

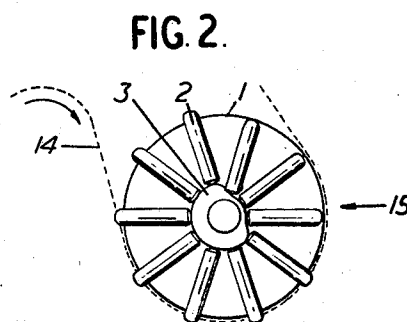
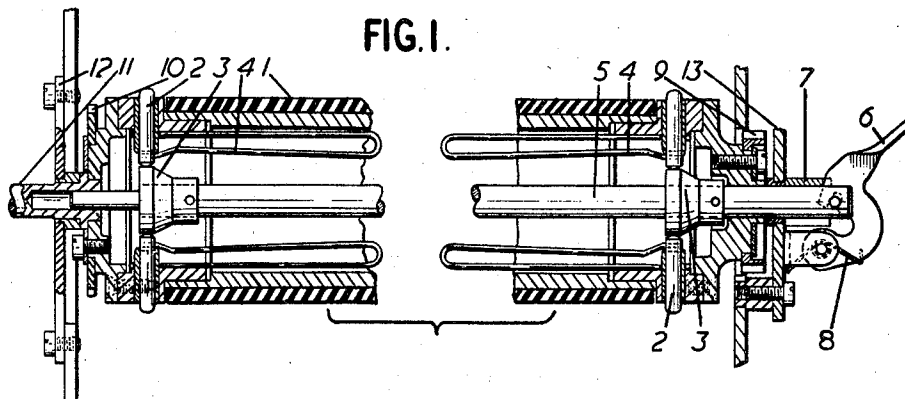
July 5, 1960

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2,943,721

PLATEN ARRANGEMENTS FOR TELEPRINTERS AND THE LIKE

Filed Sept. 19, 1958



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PLATEN ARRANGEMENTS FOR TELEPRINTERS AND THE LIKE

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Filed Sept. 19, 1958, Ser. No. 762,900

Claims priority, application Great Britain Nov. 1, 1957

5 Claims. (Cl. 197-133)

This invention relates to platen arrangements for teleprinters and the like.

It is the object of the present invention to provide simple means by which either perforated or unperforated paper may be fed over a platen, of the kind using sprocket pins which are retractable to allow of unperforated paper to be fed to the platen or are projected to engage perforations in perforated paper.

It has been proposed, e.g. in British patents 727,006, 727,298 and 736,724 to provide a strip feeding device, or a platen embodying pin-type feeding means in which all the pins are either simultaneously retracted or placed in operative position. It has also been proposed in British patent 408,125 to provide a plurality of radial pins carried within a platen roll for rotation therewith, the pins being reciprocated by cams as the platen roll rotates so that they project through the platen only at a portion of the circumference thereof. The cams were rotatably adjustable so that the portion of the circumference of the platen at which the pins protruded outwardly could be set so that the pins were operative to feed sprocket fed stationary or only protruded in positions ineffective for such feed.

According to the present invention a platen for a teleprinter or the like comprises two series of pins arranged around the platen near respective ends thereof, spring pressure means for retracting said pins, two interconnected cam members within the interior of the platen and means operable to move both cam members together longitudinally of the platen into or out of engagement with respective series of pins to press the pins outwards of the platen or to allow said pins to remain retracted.

The word "cam" as used above means that the longitudinal section consists in part of an incline to enable engagement or disengagement with the pins to be made.

The invention will be better understood from the following description of one embodiment thereof taken in conjunction with the accompanying drawings in which:

Fig. 1 shows a longitudinal section of a platen according to the invention and Fig. 2 is a view showing the relation of sprocket pins to the line of travel of sprocket fed stationery.

Into a cylindrical platen 1 are fitted two series of sprocket pins 2 the two series being near respective ends of the platen as shown. There are 10 sprocket pins in each series, each pin being free to slide in and out of the platen and being either held retracted by an individual spring 4 or pushed outwards by a cam 3.

Integral with the platen 1 at one end thereof is a shaft 11 running in a detachable end plate 12. The shaft 11 is bored to take a shaft 1 which in turn is supported at its other end by a plate 13. The platen 1 is rotated about shaft 5, a ratchet 9 and click wheel 10 being provided for feeding the platen in known manner.

The cams 3 are fixed on shaft 5 which is prevented from turning by a lever 6 which is also used to move the shaft 5 and cams 3 axially to one or other of two

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positions. The lever 6 is locked in either position by means of a split sleeve 7 which is rotated to one of two positions and held in either position by a spring 8.

When the lever 6 is moved in one direction the shaft 5 with the cams 3 is moved to the left of the position shown in the drawing and as the cams 3 slide axially the sprocket pins 2 move down the conical surfaces of the respective cams under the action of the springs 4. The ends of the pins are now below the surface of the platen thus enabling unperforated paper to be used.

When the lever 6 is moved in the other direction the conical surfaces of the cams 3 force the sprocket pins 2 out so that they protrude beyond the surface of the platen and enable perforated paper to be used.

As shown in Fig. 2 the larger diameter of the cams 3 is cut to a profile which enables pins 2 to be retracted at that position of the periphery as the platen rotates which is opposite and in the neighbourhood of the printing point. The path of the paper is shown by the dashed line 14 the printing point being indicated by the arrow 15. This arrangement prevents the pins from fouling the type wheel or type bars and enables printing to take place close to the margin of the paper.

The paper is held against the platen by means of spring loaded rollers (not shown) similar to those used in normal teleprinter practice.

Sprocket pins are used:

(1) to enable printed forms to be used, the pins ensuring correct alignment of the printed record on the form.

(2) to avoid feeding troubles when multiple copies are desired, the pins serving to keep the several copies in correct relative position.

When sprocket pins are used the spring loaded feed rollers could be dispensed with but they do not interfere with the action of the sprocket teeth. It has not therefore been thought desirable to provide means to retract the feed rollers when the sprocket teeth are in action.

While the principles of the invention have been described above in connection with specific embodiments, and particular modifications thereof, it is to be clearly understood that this description is made only by way of example and not as a limitation on the scope of the invention.

What we claim is:

1. A platen for a teleprinter or the like comprising two series of pins arranged around the platen near respective ends thereof, spring pressure means for retracting said pins, two interconnected cam members within the interior of the platen and means operable to move both cam members together longitudinally of the platen into or out of engagement with respective series of pins to press the pins outwards of the platen or to allow said pins to remain retracted.

2. A platen as claimed in claim 1 in which said cams are fixed to a shaft about which the platen rotates, said shaft being axially moveable in its bearings, manually operable means being provided to move said shaft to bring said cams into or out of engagement with the said pins.

3. A cylindrical platen rotatably mounted on an axis for positioning and feeding perforated and unperforated message sheets in a teleprinter, said platen including a plurality of reciprocating pins having an extended position and a retracted position with respect to the periphery of the platen, spring means normally urging the pins in their said retracted position, a cam on said axis and means for longitudinally positioning the cam to move the pins against the spring means into said extended position to engage perforations in a perforated message sheet, and means for further positioning the cam longitudinally on said axis to permit the pins to return to

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their retracted position for the positioning and feeding of unperforated message sheets.

4. A cylindrical platen according to claim 3, wherein the profile of said cam includes a detent for permitting the pins passing said detent to move into and out of their said retracted positions successively. 5

5. A cylindrical platen according to claim 4, wherein the said cam is non-rotatable and said detent causes the

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said movement of the pins into and out of their said positions at a predetermined angular location.

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