H. G. DAVIS.

TYPE WRITING MACHINE.

APPLICATION FILED OCT. 2, 1908.

928,945. Patented July 27, 1909.

Fig. 1,

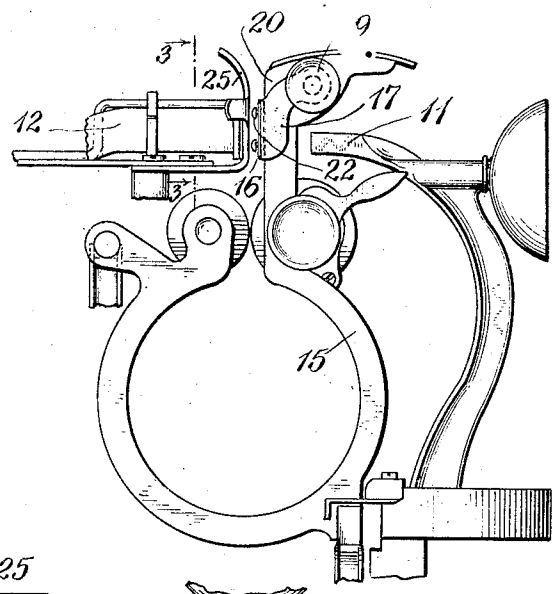


Fig. 4,

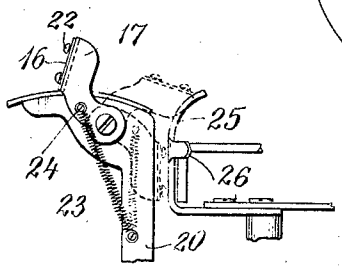
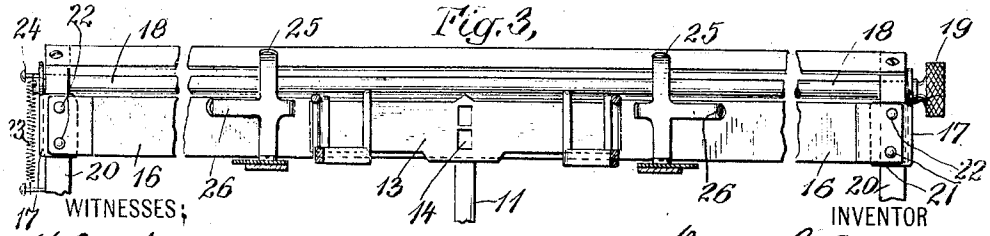


Fig. 2,

Fig. 3,



WITNESSES;

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TYPE-WRITING MACHINE.

No. 928,945. Specification of Letters Patent. Patented July 27, 1909.

Application filed October 2, 1908. Serial No. 455,906.

To all whom it may concern:

Be it known that I, HELENA G. DAVIS, a citizen of the United States of America, and a resident of East Lake, county of Jefferson, State of Alabama, have invented certain new and useful Improvements in Type-Writing Machines, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

My invention relates to improvements in typewriting machines and particularly to that class of typewriting machines which employ a type wheel or segment and a hammer for producing an impression. In this class of machine, it is common to employ an impact strip of yielding material such as rubber which is normally carried at a point in the machine between the face of the type wheel or segment at the printing point and the impression hammer. It is desirable that this impact strip may be so mounted that it may be removed from its normal position at will because, while it is useful for ordinary work, its presence is highly undesirable when the machine is being employed for manifolding, stencil cutting work etc.

The object of my present invention is to provide a means whereby such an impact strip may be readily moved toward and away from its working position, and to this end I provide an auxiliary frame for carrying the said impact strip instead of mounting the impact strip on the main frame of the carriage as has been common heretofore, and I provide, whereby the auxiliary frame may be readily moved between two positions, one being such as to hold the strip in place for operative use, and the other being a position wherein the strip will be held clear of the printing elements and out of the way of the operator. I also preferably provide a guiding means for suitably guiding the strip into place all as will be explained hereinafter in detail.

In order that my invention may be fully understood, I will now proceed to describe, in detail, an embodiment of my invention having reference to the accompanying drawings illustrating the same, and will then point out the novel features in claims.

In the drawings: Figure 1 is an end view of such parts of a typewriting machine as are necessary to illustrate my invention, a movable impact strip constructed in accordance with my invention being illustrated therewith. Fig. 2 is a top view thereof, certain parts being broken away, and other parts shown in section. Fig. 3 is a view in vertical longitudinal section, the plane of section being taken upon the line 3—3 of Fig. 1. Fig. 4 is a detail end view of the strip and carrier, the same being shown in various positions in order to illustrate the path of movement thereof.

The class of machine in connection with which I have illustrated my invention is the well known Hammond machine in which is employed a rotatable type wheel or segment 10 and a vibrating hammer 11. In this type of machine, the type wheel or segment 10 is first moved so as to bring the proper character opposite the printing point, which is in line with the face of the hammer 11, and the hammer is then caused to move forward quickly so as to give a blow upon the type character. An ink ribbon 12 is carried by a suitable guide across the path of the printing point and a shield piece 13 is provided having an opening 14 of a width only sufficient to permit the impression of one type character at any time. The paper or card upon which it is desired to make the impression is carried in the carriage 15, the part to receive the impression lying immediately back of the shield 13, the ribbon being disposed between the shield and type wheel or segment.

Disposed lengthwise in the machine and at a point immediately at the rear of the paper or card when it is in position, so that the paper or card comes between it and the shield 13, is an impact strip 16, the said impact strip being composed of rubber or some other yielding material. It has been common, in the past, to mount this strip upon the main carriage frame of the machine, but in the present invention, I provide an auxiliary frame or carrier comprising two arms 17 and a bar or rod 18. The bar or rod 18 is pivotally mounted upon the carriage frame of the machine, and is provided at the end with a knurled knob or hand piece 19 by which it may be manipulated. The arms 17 lie close to the relatively stationary arms 20 of the paper carriage 15, being provided with parts 21 turned at right angles thereto, which parts carry studs 22 upon which the strip 16 is mounted. The two arms 17 are secured fast to the bar or rod 18 so that they will turn therewith. In Fig. 1, the auxiliary frame is shown in its normal position holding the strip in the proper position for ordinary use. When it is desired to move the strip

away from its operative position, the auxiliary frame or carrier may be turned over by manipulation of the knob 19 and thrown into the position in which it is shown in full lines in Fig. 4. I employ suitable means for retaining the parts in either of the described positions, such means conveniently being a light spring 23 secured at one end to one of the carriage arms 20, and at the other end to a pin 24 upon one of the auxiliary frame arms 17.

In order to compel the strip to clear the shield 13 and ribbon 12 as it is being swung into and out of place, I provide suitable guiding pieces 25, the function of which is to deflect the impact strip slightly out of the path through which it would otherwise travel, as will be clearly understood by reference to Fig. 4 of the drawings. These guide pieces may be secured to any suitable part of the machine, and as a matter of convenience, I have shown them, in the present instance, as uprising from the line gages 26 which are commonly employed in the machine.

From the foregoing, it will be seen that by the employment of my auxiliary carrier frame, I am enabled to throw the impact strip into and out of operative position at will, and by this means am able to adjust the machine in an instant either for use with or without the said impact strip. It will furthermore be seen that should the impact strip be required to be renewed at any time or to be cleansed, such operations are very much more easily carried out where my device is employed than in a machine where the strip has but one position in the machine.

What I claim is:

1. In a typewriting machine, the combination with a paper carriage, a movable type shuttle and a printing hammer, of an impact strip arranged to be located at the printing point of the machine between the hammer and the type shuttle, and an auxiliary movable frame for carrying the same whereby the said strip may be thrown into and out of its operative position at will.

2. The combination with the printing elements of a typewriting machine, of an impact strip, and an auxiliary movable frame or carrier therefor, the said frame or carrier being arranged to be moved from one position to another to thereby throw the impact strip into and out of an operative position.

3. The combination with the printing elements of a typewriting machine, of an auxiliary movable frame or carrier, an impact strip carried thereby, and yielding means for maintaining the said carrier in a position wherein the impact strip will be located between the said printing elements.

4. The combination with the printing elements of a typewriting machine, of an impact strip, an auxiliary movable frame or carrier therefor whereby the impact strip may be swung into and out of an operative position, and guides for guiding the impact strip into and out of place.

5. In a typewriting machine, the combination with a type shuttle, a printing hammer, and a paper carriage, of an impact strip arranged to be carried by the paper carriage in a position normally located between the type shuttle and the printing hammer, an auxiliary frame or carrier comprising a longitudinally disposed rod or bar 18 and arms 17 secured thereto near the opposite ends thereof for carrying the said impact strip, yielding means for holding the carrier in its operative position, and guides for guiding the strip into and out of place as the carrier is being manipulated.

HELENA G. DAVIS.

Witnesses:
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