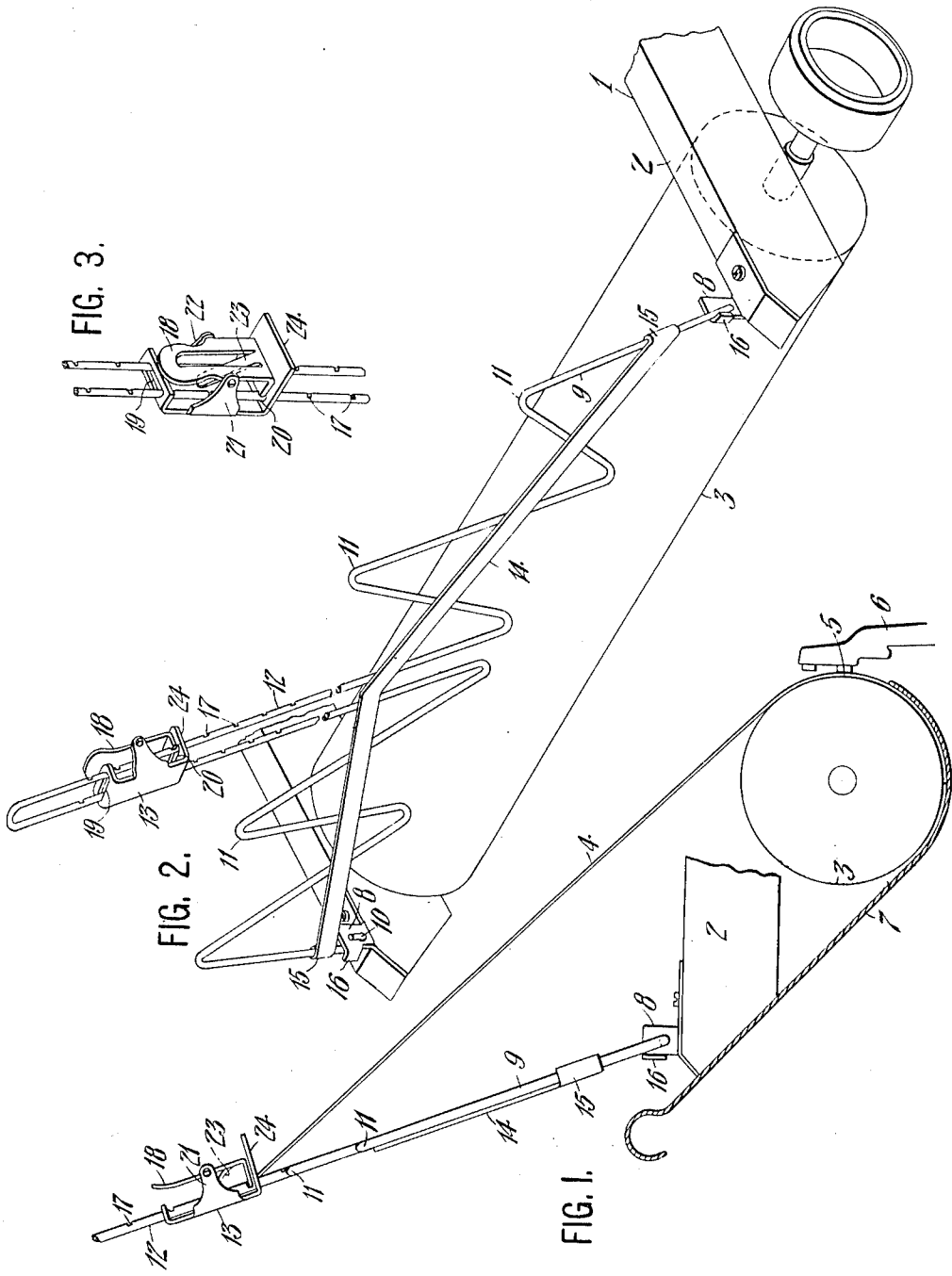


J. C. McLAUGHLIN.
TYPE WRITING MACHINE.
APPLICATION FILED APR. 6, 1912.

1,063,817.

Patented June 3, 1913.



WITNESSES:
F. C. Alexander
J. A. Propoy

INVENTOR:
John C. McLaughlin
BY D. B. Stickney
ATTORNEY

UNITED STATES PATENT OFFICE.

JOHN C. McLAUGHLIN, OF JERSEY CITY, NEW JERSEY, ASSIGNOR TO UNDERWOOD TYPEWRITER COMPANY, OF NEW YORK, N. Y., A CORPORATION OF DELAWARE.

TYPE-WRITING MACHINE.

1,063,817.

Specification of Letters Patent.

Patented June 3, 1913.

Application filed April 6, 1912. Serial No. 688,849.

To all whom it may concern:

Be it known that I, JOHN C. McLAUGHLIN, a citizen of the United States, residing in Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Type-Writing Machines, of which the following is a specification.

This invention relates to combined paper depth gage and paper support, and is an improvement on my application No. 688,331, filed April 3, 1912.

I have set forth in my application No. 688,331 above mentioned, the advantages of a paper depth gage of the general character of that used in this invention, whereby the typist can tell at a glance when a given number of lines have been written on the work sheet, or in other words, when the bottom edge of the work sheet has been approached by the typewritten matter up to a predetermined desired limit.

The use of a paper support, projecting from the platen frame for holding the paper in a raised position out of contact with the typewriting machine proper as it comes from the platen, is well-known in the art, in connection with such machines as the Underwood.

It is the purpose of this invention then, to combine a paper depth gage with a paper support, whereby the functions of the two will be merged in one device, giving a simplicity of structure and a cheapness of manufacture. In the carrying out of this purpose, the standard of the gage is formed integral with the paper support, that is to say, they are bent up from the same strip of wire. The combined paper support and gage is hinged to the platen frame, so that it can be swung from an operative position projecting outwardly to an inoperative position lying on top of the typewriter.

Other features and advantages will hereinafter appear.

In the accompanying drawings, Figure 1 is a vertical section through the upper part of a typewriter, showing the combined paper support and paper depth gage in use, and with the paper or work sheet in a position corresponding to the writing of the final line, which it is desired to write, on the sheet. Fig. 2 is a fragmentary perspective view, showing the combined gage and paper support in its erect operative position. Fig.

3 is a fragmentary perspective view, showing the relation of the stop to the standard.

Referring more particularly to the separate parts of this invention as embodied in the form shown in the drawings, 1 indicates the typewriter or typewriting mechanism, only a part of which is shown, and which may include the usual carriage having a platen frame 2 on which is supported a platen 3. The platen 3 supports and feeds a work sheet indicated at 4, so that the latter will be fed by a printing point indicated at 5, where it will be struck by the type on type bars 6 actuated by suitable key mechanism, not shown.

If it is desired to ascertain when the end of the sheet 3 is approached, it is necessary to have some outside means of indicating this condition of affairs, because of the fact that the bottom edge of the work sheet 4 is concealed at this time between the platen 3 and a paper shelf 7 which guides the paper or work sheet to the platen. It is often also desirable to support the work sheets, especially where there are several carbons being made, out of contact with the body portion of the typewriter as it comes up from the platen. In this invention, the means for supporting the paper, and the means for gaging the extent which the paper has passed through the typewriter are combined in one, so as to form a simple and inexpensive structure. To effect this result, there may be provided on the platen frame 1, brackets 8, which are perforated to form bearings for the ends of a wire 9, which extend through these openings, and may be bent up as at 10 to secure them in position.

The wire 9 is bent intermediate its ends to form a series of minor loops 11 and one major loop 12, located intermediate a plurality of minor loops. It will be noted in passing, that the reaches or sides of the minor loops extend at angles to each other, so as to form a spread supporting surface well adapted to support the work sheet or paper coming from the platen. The reaches of the major loop 12, however, are brought parallel with each other, so as to form an elongated standard on which may be adjustably mounted a stop 13. In order that all of the loops which together comprise the paper support and the standard of the paper gage may be united together to form a substantially rigid and firm structure, there is

provided a brace 14 which overlaps all of these loops, and at its ends indicated at 15, is curled about the wire 9. The points of crossing or contacting of the intermediate reaches of the several loops with the brace 14 may be joined together in any suitable manner, as by brazing or soldering.

It will be seen that in view of the fact that the wire 9, which embodies the parts of the paper gage and paper support, is pivotally mounted on the lug 8, that it can be swung from the erect position shown in Figs. 1 and 2, to a position lying down on top of the platen frame 2.

To prevent a rearward swinging movement beyond the inclination shown in Fig. 1, there are provided on the brackets 8 lugs 16, which project into the path of movement of the wire 9, and form a support therefor.

It will be seen by reference to Figs. 2 and 3, that the standard formed from the elongated loop 12 is provided with a series of notches 17, which may be located at intervals corresponding to the spaces between lines written by the typewriting mechanism on the work sheet 4. These notches enable the stop 13 to be locked in any adjusted position on the standard 12 by a latch 18, which is pivotally mounted on the stop. The stop in this case is shown to be formed from a strip of sheet metal provided with a plurality of openings 19 and 20, and a pair of arms 21 and 22. The strip of metal is bent, so that the parts carrying the openings 19 and 20 extend parallel to each other to bring the openings into alinement with each other, whereby the standard 12 can extend through them. The strip of metal is also bent so that the arms 21 and 22 extend parallel to each other, and form standards for the pivotal mount of the latch 18. This latch may be provided with an integral spring tongue 23 struck out of the body of the latch, and normally engaging the stop 13, so as to tend to force the gripping edge of the latch 18 in engagement with the standard 12.

That portion of the stop 13 which contains the opening 20, is extended forwardly a considerable distance beyond the standard 12, so as to form a projection or extension 24, forming at its junction with the standard 12 a stopping corner in which the top edge of the work sheet 4 will readily engage and be caught against further movement.

In order to set the gage portion of this device to correspond to any desired number of lines to be written on a particular work sheet, or in other words, to correspond to a certain limit of approach of the typewritten matter to the bottom edge of the work sheet, a trial sheet of the size desired is run over the platen until a previously placed mark corresponding with the last desired line of typewriting comes into register with the

printing point 5 of the typewriter, the stop 13 can then be adjusted, after first releasing the latch 18, until the junction of the extension 24 and the standard 12 abuts against the top edge of the work sheet 4. Any subsequent work sheet of the same size will then be caught under the same condition, and will indicate that the desired limit of typewriting has been reached for that particular work sheet.

If it is not desired to use the gage feature of this invention, the stop 13 can be run up or down on the standard 12 out of the way and then the connected loops will form an efficient paper support for holding the paper, as it comes up over from the platen, out of contact with the typewriter proper. If it is desired to close the machine for the night, the combined support and gage can be swung as one piece, to a position lying on top of the platen frame, where it will be out of the way.

Variations may be resorted to within the scope of the invention, and portions of the improvements may be used without others.

Having thus described my invention, I claim:

1. A combined paper support and paper depth gage comprising a single strip of wire bent to form a plurality of minor loops and a major loop of greater magnitude than said minor loop, and a stop mounted on said major loop.

2. A combined paper support and paper depth gage comprising a single strip of wire bent intermediate its ends to form an elongated loop, and bent on each side of said elongated loop to form a plurality of smaller loops extending in the same plane as said elongated loop, and a stop adjustably mounted on said elongated loop.

3. A combined paper support and paper depth gage comprising a single strip of wire bent to form a plurality of minor loops and a major loop of greater linear magnitude than said minor loops, a brace securing said loops together to form a rigid structure, and a stop adjustably mounted on said major loop.

4. A combined paper support and paper depth gage comprising a single strip of wire bent to form a plurality of loops, one of said loops having the reaches thereon extending parallel to each other to form a standard, and the reaches of the others of said loops extending at angles to each other to form a spread supporting surface, and an adjustable stop mounted on said standard.

5. A combined paper support and paper depth gage comprising a single strip of wire bent to form a plurality of loops, one of said loops having the reaches thereon extending parallel to each other to form a standard, and the reaches of the others of said loops extending at angles to each other to form a

spread supporting surface, an adjustable stop mounted on said standard, and a brace connecting all of said loops together to form a firm structure.

5 6. The combination with a standard, of a stop adjustably mounted on said standard, a latch pivotally mounted on said stop, and a spring tongue integral with said latch and engaging said stop so as to yieldingly force
10 said latch into locking engagement with said standard.

7. The combination with a standard, of a stop adjustably mounted on said standard, said stop being formed of a strip of sheet
15 metal having a plurality of openings therein, and bent so that said openings are brought into alinement with each other, and a latch pivotally mounted on said stop to engage said standard and lock said stop in
20 any adjusted position along said standard.

8. The combination with a standard, of a stop adjustably mounted on said standard, said stop being formed of a strip of metal having a plurality of openings therein and

a pair of arms, said strip of metal being 25 bent to bring said openings into alinement and to bring said arms parallel with each other, and a latch pivotally mounted on said arms and adapted to hold said stop against movement relative to said standard. 30

9. A combined paper support and paper depth gage comprising a body portion forming a paper support, an extension in the same plane with the body portion forming a gage standard, and a stop adjustable along 35 said standard.

10. A combined paper support and paper depth gage comprising a wire bent to form a number of loops, one of said loops being extended to form a gage standard, a stop on 40 said standard, and a brace connected to said loops to overcome the weakening that would otherwise be caused by said extended loop.

JOHN C. McLAUGHLIN.

Witnesses:

GEORGE E. MEWING,
C. NEWELL.