

(No Model.)

D. W. FILSTEAD.
TYPE WRITING MACHINE.

No. 462,038.

Patented Oct. 27, 1891.

Fig. 1.

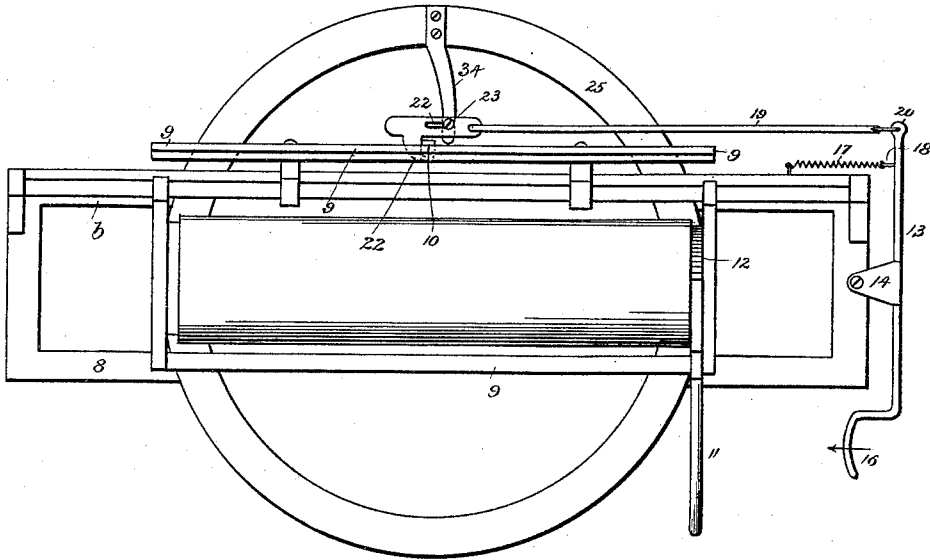


Fig. 2.

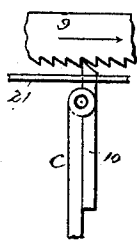


Fig. 3.

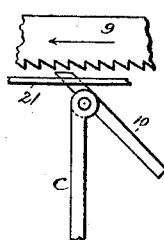
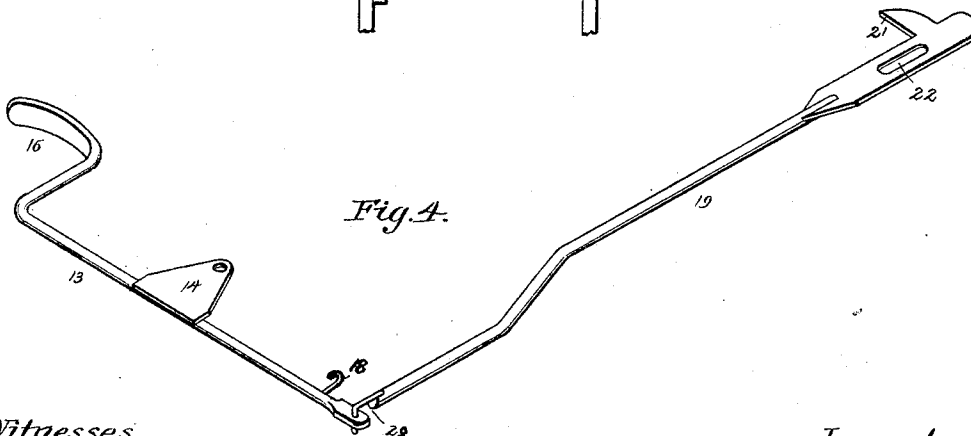


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

DAVID W. FILSTEAD, OF ST. LOUIS, MISSOURI, ASSIGNOR TO THE AMERICAN WRITING MACHINE COMPANY, OF HARTFORD, CONNECTICUT.

TYPE-WRITING MACHINE.

SPECIFICATION forming part of Letters Patent No. 462,038, dated October 27, 1891.

Application filed February 24, 1891. Serial No. 382,506. (No model.)

To all whom it may concern:

Be it known that I, DAVID WILLIAM FILSTEAD, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented a certain new and useful Type-Writing Machine, of which the following is such a full, clear, and exact description as will enable any one skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a novel means for liberating the paper-carriage of a type-writing machine from the control of the feeding-pawl in order to be able to readily place the paper-carriage in any desired position, and appertains more particularly to an improvement upon that type-writing machine known in the market as the "Caligraph."

Means have heretofore been devised to disengage the carriage-feeding pawl from the carriage-feeding ratchet-bar; but such means have generally been located on the opposite side of the machine from that which the carriage-moving handle and the spacing device for lines is applied, the latter being usually operated by the right hand and the formerly-constructed devices controlled by the left hand, thus necessitating the use of two hands in positioning the carriage and feeding the paper for lines. Means have also been devised to disengage a carriage-feeding pawl from the carriage ratchet-bar by devices actuated by the line-feeding handle.

In the present invention the means for disengaging the carriage-feeding pawl from the carriage is wholly independent of the line-feeding and carriage-positioning handle and is not operated by it, but is arranged at the same side of the machine as the line-feeding and carriage-positioning handle, so that the paper may be fed for lines, the pawl disengaged from the paper-carriage and the paper-carriage positioned by one and the same hand, leaving the other hand free for any other work to be performed.

The invention will be best understood by referring to the accompanying drawings, in which—

Figure 1 is a plan view of a part of a type-

writing machine known as the "Caligraph," provided with one form of my improvement. Figs. 2 and 3 are rear detail views showing the different positions of the carriage-feeding pawl, and Fig. 4 is an isometric projection of one form of device made in accordance with my invention.

The same marks of reference indicate the same parts throughout the several views.

6 is the paper-roller of a type-writing machine; 7, a step-by-step traveling carriage in which said paper-roller is mounted, the said carriage being guided by a rod *b*, fastened to the frame 8 of the machine. The carriage 7 has secured to it and traveling with it ratchet-bars 9, one of which is stationary and the other movable, controlled by a pawl 10, which is operated when the keys are manipulated through the instrumentality of a vibrating bar *c* and permits the carriage to feed step by step in a well-known manner. The paper-roller 6 is fed for the lines by means of a pivoted handle or pawl 11, taking into a ratchet-wheel 12, secured to one end thereof in the usual way. These devices form no part of my invention.

Heretofore in the type-writing machine known as the "Caligraph" the means for disengaging the pawl 10 from the carriage, so as to readily position it, has been located at the left-hand side of the machine, thereby necessitating the use of the left hand for withdrawing the said pawl from the ratchet-bar on the carriage. In the present invention this mechanism is located at the right hand of the machine, so that it can be operated by the same hand which moves the carriage or feeds the paper for lines, and to this end a lever 13 may be pivoted to the right-hand end of the frame 8 of the machine by means of an offset 14 and pin 15. The front end of this lever may terminate in a handle 16 of any suitable form, and is so located as to be grasped by the same hand which positions the carriage and feeds the paper-roller for lines. This lever may be provided with any suitable means of maintaining it in and returning it to its normal position, but by preference has one end of a spiral spring 17 secured to it near its rear end by a hook 18, the

other end of said spring being secured to the frame of the machine.

A connecting-rod 19 is articulated to the pivoted lever 13 by means of a hook 20, passing through an eye in the flattened rear end of said lever. This connecting-rod 19 may be of any suitable shape, but is preferably of the configuration shown in Fig. 4. At the other end of the connecting-bar 19 is, by preference, a flattened finger 21, which may be provided with a slot 22, through which passes a screw 23, carried by an arm 24, extending from the annular top 25 of the basket of the machine. The finger 21 is arranged adjacent to the pawl or dog 10, which controls the carriage-feeding ratchet 9, but does not interfere at all with the usual functions of said parts. The flattened slotted finger 21, its supporting arm 24, and the rod 19 form no part of my invention, they being nearly the same as the devices now in use. The rod 19 in the device now employed is, however, a push-rod and extends to the left-hand side of the machine, as previously explained. Normally the pawl 10 engages the rack 9, as shown in Fig. 2. When, however, the carriage is moved slightly to the right and the handle 16 is pulled, preferably with the forefinger, in the direction indicated by the arrow in Fig. 1. The dog 10, by the means described, is thrown in the position shown in Fig. 3, and the ratchet 9 and the carriage left free to be moved to any desired position by the handle 11, which may also be manipulated to feed the paper-roller. After the handle 16 is liberated the spring 17 returns the parts of the device to their normal positions and leaves the dog 10 in position where it can be operated by the keys, the same as before, to feed the carriage step by step.

It will be understood in moving the carriage to its starting-point at the extreme right of the machine that it is not necessary to manipulate the device, as the rack 9 can be drawn

over the pawl 10 without disengaging it therefrom; but when it is required to move the carriage a considerable distance to the left of its position the device is brought into requisition to disengage the pawl from its ratchet-bar and allow the carriage to move freely to the left through any desired space. In this respect my device is similar in function to the device heretofore used.

It will be noted that the invention is simple in construction, and that by it work can be performed with one hand which heretofore in the Caligraph required two hands.

While I have described my invention as applied to the Caligraph, I do not wish to necessarily restrict it to use with such machine, as it may be applied to other machines.

Having fully set forth my device and described the advantages and operation thereof, what I desire to claim and secure by Letters Patent of the United States as my invention is—

The combination, in a type-writing machine, of a feeding mechanism carried by the carriage thereof, a pawl vibrated transversely thereof by the keys to feed the carriage step by step, a finger for throwing said pawl downward longitudinally from said feeding mechanism, a connecting-bar secured to said finger, and a spring-actuated lever pivoted to the right-hand frame of the machine and having a handle terminating adjacent to the carriage-handle, whereby the two handles may be grasped by one and the same hand, substantially as and for the purpose described.

In testimony whereof I have hereunto set my hand and affixed my seal, this 11th day of February, 1891, in the presence of the two subscribing witnesses.

DAVID W. FILSTEAD. [L. S.]

Witnesses:

A. C. FOWLER,
J. E. WESTON.