Oct. 25, 1927. 1,646,394

J. W. ENGELSIEPEN

TYPEWRITING MACHINE

Filed Dec. 21, 1926

Fig. 1.

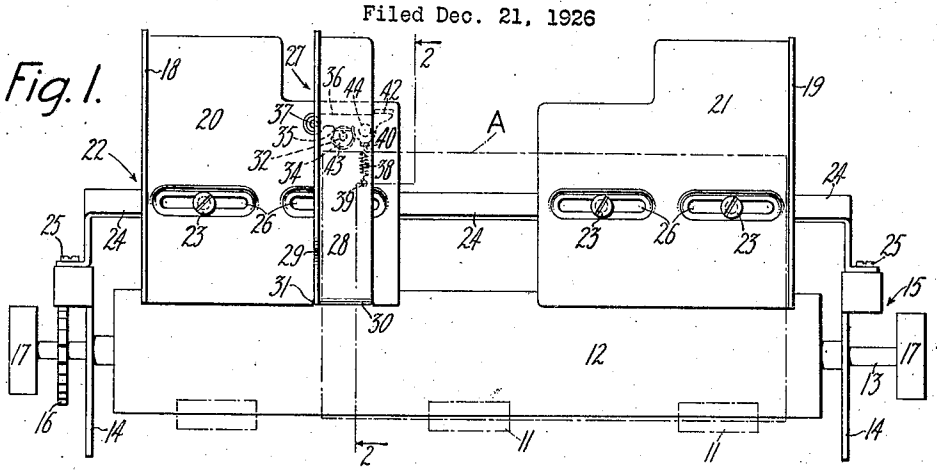


Fig. 2.

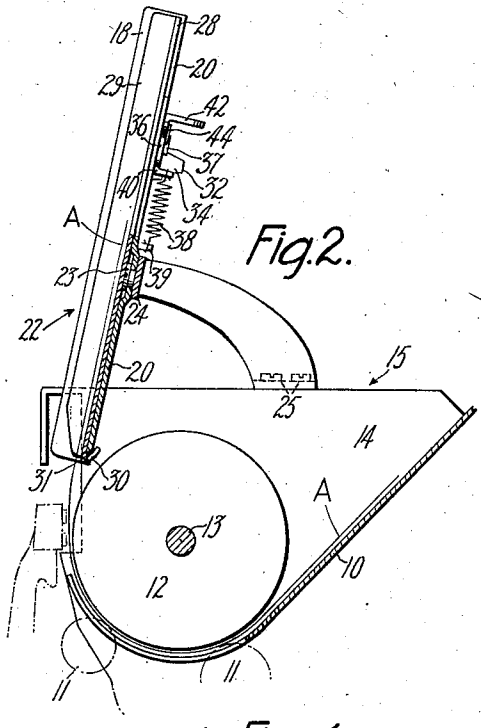


Fig. 3.

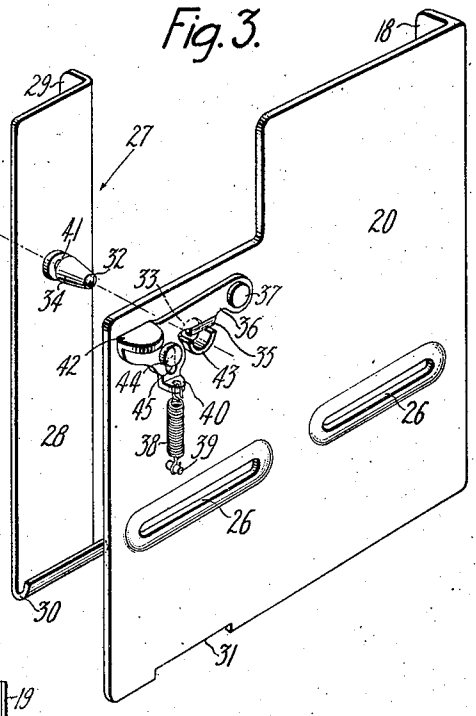
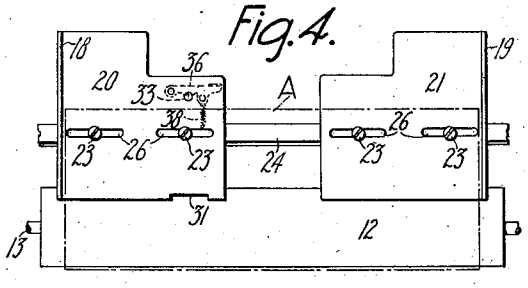


Fig. 4.



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UNITED STATES PATENT OFFICE.

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TYPEWRITING MACHINE.

Application filed December 21, 1926. Serial No. 156,087.

This invention relates to paper-aligning tables for typewriters, and more particularly to manipulable work-sheet-side-edge gages therefor.

Tables of this kind are usually mounted at the delivery side of the platen, and provided with fixed left and right side-edge gages for the sheets.

Sometimes sheets of different widths are alternatively used in the typewriter, and in this case the table must either be replaced or spaced, so that the gages correspond to the differing width of sheet, which is objectionable.

It is one of the objects of this invention to overcome this objection. To this end, there is provided an auxiliary side-edge gage, which may be easily and quickly attached to or detached from the paper-table, the auxiliary gage having a predetermined position between the two fixed gages, so that when a sheet is to be used, narrower than the distance between the fixed gages, the auxiliary gage is fixed to the table, and the sheet is gaged between the auxiliary gage and the opposite fixed side gage. When a wide sheet is to be used, the auxiliary gage is temporarily removed, and the two fixed gages are used.

The auxiliary gage is bent at its lower end to form a hook, which engages a notch cut in the table. At its upper end, the gage is provided with a stud, which passes through an opening in the table, and is engaged by a latch mounted on the rear side of the table, to secure the gage in place.

To attach the gage to the table, its hook-portion is positioned in the cut-out, which prevents any lateral displacement, and then the stud is forced into the opening in the table and is engaged by the latch, which holds it in place. For detaching the gage, the latch is swung up out of engagement with the stud, and the gage lifted off the table.

Other features and advantages will hereinafter appear.

In the accompanying drawings,

Figure 1 is a front view, in elevation, showing the invention applied to an Underwood standard typewriting machine.

Figure 2 is a sectional side view, taken on the line 2—2 of Figure 1.

Figure 3 is a rear perspective view of one section of the paper-table, showing the auxiliary gage detached therefrom.

Figure 4 is a front diagrammatic view, showing the paper-table with the auxiliary gage removed.

A ledger-sheet A, upon which one or more lines are to be typed, is positioned in a typewriting machine by feeding it down over a rear paper-table 10, between feed-rolls 11 and a platen 12, the latter being mounted on a shaft 13, which is revolubly mounted in side plates 14 of a platen-frame 15. The platen can be rotated for sheet-feeding either by a line-space mechanism 16 or by knobs 17.

The sheet is fed down around the platen, and up past the printing point, and is laterally-positioned between upturned edges or gages 18 and 19, integral with plates 20 and 21, respectively, of a paper-table 22. The plates 20 and 21 are secured, by means of screws 23, to a cross-bar 24, which in turn is fixed by screws 25 to the side plates 14 of the platen-frame 15. The plates 20 and 21 are provided with slots 26, to permit lateral spacing of the gages 18 and 19. In order to space the gages, the screws 23 must first be loosened, and then the plates carefully positioned, so that the distance between them corresponds to the width of the sheet to be used, after which the screws are tightened, thereby fixing the plates and gages in place.

In order to facilitate the handling of sheets of different widths, there is provided an auxiliary gage 27, which may easily be attached, at a predetermined position, to the plate 20 of the paper-table 22. The gage consists of a flat surface 28, having an upturned edge 29, against which one side of the sheet is aligned. For attaching the gage to the table 22, the lower end of the flat portion 28 of the gage 27 is bent over to form a hook 30 for engaging the bottom edge of the plate 20 in a cut-out or notch 31. After hooking the bottom edge of the gage 27 in place, the top portion is swung towards the plate 20, so that a conical-shaped stud 32 will pass through a hole 33 in the plate 20. When the stud passes through the hole 33, its edge-surface 34 engages a downwardly-projecting beveled portion 35 of a latch 36 pivoted at 37 to the rear side of the plate 20. It will be seen that by further movement of the

gage 27 towards the plate 20, the latch will ride up on the surface 34 of the stud 32 against the tension of a spring 38 attached at one end to a pin 39, fast on the plate 20, and at its other end to a projection 40 on the latch 36. The beveled portion 35 will continue to ride up on the stud 32 until it rides clear thereof, at which time the spring 38 will force the portion 35 to wedge itself down between that part of a circular groove 41 in the stud 32, which extends though the plate 20, and the rear side of the plate 20, thereby holding the stud 32 and gage 27 tightly against the plate 20.

The latch is provided with a handle 42, by means of which the same may be swung up to disengage it, so that the gage may be detached from the stud 32, after which the gage 27 may be lifted off the plate 20. The stud 32 slides out of the opening 33, riding on a semicircular guide-piece 43 struck out of the plate 20 at the rear thereof. The inner circumference of the guide 43 coincides with the circumference of the opening 33, and is of greater width than the groove 41, thus preventing the edge of the plate 20 at the opening 33 from catching in the groove 41 when the stud 32 is moved through the opening.

A pin 44 co-operates with a slot 45, for limiting the movement of the latch 36.

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 detachable side-edge gage for use on a collating table, including a plate having a hook at its lower end to engage the bottom edge of a paper-table and a stud at its upper end to be moved through an opening in the table, and a latch on the rear side of the table and at the back of said opening to engage said stud when moved through said opening so as to hold said gage against the table.

2. A detachable side-edge gage for use on a collating table, including a plate having a hook at its lower end to engage the lower portion of the paper-table in a cut-out to prevent side motion and a stud carried at the upper end of the gage to be moved through an opening in the paper-table, a groove in said stud, a pivoted arm on the rear side of the table, and a spring to move the arm to enter the groove when the stud is moved through the opening in the collating table, thereby securing said gage in place.

3. A detachable side-edge gage for use on a collating table, including a plate having a hook at its lower end to engage the lower portion of the paper-table in a cut-out to prevent side motion and a stud carried at the upper end of the gage to be moved through an opening in the paper-table, a groove in said stud, a pivoted arm on the rear side of the table, a spring to move the arm to enter the groove when the stud is moved through the opening in the collating table, thereby securing said gage in place, and means for preventing the groove from catching on the sides of the opening, said means including a guiding shelf wider than the width of the groove.

4. In a typewriting machine, the combination with an aligning table, of a detachable side-edge gage having a hook at its lower end and a grooved stud at its upper end, said hook engaging a cut-out in the lower edge of the aligning table to position the gage on the table and the grooved stud extending through an opening in the aligning table, an arm pivoted at the rear of said table, a downwardly-extending beveled portion on said arm, and a spring to wedge said beveled portion into the slot formed by that part of the groove extending through the opening and the rear side of the aligning table.

5. In a typewriting machine, the combination with an aligning table and rigid side-edge gages on said table, of an auxiliary side-edge gage, means for securing said gage at a predetermined place between said rigid gages, said means including a hook at one end of the auxiliary gage to engage the lower edge of the aligning table and a stud at the upper end of the gage to pass through an opening in the aligning table, and a latch on the rear side of the table to engage and hold said stud in position.

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