

J. RABER.
 PLATEN MECHANISM FOR TYPE WRITING MACHINES.
 APPLICATION FILED FEB. 19, 1909.

1,027,391.

Patented May 21, 1912.

Fig. 1.

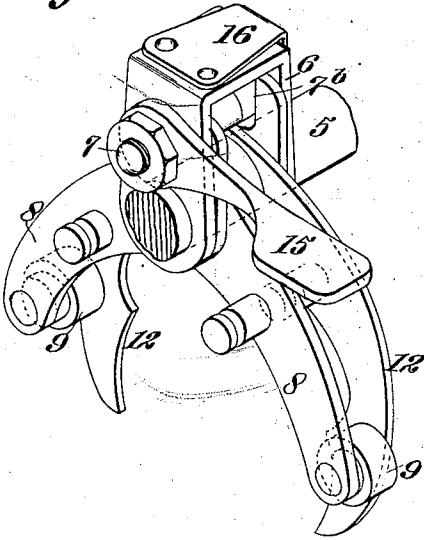


Fig. 2.

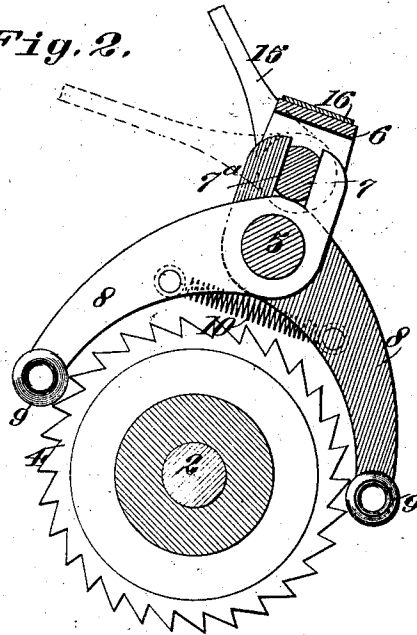


Fig. 3.

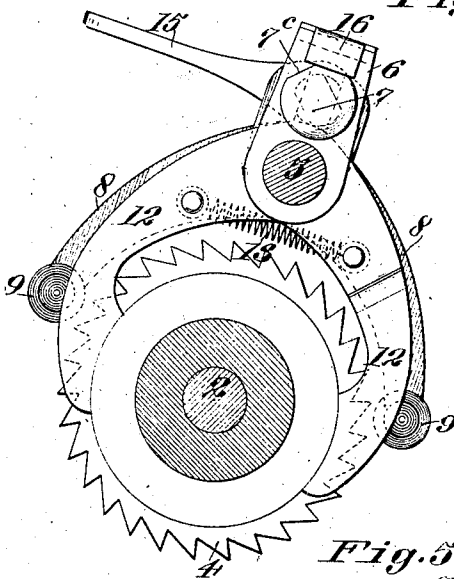


Fig. 4.

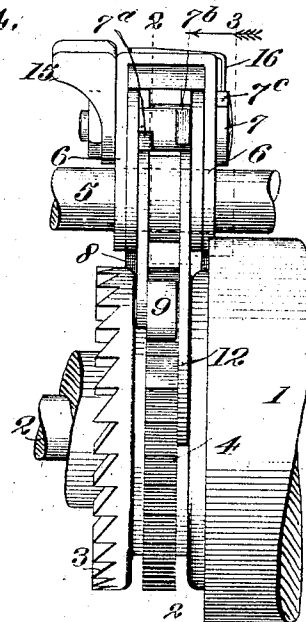
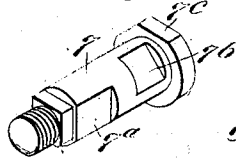


Fig. 5.



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 atty

UNITED STATES PATENT OFFICE.

JOSEPH RABER, OF POPLAR BLUFF, MISSOURI, ASSIGNOR TO ADDING TYPEWRITER COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF MISSOURI.

PLATEN MECHANISM FOR TYPE-WRITING MACHINES.

1,027,391.

Specification of Letters Patent.

Patented May 21, 1912.

Application filed February 19, 1909. Serial No. 478,970.

To all whom it may concern:

Be it known that I, JOSEPH RABER, a citizen of the United States, residing at Poplar Bluff, Missouri, have invented a new and useful Platen Mechanism for Type-Writing Machines, of which the following is a specification.

This invention relates to platen mechanisms for typewriting machines, and has for its object to provide devices arranged to cooperate with a ratchet wheel on the platen shaft effectively to adjust the platen at the exact position desired at which line space movement in combination with friction devices arranged to cooperate with the platen whereby the platen will be held in any desired adjustment, and controlling means whereby any of said devices may be brought into operative position.

In the drawings Figure 1 is a perspective view of the subject matter of the present invention detached from the platen. Fig. 2 is a sectional view taken on the line 2—2 of Fig. 4. Fig. 3 is a sectional view taken on the line 3—3 of Fig. 4 showing the friction devices in connection with a platen. Fig. 4 is a front elevation of a portion of the platen having my present invention arranged to cooperate therewith. Fig. 5 is a perspective view of the controlling or operating shaft whereby the line space controlling devices and the friction devices are operated.

The platen 1 is of the usual construction mounted on a shaft 2 whereby the platen may be rotated to move the paper longitudinally in its line spacing movements. A feed ratchet wheel 3 is attached on the shaft 2 for cooperation with any suitable line space mechanism the arrangement and construction of which are immaterial to the present invention. A second ratchet wheel 4 is interposed between the end of the platen and the wheel 3 being also in rigid connection with the platen shaft. A shaft 5 is supported parallel with the platen shaft 2 and carries a bracket 6 in which is journaled a shaft or spindle 7. Upon the shaft 5 two curved arms 8 are pivoted and carry rollers 9 on their free ends. A spring 10 connects the arms 8 acting to hold the rollers 9 in engagement with the teeth on the periphery of the wheel 4, so that when the platen is operated to move the paper in line spacing, the tension of the spring 10 will cause the rollers 9 to act upon the wheel 4 effectively to move

and hold the platen at the exact adjustment desired. The arms 8 have extensions beyond the shaft 5 which embrace the spindle 7. The spindle 7 is formed with a narrow portion 7^a formed by cutting away portions of the opposite sides thereof, said narrow portion being embraced by the extended portions of the arms 8 as shown in Fig. 2. When the spindle 7 is adjusted as shown in Fig. 2, the rollers 9 are held in engagement with the ratchet wheel 4 by their spring 10, but rotation of the spindle will operate the arms 8 effectively to raise the rollers 9 out of engagement with the wheel 4 into the position shown in Fig. 3, thereby permitting the platen to stop in any position.

12 indicates two curved arms pivoted upon the shaft 5 having their free ends extending between the end of the platen and the ratchet wheel 4, and their opposite ends provided with extensions on opposite sides of the spindle 7. The arms 12 are connected by a spring 13 acting to draw the free ends of said arms into contact with a hub or collar 14 on the platen shaft between the end of the platen and the wheel 4.

A narrow portion 7^b is formed on the spindle 7 and is arranged to cooperate with the extensions of the arms 12 in such manner that said arms will be held out of engagement with the hub or collar 14 when the rollers 9 are in engagement with the ratchet wheel 4 and vice versa. A lever 15 is attached to the spindle 7 constituting manually operable means for turning said spindle as required to operate the arms 8 or 12. A spring plate 16 is attached to the bracket 6 and has one end arranged to cooperate with the flat surfaces 7^c on the head of the spindle 7 to hold said spindle and the arms 8 and 12 in their different adjustments.

By adjustment of the arms 8 to engage the rollers 9 with the ratchet wheel 4 the platen will be caused to feed the paper at uniform line spaces. By operation of the lever 15 the rollers 9 will be disengaged from the ratchet wheel and the ends of the arms 12 will be frictionally engaged with the hub or collar 14 whereby the platen will be held in any adjustment in which it is placed, whether in complete line space position or in any fractional portion of the line space.

I am aware that there may be modifica-

tions and alterations in the construction and arrangement of the parts embodying this invention without departure from the spirit and scope of the invention, and I do not
5 restrict myself to identical features of construction or arrangement, but

What I claim and desire to secure by Letters Patent is—

1. The combination with a platen, a wheel
10 rigid therewith having teeth on its periphery, arms arranged to engage with said ratchet wheel, friction devices, and a lever operable to release said arms from engagement with said ratchet wheel and to cause
15 said friction devices to operate, substantially as specified.

2. The combination with a platen, a ratchet wheel rigid therewith, and a hub or collar rigid with said ratchet wheel and
20 platen, of friction devices operable to engage with said hub or collar, arms arranged to engage with said ratchet wheel, and a lever operable to disengage said friction devices and cause said arms to engage with
25 said ratchet wheel, substantially as specified.

3. The combination with a platen, of a shaft or spindle, devices for holding the platen in exact position at each line space operation, a spring for actuating said devices to hold said platen, a friction device
30 arranged to cooperate with the platen when said first-named devices are inoperative, a spring for actuating said friction device to cooperate with the platen, an element for
35 operating said shaft or spindle effectively to actuate said first-named devices or said

friction devices to different adjustments, and a latch engaging with said shaft or spindle, substantially as specified.

4. In a typewriting machine, a platen, a
40 wheel rigid with said platen, a shaft, a detent pivoted on said shaft and arranged to engage with said wheel, a friction device pivoted on said shaft and arranged to cooperate with the platen when said detent
45 is inoperative, a lever operable to disengage said detent from said wheel and to cause said friction device to move to position effective to restrain rotation of said platen,
50 separate springs for actuating said detent and said friction device, and an element arranged to hold said friction device in the position aforesaid, substantially as specified.

5. In a typewriting machine, a platen, a
55 wheel rigid with said platen, a detent arranged to engage with said wheel, a spring actuating said detent, a friction device, a separate spring actuating said friction device, a lever controlling said detent and said
60 friction device, to move them in opposition to said springs at different times, and a latch holding said detent and said friction device in different adjustment, substantially as specified.

In testimony whereof, I hereunto affix my
65 signature to this specification this 28th day of January, 1909, in the presence of two witnesses.

JOSEPH RABER. [L. S.]

Witnesses:

CHARLES PICKLES,
JOHN E. GREVE.