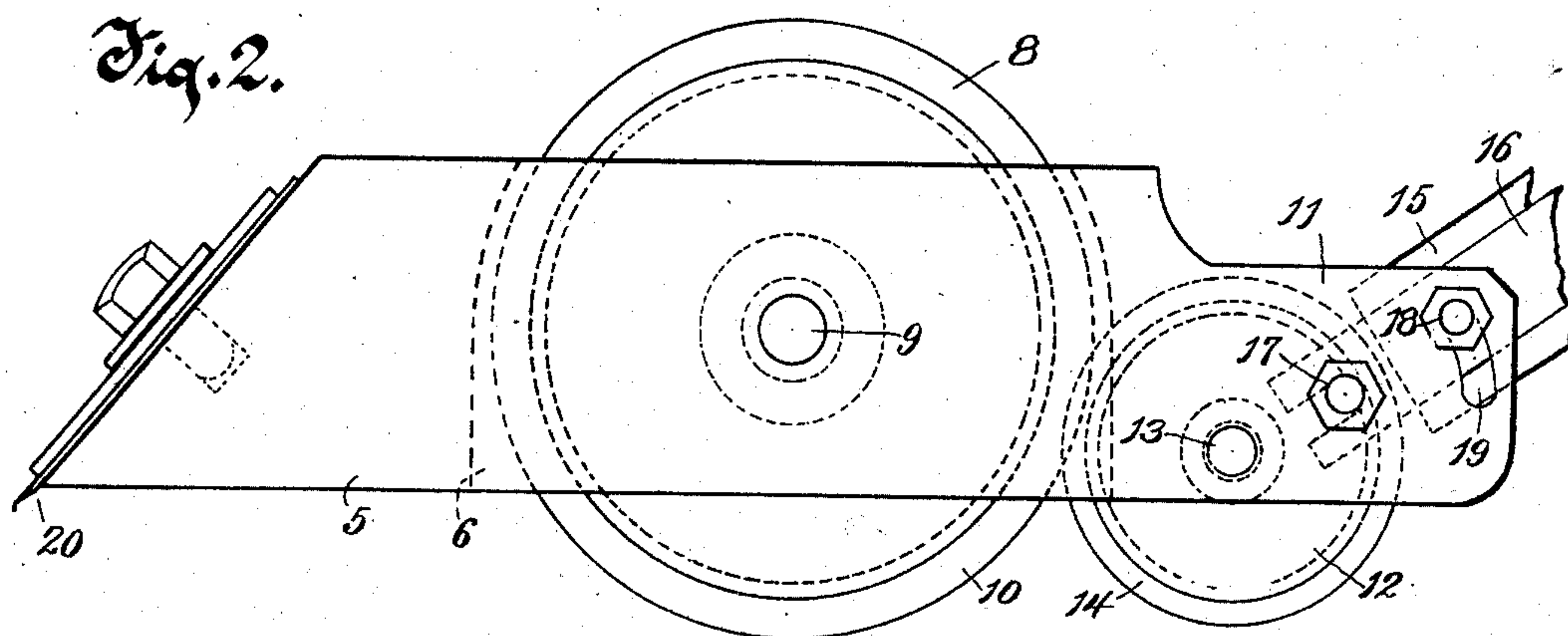
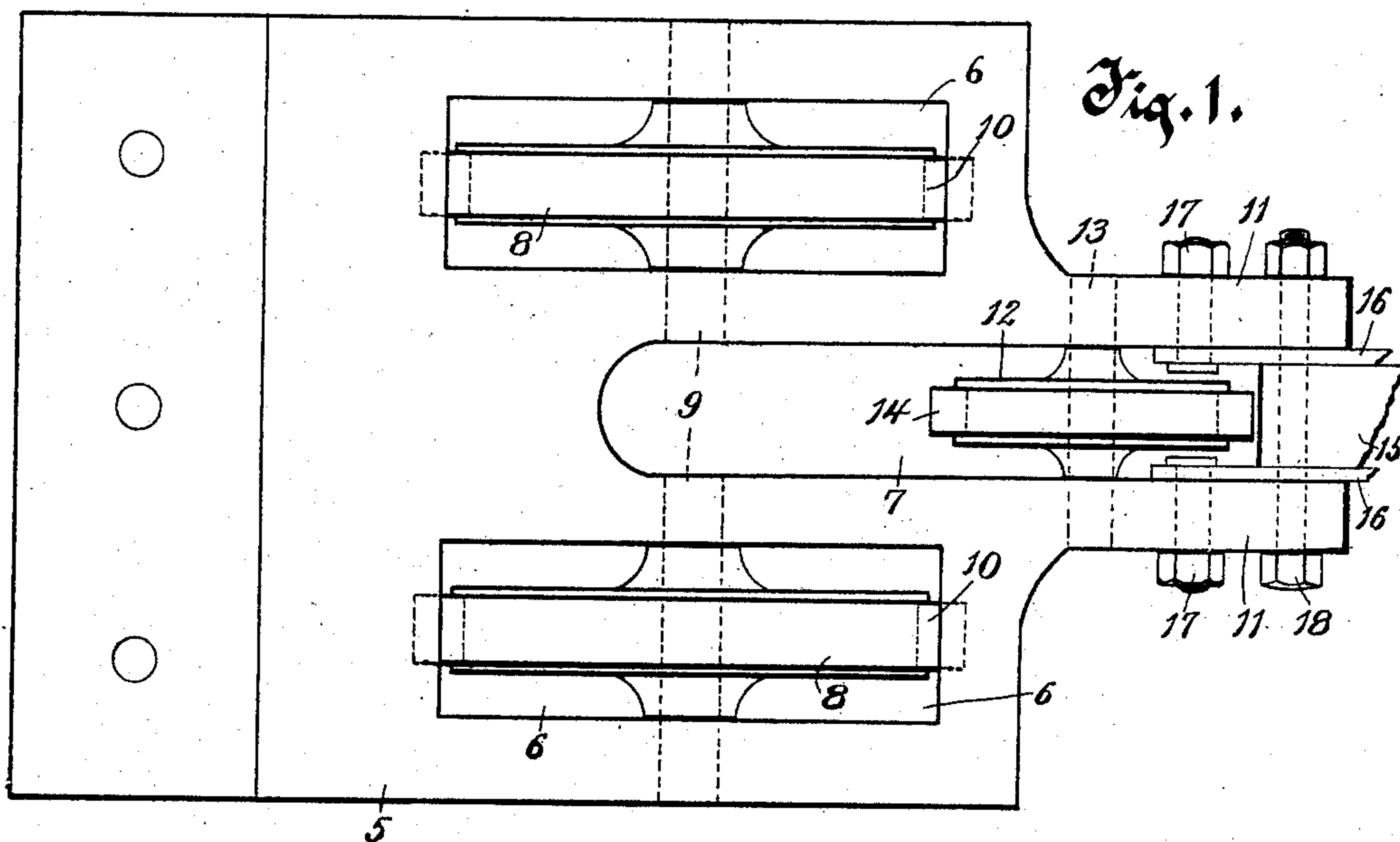


No. 864,260.

PATENTED AUG. 27, 1907.

G. G. REHFELD.  
FLOOR PLANER.

APPLICATION FILED MAR. 27, 1907.



*Witnesses.*

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# UNITED STATES PATENT OFFICE.

GROVER G. REHFELD, OF MILWAUKEE, WISCONSIN.

## FLOOR-PLANER.

No. 864,260.

Specification of Letters Patent.

Patented Aug. 27, 1907.

Application filed March 27, 1907. Serial No. 364,943.

*To all whom it may concern:*

Be it known that I, GROVER G. REHFELD, residing in Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented new and useful Improvements in Floor-Planers, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

This invention has for its object to provide a floor planer adapted to be drawn over the surface of the floor and cut or scrape a thin shaving therefrom, being operated by means of a handle by which it may be tilted on its return stroke so as to bring the cutter out of engagement with the floor.

The invention has particularly for its object to improve upon details of construction of such floor planers.

With the above and other objects in view the invention consists in the floor planer herein claimed, its parts and combinations of parts and all equivalents.

Referring to the accompanying drawings in which like characters of reference indicate the same parts in the different views; Figure 1 is a plan view of a floor planer constructed in accordance with this invention with the blade removed; and, Fig. 2 is a side elevation thereof with the blade in place.

In these drawings 5 represents a solid metal block or body portion forming a frame with a pair of side openings 6 therein extending from top to bottom and a central slot 7 between the openings. Each of the openings 6 has a large roller 8 mounted therein on a pin 9 passing through the side walls of the openings from the outside of the frame to the slot 7, these pins being so fitted in place as to be prevented from accidental displacement, but capable of being easily forced out of place when it is desired to remove one of the rollers for repair. The rollers 8 have grooved peripheries in which rubber tires 10 are fitted.

One end of the block or frame 5 has a pair of arms 11 extending therefrom in prolongation of the sides of slot 7 and a small roller 12 is journaled therein on a removable pin 13 in a similar manner to the larger rollers 8 and is likewise provided with a rubber tire 14 on its grooved periphery. A handle member 15 is provided with a pair of side plates 16 on its lower end which extend beyond said end and are forked so as to embrace the headed inner ends of bolts 17 which pass through the arms 11 of the frame on opposite sides of the roller 12, while a bolt 18 passes entirely through the end of the handle 15 and its side plates 16 and rides in arc shaped slots 19 in the ends of the arms 11 so that the handle may be adjusted on its pivotal connections to stand at any angle desired. The other end of the frame is beveled to form an inclined seat for a cutter blade 20 whose lower sharpened edge is turned downwardly.

In operation the floor planer rides on the larger rollers 8 and is tilted thereon by means of the handle so as to

either bring the roller 12 to the floor with the cutter blade elevated, when the floor planer is pushed from the operator, or it may be tilted so as to lift the roller 12 and bring the cutter blade 20 into engagement with the floor, while the floor planer is being drawn toward the operator. The action of the cutter blade 20 on being drawn across the surface of the floor is to cut a thin shaving therefrom for the purpose of smoothing the floor, and as the work may be done by the operator in a standing position with the weight of the frame 5 giving the necessary pressure upon the blade, it may be done better and more quickly and with less effort on the part of the operator than by means of hand scrapers.

By the particular construction of this floor planer each of the rollers has its own separate bearings so that when it becomes desirable to remove one roller it is not necessary to disturb the others, and this may be done quickly by reason of the snug fitting pins which may be easily forced out of place.

The arrangement of the parts is such that the maximum of weight is applied directly to the cutter blade so as to be effective, permitting the device to be made lighter than with other constructions. The entire frame is one solid body which gives strength to the device as well as rendering it inexpensive to construct.

The handle which is preferably adjustable in length may be quickly and easily removed from the frame or replaced, it being only necessary to remove the bolt 18 when the side plates 16 will slip off of the headed ends of bolts 17. The hubs of the rollers fit snugly against the side walls of the openings and the slot respectively so that there is no side motion or play therebetween.

What I claim as my invention is;

1. A floor planer, comprising a solid metal block forming a frame with openings side by side and a slot therebetween, pins passing through the side walls of the openings from the slot to the sides of the frame, rollers journaled on the pins in the openings, arms on the frame in extension of the walls of the slot, a pin passing through said arms, a roller journaled thereon within the slot, a handle connected to the arms, and a cutter blade mounted on the end of the frame.

2. A floor planer, comprising a solid metal block having openings therethrough from top to bottom and a slot extending therebetween from one end of the frame, rollers journaled in the openings, a roller journaled in the slot in advance of the other rollers, a handle pivotally mounted in the slot, means for holding the handle in its pivotal adjustments, and a cutter blade mounted on the end of the frame.

3. A floor planer, comprising a solid metal block having openings therethrough from top to bottom and a slot extending therebetween from one end of the frame, arms on the frame in extension of the walls of the slot, rollers journaled in the openings, a roller journaled between the arms in advance of the other rollers, a cutter blade mounted on the end of the frame, a handle having forked side plates projecting beyond its end, headed bolts passing through the arms and engaged by the forked ends of the side plates, and a clamping bolt passing through the side



plates and fitting in curved slots of the arms for holding the handle in its pivotal adjustments.

- 5 4. A floor planer, comprising a frame formed of a solid block of metal with openings side by side extending from top to bottom and a slot therebetween extending from one end of the frame, a cutting blade secured on a beveled seat at the other end of the frame, pins loosely fitting in the walls of the openings and extending from the slot to the sides of the frame, rollers mounted on the pins in the  
10 openings and having hubs fitting against the walls of the openings, arms on the frame in extension of the walls of the slot, a loose pin passing through the arms, a roller mounted thereon within the slot and having hubs fitting against the walls of the slot, bolts passing through the

extension arms with their headed ends projecting into 15 the slot on opposite sides of the last mentioned roller, a handle, forked side plates secured to the handle and projecting beyond the end thereof and engaging the headed ends of the bolts with their forked ends, and a clamping bolt passing through the end of the handle and the side 20 plates and fitting in curved slots in the arm for locking the handle in its pivotal adjustments.

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

GROVER G. REHFELD.

Witnesses:

R. S. C. CALDWELL,  
ANNA F. SCHMIDTBAUER.