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R. J. ORR

TYPEWRITING MACHINE

Original Filed Sept. 23, 1918

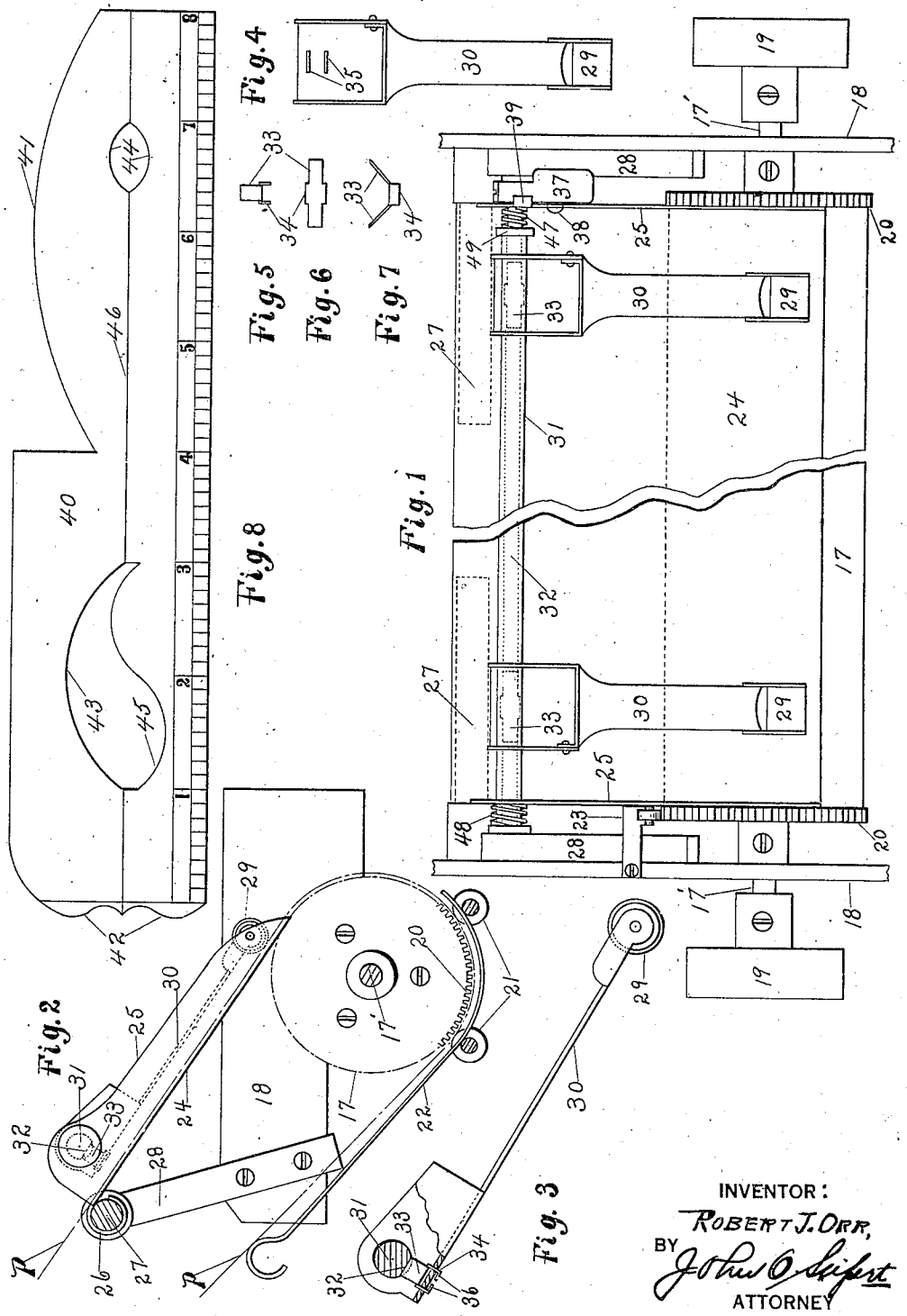


Fig. 1

Fig. 8

Fig. 4

Fig. 5

Fig. 6

Fig. 7

Fig. 2

Fig. 3

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TYPEWRITING MACHINE.

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To all whom it may concern:

Be it known that I, ROBERT J. ORR, a citizen of the United States, and a resident of Woodhaven, in the borough and county of Queens, city and State of New York, have invented certain new and useful Improvements in Typewriting Machines, of which the following is a specification.

This invention relates to writing machines, and particularly to machines for writing musical notations, the present application being a division of my co-pending application Serial Number 255,326, which has become Patent Number 1,391,788 issued Sept. 27, 1921, in which a writing sheet upon which the music characters and signs are to be impressed is carried by a platen to have to and fro longitudinal movement with a platen carriage with the necessary mechanism to advance the carriage with the platen step by step letter space distances in the usual manner of typewriting machines, and in which means are provided to line space the platen at will either forwardly or backwardly distances representative of one or more degrees, or multiples thereof, of a music staff.

It is the object of the present invention to provide an improved paper shelf or table to extend longitudinally of and above the writing line of the platen with means to hold the paper or writing sheet firmly in contact with such shelf to facilitate the manual writing of music signs in connection with mechanically written music characters when freehand lines are desired, such as braces and slurs or lines representative of expression, as crescendo, diminuendo, etc.

It is a further object of the invention to provide a templet for use in connection with the paper shelf for the manual writing of lines of expression, such as slurs or the like, or other music signs, in connection with mechanically written characters.

In the drawing accompanying and forming a part of this specification, Figure 1 is a plan view of my inproved paper table or shelf, showing the same mounted upon a platen frame in relation to the platen.

Figure 2 is a cross sectional view showing the relation of the paper shelf or table to the platen.

Figure 3 is an enlarged side elevation, partly in section, of the paper holding and feeding finger utilized in connection with the paper shelf or table.

Figure 4 is a view of the paper finger looking at the top of Figure 3.

Figures 5, 6 and 7 are card, plan and front elevations of a spring member to yieldingly hold the fingers shown in Figures 3 and 4 in adjusted position relative to the paper shelf or table; and

Figure 8 is a plan view of a templet to be used manually in connection with the paper shelf or table.

Similar characters of reference designate like parts throughout the different views of the drawing.

An embodiment of the invention is shown in the drawing in connection with a cylindrical platen 17 of a type-writing machine fixed to an axle 17′ whereby the platen is rotatably mounted in the ends 18 of a platen frame to have to and fro movement in line spacing direction by knobs 19 secured to the ends of the platen axle, type carried by type bars (not shown) being adapted to strike rearwardly against the front of the platen as is common in front strike writing machines.

The paper or writing sheet, shown in a general way at P (Figure 2) to receive the impressions upon the platen is guided between feed rollers 21 and the platen and around the platen by a table 22 extending between the ends of the platen, and the platen is releasably retained in predetermined writing position by a yielding detent 23 co-operating with one or both of toothed wheels 20.

As stated it is an object of the present invention to provide means to facilitate the manual writing of music signs in connection with mechanically written characters of music notation and for this purpose a paper shelf or table 24 is provided to extend along and above the platen, said shelf inclining downward and forward toward the platen with the leading edge of the shelf above the line of writing on the platen. This shelf is preferably made of sheet material with the side edges bent up at right angles to provide guide ledges 25 for the side edges of the paper. The longitudinal edge of the shelf is curled downwardly or curved, as at 26, to engage over studs 27 carried by brackets 28 secured to and projecting up-

wardly from the platen frame ends, said studs extending inwardly parallel with the platen. By so mounting the shelf it is adapted to be adjusted to throw the leading edge thereof into or out of engagement with the platen. To maintain the writing sheet in contact and flat against the shelf as it is fed by the platen and feed rollers 21 rollers 29, shown as two in number, are provided to engage with the top of the paper shelf. These rollers 29 are carried by resilient arms or fingers 30 mounted on a rod 31 extending longitudinally above the shelf and rotatably supported at its ends in the shelf ledges 25. To maintain these fingers in position on the rod to yieldingly urge the rollers 29 against the paper shelf, the rod has a flattened portion 32 with which the free ends of both spring members 33 (Figures 5, 6 and 7) carried by the fingers is adapted to normally engage. By this arrangement the fingers may be rotated on the rod independently of each other to throw either one or both of the rollers into or out of engagement with the paper shelf, and to adjust the fingers along the rod. The bow spring members are arranged with clips 34 adapted to engage in openings 35 (Figure 4) in the fingers 30 and may be bent over as shown at 36 (Figure 3) to secure them to said fingers.

To throw both of the fingers simultaneously out of or into engagement with the paper shelf a finger lever 37 is secured to one end of the rod outside of a shelf ledge 25, this finger lever being made of resilient material to operate as a detent to retain the rod and fingers in position with the rollers in or out of engagement with the paper shelf. For this purpose the finger lever has a protuberance 38 extending laterally thereof toward the shelf ledge and when the rollers are in engagement with the paper shelf engages in a perforation in the shelf ledge, and when the rod is adjusted to position with the fingers held in position with the rollers out of engagement with the paper shelf said protuberance engages with the top of the shelf ledge. To prevent throwing the roller carrying fingers too far back an ear 39 is bent laterally from the shelf ledge to serve as a stop for the finger lever.

To reinforce the action of finger lever 37 a spring 47 may be provided on the rod 31 as shown, or between the integral head of rod 31 and left ledge 25, as at 48. A collar 49 prevents the paper finger 30 at the right from slipping off from the portion of the rod 31 of larger diameter.

To facilitate the manual writing of music signs in conjunction with the mechanically written music notation on the writing sheet while engaging over the paper shelf there is provided a templet 40 of transparent sheet material, such as celluloid, (Figure 8). This templet is provided with an elongated curvilinear edge 41 of regular form to serve as a guiding edge for a pencil, pen or stylus in the writing of slurs and the like, and at the left hand end with an irregular curved edge 42 to facilitate the writing of braces to connect staffs. The templet also has portions stamped therefrom to provide interior regular curved edges 43, 44 and an irregular curved edge 45. The templet is also arranged with a straight line 46 extending longitudinally and substantially centrally thereof whereby to parallel the templet with the staff lines on the writing sheet to facilitate the marking or writing of angular lines. One of the longitudinal edges is provided with graduated sectional representation of spaces, bars and forms of music notation. In use the templet is placed over the paper on the paper shelf after the mechanically written music notation has been impressed thereon to mark on the sheet slurs and the like to tie or connect such music notes as it is desired. By the arrangement of the fingers 30 carrying the rollers 29 the writing sheet is held flat and firmly against the table permitting of the templet to be used effectively as a tracing instrument in conjunction with a pencil, pen or stylus.

Having thus described my invention I claim:

1. In a writing machine, the combination with a platen, of a paper shelf to extend longitudinally of and above the platen with the leading edge above the line of writing on the platen, and arranged to be moved to position with the leading edge of the shelf out of or in engagement with the platen, and fingers carrying rollers to yieldingly engage with the shelf and arranged to be moved into and out of engagement with the shelf.

2. In a writing machine, the combination with a platen, of a paper shelf to extend longitudinally of and over the platen with the leading edge above the line of writing on the platen, and arranged to be moved to position with the leading edge of the shelf out of or in engagement with the platen, a rod pivotally carried by the shelf to extend longitudinally thereof; and fingers carrying rollers carried by said rod to engage with the shelf.

3. In a writing machine, the combination with a platen, of a paper shelf to extend longitudinally of and above the platen; a rod pivotally carried by the shelf to extend longitudinally thereof; fingers carrying rollers carried by said rod to engage with the shelf; and a finger lever connected to the rod to rotate the rod and move the fingers to position with the rollers in or out of engagement with the shelf.

4. In a writing machine, the combination with a platen, of a paper shelf to extend

longitudinally of and above the platen, a rod pivotally carried by the shelf to extend longitudinally thereof; fingers carrying rollers carried by said rod to engage with the shelf; and a finger lever connected to the rod to rotate the rod and move the fingers to position with the rollers in or out of engagement with the shelf, said lever being arranged to operate as a detent to cooperate with the shelf to lock the rod in position with the rolls in engagement with the shelf or in position with the rolls out of engagement with the shelf.

5. In a writing machine, the combination with a platen, of a paper shelf to extend longitudinally of and above the platen, said shelf having paper guiding ledges at the ends; a rod pivotally carried by the shelf to extend longitudinally thereof; fingers carrying rollers carried by said rod to engage with the shelf; and a finger lever connected to the rod to rotate the rod and move the fingers to position to engage the shelf or out of engagement with the shelf, said lever having a protuberance to engage with a perforation in the shelf ledge to lock the shaft in position with the rollers in engagement with the shelf, and said protuberance adapted to engage with the top of such ledge and maintain the rod in position with the rollers out of engagement with the shelf.

6. In a writing machine, the combination with a platen, of a paper shelf to extend longitudinally of and over the platen with the leading edge above the line of writing on the platen, and arranged to be moved to position with the leading edge of the shelf out of or in engagement with the platen, said shelf having paper guiding ledges at the ends; a rod pivotally carried by the shelf to extend longitudinally thereof; and fingers carrying rollers carried by said rod to engage with the shelf and arranged to be thrown into and out of engagement with the shelf, and said shelf adapted to be moved to position with the leading edge in engagement with the platen or with the leading edge out of engagement with the platen.

7. In a writing machine, the combination with a platen, of a paper shelf to extend longitudinally of and above the platen; a rod pivotally carried by the shelf to extend longitudinally thereof; and fingers carrying rollers carried by said rod to engage with the shelf; said rod being adapted to be rotated to throw the rollers into or out of engagement with the shelf, and said fingers adapted to be moved on the rod to throw either of the fingers to position with the rollers into or out of engagement with the shelf.

8. In a writing machine, the combination with a platen, of a paper shelf to extend longitudinally of and above the platen; a rod pivotally carried by the shelf to extend longitudinally thereof; and fingers carrying rollers carried by said rod to engage the shelf; said fingers being adapted to have movement independently longitudinally on the rod and movement on the rod to throw either of the fingers to position with the rollers in or out of engagement with the shelf.

9. In a writing machine, the combination with a platen, of a paper shelf to extend longitudinally above the platen having paper gauging ledges at the opposite ends, a rod rotatably mounted in said ledges, roller carrying fingers mounted on said rod, a finger lever connected to said rod and arranged to cooperate with one of the ledges to releasably retain the rod in position with the finger rollers in or out of engagement with the paper shelf, and yielding means arranged to urge the rod in an axial direction to reinforce the locking action of the finger lever.

Signed at city, county and State of New York, this 16th day of August, 1921.

ROBERT J. ORR.