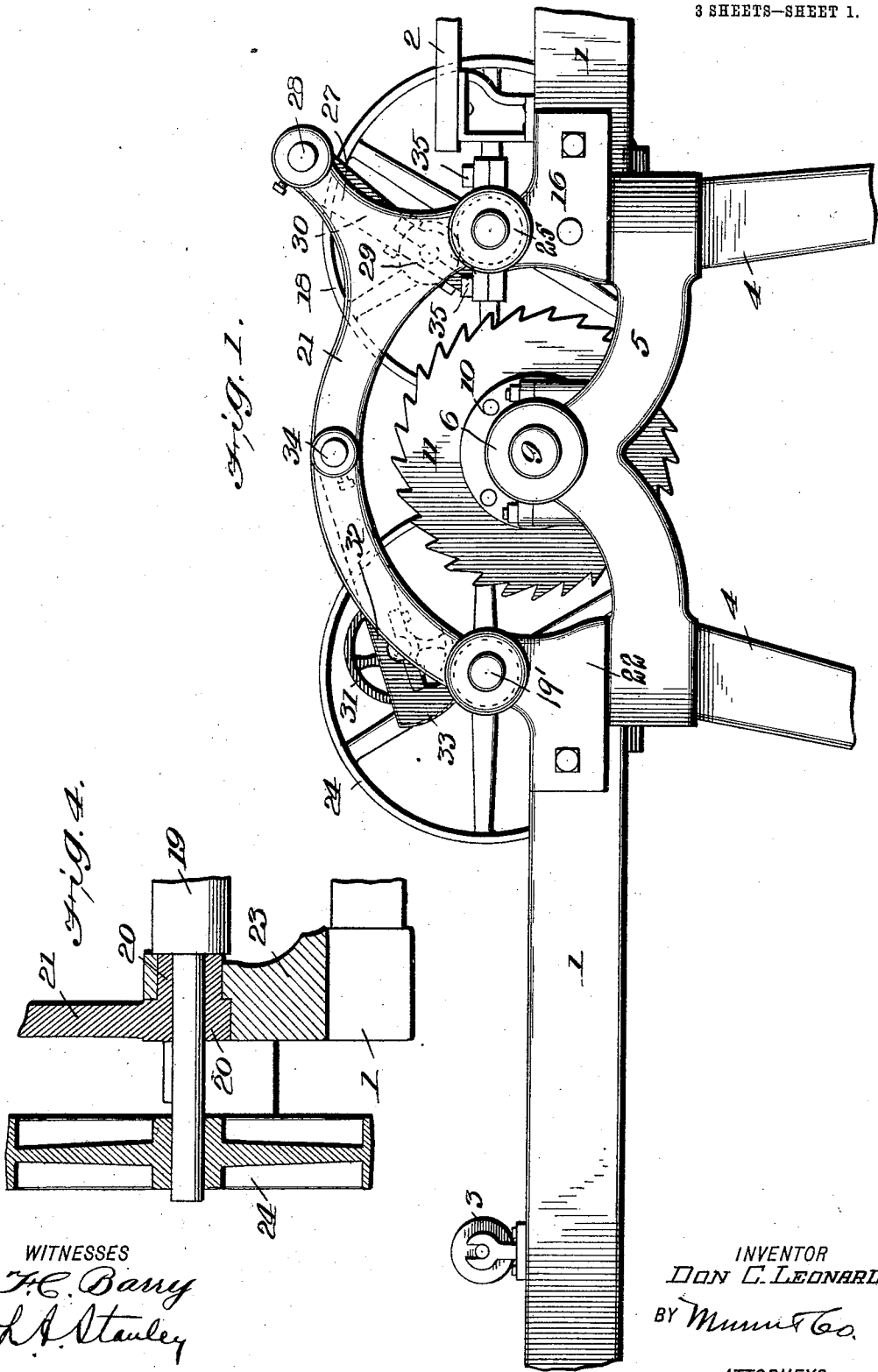


933,569.

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GANG EDGER.

APPLICATION FILED JAN. 5, 1909.

Patented Sept. 7, 1909.
3 SHEETS—SHEET 1.



WITNESSES
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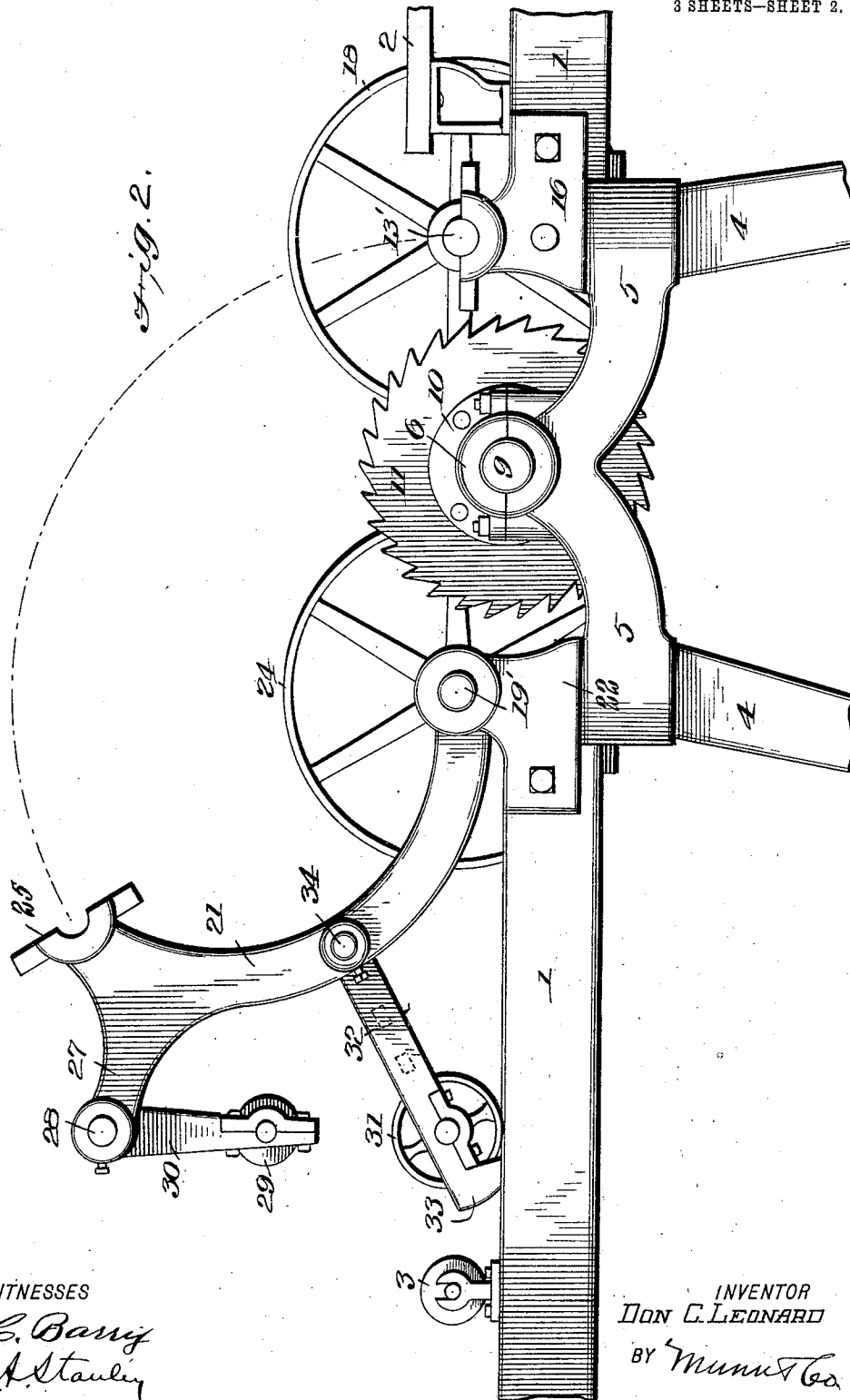
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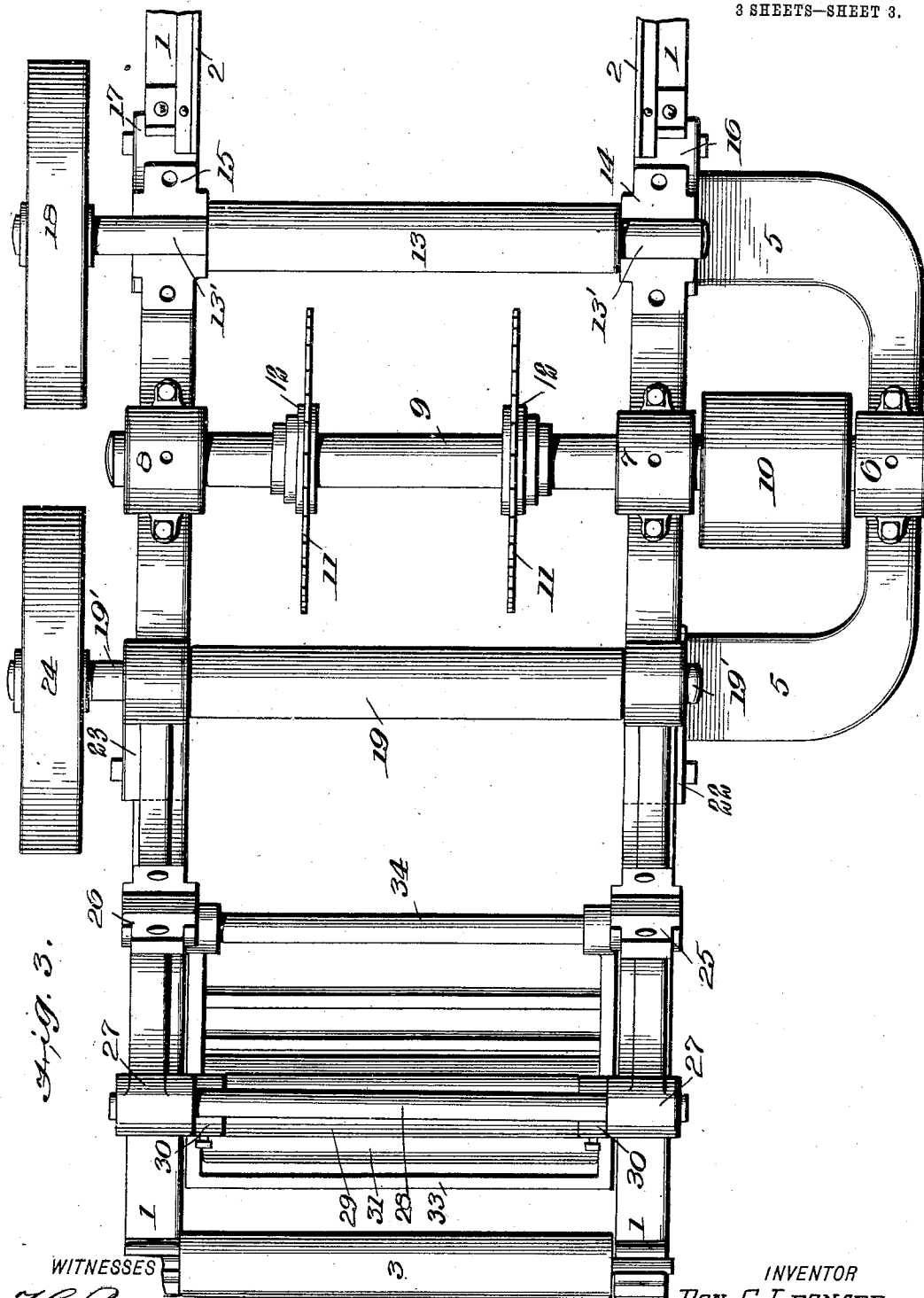


Fig. 3.

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UNITED STATES PATENT OFFICE.

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GANG-EDGER.

933,569.

Specification of Letters Patent.

Patented Sept. 7, 1909.

Application filed January 5, 1909. Serial No. 470,814.

To all whom it may concern:

Be it known that I, DON CARLOS LEONARD, a citizen of the United States, and a resident of Columbia, in the county of Richland and State of South Carolina, have invented a certain new and useful Improvement in Gang-Edgers, of which the following is a specification.

My invention relates to sawing machinery and more particularly to that type of such devices known as gang edgers. In these machines a plurality of circular saws are adjustably mounted on a common arbor and serve to edge boards of different widths. Ordinarily in devices of this kind when it becomes necessary to sharpen a saw, the latter must be removed from its shaft or arbor. This results in inconvenience and delay, since various parts of the machine must necessarily be dismantled in taking out and readjusting the saw blades.

The main object of my invention is to provide a machine which has movable members constituting part of the frame of the device, which can be swung up out of the way to permit easy access to the saws and thereby enable the operator to file them while they are on the arbor.

My invention is illustrated in the accompanying drawings in which,

Figure 1 is a side view of the device showing the parts in their normal operative position; Fig. 2 is a similar view showing the swinging arch turned back to permit access to the saws; Fig. 3 is a plan view of Fig. 2, and Fig. 4 is a detail sectional view of the feed roller and arch bearings.

In the several views of the device I have shown only so much of the working parts as is necessary for an understanding of the novel features of the invention.

Referring now to the drawings, 1 denotes the bed-frame of a gang-saw edger upon which are mounted the usual guide rails 2 and supporting rollers 3, the frame itself being supported upon the legs 4. At the central part of the frame and on one side thereof is a laterally extending yoke 5 which constitutes part of the husk frame, having a bearing 6 alined with the bearings 7 and 8 in the frame itself in which the arbor 9 is rotatably mounted. Secured to the shaft are the drive pulley 10, and the saws 11, the latter being held by the collars 12 on each side thereof in a well known manner.

On one side of the arbor is the front feed roller 13 which is mounted on a shaft 13' journaled in the semicylindrical bearings 14 and 15 carried by the stands 16 and 17 respectively, the latter members being bolted to the frame 1 as shown in the drawings.

On one end of the shaft 13' is the front feed pulley 18. The rear feed roller 19 has its shaft 19' journaled in the inwardly projecting sleeves 20 which are integral with the folding arch 21 of the husk frame, the sleeves 20 themselves being mounted for rotation in the stands 22 and 23 carried by the bed-frame 1. The construction is clearly shown in Fig. 4. The rear feed pulley is shown at 24.

The arch 21 which is pivoted at its rear end as described, carries at its forward end the semi-cylindrical bearings 25 and 26 which form the upper parts of cylindrical bearings, the lower parts of the same being formed by the semi-cylindrical bearings 14 and 15 respectively.

On the forward end of the arch 21 is an upwardly inclined extension 27 on each side of the machine in which is journaled a rock shaft 28. The front pressure roller 29 is rotatably mounted in arms 30 secured to the rock shaft 28. The rear pressure roller 31 is similarly mounted in the arms 32 secured to the rock shaft 34 which is journaled in the opposite members of the arch 21. The arms 32 have a downwardly projecting extension 33 at their ends for the purpose of supporting the arch when it is turned back. The operation of the device may be clearly understood from the foregoing description of the various parts. In Fig. 1 the machine is shown in its operating position. The arch 21 is securely fastened to the stands 16 and 17 by the bolts 35 which pass through the bearing flanges and at the same time unite the upper and lower bearing parts of the feed roller shaft. When now, it is desirable to sharpen one of the saws, all that is necessary is to loosen the bolts 35 and swing the arch backward as shown in Fig. 2, arm 32 serving as a prop or support for the arch in this position by the engagement of its extension 33 with the frame 1.

It will be seen that I have provided a convenient means for gaining access to the saws without the necessity of taking them out or of dismantling the machine. Moreover when the parts are in their normal po-

sition they are as rigidly held as in the ordinary machines of the kind.

I claim,

1. In a gang-saw edger, a frame, a saw arbor journaled therein, front and rear feed rollers, saws mounted thereon, bearing stands therefor, an arch pivoted to one of said stands carrying a semi-cylindrical bearing part, a similar semi-cylindrical bearing part carried by the other stand, means for securing said semi-cylindrical bearing parts together, for forming a bearing for one of said feed rollers.

2. In a gang-saw edger, a frame, a saw arbor mounted therein, front and rear feed rollers, a plurality of saws mounted on said arbor, an arch disposed above said saws being pivotally mounted at one end and having semi-cylindrical bearings at the other end, semi-cylindrical bearings carried by said frame, and arranged to register with the semi-cylindrical bearings carried by the arch to form a common cylindrical bearing for one of said feed rollers.

3. A gang-saw edger, a frame, a saw arbor, saws mounted thereon, a stand provided with an opening, an arch having a lateral projecting sleeve arranged to enter

the opening in said stand for pivotally mounting the arch, front and rear feed rollers, a shaft for one of said feed rollers journaled in said sleeve, a semi-cylindrical bearing at the opposite end of said arch, a second stand provided with a semi-cylindrical bearing arranged to register with the first named cylindrical bearing forming a common bearing for one of said feed rollers.

4. In a gang-saw edger, a frame, a saw arbor mounted therein, a plurality of saws carried by said arbor, an arch disposed above said saws, a pressure roller carried by said arch, front and rear feed rollers, one end of said arch being pivotally mounted so as to turn about the axis of one of said feed rollers, the other end of the arch having semi-cylindrical bearings, a stand having semi-cylindrical bearings arranged to register with the first mentioned semi-cylindrical bearings to form a common bearing for one of said feed rollers, and means for securing said bearings together.

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Witnesses:

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