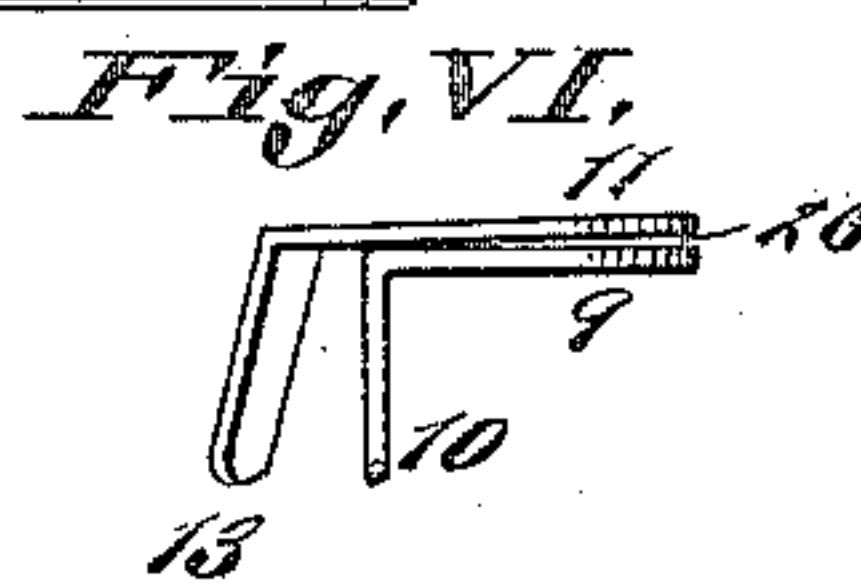
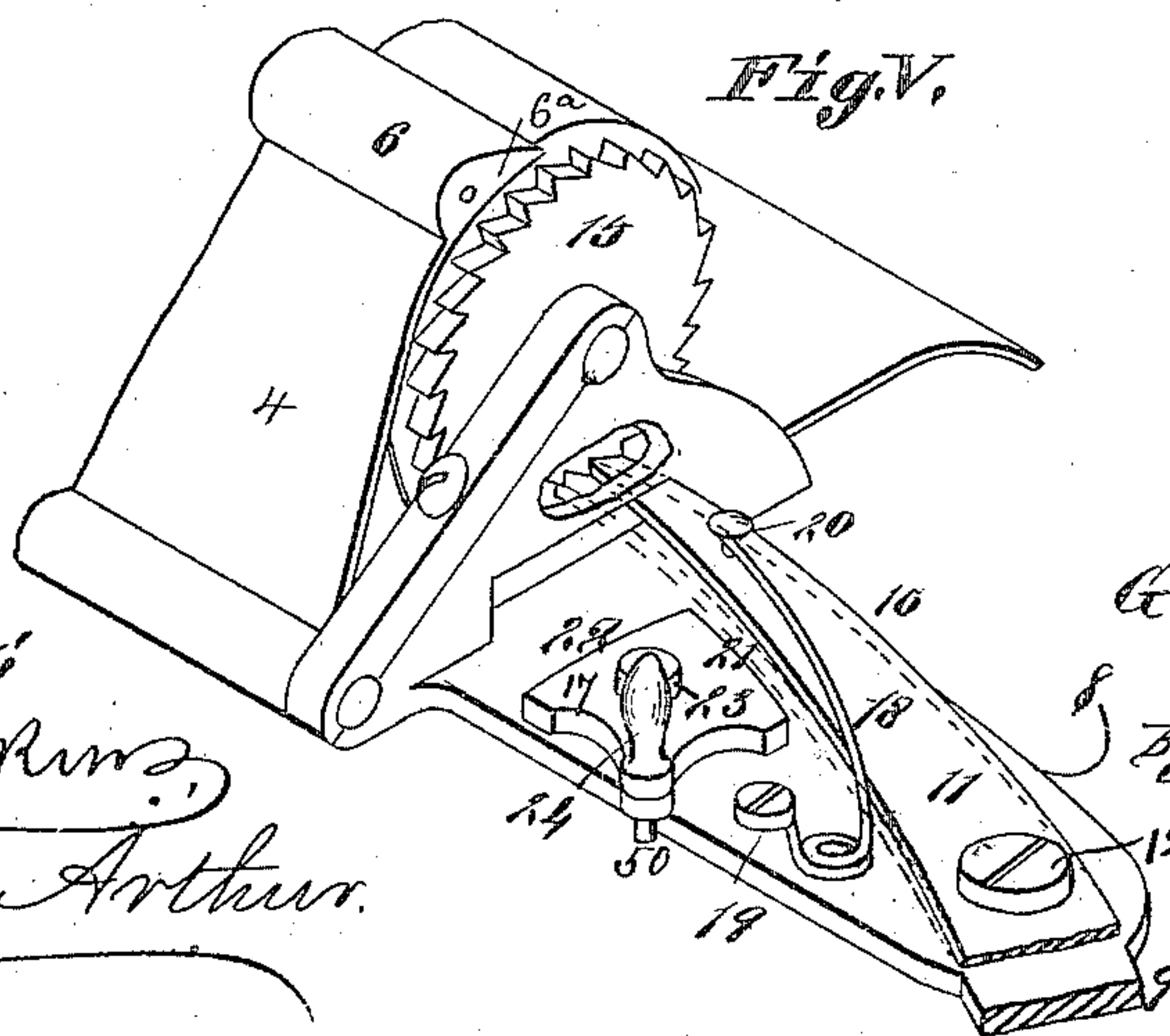
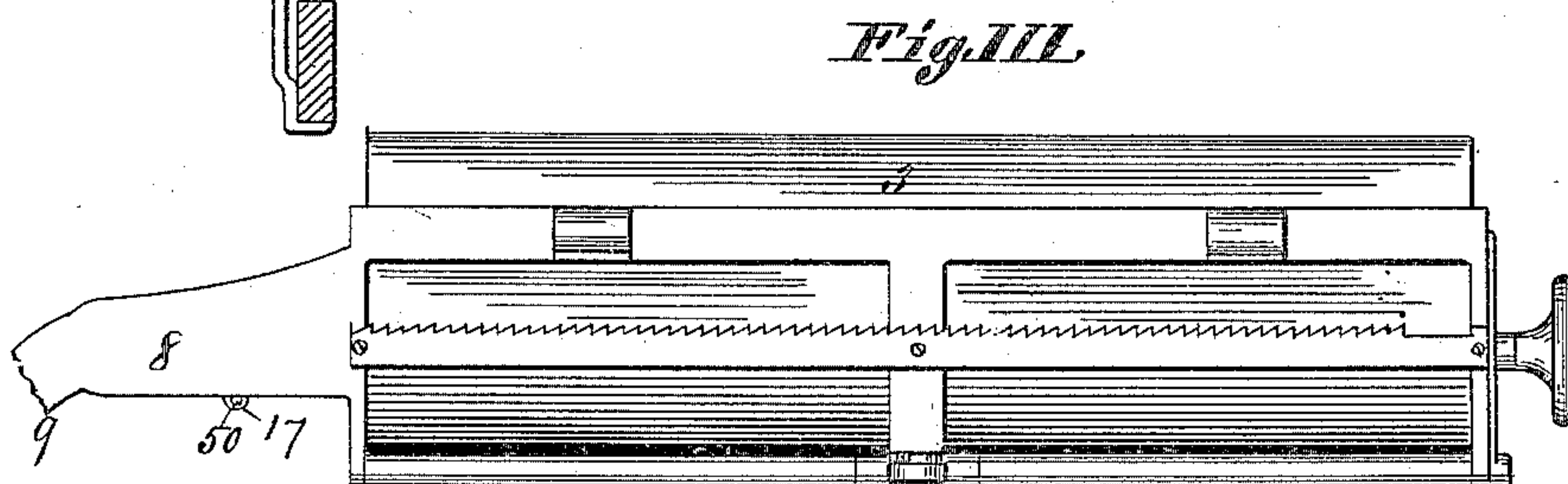
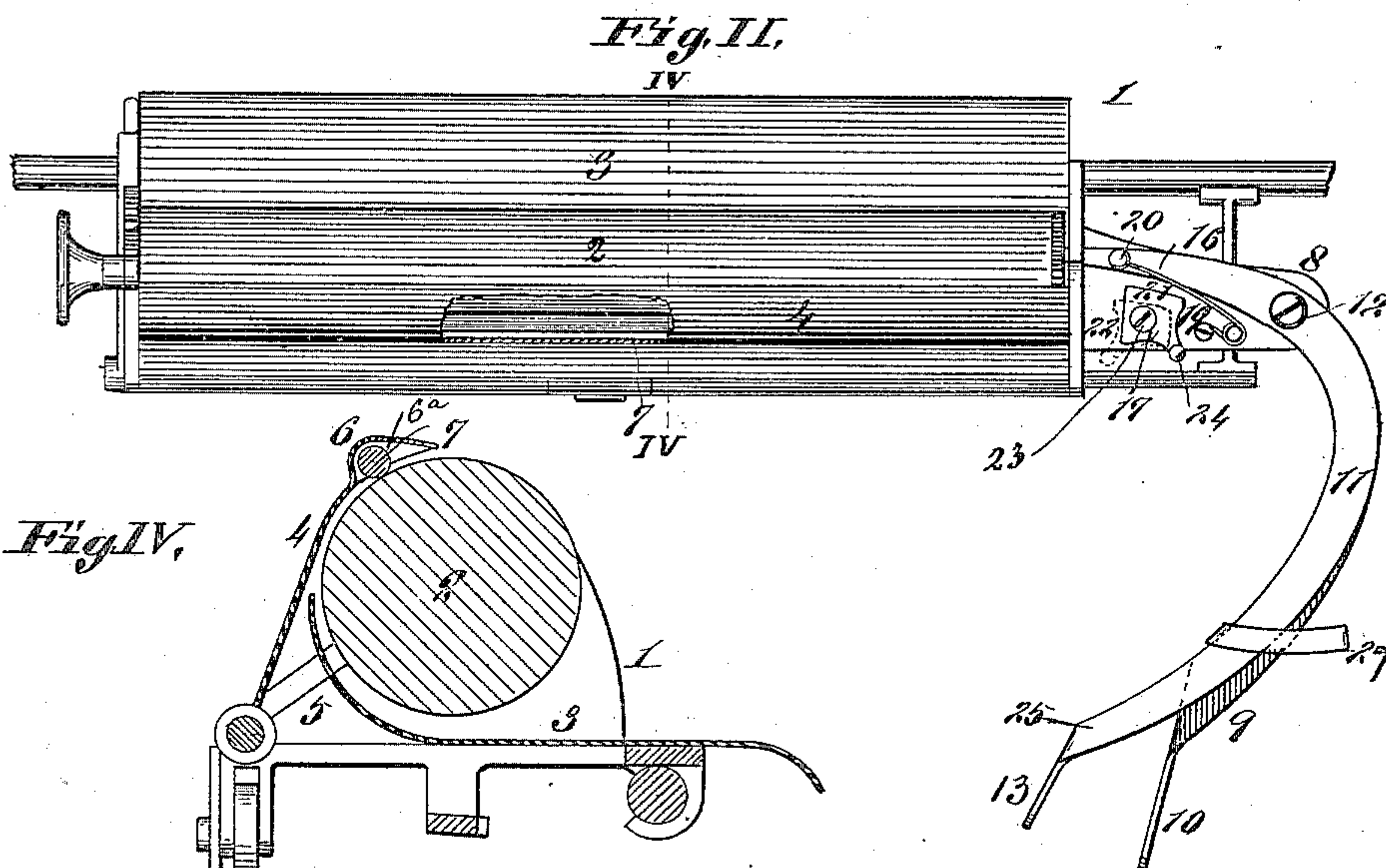
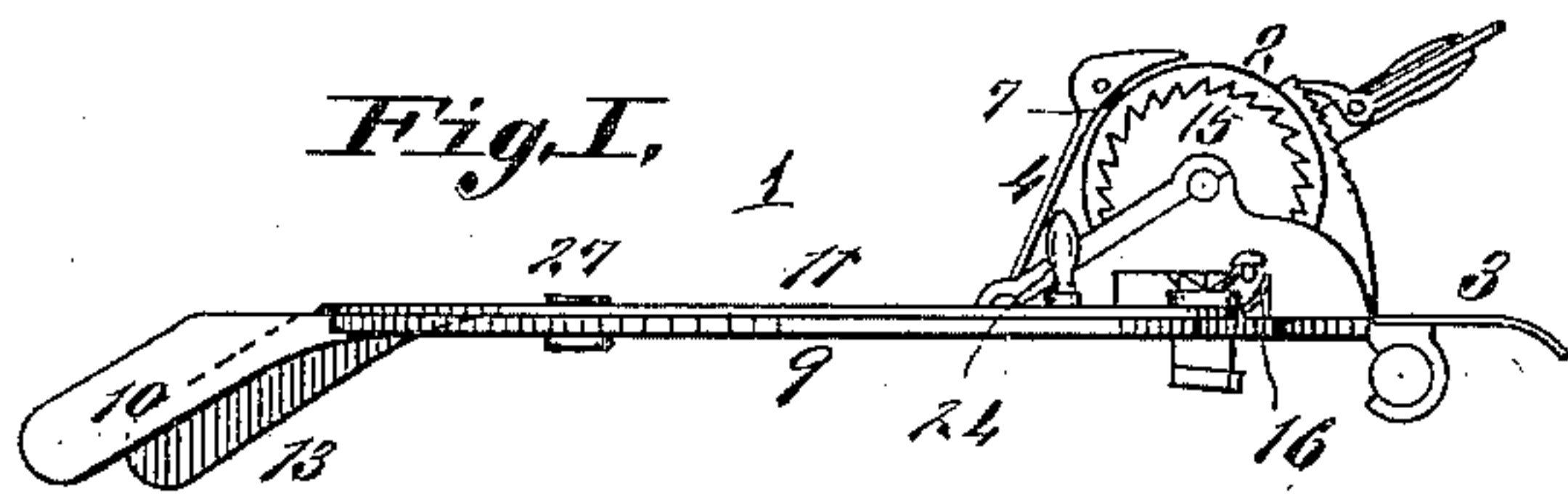


(No Model.)

G. H. LASAR.  
TYPE WRITING MACHINE.

No. 415,532.

Patented Nov. 19, 1889.



Attest:  
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Emma Arthur.

*Inventor:*

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# UNITED STATES PATENT OFFICE.

GODFREY H. LASAR, OF ST. LOUIS, MISSOURI.

## TYPE-WRITING MACHINE.

SPECIFICATION forming part of Letters Patent No. 415,532, dated November 19, 1889.

Application filed March 28, 1887. Renewed June 22, 1889. Serial No. 315,144. (No model.)

*To all whom it may concern:*

Be it known that I, GODFREY H. LASAR, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Type-Writing Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

10 Figure I is an end view of the carriage of a type-writer with my improvement applied. Fig. II is a top or plan view. Fig. III is an under or bottom view. Fig. IV is a transverse section taken on line IV IV, Fig. II, 15 Fig. V is an enlarged detail perspective view showing one end of the carriage and the accompanying parts. Fig. VI is an end view of the handle and ratchet-lever.

20 My invention relates to certain improvements in type-writer-carriage attachments; and it consists in features of novelty hereinafter fully described, and pointed out in the claims.

Referring to the drawings, 1 represents the 25 carriage of a type writer having a roller or platen 2 and a paper-guide having parts 3 4. The part 3 of the guide is horizontal, with a vertically-projecting end 5, and the part 4 is inclined from the vertical, as shown in Fig. 30 IV. The only invention claimed in connection with this guide is the raised portion 6 in the upper end of part 4. In the under side of this raised portion I place a roller 7, which is journaled in the side plates 6<sup>a</sup> of the part 35 4, and bears upon the platen or roller 2, and holds the paper upon the platen or roller, so that the part 4 of the guide not only directs the paper into position, but, through means of the roller 7, holds the paper upon the platen 40 near the point struck by the type, and the roller by turning offers but little resistance to the passage of the paper.

At one end of the carriage is an arm or plate 8, on which is formed a handle 9, by 45 means of which the carriage may be moved back after a line or part of a line has been written. On the outer end of the handle is preferably a flat portion 10, against which the handle is pressed in moving the carriage.

50 To provide a simple means for turning the roller or platen of the carriage the required distance to move the paper forward the dis-

tance of one line as the carriage is moved back, I pivot a lever 11 to the extension 8 or handle 9, as shown at 12, the rear end of 55 which extends over to the end of the handle 9, and which is preferably flattened, as shown at 13, to afford an easy grasp for the hand. The end of this lever projects inward some distance from the outer end of the handle 9, 60 so that the latter can be taken hold of without touching the lever, if desired. The forward end of the lever 11 at the side is turned upward, and engages with the teeth of a ratchet-wheel 15 on the platen or roller of the carriage. Now, when a line or part of a line has 65 been written and it is desired to run the carriage back, the hand is pressed against the lever 13, which moves until it comes against the handle 9, or until its inner end 16 comes 70 against a stop 17, and then this movement ceases, and the pressure still being continued the carriage is run back. As the lever is moved up to the handle or to the stop 17, it will be seen that the platen or roller of the 75 carriage will be turned, and then as the lever comes to a stop the carriage will be moved endwise, as stated. As soon as the pressure is removed the lever is pulled back again to its normal position by a spring 18, which I 80 have shown connected at 19 to the arm 8, and bearing by its free end against a pin or projection 20 upon the inner end 16 of the lever.

In order that the lever may move a greater or less distance, so as to turn the roller or 85 platen the desired distance to print a line or "half-line," I form the eccentrically-pivoted stop 17 in the shape shown in Figs. II and V, or of any other suitable shape. The shape I have shown it consists of a triangle with 90 a bearing-face 21 to receive the impact of the lever, and another bearing-surface 22 to receive the impact of the lever. It is connected to the arm 8 by a pivot pin or screw 23, and has a stem or projection 24, by 95 which it may be turned, and a projection 50 to limit its movement. The bearing-surface 21 is farther from the pivot 23 than the bearing-surface 22, and by turning surface 21 toward the lever, as shown in Figs. II 100 and V, the latter will be stopped when the roller or platen has moved the distance to half-line, and by turning the other bearing-surface 22 toward the lever, as shown by dot-



ted lines in Fig. II, the lever will be moved the required distance to turn the platen or roller far enough to produce a full line. The front side of the inner end 16 of the lever is turned up from the pivot 12, as stated, so as to engage with the ratchet-wheel 15, and should it be desired to turn the platen or roller backward at any time the lever can be thrown out of engagement with the ratchet-wheel 15 by simply pressing on the outer end at a point indicated by 25, and the body of the lever will be tilted up off the handle 9, as shown at 26 in Fig. VI, and the inner end 16 of the lever will be disengaged or rocked out of contact with the ratchet-wheel, which will permit the platen to be turned backward. The lever is shown thus rocked out of engagement with the ratchet-wheel by dotted lines in Fig. V.

27 represents a keeper for holding the lever 11 sufficiently near the arm 9 to prevent its being strained by being sprung upward. There is, however, sufficient distance between the lever 11 and the keeper 27 to permit of the rocking of the former, as just stated.

I claim as my invention—

1. The combination, with the platen, and the upturned apron 3 for guiding the paper around the platen, of the upwardly-extending apron formed with a raised portion, pro-

viding a groove on the inside, and a roller within the groove guiding the paper from the upturned apron onto the platen.

2. In a type-writer, the combination of the carriage provided with a handle 9, a platen having a ratchet-wheel, and a pivoted lever engaging the ratchet-wheel and projecting outward along the handle, substantially as and for the purpose set forth.

3. In the carriage of a type-writer, the combination of the handle 9, the platen provided with a ratchet-wheel, a pivoted lever 11, engaging the ratchet-wheel at its inner end and extending outward parallel and in line with the handle, and a keeper 27, substantially as and for the purpose set forth.

4. In a type-writer, the combination of the carriage, a platen provided with a ratchet-wheel, a handle by which the carriage is moved, a pivoted lever turned up at its inner end to engage the ratchet-wheel and extending along the line of the handle, substantially as described, whereby the lever may be rocked upon the handle to disengage its inner end from the ratchet-wheel, substantially as set forth.

GODFREY H. LASAR.

In presence of—

GEO. H. KNIGHT,  
JOSEPH WAHLE.