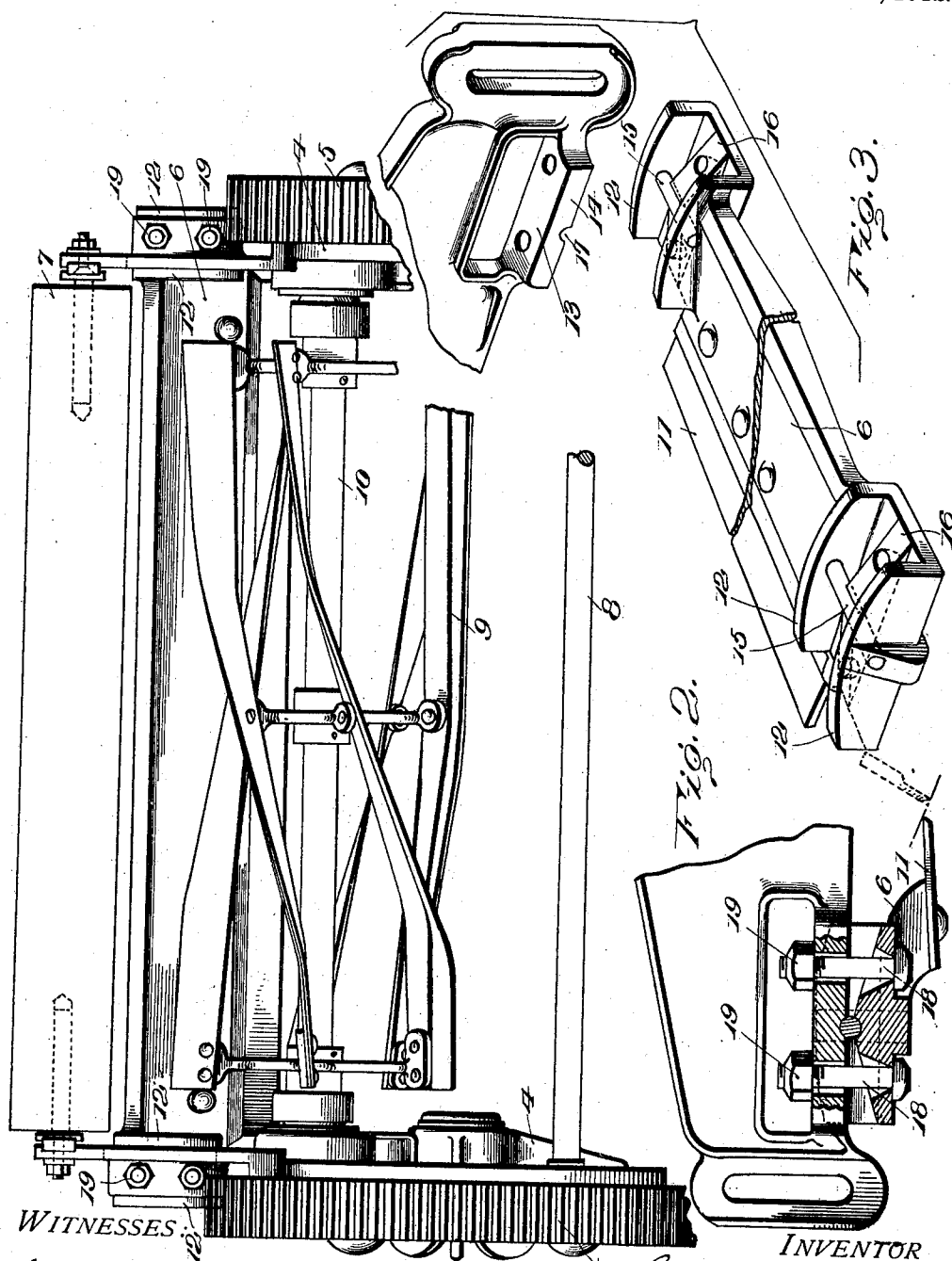


L. BROWN.
STATIONARY KNIFE MOUNTING.
APPLICATION FILED OCT. 5, 1911.

1,029,168.

Patented June 11, 1912.



WITNESSES

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Fig. 1.

BY

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LEVI BROWN, OF RICHMOND, INDIANA, ASSIGNOR TO JOHN M. LONTZ, OF RICHMOND, INDIANA.

STATIONARY-KNIFE MOUNTING.

1,029,168.

Specification of Letters Patent.

Patented June 11, 1912.

Original application filed April 24, 1911, Serial No. 622,992. Divided and this application filed October 5, 1911. Serial No. 652,939.

To all whom it may concern:

Be it known that I, LEVI BROWN, of Richmond, Indiana, have invented a new and useful Improvement in Stationary-Knife Mountings, which invention is fully set forth in the following specification.

The present invention relates to lawn mowers, and the objects of the invention are to provide an improved connection between the ends of the stationary knife and the side frames of the machine, so that said frames are secured in practical and unalterable parallelism under all conditions of usage, and so that the stationary knife is readily adjustable, with great exactness, toward and from the rotary cutter.

The present application is a division of application Serial No. 622,992, filed April 24, 1911.

In lawn mowers heretofore constructed, it has been experienced that, due largely to the nature of the connection between the stationary knife and the side frames of the machine, the rough treatment to which the machines are subject incident to shipment would result in the devices reaching their destination out of adjustment. It has been found that mowers equipped with the improved connection between the stationary knife and the side frames reach their destination in perfect adjustment, notwithstanding said rough usage.

The invention will be better understood by reference to the accompanying drawing, wherein,

Figure 1 is a top plan view of a lawn mower, partly broken away, equipped with the present invention; Fig. 2 is a sectional view, partly in elevation, illustrating the means for connecting the stationary knife to the side frames of the machine; and Fig. 3 is a perspective view illustrating the means for rigidly securing together the stationary knife and the side frames of the machine.

Referring to the drawings, 4, 4, indicate two side frames of the machine on which are mounted ground wheels 5, stationary knife 6 and roller 7, said side frames being connected together by rod 8. The shaft for the rotary cutter blades 9 is indicated by 10, said shaft being rotated in the usual man-

ner. With the object of insuring the rigidity of said side frames, the stationary knife 6, which has a cutting edge 11, is provided with means for maintaining said side frames in accurate and fixed parallelism. On each end of said knife there is provided two parallel flanges 12 between which a bearing portion 13 of each side frame engages. This bearing 13 is provided with carefully machined parallel faces 14 which engage the inside faces of flanges 12 which latter are also carefully machined. A cylindrical pin 15 passes through said flanges 12; and surfaces 16, preferably formed integral with the stationary knife, incline downwardly from said pin on each side thereof. The bearing portion 13 of each side frame is provided on its lower face with an elongated semi-circular recess 17 which is adapted to engage the pin 15 which latter constitutes a fulcrum ridge. Bolts 18, provided with nuts 19, pass through suitable openings in said stationary knife on either side of said pin or fulcrum ridge 15, and through enlarged bearing portion 13; and fixedly hold said knife in any position to which it may be adjusted. The provision of this cylindrical bearing insures that any movement of the stationary knife to adjust the same will always be on the same radius; and it will be understood that to adjust said knife to any desired position, it is only necessary to loosen one bolt and tighten the other, and vice-versa.

What is claimed is:—

1. In a machine of the character described, the combination of two side frames, each provided with two parallel bearing surfaces and with a depression on the under side thereof, a stationary knife, a plurality of parallel flanges provided on each end thereof to embrace the bearing surfaces on said side frames, a cylindrical pin mounted in said flanges and engaging said depression and means for adjusting said knife around said pin as a center and fixing said knife in its adjusted position.

2. The combination with a knife bar and a side frame, one of said parts having a portion fitting in a correspondingly shaped elongated recess in the other part, the opposing walls of the two parts closely con-

tacting to rigidly maintain the angular relationship of the parts, a fulcrum ridge extending across said recess fixed to one part and engaging the other part and bolts connecting the side frame and cutter bar on opposite sides of said fulcrum ridge.

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In testimony whereof I have signed this

specification in the presence of two subscribing witnesses.

LEVI BROWN.

Witnesses:

H. R. LONTZ,

B. T. HILL.

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