

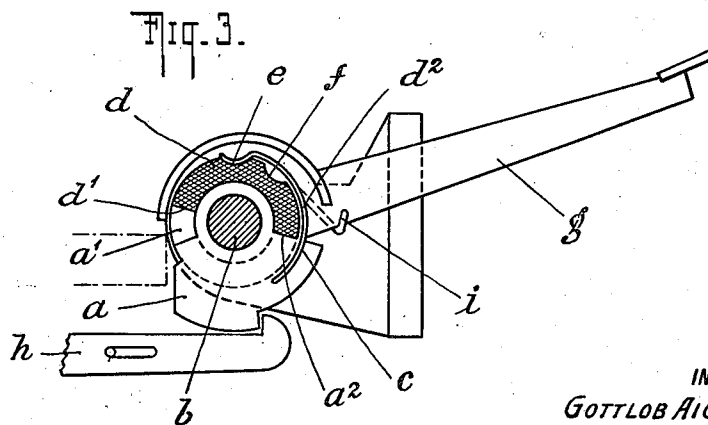
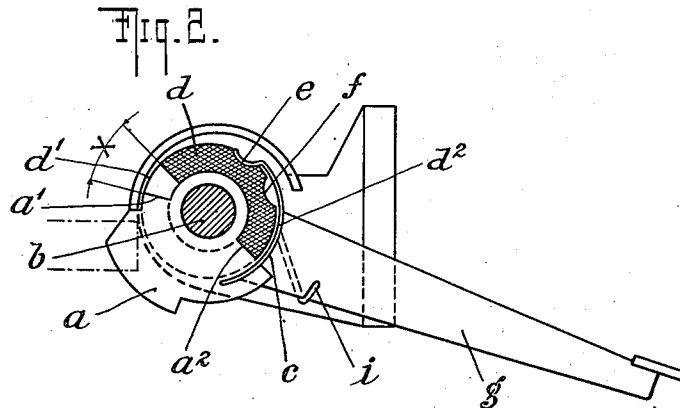
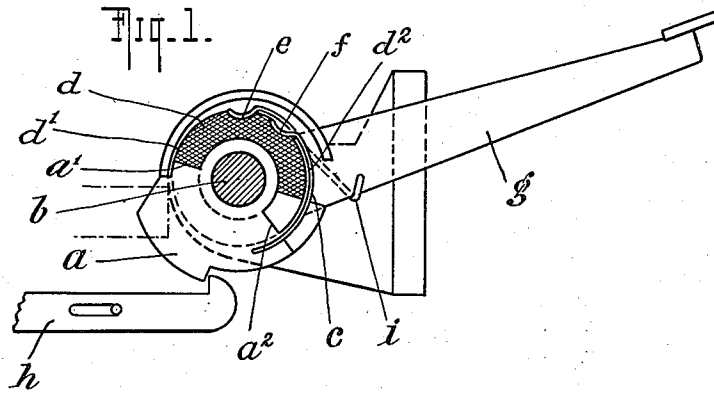
Sept. 16, 1924.

1,508,911

G. AICHELE

COLUMN STOP MECHANISM OF TYPEWRITING MACHINES

Filed Feb. 7, 1924



WITNESS

L. V. Rasmussen

INVENTOR

GOTTLÖB AICHELE

BY

Wm. H. Schreck
ATTORNEYS

UNITED STATES PATENT OFFICE.

GOTTLOB AICHELE, OF NELLINGEN, NEAR ESSLINGEN, GERMANY.

COLUMN-STOP MECHANISM OF TYPEWRITING MACHINES.

Application filed February 7, 1924. Serial No. 691,106.

To all whom it may concern:

Be it known that I, GOTTLOB AICHELE, a citizen of the State of Wurttemberg, Germany, residing at Nellingen, near Esslingen, Wurttemberg, Germany, Kaiserstrasse 2, have invented certain new and useful Improvements in a Column-Stop Mechanism of Typewriting Machines, of which the following is a specification.

This invention relates to typewriting machines and more especially to an improvement of the column stop mechanism of such machines.

Prominent objects of my invention are to simplify the column stop mechanism, to render its operation more reliable than that of the devices of ordinary construction and to provide a construction for this mechanism which is not only of greater simplicity but also more durable and which may be more easily constructed and assembled, than has been possible with devices of this class heretofore in use.

In typewriting machines of ordinary construction there is generally employed a uniformly resilient steel wire extending over all column stops, said steel wire serving as a fixing member for the latter. In a construction of this kind there is further required a so-called rack, whose teeth mesh with the column stops. My invention consists therein, that the column stops are united with a cylinder section which is rotatably mounted upon a common axis with the column stops, the edges of said cylinder section forming the stopping surfaces for the column stops. The cylinder section furthermore in order to fix the column stops in their position is made with two parallel grooves or recesses, the relative position of said grooves or recesses upon the circumference of the cylinder section corresponding to the angle of rotation of the column stops.

The accompanying drawing shows an example of carrying my invention into effect. Fig. 1 shows the stops in side view and the operating mechanism, in cross-section, the stop being shown in its operative position. Fig. 2 is a view similar to Fig. 1 and likewise showing the stop in its operative position, the operating mechanism, however, being illustrated in the position which it assumes in order to release the stop, and Fig. 3 is a similar view showing the stops of Fig. 1 in released condition or in an inoperative position.

As shown in the several figures of the drawing the stops a are mounted rotatably upon a shaft b and are provided with radially extending stopping edges a' and a'' , said stops furthermore being equipped with a resilient locking member c . In axial direction on the shaft b there is provided a rotatable stop-clearing member d which consists of a cylindrical section having two recesses e and f for independently receiving the free end of the locking member c . A lever g is associated with the member d and serves as a means for rotating the latter.

The device according to my invention operates as follows: The stops a are adjusted to their operative positions by latching in the stop-setting lever h . The stopping edges a' of the stop will thus be pressed against the stopping edge d' of the member d , and the end of locking member c will thereupon enter into the recess f and accordingly fix the stop in its operative position. For releasing the stops, the lever g is shifted from the position shown in Fig. 1 to the position illustrated in Fig. 2, and thereby rotatably adjusts the member d and moves the end of the locking member c from the recess f into the recess e . The stopping edge d'' of the member d will thereby be brought into contact with the stopping edge a'' of the stop a . The lever g is connected with a spring i which as soon as the lever g is released will return the same to its normal position and in doing so will rotate the member d from the position shown in Fig. 2 to the position shown in Fig. 3. As this occurs a pull is exerted upon the locking member c which carries the same to shift the stops a to the inoperative position shown in Fig. 3. When again adjusting the stops from their released inoperative position to an operative position the end of the locking member c will move from the recess e into the recess f . The distance between the two recesses e and f corresponds to the distance x between the stopping edges a' , d' and a'' , d'' of the stops and the member d .

I claim:

1. In a typewriting machine, the combination of a rotatably mounted cylindrical section provided with recesses, rotatably mounted column stops and means carried by said stops and cooperating with the recesses of said cylinder section for fixing said column stops in operative position.
2. In a typewriting machine, the combina-

tion of a rotatably mounted cylindrical section provided with recesses, rotatably mounted column stops having a common axis with said cylinder section, and a locking member mounted upon said column stops and adapted to engage one or the other of said recesses for fixing the position of said column stops.

3. In a typewriting machine, the combination of rotatably mounted column stops, a rotatably mounted cylinder section coaxial therewith and having recesses which are spaced in accordance with the angle of rotation of said column stops, and resilient means interposed between said column stops and the recesses in said cylinder section and cooperating with said recesses for fixing said column stops in operative position.

4. In a typewriting machine, the combination of a shaft, a column stop rotatably mounted thereon, a stop-clearing member rotatably mounted on said shaft, means for rotatably actuating said member and cooperating means upon said member and stop for locking the latter in its operative posi-

tion and causing it to partake of a return movement of said member and thereby to be shifted to an inoperative position.

5. In a typewriting machine, the combination of a shaft, a column stop rotatably mounted thereon, a stop-clearing member rotatably mounted on said shaft and provided with recesses, a lever for rotatably actuating said member, a resilient locking member carried by said stop and adapted to enter one of said recesses and lock the stop in its operative position and to enter the other recess and thereby cause said stop to partake of a return movement of said rotatable member and thereby to be shifted to its inoperative position and a spring acting upon said lever to move said rotatable member in said return direction.

In testimony whereof I affix my signature in presence of two witnesses.

GOTTLOB AICHELE.

Witnesses:

HOWARD TAYLOR,
JORDAN FAUER.