

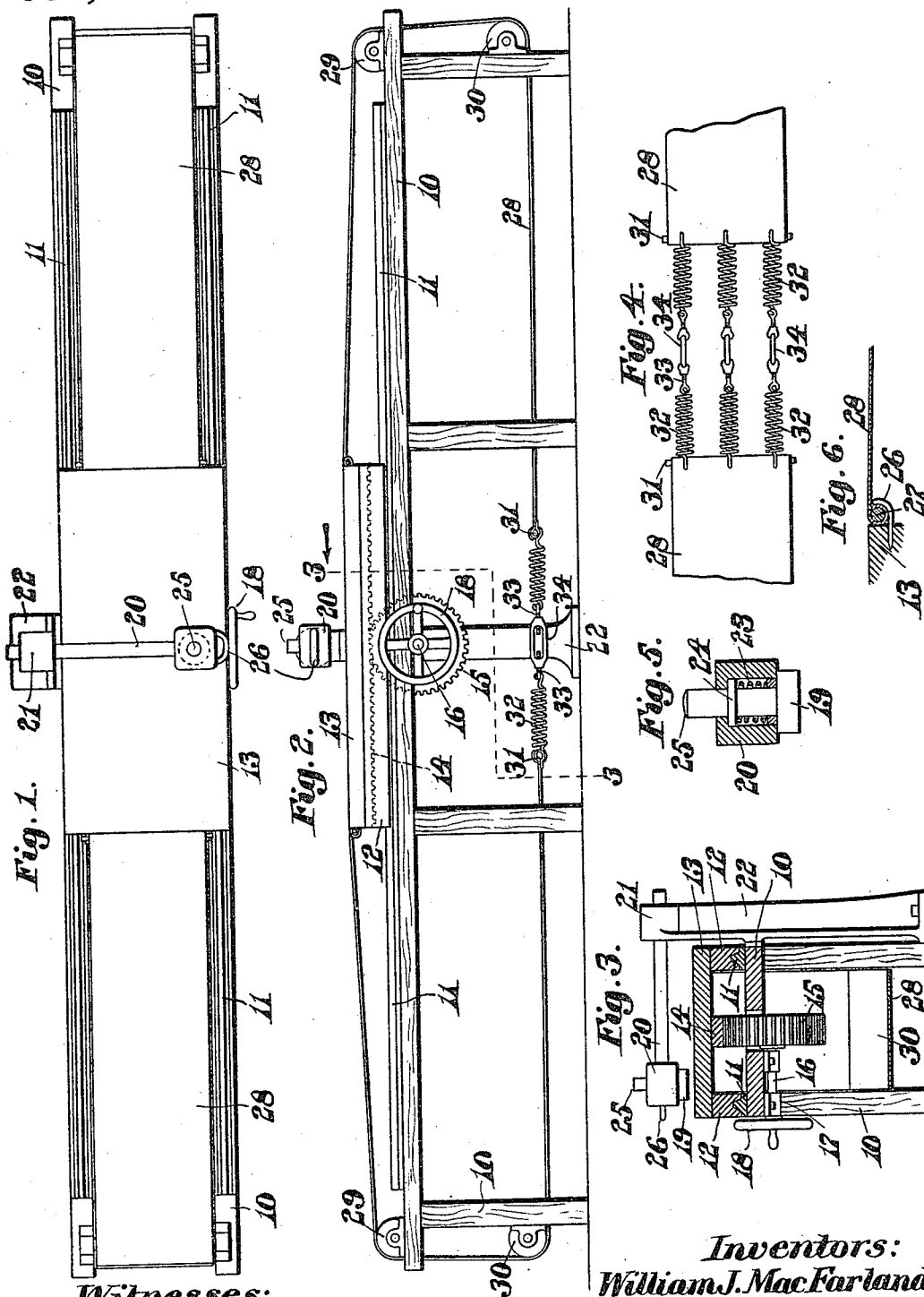
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CUTTING TABLE.

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950,002.



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UNITED STATES PATENT OFFICE.

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CUTTING-TABLE.

950,002.

Specification of Letters Patent.

Patented Feb. 22, 1910.

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To all whom it may concern:

Be it known that we, WILLIAM J. MacFARLAND and WILLIAM G. EATON, citizens of the United States of America, and residents, respectively, of Dorchester and Roxbury, both in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Cutting-Tables, of which the following is a specification.

10 This invention relates to devices for dieing out the blanks to be used for various purposes, as, for instance, in the construction of boots and shoes, and it relates more particularly to the table for supporting the material to be acted upon and it consists in providing a table adapted to be reciprocated at the will of the operator with an apron at either end for the purpose of supporting that portion of the material which is not accompanied by the cutting block itself.

The invention consists further in providing a means for keeping the apron taut at all times and under all conditions.

25 It consists further in certain novel features of construction and arrangement of parts which will be readily understood from the description of the drawings and the claims hereinafter given.

30 Of the drawings: Figure 1 represents a plan view of an apparatus embodying the features of this invention. Fig. 2 represents a front elevation of the same. Fig. 3 represents a transverse vertical section of the same, the cutting plane being on line 3—3 on Fig. 2. Fig. 4 represents a plan of the spring connections between the ends of the two aprons serving as a means of keeping the aprons taut. Fig. 5 represents a section through the die-supporting arm and showing the spring-retracted die in elevation, and Fig. 6 represents a detail to show the means of attaching the apron to the end of the reciprocating cutting block.

35 Similar characters designate like parts throughout the several figures of the drawings.

40 In the drawings, 10 represents a suitable framework upon which are mounted the guide rails 11 extending longitudinally of said frame and supporting the movable members 12 formed upon or secured to the under side of the cutting block 13.

Secured to the under side of the cutting block 13 is a rack 14 with which meshes a

55 gear 15 secured to a suitable shaft 16 mounted in bearings 17 secured to the frame 10.

The outer end of the shaft 16 is provided with a suitable crank member 18 by which the gear 15 may be revolved to move the cutting block into any desired position beneath the cutting die 19. This cutting die 19 is mounted in an arm 20 adapted to be reciprocated transversely of the cutting block 13 in a bearing 21 formed upon the upper end of the standard 22 secured in position in the rear of the frame 10. The die 19 is normally held in raised position by means of the spring 23 acting upon the shoulder 24 formed upon the shank thereof.

When it is desired to cut a blank from any piece of material resting upon the cutting block 13, this block is moved into suitable position beneath the die 19 and the die 19 is moved transversely to the material by means of the handle 26 formed upon the front end of the supporting arm 20 and then by means of the usual mallet or a reciprocating beam, pressure is applied to the end 25 of the shank of the die 19 to cause it to cut from the material the requisite blank.

Each end of the cutting block 13 is provided with a plurality of hooks 26 adapted to receive a rod 27 to which is secured the end of an apron 28. Each apron 28 passes over a roller 29 at the end of the frame 10 and then downwardly over a second roller 30, the opposite ends of the two aprons each being provided with a rod 31, to each of which is secured a plurality of springs 32, the opposite ends of each of which has secured thereto threaded members 33 connected together in pairs by means of suitable turnbuckles 34. It is obvious that by operating the turnbuckles 34 the aprons 28 may be drawn taut so as to readily support any material lying thereon.

By the provision of the aprons 28 a support is given at all times to the material being operated upon so that it will not hang over the edges of the cutting block and become damaged as would be the case in some kinds of material, as, for instance, patent leather.

By detachably connecting the aprons 28 to the ends of the reciprocating cutting block 13 and providing a suitable tension device between the opposite ends, the cutting block, the aprons, and the tension devices are con-

tinuously connected in such manner that when the crank 18 is operated to move the block in either direction the aprons 28 will move therewith, passing over rollers 29 and 30 in either direction, as the case may be. It is obvious therefore that no matter what position the cutting table may be beneath the die 19 a flexible support is provided for any material which is to be operated upon, thus preventing any undue injury thereto.

It is believed that the operation and many advantages of the invention will be understood without further description.

Having thus described our invention, we claim:

1. In an apparatus of the class described, the combination with a reciprocating cutting block; of a wide apron secured to the end of said block and adapted to support the material being operated upon; and means for holding said apron taut.

2. In an apparatus of the class described, the combination with a reciprocating cutting block; of a wide apron detachably secured to the end of said block and adapted to support the material being operated upon; and means for holding said apron taut.

3. In an apparatus of the class described, the combination with a reciprocating cutting block; of a wide apron detachably secured to the end of said block and adapted to support the material being operated upon; and a spring for holding said apron taut.

4. In an apparatus of the class described, the combination with a reciprocating cut-

ting block; of a wide apron detachably secured to the end of said block and adapted to support the material being operated upon; a roller over which said apron is adapted to pass; and a spring for holding said apron taut on said roller.

5. In an apparatus of the class described, the combination with a reciprocating cutting block; of an apron secured to each end of said block; rollers over which said apron passes; and means interposed between the ends of said apron for holding them taut on said rollers.

6. In an apparatus of the class described, the combination with a reciprocating cutting block; of an apron secured to each end of said block; rollers over which said apron passes; and a spring interposed between the ends of said aprons for holding them taut on said rollers.

7. In an apparatus of the class described, the combination with a reciprocating block; of a wide apron secured to one end of said block and adapted to support the material being operated upon; a roller over which said apron is adapted to pass; and means secured to the opposite end of said apron for holding said apron taut between said roller and its point of attachment to said reciprocating block.

Signed by us at 4 P. O. Sq., Boston, Mass., this 5th day of April, 1909.

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