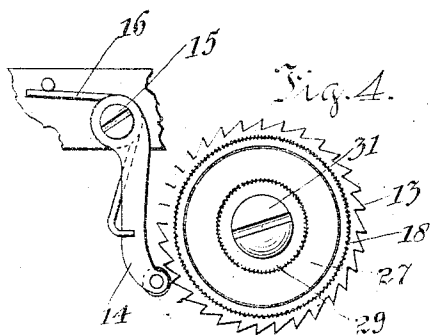
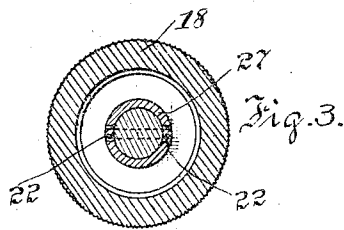
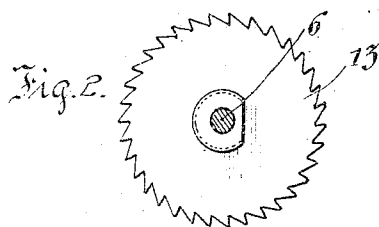
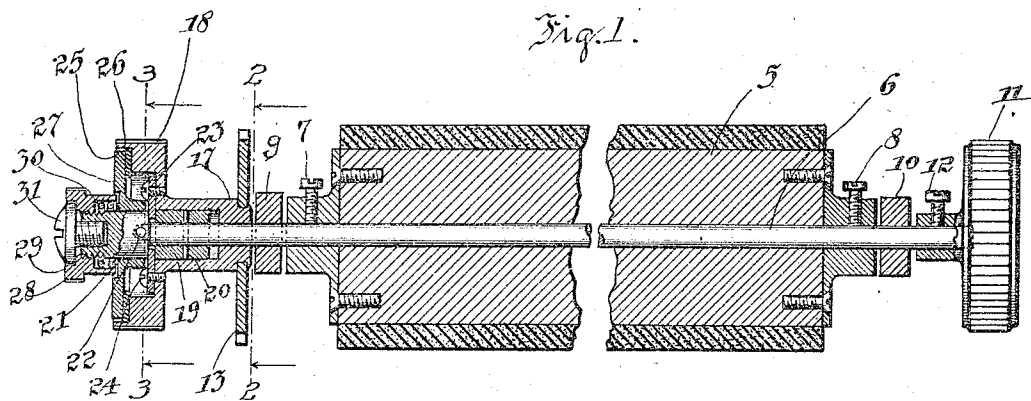


E. J. GOLDBLATT.
TYPE WRITER.
APPLICATION FILED APR. 27, 1912.

1,065,041.

Patented June 17, 1913.



Witnesses
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UNITED STATES PATENT OFFICE.

EDWARD J. GOLDBLATT, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO ARTHUR R. AMES, OF LA GRANGE, ILLINOIS.

TYPE-WRITER.

1,065,041.

Specification of Letters Patent.

Patented June 17, 1913.

Application filed April 27, 1912. Serial No. 693,511.

To all whom it may concern:

Be it known that I, EDWARD J. GOLDBLATT, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Type-Writers, of which the following is a specification.

My invention relates to improvements in typewriters, and has especial reference to variable line spacers of such machines.

One of the objects of my invention is to provide means for varying the space between lines by means whereby the platen may be adjusted to any position with reference to the printing line.

All typewriters are provided with means for uniformly spacing the lines apart. My invention is essentially to be associated with such spacing mechanism, and it consists in means whereby any such line space may be varied independently of, and without disturbing, the ordinary spacing mechanism.

By use of my device the platen may be moved to any selected position, within the smallest fraction of an inch, so that any printed line may be quickly and easily re-adjusted to register with the printing line.

Other and further objects of my invention will become clearly apparent, to persons skilled in the art, from a consideration of the following description, taken in conjunction with the drawings, wherein;

Figure 1 is a longitudinal, central section of the platen and the spacing mechanism; Fig. 2 is a section taken on line 2—2 of Fig. 1 showing the usual spacing ratchet wheel. Fig. 3 is a section taken on line 3—3 of Fig. 1, showing part of the interior of my device. Fig. 4 is an end view of the spacing mechanism.

In all of the views the same reference characters indicate similar parts.

In the embodiment illustrated, which I have selected to disclose my invention, the platen 5 is secured to the twirler knob shaft 6 by screws 7 and 8, as usual in such structures.

9 and 10 are parts of the carriage frame which afford bearings upon which the shaft 6 and feed roller are rotated.

A twirler knob 11 is secured to the shaft 6, by means of a screw 12.

As parts of the ordinary typewriter mechanism entering into the operation of my device, I have shown the spacing ratchet

wheel 13, provided with a coacting detent 14, pivoted as at 15, and resiliently pressed into contact with the teeth of the ratchet wheel by a spring 16.

In my improved device instead of securing the ratchet wheel 13 directly to the rod 6, I fix it securely to a hub 17, which is a part of the left-hand twirler knob 18, so that now without further means, if the twirler knob 11 be turned the ratchet wheel 13 will not be rotated. I, therefore, provide a friction engaging device between the ratchet wheel 13 and the twirler knob 11, of such frictional resistance that when the knob 11 is rotated the friction is great enough to transmit the motion from the knob 11 to the wheel 13 and permit the spacing, as controlled by the ratchet wheel and the detent 14. To this end I secure, to the left-hand end of a shaft 6, a lug 19, conveniently, by means of a pin 20, and another lug 21 by means of a pin 22. Between these lugs is loosely confined a disk 23, which is fastened to the knob 18 by means of screws 24. By this means the knob 18 is permitted to have rotary association with the shaft 6 and is secured thereto to prevent its removal therefrom. The knob 18 is counter-bored, as at 25, to provide a seat for a washer 26. This washer is preferably composed of vulcanized fiber, or the like, which has a high friction co-efficient for metal surfaces. A metal disk 27 is adapted to press upon the outer surface of the washer and to press it into firm contact with the counter-bored surface of the knob 18, thereby producing considerable friction between the disk 27 and the knob. The pin 22 passes loosely through a sleeve on the disk 27 to rotatably secure the shaft 6 and the disk 27, but to permit some longitudinal movement of the disk 27 on the shaft 6. The lug 21 is exteriorly screw threaded, as at 28, for engagement of the interiorly screw-threaded cap 29. Within the cap 29 is an open, helical spring 30, having one end resting upon a shoulder provided in the cap 29. The tension of the spring may be varied by the distance that the cap 29 is screwed on to the lug 21, and the cap 29 may be held in any adjusted position, by means of the screw 31, which is also adjustable within the lug 21, so that by this means the frictional contact, between the disk 27 and the twirler knob 18, may be varied by the longitudinal adjustment of

the cap 29 on the lug 21, and such adjustments may be maintained by means of the screw 31.

In the operation of the device the friction between parts 26 and 27 is sufficient to cause turning of the ratchet wheel 13 when handle 11 as well as when handle 18 is rotated, such rotation being governed by the detent 14, so that spacing may be accomplished as in the usual manner. Now when it is desirable to turn the platen 5 to a selected position, without reference to the spacing mechanism, it is only necessary to grasp the twirler knob 18 with the left hand and turn the knob 11 with the right hand and, thereby the friction between parts 26 and 27 may be forcibly overcome and the disk 27 with its connected shaft and platen will be rotated with reference to the ratchet wheel 13, so that by this means any selected point on the platen, with reference to the printing line, may be brought into position.

My device is so arranged that it may readily be associated with the ordinary and usual spacing mechanism in typewriters of the usual type.

The drawing shows an Underwood typewriter with my variable spacing device in place, and it will be observed that there are no changes necessary in the mechanism of such a machine in order to make the desired addition. It is apparent that the device may be added to typewriters of other makes, or types, and I wish it to be clearly understood that I do not consider that my invention is limited to the specific embodiment shown and described herein, but that considerable variation may be made, within the scope of the appended claims, without departing from the spirit of the invention.

Having described my invention what I claim is:

1. In a typewriter, a platen, a twirling knob connected therewith at one end of the platen, a hollow knob at the other end of said platen, a line-spacing ratchet rigidly secured thereto for rotation therewith, and a friction clutch between the last mentioned knob and platen and within the hollow knob.

2. In a typewriter, a platen, a twirler knob secured to the platen for rotation therewith, a second twirler knob rotatable with respect to the platen and first twirler knob, a ratchet wheel secured to said second twirler knob for rotation therewith, and means to rotate one of said rotatable knobs by the other comprising friction means having coacting parts adjusted to contact for frictional resistance continuously effective against resistance of the rotated part and

at the same adjustment ineffectual against intentional forcible rotation of the twirler knobs in opposite directions.

3. In a typewriter, a platen, a twirler knob rotatable relative thereto having a counter-bored part supporting and carrying rotatably connected therewith the line-spacing ratchet of the platen, and a friction member connected with the platen and lying within said counter-bored part of the knob for coaction with said counter-bored part to connect the relatively rotatable platen and twirler knob.

4. In a typewriter, a shaft, a platen mounted on the shaft, a twirler knob carrying a ratchet wheel rigidly connected therewith and loosely rotatable on said shaft, a part within the twirler knob secured to said shaft, and friction-engaging means for yieldingly uniting said knob and the part within the knob.

5. The combination of a twirler-knob having a hub, loose on the platen shaft of a typewriter, a ratchet wheel secured on said hub, a disk member secured to said shaft for rotation therewith, a spring for pressing said disk and knob into frictional engagement, a cap for varying the tension of the spring, and a screw for fixing the cap in adjusted position.

6. In a typewriter, a platen, a typewriter twirler knob having a recess therein, a disk member within said recess, said disk member being rotatable with the platen, friction means connecting said disk member with said knob to rotate therewith, and an adjustable spring controlling said friction means, whereby said knob may be used to rotate said disk member, through the agency of said friction means, and said platen which is rotatable with said disk member.

7. In a typewriter, a platen, a twirler knob secured to the platen for rotation therewith, a second twirler knob rotatable with respect to the platen and first twirler knob, a ratchet wheel secured to said second twirler knob for rotation therewith, friction means between said relatively rotatable parts, and means to adjust said friction means to cause rotation of one of said rotatable parts by the other but to be ineffectual at such adjustment to resist forcible rotation of the twirler knobs relative to each other upon friction-overpowering forcible rotation thereof.

In testimony whereof I hereunto set my hand in the presence of two witnesses.

EDWARD J. GOLDBLATT.

In the presence of—

MARY F. ALLEN,
W. LINN ALLEN.