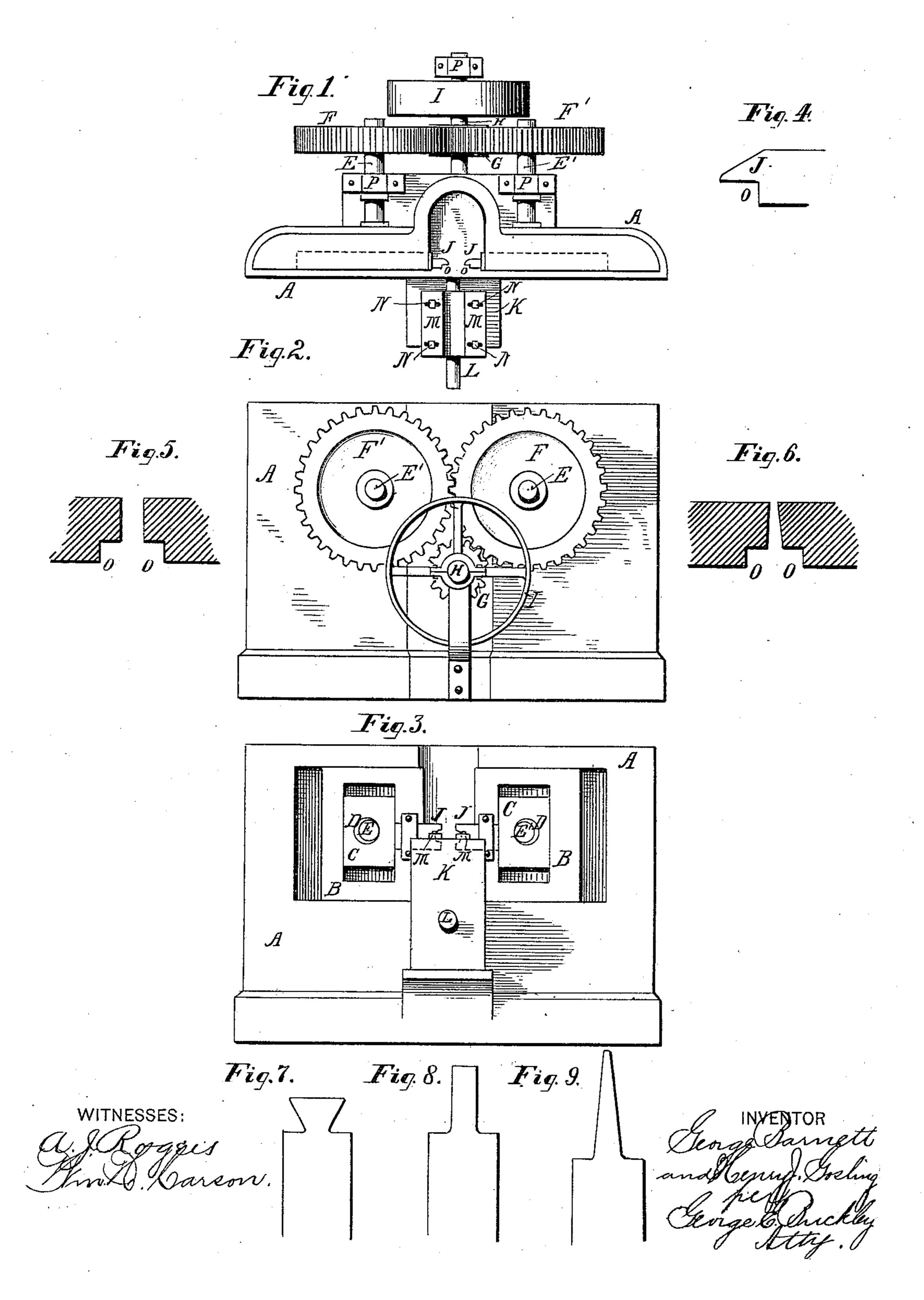
G. BARNETT & H. J. GOSLING.

FULLERER FOR FILE BLANKS.

No. 303,484.

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FULLERER FOR FILE-BLANKS.

SPECIFICATION forming part of Letters Patent No. 303,484, dated August 12, 1884.

Application filed January 18, 1884. (No model.)

To all whom it may concern:

Be it known that we, George Barnett and Henry J. Gosling, citizens of the United States, and residents of Philadelphia, Pennsylvania, have invented a new and Improved Fullerer for File-Blanks, of which the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making part hereof.

o The nature of our invention will fully appear from the following description and claims.

In the drawings, Figure 1 is a plan view of our invention; Fig. 2, an elevation of the same from the rear; Fig. 3, a front elevation of the same; Fig. 4, a broken enlarged view of one form of a cutter or fuller used to make the first crimp for the file-tang, such as is shown in Fig. 7; Fig. 5, a similar view of two cutters or fullers used to give the second crimp or impression to the tang being formed, such as is shown in Fig. 8; Fig. 6, a similar view of two cutters or fullers for further crimping the file-tang to bring it to the form shown in Fig. 9. Figs. 7, 8, and 9 are broken sections

of file-blanks, showing the various shapes of the tang from the first stage in progress of formation to the completed tang.

A is the frame of the machine, which sup-

ports the working parts thereof; B B, Fig. 3, sliding panels, which reciprocate laterally in grooves in the back of the frame A.

C C are smaller panels, which reciprocate vertically in grooves in the panels B B.

DD are two eccentrics, which, in their revo-35 lution, actuate the panels BBCC, and impart to the latter the respective movements above described.

E E' are shafts, by the revolution of which the said eccentrics are revolved. F F' (see 40 Figs. 1 and 2) are two cog-wheels set upon shafts E E', respectively. These cogs mesh with each other. The small cog-wheel G meshes with the cog-wheel F, and turns the latter. This cog-wheel G is turned by the

45 pulley I, which is set upon its shaft H. (See Figs. 1 and 2.) The pulley L is actuated by a belt from the main line of shafting.

J J are two cutters or fullers, which are bolted, screwed, or otherwise secured to the

edges of the panels B B, (see Fig. 3,) whereby 50 as these panels move toward and from each other these cutters approach and recede from each other.

K, Figs. 1 and 3, is a stand or platform, over the upper surface of which the file-blank is 55 pushed until its end comes between the cutters J J.

Lis, a rod or bar, which, passing loosely through the stand K, forms a guide for the platform when the latter is moved toward and 60 from the machine. This bar; at its inner end, is secured to the machine.

M M are adjustable guide-plates having a passage-way between them over the top of the platform K. These plates are adjustable, so 65 as to narrow or widen the passage-way, by means of the slots and set-screws N N N N. (See Fig. 1.)

O O are shoulders on the cutters or fullers, to come against the side or upper edges of the 70 blank when the tang is in the process of being cut or crimped.

P P P, Fig. 1, are simply housings to sustain the revolving shafts.

The operation of our device is as follows: 75 The revolution of the pulley I turns the small cog-wheel G, which revolves the cog-wheel F. Now, as the cog-wheel F gears with the cogwheel F', the latter will be revolved by the movement of the former, and they turn over 80 toward each other, motion thus being communicated to the shafts E E' and the eccentrics D D, and the latter will also rotate toward each other. The panels B B will thus receive reciprocal motion toward and from each 85 other. The upward and downward throws of the eccentrics will be neutralized by the upward and downward sliding motion of the small panels C C in the large panels D D. (See Fig. 3.) A plain file-blank is now pushed 90 through the channel M' until its inner end reaches a point between the cutters or fullers J J. Now, the motion of the panels B B toward each other will throw forward the two cutters or fullers J J, which latter will crimp, 95 crush, cut, or full the first two fillets in the file-blank which is between them, in the manner shown in Fig. 7. After any desired num-

scribed.

ber of blanks have thus been crimped, the angular cutters J J are removed from the panels BB; and if it is desired to further crimp or full the blank to the form shown in Fig. 8, 5 cutters or fullers of the shape shown in Fig. 5 are attached to the panels B B. To produce the form shown in Fig. 9, cutters or fullers of the shape shown in Fig. 7 will have to be substituted for the form shown in Fig. 5. It 10 is not actually necessary that both cutters J J should move, as it would be plainly seen that the same result would be accomplished if one of them were stationary and the movement were confined to the other. In this way all the 15 movable parts now necessary to actuate one of these cutters could be dispensed with, and the immovable cutter bolted to the stationary frame. The force of the blow of the moving cutter will jam the file-blank against the op-20 posite cutter, and the blank will thus be cut off fulled upon both sides.

What we claim as new is—
1. In a fullerer or crimping machine for fileblanks, the combination of the frame A, mova25 ble slides or panels B, and cutters or fullers
J J, secured to said panels B B, respectively,
and the actuating eccentrics D D, the latter
being rotated or turned by suitable mechanism, E, E', F, F', and I, substantially as de-

2. In a fullerer or crimping machine for file-blanks, the combination of the frame A, laterally-moving slides B, and cutters or fullers J J, secured to said panels B B, respectively, and the actuating-eccentrics D D, the latter

3. In a fullerer or crimping machine for file-blanks, the combination of the frame A, mova-40 ble slides or panels B, and cutters or fullers J J, secured to said panels B B, respectively, worticelly movable panels CC within said pan-

being rotated or turned by suitable mechan-

ism, E, E', F, F', and I, substantially as de-

vertically-movable panels CC within said panels BB, and the actuating-eccentrics DD, the latter being rotated or turned by suitable 45 mechanism, E, E', F, F', and I, substantially as

described.

4. In a fullerer or crimping machine for file-blanks, the combination of the frame A, laterally-moving slides B, and cutters or fullers 5° J J, secured to said panels B B, respectively, vertically-movable panels CC within said panels B B, and the actuating-eccentrics D D, the latter being rotated or turned by suitable mechanism, E, E', F, F', and I, substantially as 55

5. In a fullerer or crimping machine for blanks, the combination of the frame A, laterally-moving slides B, and cutters or fullers J J, detachably secured to said panels B B, respectively, and the actuating-eccentrics D D, the latter being rotated or turned by suitable mechanism, E, E', F, F', and I, substantially as described.

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Witnesses:
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