W. W. LASKER.

REINKING DEVICE FOR RIBBONS.

APPLICATION FILED OCT. 4, 1916.

1,358,083.

Patented Nov. 9, 1920.

3 SHEETS—SHEET 1.

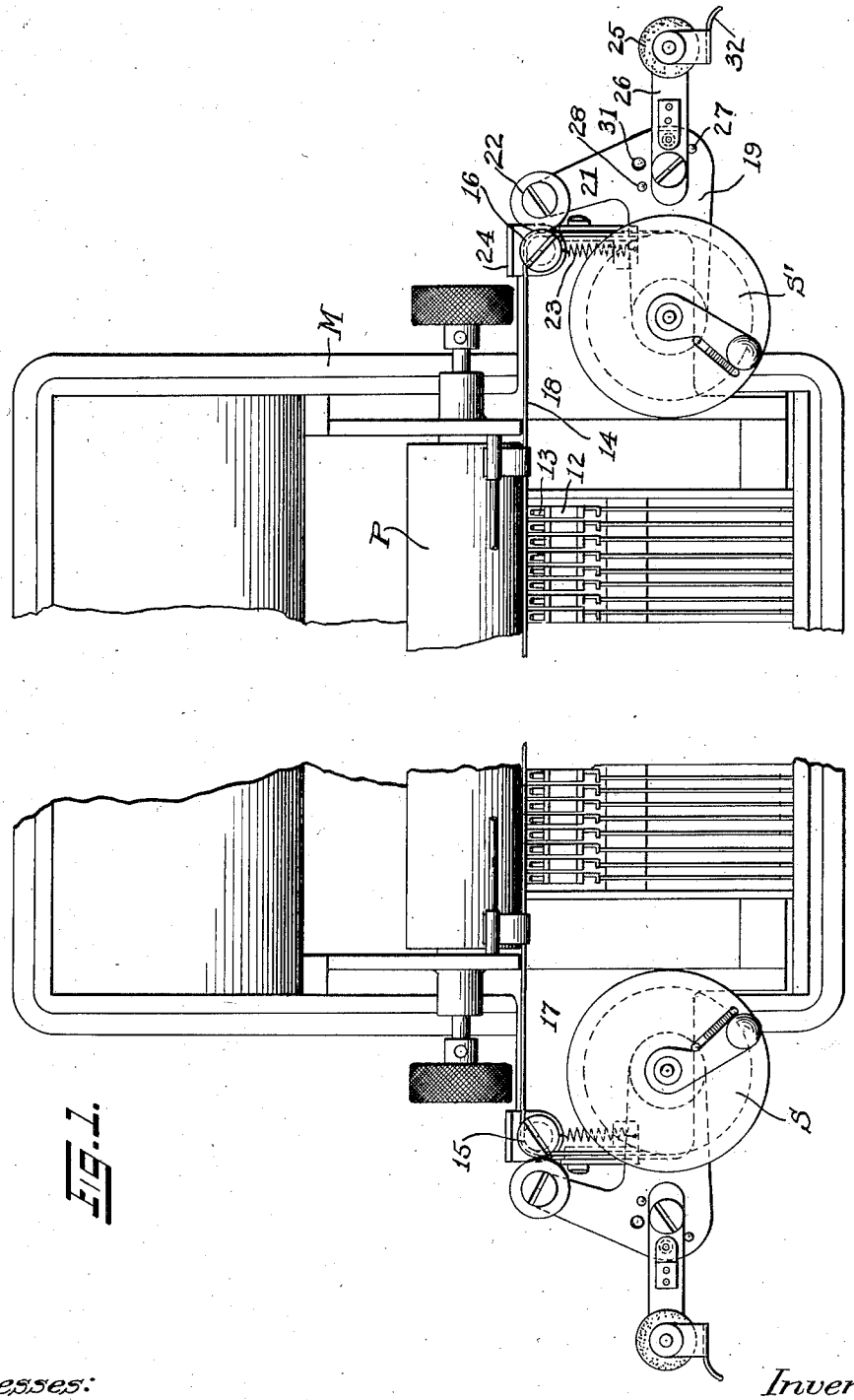


Fig. 1.

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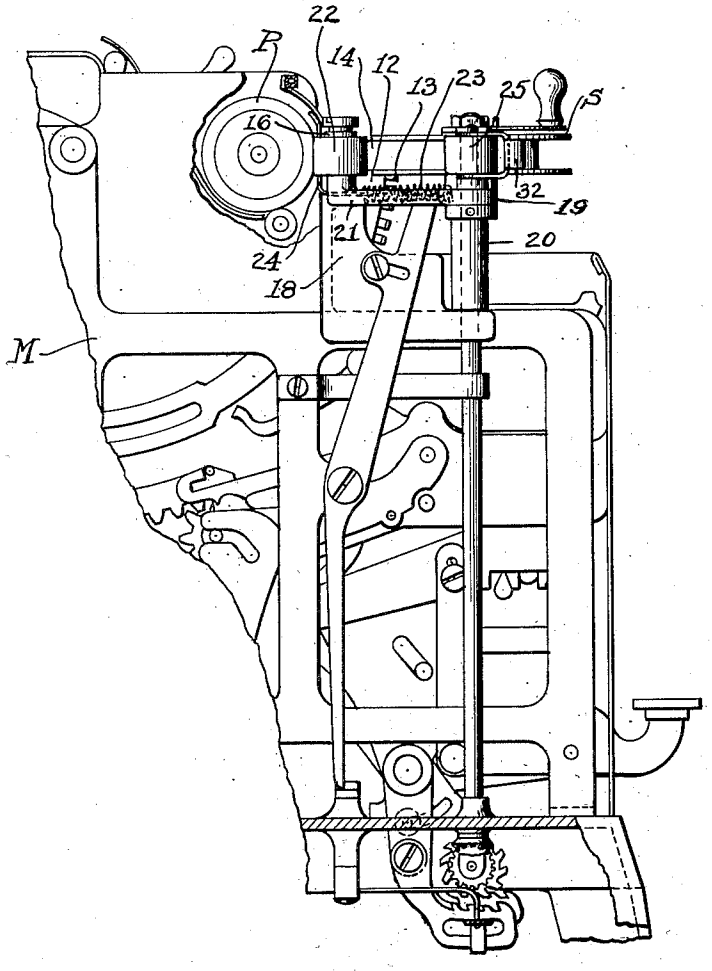
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3 SHEETS—SHEET 2.

FIG. 2.



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3 SHEETS—SHEET 3.

Fig. 3.

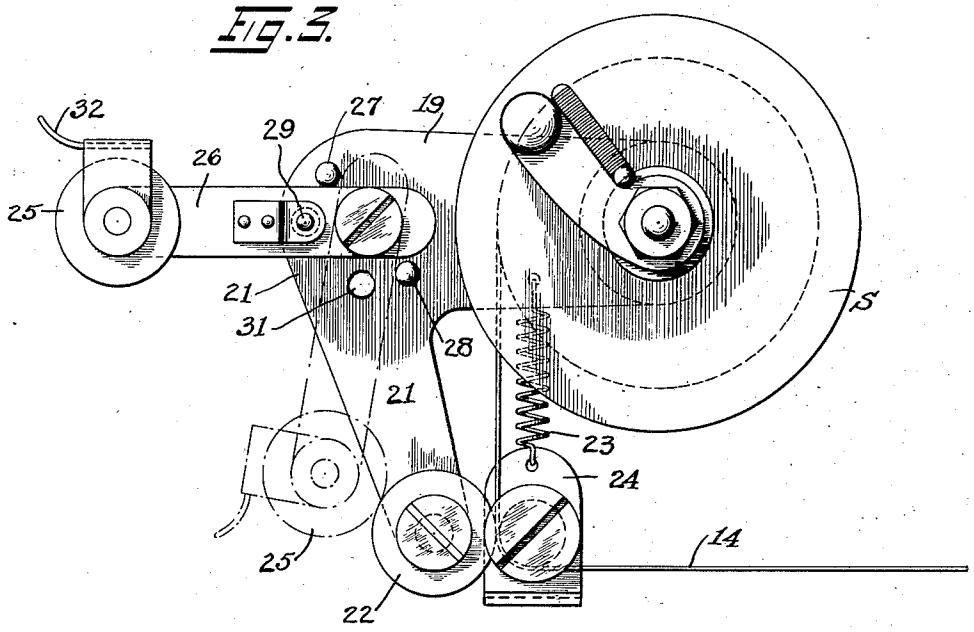
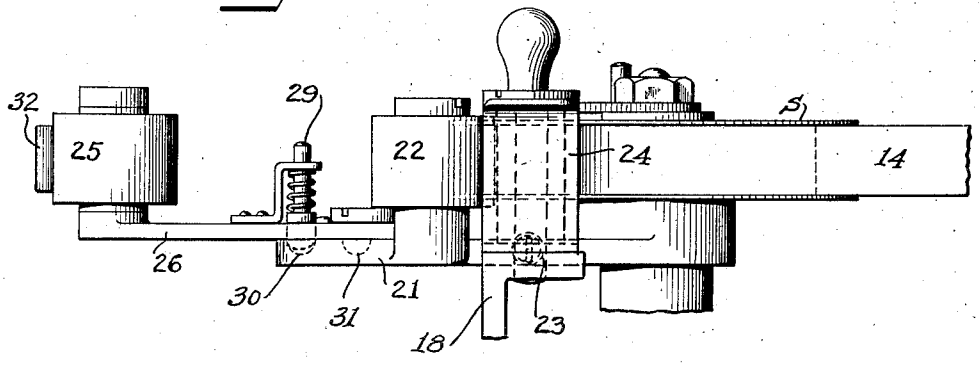


Fig. 4.



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UNITED STATES PATENT OFFICE.

WILLIAM W. LASKER, OF BROOKLYN, NEW YORK, ASSIGNOR TO POWERS ACCOUNTING MACHINE COMPANY, OF NEW YORK, N. Y., A CORPORATION OF DELAWARE.

REINKING DEVICE FOR RIBBONS.

1,358,083. Specification of Letters Patent. Patented Nov. 9, 1920.

Application filed October 4, 1916. Serial No. 123,650.

To all whom it may concern:

Be it known that I, WILLIAM W. LASKER, a citizen of the United States, residing in Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Reinking Devices for Ribbons, of which the following is a specification.

This invention relates in general to printing ribbons and more especially to reinking devices for printing ribbons.

One of the main objects of the present invention is to provide reinking devices for printing ribbons by means of which the ribbons may be reinked while being used.

The present invention further contemplates the provision of an arrangement whereby printing ribbons while in use may be continuously reinked, or the reinking device disconnected at will out of reinking position.

These and other features, capabilities and advantages of the invention will appear from the subjoined detail description of one specific embodiment thereof illustrated in the accompanying drawings, in which—

Figure 1 is a fragmental plan view illustrating an accounting machine equipped with the present improvement.

Fig. 2 is a fragmental side elevation of the same.

Fig. 3 is a detached plan view of one of the reinking mechanisms, and Fig. 4 is a side elevation of the portion illustrated in Fig. 3.

In the embodiment illustrated, there is provided a main frame M of an accounting machine, at the upper end of which there is mounted a paper supporting platen P, in front of which travel the type segments 12 to printingly dispose the type 13 relative to the platen P. Between the platen P and the printing position of the type 13 there extends the printing ribbon 14, such ribbon extending from the ribbon spool S disposed adjacent to one end of the platen P around the idler 15, across the machine between the platen P and the printing position of the type 13, and around the idler 16, to the ribbon spool S′ disposed adjacent to the other end of the platen P. The spool S and idler 15 are mounted on the bracket 17 extending from one side of the frame M, and the spool S′ and idler 16 are mounted on the bracket 18 extending from the other side of the frame M.

Adjacent to spools S, S′ there are mounted reinking devices which are substantially identical with one another for which reason it will suffice to describe but one of them in detail. The reinking device disposed adjacent to the spool S′ comprises an arm 19 pivotally mounted on the shaft (not shown) of the spool S′, which shaft is similar to the shaft 20 (Fig. 2) of spool S. The arm 19 has a lateral extension 21 provided with a brass inking roller 22 at its extreme end, which is tightly pressed against the portion of the ribbon passing over the idler 15 by means of the spring 23 which connects the arm 19 with the bracket 24 anchored to the bracket 18 adjacent to the idler 16.

The brass roller serves as the inking roller and is supplied with ink from the fountain roller 25 rotatably mounted on the free end of the arm 26 pivotally connected to the arm 19. The arm 26 is limited in its outward movement by the stop 27 formed on the arm 19 and limited in its inward movement by the stop 28 on the arm 19. For anchoring the arm 26 in its outward position, the arm 26 is provided with the spring pressed pin 29 which extends through such arm 26 and projects therefrom to coöperate with the recesses 30 and 31 in the arm 19, such recesses 30 and 31 corresponding with the limit of movement defined by the stops 27 and 28 and being disposed adjacent to such stops 27 and 28, respectively. For facilitating the manipulation of the arm 26, the finger piece 32 is provided at its outer end. The fountain roller 25 is preferably composed of any suitable absorbent material.

In the use of the device, whenever it is desired to ink the ribbon the fountain roller 25 will be supplied with ink, and then the arm 26 swung over so that its roller 25 contacts with the roller 22, where it will be anchored by the coöperation of the recess 31 with the pin 29, whereupon the ink from the roller 25 will be transferred to the roller 22, and from the roller 22 to the ribbon 14. When the ribbon has been sufficiently inked the arm may then be swung out into its outward limit of movement and there anchored by the coöperation of the recess 30 with the

pin 29. Obviously, the inking operation may accompany and be continuous with the operation of the ribbon so that the arm 26 would be constantly maintained in its inward position, or else the inking operation only take place when the ribbon requires inking, in which case the arm 26 would be swung into its inward position when no inking is to take place.

The ribbon may be intermittently actuated to continuously present a fresh printing surface as is usual with typewriter ribbons, for which purpose the spool S may be fixed to its shaft 20 and the spool S′ to a similar shaft (not shown), and such shafts actuated one to the exclusion of the other or simultaneously as the case may be.

It is obvious that various changes and modifications may be made to the details of construction without departing from the spirit of the invention as defined in the claims.

I claim:

1. An ink-distributing device comprising, a distributing roller; a fountain roller; a member for supporting the fountain roller and for moving the fountain roller into and out of contact with the distributing roller; and an automatic latch for retaining said member in position for contact of the fountain roller with the distributing roller.

2. An ink-distributing device comprising, a distributing roller; a fountain roller; a member for supporting the fountain roller and for moving the fountain roller into and out of contact with the distributing roller; and an automatic latch for holding said member with the fountain roller away from the distributing roller and retaining said member in position for contact of the fountain roller with the distributing roller.

3. An ink-distributing device comprising, a distributing roller; a fountain roller; a swinging arm for supporting the fountain roller and for moving the fountain roller into and out of contact with the distributing roller; and means for holding said arm with the fountain roller away from the distributing roller and retaining the swinging arm in position for contact of the fountain roller with the distributing roller.

4. An ink-distributing device comprising an idler; a distributing roller adjacent to said idler; a fountain roller normally out of contact with the distributing roller; a swinging arm for supporting the fountain roller and for moving the fountain roller into and out of contact with the distributing roller; and means for retaining the swinging arm in position for contact of the fountain roller with the distributing roller.

5. An ink-distributing device comprising, with an idler, a distributing roller in contact with said idler, a fountain roller normally out of contact with the distributing roller, a swinging arm for supporting the fountain roller and for moving the fountain roller into and out of contact with the distributing roller, means for limiting the movement of said arm toward and away from the distributing roller, and means for retaining the swinging arm in position for contact of the fountain roller with the distributing roller.

6. An ink-distributing device comprising, with an idler over which a printing ribbon may travel, a distributing roller, said ribbon traveling between said idler and said distributing roller, a fountain roller normally out of contact with the distributing roller, a swinging arm for supporting the fountain roller and for moving the same into and out of contact with the distributing roller, means for limiting the movement of said arm toward and away from the distributing roller, and means for retaining the swinging arm in position for contact of the fountain roller with the distributing roller.

7. A printing ribbon reinking device comprising an inking roller, a bracket on which said roller is mounted, the bracket being mounted to resiliently maintain said roller against said ribbon, a fountain roller for transferring ink to said inking roller, and a second bracket on which said fountain roller is mounted.

8. A ribbon reinking device comprising an inking roller, a bracket on which said roller is mounted, the bracket being mounted to resiliently maintain said roller against said ribbon, a fountain roller for transferring ink to such inking roller, a second bracket on which said fountain roller is mounted, and means for anchoring said second bracket either in ink transferring position or out of ink transferring position.

9. The combination of an idler around which a ribbon is passed, a spool on which said ribbon is wound, a shaft on which said spool is mounted, a bracket pivotally mounted on said shaft, an inking roller at the end of said bracket, a spring for resiliently maintaining said inking roller in contact with said ribbon adjacent to said idler, a fountain roller for transferring ink to said inking roller, a second bracket on which said fountain roller is mounted, and means for anchoring said second bracket either in ink transferring position or out of ink transferring position.

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