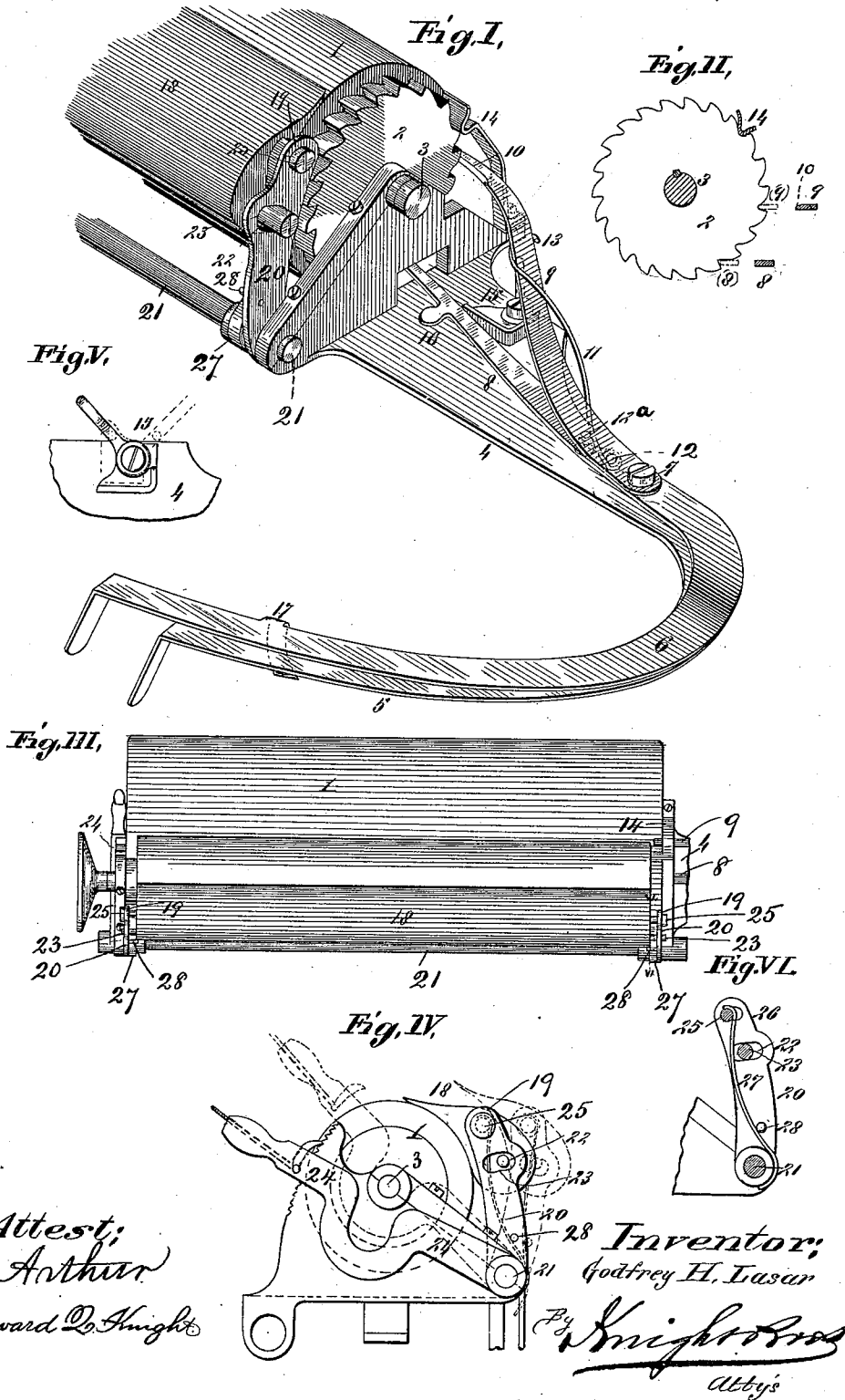


(No Model.)

G. H. LASAR.
TYPE WRITING MACHINE.

No. 463,366.

Patented Nov. 17, 1891.



Attest;
Edward D. Knight

Inventor;
Gottfrey H. Lasar

By Knight & Co.
attys

UNITED STATES PATENT OFFICE.

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

TYPE-WRITING MACHINE.

SPECIFICATION forming part of Letters Patent No. 463,366, dated November 17, 1891.

Application filed June 14, 1889. Renewed October 13, 1890. Serial No. 368,009. (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-Writers, 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 a detail perspective view showing one end (to the right hand) of the carriage of a type-writer, and illustrating a portion of my present invention. Fig. II is a side view of the ratchet of the platen, which is at 15 the same end, and showing the pawl-spring and stop in section. Fig. III is a top view showing the parts adjacent to the ends of the platen of the carriage in normal position. Fig. IV is an elevation showing the other end 20 (to the left hand) of the carriage. Fig. V is a detail view of the stop located on the carriage-arm for limiting the throw of the lever, and thereby regulating the rotary movement of the platen. Fig. VI is a detail view showing one of the clip-arms and being a vertical 25 section taken on line VI VI, Fig. III, looking outward.

My present invention relates to certain improvements in type-writing machines; and it 30 consists in features of novelty hereinafter fully described, and pointed out in the claims.

Referring to the drawings, 1 represents the roller or platen of a type-writing machine; 2, the ratchet-wheel secured to the platen or 35 to the spindle or journal 3 of the platen, and 4 represents an arm arranged horizontally having connection with the frame of the carriage and which has a curved extension 5, 40 against which pressure is applied in running the carriage back after a line has been written. Over this arm 4 and extension 5 is a horizontally-arranged lever 6, 45 pivoted to the arm at 7, and having an extension 8 in line therewith, forming a pawl or dog that engages the ratchet 2 sidewise. Where such arrangement has been used, it has sometimes been found that in working the machine rapidly the momentum of 50 the platen (when the lever 6 was moved) would carry it around more than the distance of one notch. To avoid any further difficulty of this kind I secure to the inner end of the

lever 6, above the extension 8, a stop plate or arm 9, which extends in, preferably, an upward direction from its point of connection 55 with the lever 6 and behind the ratchet-wheel 2. The arm is so connected to the lever 6 as to be operated or moved with the lever. Now each time the lever is operated to turn the platen the arm 9 is brought into engagement 60 sidewise with the teeth of the ratchet-wheel, and the parts are so disposed that the arm enters a tooth of the wheel just as the lever has completed its action, so that it does not interfere with the operation of the lever. 65 The inner side of the end of the arm is beveled, as shown at 10, so as to fit snugly into the teeth of the ratchet-wheel, as shown by dotted lines in Fig. II. When the pressure is removed from the lever 6 its inner end 8 is 70 made to engage another notch, and the arm 9 is carried out of engagement with the wheel by means of a suitable spring 11, the spring being preferably secured to the arm 4 at 12^a by one end and passing behind a pin 12 in 75 the arm 4 extends inward and embraces the arm 9 at 13. By an arrangement of this kind it will be impossible for the platen or roller to move more than the desired distance at each operation. 80

14 represents a friction-spring for regulating the tension of the platen.

15 represents a two-faced stop, pivoted to the arm 4, as shown in Figs. I and V.

16 represents a projection on the end 8 of the lever 6, against which a finger may be placed 85 to depress this end of the lever out of engagement with the ratchet 2.

17 represents a lip formed on the lever 6 and embracing the extension 5 of the arm 4 90 and serving to hold the lever to the arm, but permitting its free and individual movement.

18 represents a clip pivoted at each end at 19 to the upper ends of a pair of arms 20, secured one at each end to a rock-shaft 21. 95 The lower portion of each end of this clip is provided with a pin 22, fitting in a slot 23 in each arm 20.

24 represents a lever secured to the rock-shaft 21. The clip 18 is secured to the arms 100 20 at 19 by means of pins 25. (See Fig. VI.) There is of course a pin at each end or one for each arm, and each pin fits in a slot 26 of its arm. 27 represents a spring (there is one

at each end of the clip) engaging the pin 25, passing beneath a pin 28 on the arm 20, and which bears against the lower end of the arm or against the rock-shaft, either one, as desired. Now when the rock-shaft is moved by the lever 24 to bring the clip 18 down upon the platen or to move it from the position shown in dotted lines, Fig. IV, to the position shown in full lines, the springs 27 will hold the clip against the platen with a yielding pressure, as will be plainly understood, the result being that the pressure of the clip on the paper when the latter is placed between the clip and the platen is uniform and regular from one end of the platen to the other.

I claim as my invention—

1. In a type-writer, the combination of the platen provided with a ratchet-wheel, a pivoted lever for moving the platen, and an arm secured to and extending inwardly and upwardly from the lever having a free end engaging the ratchet-wheel when the lever is operated to turn the platen, substantially as and for the purpose set forth.

2. In a type-writer, the combination of the platen provided with a ratchet-wheel, a piv-

oted lever for moving the platen, an arm secured to and extending inwardly and upwardly from the lever having a free end engaging the ratchet-wheel when the lever is operated to turn the platen, and means for returning the lever and arm to normal position, substantially as and for the purpose set forth.

3. In a type-writer, the combination of the platen provided with a ratchet-wheel, a pivoted lever, an arm secured to and extending inwardly and upwardly from the lever, and a spring engaging the arm, said arm having a free end engaging the ratchet-wheel when the lever is operated to turn the platen, substantially as and for the purpose set forth.

4. In a type-writer, the combination of a platen, a rock-shaft, arms secured to the rock-shaft, a clip having a slot-and-pin connection with the arms, springs 27, and a lever 24, all substantially as and for the purpose set forth.

GODFREY H. LASAR.

In presence of—

EDW. S. KNIGHT,
THOMAS KNIGHT.