A. H. PRENZEL.

BEVELING MACHINE.

APPLICATION FILED OCT. 2, 1909.

965,744.

Patented July 26, 1910.

2 SHEETS—SHEET 1.

Fig. 1.

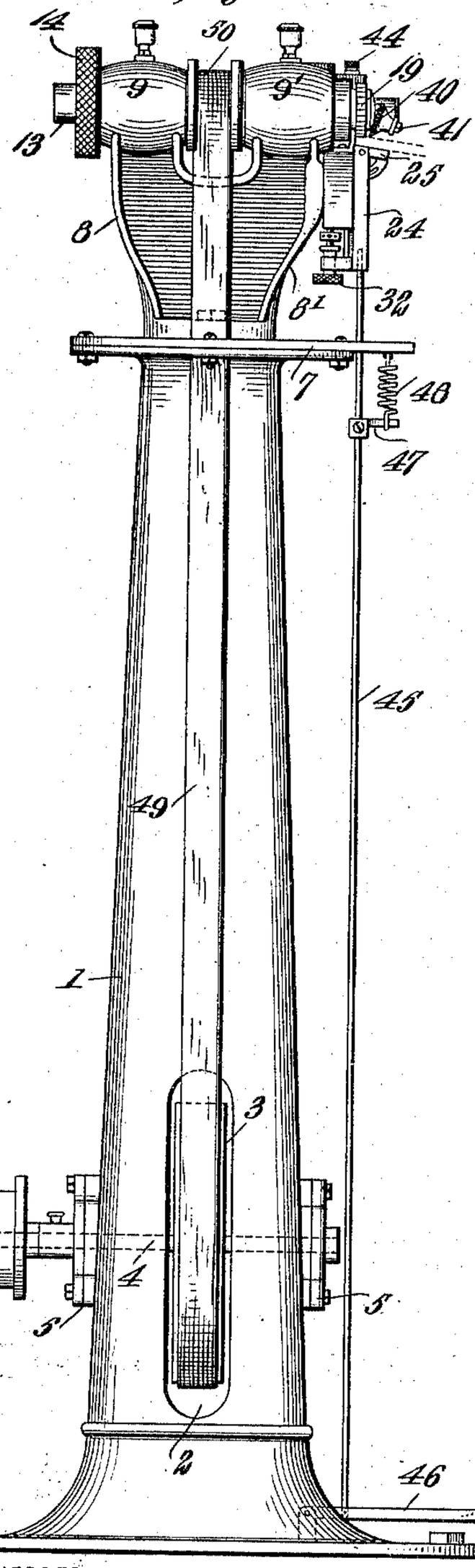


Fig. 2.

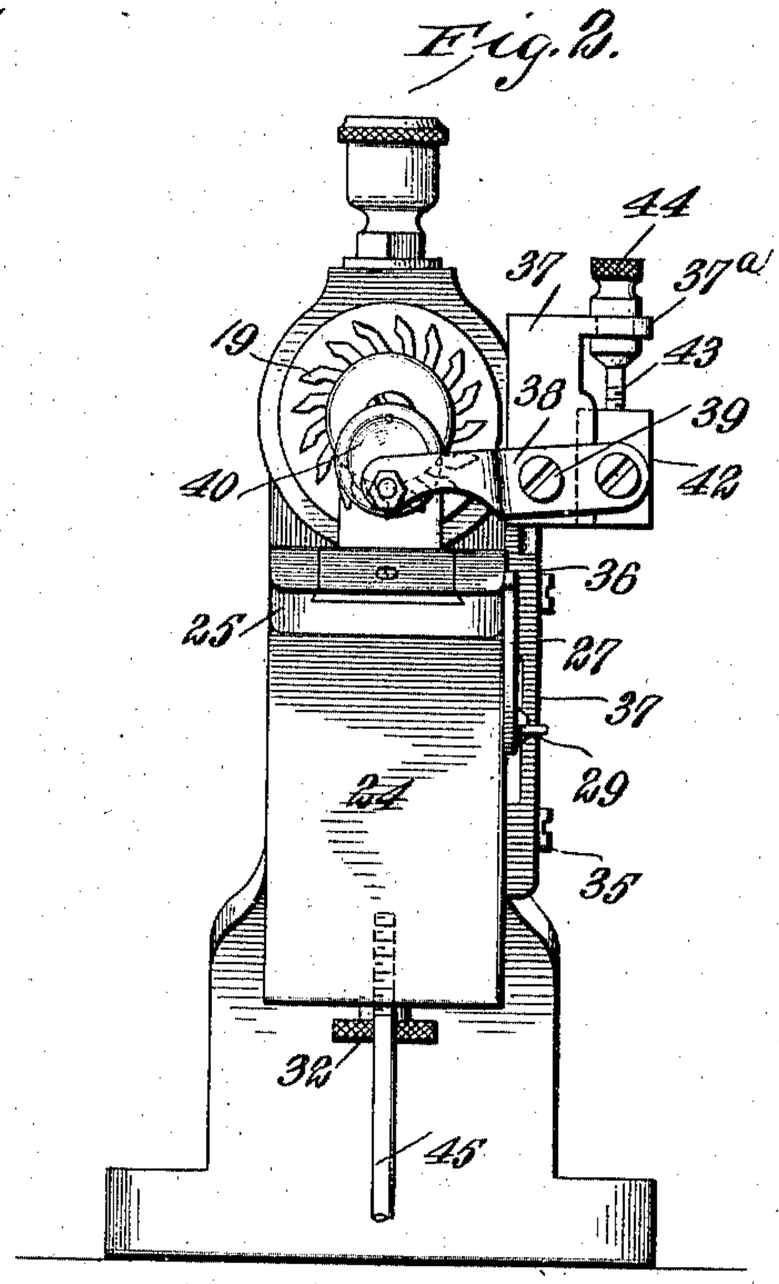


Fig. 3.

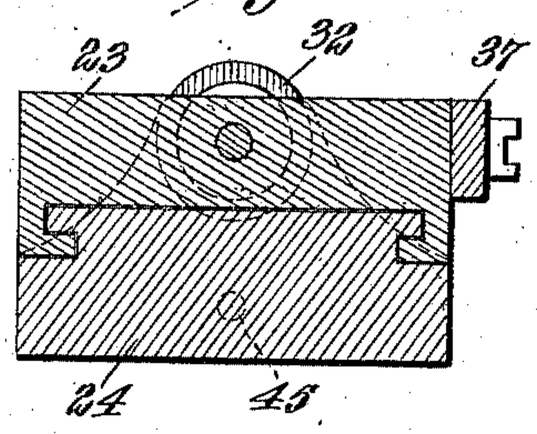
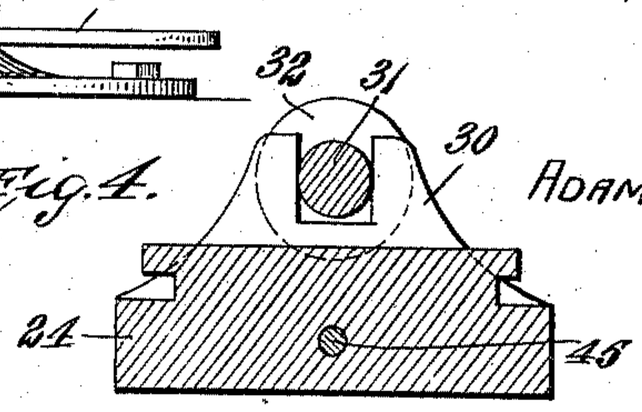


Fig. 4.



WITNESSES

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2 SHEETS—SHEET 2.

Fig. 5.

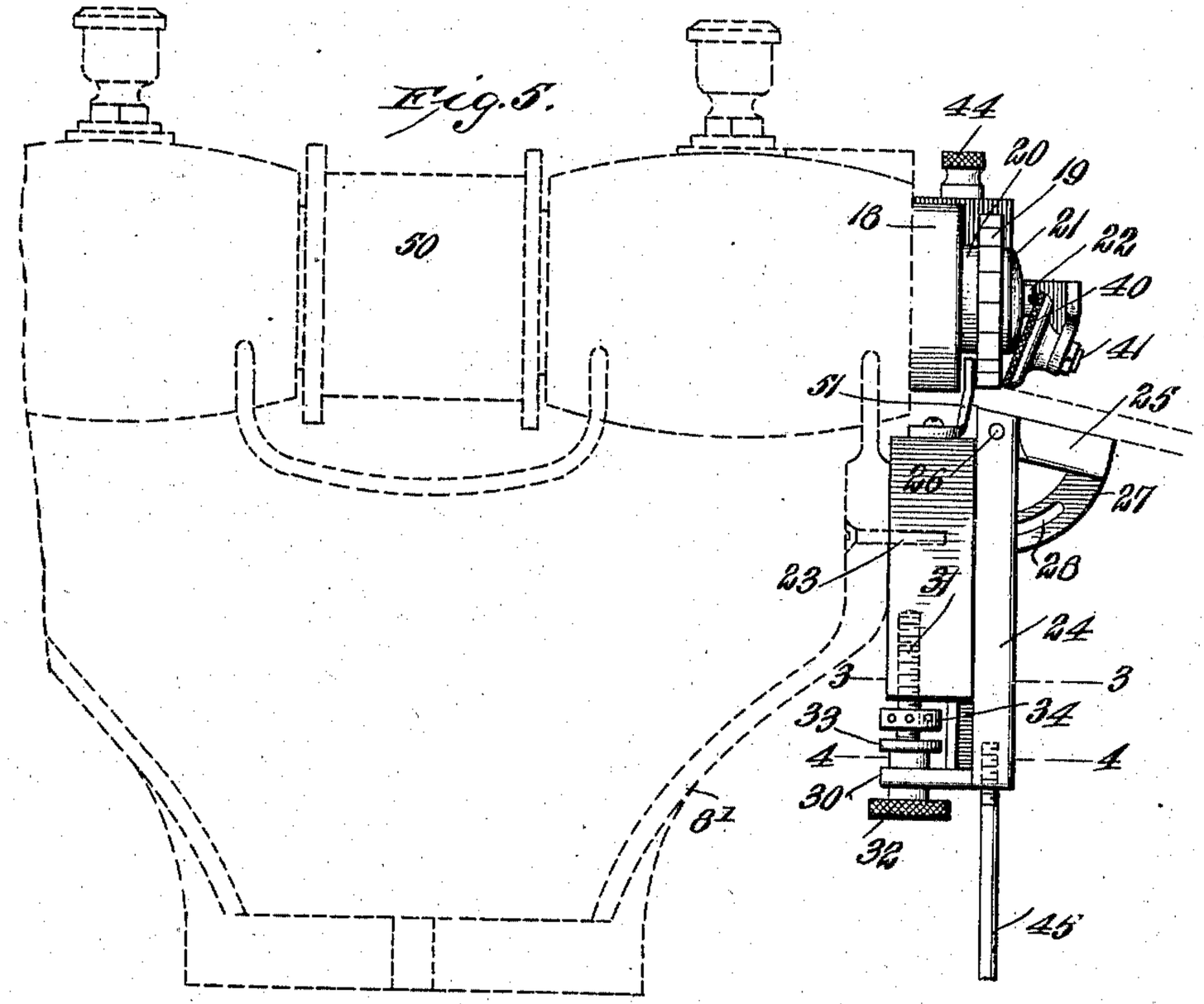
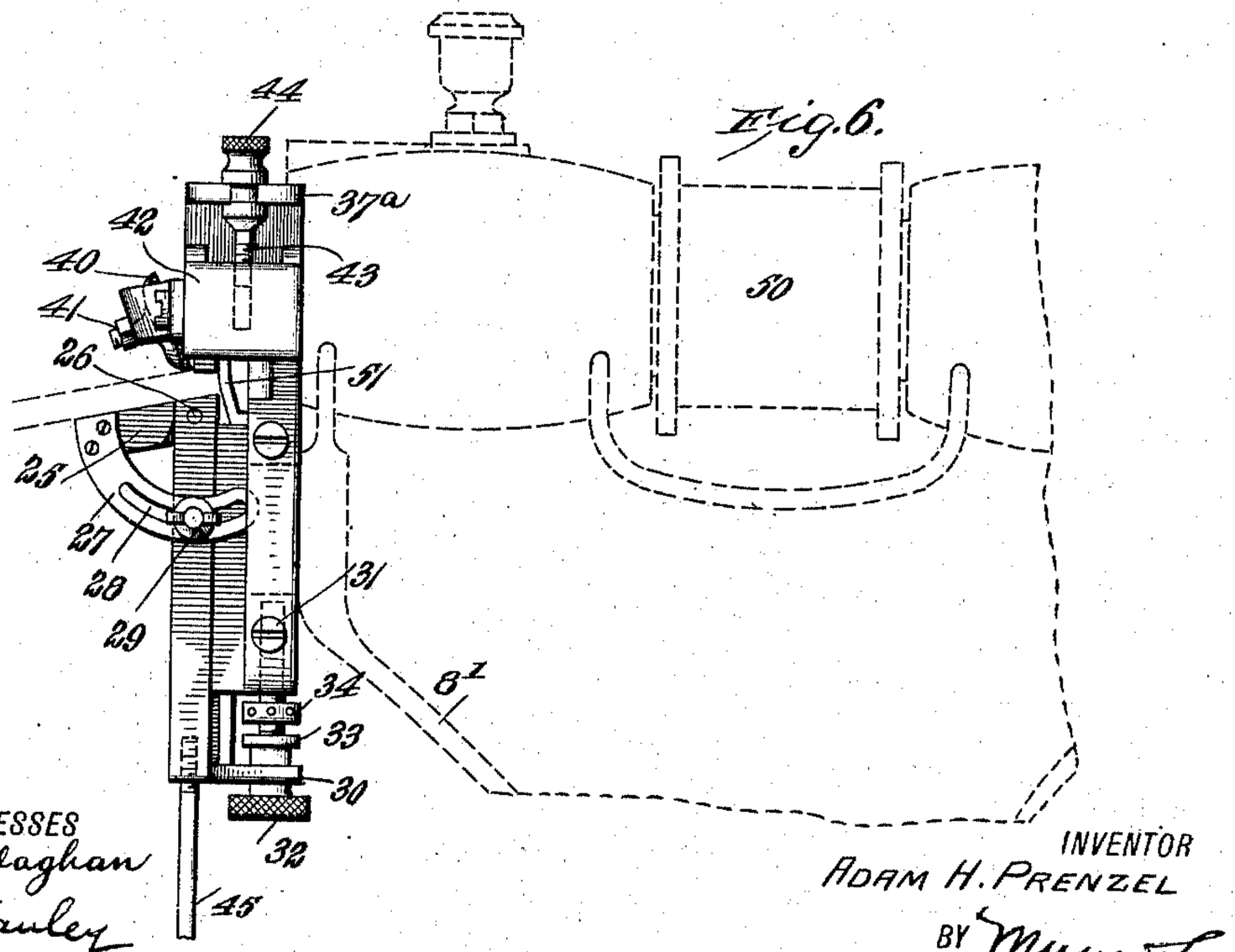


Fig. 6.



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UNITED STATES PATENT OFFICE.

ADAM HENRY PRENZEL, OF HALIFAX, PENNSYLVANIA.

BEVELING-MACHINE.

965,744. Specification of Letters Patent. Patented July 26, 1910.

Application filed October 2, 1909. Serial No. 520,672.

To all whom it may concern:

Be it known that I, ADAM HENRY PRENZEL, a citizen of the United States, and resident of Halifax, in the county of Dauphin and State of Pennsylvania, have invented certain new and useful Improvements in Beveling-Machines, of which the following is a specification.

My invention relates to improvements in devices for beveling heel seats of shoes, and it consists in the combinations, constructions, and arrangements of parts herein described and claimed.

An object of my invention is to provide a device by means of which heel seats of those shoes in which underwedges are provided in the heel portions may be quickly and accurately beveled along the outer edge so as to permit the upper, which is fastened to the heel seat, to be placed farther from the edge or nearer to the latter.

A further object of my invention is to provide means by which the angle of the bevel may be varied to suit various shapes or styles of shoes.

A further object of my invention is to provide a device which will automatically bevel heel portions of varying thicknesses to the same depth and at the same angle.

Further objects and advantages will appear in the following specification, and the novel features thereof will be particularly pointed out in the appended claims.

My invention is illustrated in the accompanying drawing in which similar reference characters indicate like parts in the several views, and in which—

Figure 1 is a side view of the device, Fig. 2 is an enlarged end view of the upper portion of the machine, Fig. 3 is an enlarged section along the line 3—3 Fig. 5, Fig. 4 is an enlarged section along the line 4—4 of Fig. 5, Fig. 5 is an enlarged detail side view of a portion of the device, and Fig. 6 is a view of the opposite side from that shown in Fig. 5.

In carrying out my invention, I provide a main standard or support 1, which has an opening 2 for the reception of the main driving wheel 3. The latter is located on the shaft 4, secured to the standard 1 in bearings 5, which bears upon its outer end the driving pulleys 6. At the top of the standard 1 is secured the cutting machine proper which consists of a base portion 7 bearing the arms 8 and 8′ which support the bearings 9 and 9′. The shaft 13 is journaled in the bearings 9 and 9′. At one end of the shaft is a hand wheel 14. On the opposite end of the shaft is a collar 18 which is integral with the shaft. A cutter wheel 19 is held between the two rings 20 and 21 by means of a screw 22 which enters the end of the shaft. Secured to the arm 8′ is a block 23 which is mortised to receive the sliding plate 24, (see Fig. 3). The latter bears at its top a table 25 which is pivoted at 26 and is provided with an arc-shaped support 27 which has a slot 28 through which the adjusting screw 29 is arranged to pass. The bottom part of the plate 24 is provided with a laterally extending yoke 30, (see Fig. 4) through which a screw 31 extends. The latter enters a threaded opening in the block 23, and has on its lower end an integral thumb wheel 32. The screw bears a shoulder 33 which is adjacent the yoke 30, and the portion of the screw between the shoulder and the thumb wheel is enlarged as clearly shown in the drawings. The screw bears a lock nut 34 between the shoulder and the lower end of the block 23. Secured to the block 23 by means of the screws 35 and 36 is a support 37. This support bears an arm 38 which is pivoted at 39 to the support. One end of the arm carries a gage wheel 40, (see Figs. 2 and 5), which has a milled edge and which is mounted for rotation upon the end of the arm by means of a short shaft 41. The outer end of the arm 38 is pivotally secured to the sliding block 42 which is threaded to receive the adjusting screw 43. The latter is mounted for rotation on an arm 37ª of the support 37 and may be manipulated by a milled head 44. A rod 45 has its upper end secured into the plate 24 while its lower end is attached to a foot lever 46. The shaft, as shown in Fig. 1, passes through the base 7 and has an adjustable arm 47 which is secured to the lower end of the spring 48, the upper end of which is attached to the under side of the base 7.

From the foregoing description of the various parts of the device, the operation thereof may be readily understood. The power for running the shaft 13 which bears the cutter wheel 19 is transmitted through the wheel 3 by means of the belt 49 over the pulley 50, secured to the shaft. The cutter wheel is therefore driven at a rapid rate. From Fig. 5 it will be seen that the edges of the teeth of the cutter wheel are parallel

with the axis of the wheel. The movement of the plate 24 bearing the supporting table 25 is first gaged by manipulation of the screw 31, which is generally set so that the spring 48 will hold the plate 24 in an upper position when the stock has been removed but will not permit it to come in contact with the teeth of the cutter wheel 19. This may be done by adjusting the screw so that the shoulder 33 will be engaged by the yoke 30 on the plate 24. It may be locked in this position by means of the lock nut 34. The gage wheel 40 is then set for effecting a cut of the proper depth by manipulating the thumb wheel 44, the block 42 rising and falling in response to the turning of this wheel, and thus lowering and raising the gage wheel 40. When the stock is to be beveled, the foot lever 46 is depressed, thereby drawing down the plate 24 and the table 25, which, of course has been set at the proper angle. The stock or heel portion is then thrust in until it meets the stop member 51 secured at the top of the block 23, and the foot lever 46 is then released. The heel portion is turned, but is kept close to the stop 51 and the edges are therefore beveled at the angle at which the table 25 is inclined from the horizontal. Moreover, the gage wheel 40 allows the same depth of cut, no matter what the thickness of the piece may be, while the spring actuated plate holds the heel up to the cutter. If a thicker heel stock is to be beveled, the plate 24 will automatically adjust itself to the thickness of the stock. This is an important feature of my invention, since it does away with the necessity of adjusting the plate to a definite height for varying thicknesses of stock.

I claim:

1. In a beveling machine, a rotary cutter, a gage therefor for regulating the depth of the cut, said gage comprising an adjustable block, an arm pivoted thereto, a rotary gage wheel secured at the end of said arm, and means carried by said block and adapted to engage the opposite end of said pivoted arm for moving said rotary gage toward or away from the axis of said rotary cutter.

2. In a beveling machine, a rotary cutter, a gage therefor for regulating the depth of the cut, said gage comprising an adjustable block, an arm pivoted thereto, a rotary gage wheel secured at the end of said arm, an extension carried by said block, and an adjusting screw carried by said extension and adapted to actuate said pivoted arm for moving said rotary gage toward or away from the axis of said rotary cutter.

3. In a beveling machine, a rotary cutter, a gage therefor for regulating the depth of the cut, said gage comprising an adjustable block, an arm pivoted thereto, a rotary gage wheel secured at the end of said arm, an extension carried by said block, a slidable block carried by said first-named block, pivotal connections between said slidable block and said pivoted arm, and an adjusting screw carried by the extension on said first-named block for moving the said sliding block, thereby moving said rotary gage toward or away from the axis of said rotary cutter.

ADAM HENRY PRENZEL.

Witnesses:
L. W. RYAN,
G. W. SHULTZ.