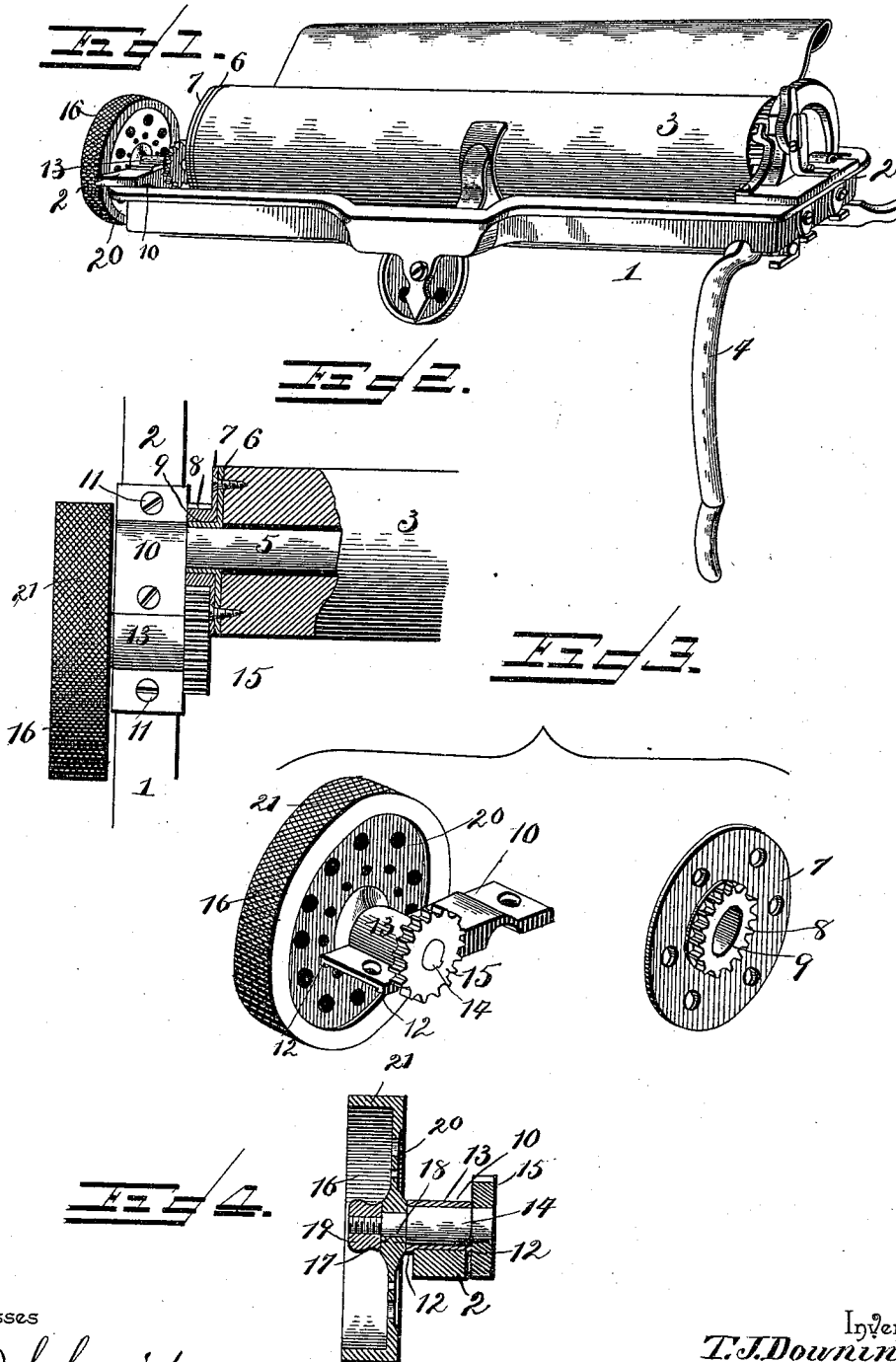


(No Model.)

T. J. DOWNING.
TYPE WRITING MACHINE.

No. 510,331.

Patented Dec. 5, 1893.



Witnesses

W. C. Schneiders
C. E. Doyl

Inventor
T. J. Downing.

By his Attorneys,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

THOMAS J. DOWNING, OF LINCOLN, ILLINOIS.

TYPE-WRITING MACHINE.

SPECIFICATION forming part of Letters Patent No. 510,331, dated December 5, 1893.

Application filed December 20, 1892. Serial No. 455,767. (No model.)

To all whom it may concern:

Be it known that I, THOMAS J. DOWNING, a citizen of the United States, residing at Lincoln, in the county of Logan and State of Illinois, have invented a new and useful Attachment for Type-Writing Machines, of which the following is a specification.

My invention relates to a device for turning the platen in adjusting the paper in a type-writing machine.

It is the common practice in operating such machines as the Remington, Caligraph and others provided with a revoluble platen, mounted upon a carriage, and a hand operated spacing lever to rotate the platen, to introduce and set the paper by means of the said lever by which the paper can be moved only forwardly or by turning the platen by hand, the fingers of the operator frequently coming in contact with the paper. This practice occasionally, if not frequently, causes soiling of the paper besides being inconvenient, slow and uncertain. Therefore, it is the object of this invention to provide an improved and simple device adapted to be connected to the roller mechanism of machines such as above mentioned whereby the platen may be turned, reversed and adjusted at will to set the paper, without reference to the spacing lever and without requiring the operator to touch the platen or paper, such device being so constructed as to be attachable to machines now in use, and the attachment being accomplished without altering or modifying the construction of the machines.

Further objects and advantages of my invention will appear in the following description and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings: Figure 1 is a perspective view of the carriage of a type-writing machine, with the invention applied thereto in the operative position. Fig. 2 is a plan view of a portion of the same, partly broken away to show the manner of attachment. Fig. 3 is a perspective view of the attachment, with its members detached. Fig. 4 is a detail sectional view, showing the spindle of the milled hand-wheel and the means for the attachment of the latter thereto.

1 represents the frame of the carriage, 2 the side-bar of such carriage, 3 the platen,

and 4 the spacing-lever, all of these parts being of the ordinary and well-known construction and arrangement. Furthermore, 5 represents the spindle of the platen, such being secured at its extremities to the side-bars of the carriage, and 6 represents an end-plate which is secured to and caps the end of the platen.

Secured to the end of the platen, as shown in Fig. 2, is a disk 7, which is provided with a spur-wheel 8. This disk is provided with a central aperture 9 through which projects the spindle of the platen, and by this construction it will be seen that the device is capable of attachment to any machine of this class now in use, for the reason that it is simply necessary to withdraw the screws which secure the end-plate 6, fit the disk over the spindle and reinsert the screws so as to engage and secure the disk and plate to the platen, as indicated in said Fig. 2.

10 represents a bracket which is adapted to be attached by means of a screw or screws 11 to the upper side of the side-bar of the carriage, such bracket being provided with depending flanges 12 12 to engage the edges of the side-bar, and in this bracket is formed a bearing 13.

14 represents a spindle which is mounted in the bearing 13 and is provided at one end (its inner end) with a pinion 15 whose teeth mesh with the teeth of the spur-wheel 8, and upon whose outer end is fitted a milled hand-wheel 16. The bore of the hub of this hand-wheel is provided with a key 17 which engages a groove or flat 18 in the side of the spindle to prevent independent rotation, and the terminal of the spindle is reduced and threaded to receive a securing nut 19, to hold the hand-wheel in place. Thus, it will be seen, that the platen is provided with a spur-wheel which is concentric with its spindle, and the hand-wheel carries a pinion which meshes with such spur-wheel to enable the platen to be turned and reversed at will to adjust the paper. It will be seen, further, that this device may be applied to the carriage when the latter is manufactured, or may be attached to the carriage of any machine, of this class, now in use.

The form of the bracket, 10, is immaterial to my invention, and must be constructed to accommodate the form and arrangement of

the particular class of type-writer to which it is to be applied. For instance, in certain machines the side-bars of the carriage are more remote from the ends of the platen than
 5 in others, thus necessitating an extended bracket for attachment thereto. This feature, however, does not form an essential part of my invention; it is necessary, simply, to provide a bracket, capable of being at-
 10 tached to the frame of the carriage and having a bearing for the spindle of the device.

The advantages gained by the use of this attachment, whereby the platen may be turned in either direction without requiring the aid
 15 of the fingers in the reverse movement, without the actual grasping of the platen or paper, and without causing the jerking of the platen and the uncertain feeding and setting of the paper as when the spacing-lever is employed for this purpose, will be apparent to
 20 those skilled in this art without further explanation herein.

Changes in the form, proportion and minor details of construction and arrangement may
 25 be resorted to without departing from the spirit of the invention or sacrificing any of the advantages thereof.

The attachment may be applied to either end of the carriage and may be arranged
 30 either in front or in rear of the spindle of the platen, to suit the style of machine and the convenience of the operator.

Although the particular form of the hand-wheel does not form an essential feature of
 35 my invention, that shown in the drawings is convenient and preferable, the same having a perforated or open-work web 20 provided at its periphery with an outward-extending flange 21 whose outer surface is milled, as
 40 shown. It should be understood, furthermore, that while I have described my invention in connection with a particular form of type-

writer in which for convenience the spur-wheel is shown and described as attached to the end of the platen, it is not essential to
 45 my invention that this precise arrangement be followed.

It is desirable that the attachment be connected to a feed-roller, and preferably the
 50 controlling feed-roller, namely; that roller to which is applied the power in spacing and feeding the paper. In the form of machine illustrated in the drawings such feed-roller is the platen, but this varies in different machines.
 55

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. As a new article of manufacture an attachment for a roller platen type-writing machine comprising a spur-wheel adapted to be
 60 fixed to one end of the platen, a bracket and a hand-wheel carried by the bracket and provided with a pinion meshing with said spur-wheel, whereby the platen may be set, advanced or reversed, without grasping the
 65 same, substantially as specified.

2. An attachment for a roller platen type-writing machine comprising a spur-wheel fixed to one end of the platen, a bracket and
 70 means for securing the same to the frame of the machine, a hand-wheel having its spindle mounted in a bearing in said bracket, and a pinion carried by the spindle of the hand-wheel and meshing with said spur-wheel, substantially as specified.
 75

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

THOMAS J. DOWNING.

Witnesses:

E. G. KING,
 L. B. STRINGER.