Feb. 26, 1935. K. ŽLÁBEK 1,992,562

FRONT FEED DEVICE FOR BOOKKEEPING MACHINES

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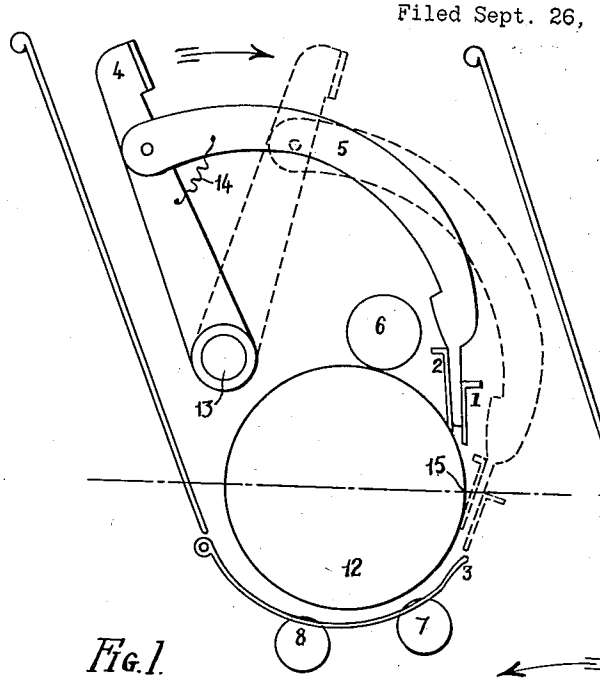


FIG. 1.

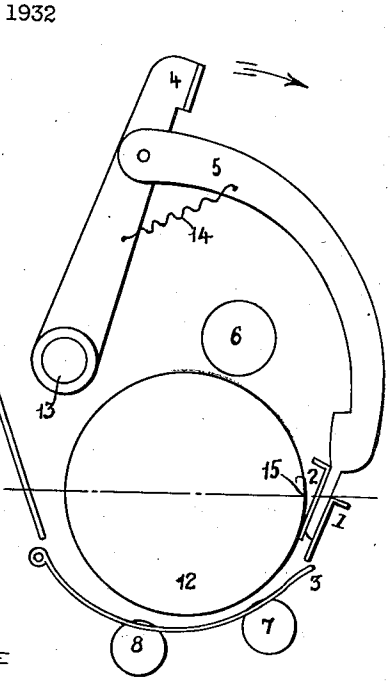


FIG. 2.

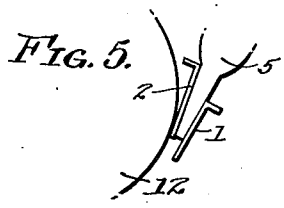


FIG. 5.

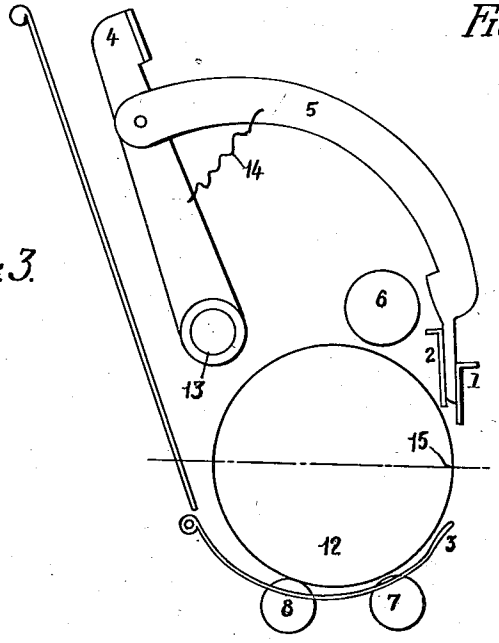


FIG. 3.

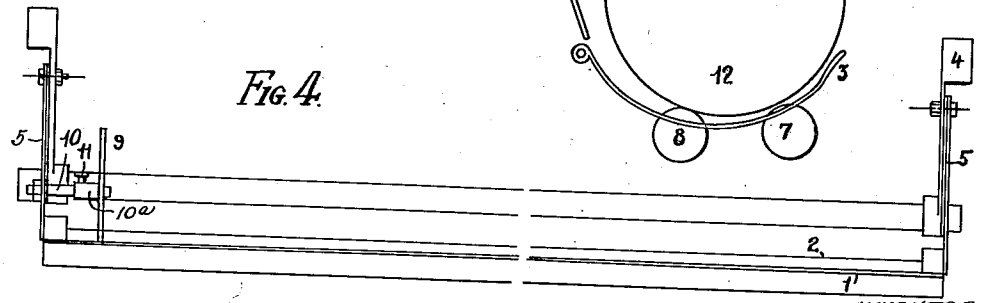


FIG. 4.

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FRONT FEED DEVICE FOR BOOKKEEPING MACHINES

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4 Claims. (Cl. 197—127)

This invention relates to improvements in front feed devices for bookkeeping machines.

One object of the invention is to provide a device which makes it possible to feed into a bookkeeping machine individual sheets or forms in front of a collective sheet or form which is retained in the machine while a plurality of individual forms are inserted, filled up and again taken out of the machine, the matter written on the individual sheets, for example individual invoices, thus appearing through the interposition of a sheet of carbon paper or the like in chronological order on the collective sheet, for example an invoice journal.

Another object of the invention is to provide a device of the type described which will be of very simple construction and easy and quick to operate and will enable the adjustment of the collective, as well as the individual forms to the required writing position with speed and accuracy, without it being necessary to provide the forms with any special ruling or marks, such as perforations or the like, and without providing any corresponding marks or members on the bookkeeping machine, such as studs fitting into the said perforations or the like.

In the accompanying drawing one constructional form of the invention is shown by way of example.

Fig. 1 is a side elevation, in a diagrammatic representation, of the platen of a bookkeeping machine with co-operating parts and the device according to the invention attached thereto.

Fig. 2 is a similar view, in a different position.

Fig. 3 is also a similar view in a third position.

Fig. 4 is a front view of the front feed device according to the invention, drawn to a smaller scale.

Figure 5 is a detail view illustrating a modification of the invention.

Referring to the drawing, 12 is the usual platen which co-operates with the known deflecting plate 3 and the feed rollers 7 and 8. Another paper fixing roller 6 is also provided which serves to hold firmly in the machine in conjunction with the platen 12 any sheets or forms which may be retained in the machine while the feeding rollers 7 and 8 are released to allow other forms to be withdrawn from the machine.

Secured to each end of a shaft 13 pivotally mounted on the carriage of the machine there is a lever 4, and pivotally attached to each lever 4 there is an arm 5, the free ends of the arms 5 being interconnected by means of two flat guide bars 1 and 2. As will be seen in the drawing the arrangement is such that the rear guide bar 2 is continuously gliding on the platen or on the collective sheet which is retained in the machine. The contact between the lower edge of the rear guide bar 2 and the platen 12 is assured by a spring 14 the ends of which are attached to the lever 4 and the arm 5 respectively. The guide bars 1 and 2 preferably diverge upwardly, as illustrated in Figure 5 of the drawing, so as to facilitate the insertion of a sheet of paper between the bars from above.

The arrangement and the adjustment of the device is such that in the inoperative position shown in Figs. 1 and 3 the guide bars 1 and 2 are clear of the writing line 15 and do not obstruct the typebars hitting on this line. In the operative position, however, the upper edge of the front guide bar 1 indicates exactly the writing line 15 as shown in Fig. 2.

In operation, assuming that the device is in its inoperative position shown in Fig. 1 and a collective sheet is retained in the machine and held firmly between the platen 12 and the fixing roller 6, the deflecting plate 3 and the feeding rollers 7 and 8 are released thus providing a free space between themselves and the platen 12 and releasing any individual sheet or sheets which it may be desired to take out of the machine. Such individual sheets are now taken out and the collective sheet which is still firmly held in the machine between the fixing roller 6 and the platen 12 is adjusted by turning the latter to a position wherein the first line of the next entry on the collective sheet coincides with the writing line 15. The guide bars 1 and 2 are now pulled down by actuating either lever 4 until they reach their lowermost position shown in Fig. 2, wherein the top edge of the front guide bar 1 indicates exactly the writing line 15. In addition, in this position the space between the guide bars 1 and 2 forms a continuation of the free space between the feeding rollers 7 and 8 and the platen 2, so that the next individual sheet which is inserted from above between the guide bars 1 and 2 and in front of the collective sheet retained in the machine, is neatly and easily guided between the feeding rollers 7 and 8 and the platen 12. The next individual sheet thus inserted is pushed down until the line on which it is desired to make an entry coincides with the top edge of the front guide bar 1, which indicates the exact position of the writing line 15, whereupon the feed rollers 7 and 8 and the deflecting plate 3 are again engaged and secure the individual sheet just inserted, as well as the collective sheet firmly in the machine. The guide

bars 1 and 2 are now pulled up by operating either lever 4, this position being shown in Fig. 3, when the machine is ready for use, and it will be seen that the place of the next entry is accurately adjusted on both the collective sheet and the fresh individual sheet.

To provide for laterally spacing vertical columns of matter which is written, sheet guide means preferably are provided as illustrated at the left hand end of Figure 4. That is to say, one of the arms 5, preferably the one at the left hand side of the machine, is provided with an inwardly extending stud or bolt 10 on which is slidably engaged a sleeve 10*a* having a set screw 11 whereby it may be secured in any desired position of adjustment along said stud or bolt, and carried by said sleeve 10*a* is a plate 9 constituting an abutment against which the adjacent side edge of a sheet or sheets is or are guided.

I claim:—

1. In a machine of the character described, in combination with a platen and a sheet deflector plate therebeneath, a front feed device comprising a pair of inner and outer spaced apart guide bars to guide sheets inserted between them into the space between the platen and said sheet deflector plate, and means mounting said guide bars for movement across the front of the platen between an inoperative position spaced above the deflector plate and an operative position in which the outer guide bar substantially engages and forms in effect a continuation of the sheet deflector plate and in which the upper edge of the outer guide bar coincides with the writing line of the platen.

2. In a machine of the character described, in combination with a platen and a sheet deflector plate therebeneath, a shaft parallel to the platen, a pair of levers fixed to said shaft, arms pivoted to said levers, respectively, a pair of spaced apart sheet guide bars carried by said arms and extending parallel to the platen, and spring means connecting said arms and levers and tending constantly to swing said arms and said guide bars inwardly towards the platen, said levers being swingable to move said guide bars to an inoperative position spaced above the deflector plate and to an operative position in which the outer guide bar substantially engages and constitutes in effect a forward and upward continuation of said deflector plate and in which the upper edge of the outer guide bar coincides with the writing line of the platen.

3. The combination as set forth in claim 2 in which sheet guide means is carried by one of the arms for adjustment longitudinally with respect to the platen to be engaged by the edge of a sheet.

4. The combination as set forth in claim 2 including a stud projecting inwardly from one of the arms, a sleeve slidable along said stud, means to secure the sleeve to the stud, and a plate carried by said sleeve to be engaged by the edge of a sheet.

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