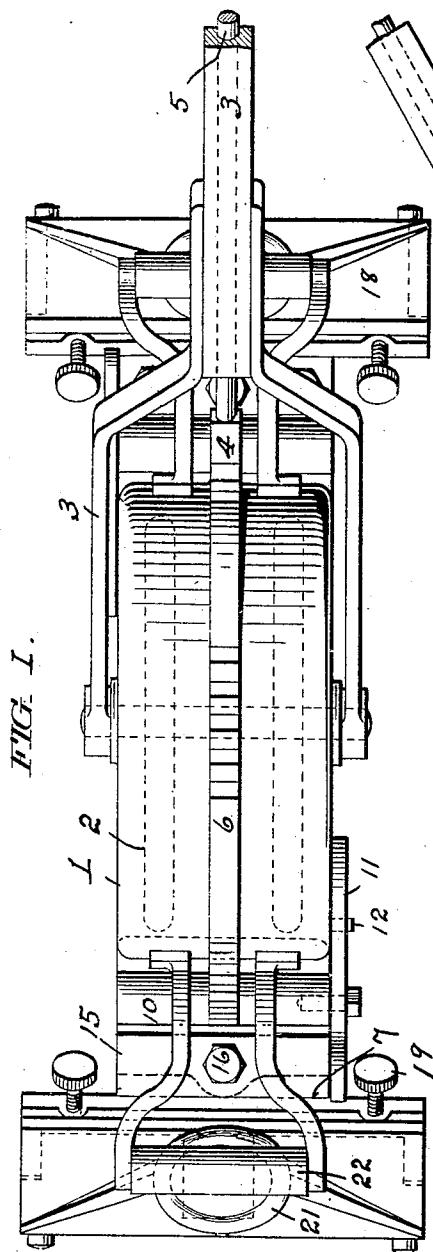


955,444.

Patented Apr. 19, 1910.



WITNESSES:

Daniel Webster, Jr.
John Kelly,

Walter F. Stern,

INVENTOR:

By E. A. Kelly,

ATTORNEY

UNITED STATES PATENT OFFICE.

WALTER F. STERN, OF READING, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO
JAMES H. KNOLL, OF READING, PENNSYLVANIA.

FLOOR-SCRAPER.

955,444.

Specification of Letters Patent.

Patented Apr. 19, 1910.

Application filed April 22, 1909. Serial No. 491,431.

To all whom it may concern:

Be it known that I, WALTER F. STERN, citizen of the United States, residing at Reading, in the county of Berks and State of Pennsylvania, 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 and the object is to provide a device with a scraper blade at either end with a swinging handle; one in which the blade carrying heads are adjustable vertically and longitudinally, and one in which the blades are easily adjusted in their holders.

A further object is to provide a device in which the entire blade holder is readily removable from the machine so that the blade may be sharpened without removing it from the holder or interfering with its adjustment therein.

Another object is to provide means for securely clamping the blade in the holder until it has been consumed, by grinding and sharpening, to approximately one-third of its original size.

Provision is also made for operating the device in places where the handle would not ordinarily permit its use.

The invention is more fully described in the following specification and clearly illustrated in the accompanying drawing, in which:—

Figure 1 is a plan view of my machine. Fig. 2 is a side elevation thereof, showing one of the blade carrying heads in section.

The numeral 1 designates the frame; 2 the wheels on which it is mounted and 3 the operating handle which is provided with a latch 4 and a rod 5 for operating the latch.

The numeral 6 designates a rack adapted to be engaged by said latch.

The numeral 7 designates the blade carrying heads. There are two of these heads, one at either end of the machine. These heads are made up of a block 8 provided with a knuckle joint 9 working in a seat in the frame where they are held in position between ears 9^a by means of a pin 9^b and these blocks are each formed with an upward extension 10 which is secured to a toothed quadrant 11 whose teeth engage a pin 12 on the frame. The opposite extremity of this quadrant is provided with a handle 13 and by means of it the head is ad-

justed vertically, for by moving the toothed portion of the quadrant in either direction, with relation to the pin 12, the head will rock in the joint 9 and either raise or lower the outer extremity, in which the scraper blade is carried.

The numeral 14 designates the blade holder. This is composed of a body having a pair of jaw members 15 adapted to be removably pivoted to the head 7 by means of a centrally disposed bolt 16. This pivotal connection permits the entire blade holder to swing to either side, thus providing lateral adjustment of the blade, allowing it to be set at an angle, other than right angles, to the longitudinal center line of the machine, that is, to the general direction in which the machine travels. This adjustment is desirable in the event of scraping a cross-grained surface.

The numeral 17 designates the scraper blade and 18 the backing plate therefor. The blade lies on the holder 14 and a pair of set screws 19 in the upper edge of the holder, bear against the rear edge of the blade and serve to adjust the blade in the holder.

The numeral 20 designates a clamping plate. This plate is interposed between the backing plate and the holder and bears against the upper surface of the blade. On the backing plate I provide a screw 21 for securing the blade in the holder. This screw bears against the plate 20 and the plate bears against the blade, thus holding it securely. This construction permits the blade to be used until it has been almost entirely consumed and long after it has passed from the point where direct engagement with the screw 21 would be possible.

It is evident that in my device the handle may be placed so that the machine may be operated from either end. This is accomplished by the latch in the handle engaging the toothed surface of the rack, and this latch may be operated by the rod 5 which may project entirely through the handle if desired or may be operated from a projection on said rod at any suitable point in its length. When the handle is thus placed, it will hold securely while the machine is being operated.

When it is desired to operate the scraper in a place too small to permit of the usual manner of moving it, the handle is placed in

vertical position and the operator grasps one of the supplemental handles 22, by means of which a short stroke may be secured advantageously.

5 The adjustment of the blade in the holder is easily accomplished by means of the set screws 19 after which the screw 21 is tightened, securely holding it in position.

10 The vertical adjustment of the blade carrying head is just as easily accomplished, by grasping the handle 13 and moving it in its joint 9, after which the toothed end of the quadrant 11 is made to engage the pin 12.

15 The lateral adjustment of the blade holder is readily accomplished by loosening the bolt 16 and turning the holder to either side, and then securing it by again tightening the bolt. This lateral adjustment is never very great and as shown in the drawing, provision is made only for a very limited movement in this manner. It is also clear that the entire blade holder may readily be removed from the machine, by merely removing the bolt 16, thus allowing the blade to be sharpened with ease and greater accuracy, and without interfering in the least with its adjustment in the holder.

20 Having thus fully described my invention, what I claim and desire to secure by Letters Patent is:—

30 1. In a floor scraper, a frame mounted on

wheels, a removable and laterally adjustable blade holding head secured to either end of the frame, a swinging handle, a bolt and rack for locking the handle in different positions, a toothed rack and an engaging pin for securing vertical adjustment of the blade holders, and set screws for adjusting the blades in the holders. 35

2. In a floor scraper, a frame mounted on wheels, a swinging operating handle, a toothed rack, releasable means on said handle for engaging said rack, an adjustable block secured to either end of the frame, a pin on the frame, a toothed quadrant adapted to engage said pin at different points in its length and connected to said block, said block being formed with a knuckle joint where it is connected to the frame, a laterally adjustable blade holder removably secured to each of said blocks, a scraper blade in each holder, means for adjusting the blades in the holders, backing plates, clamping plates, and means for pressing the clamping plates against the blades. 40 45 50 55

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

WALTER F. STERN.

Witnesses:

ED. A. KELLY,

ROBT. M. KLINE.