May 27, 1930. H. A. W. WOOD 1,760,573

PAGE CUT-OFF FOR INK FOUNTAINS

Original Filed Nov. 15, 1926

Fig. 1.

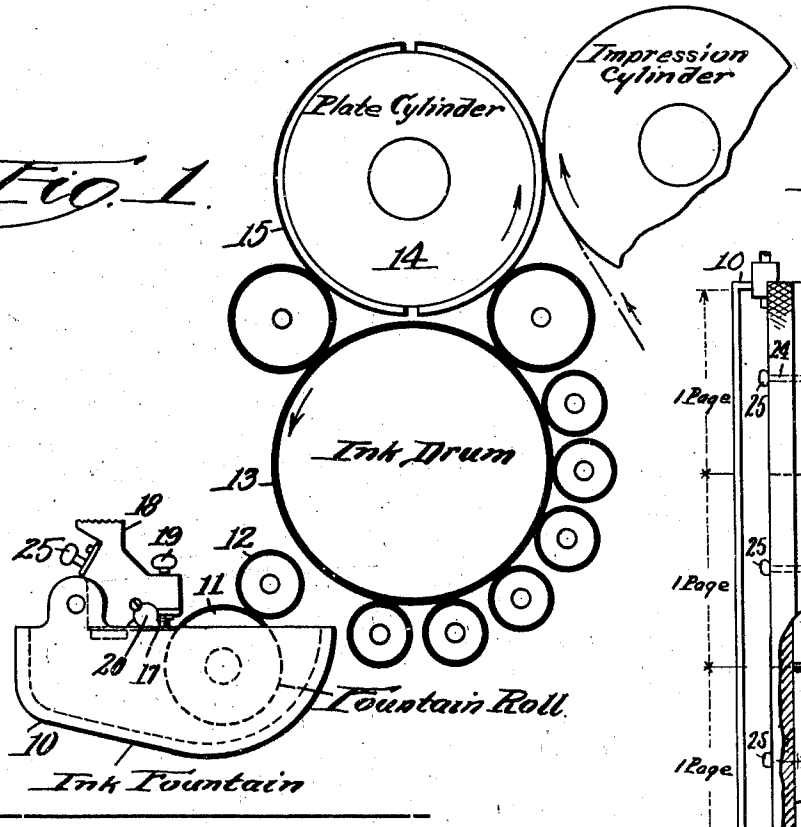


Fig. 2.

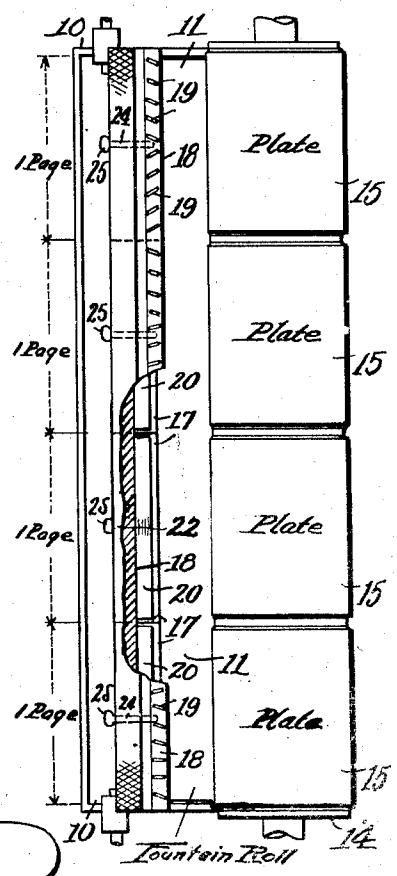
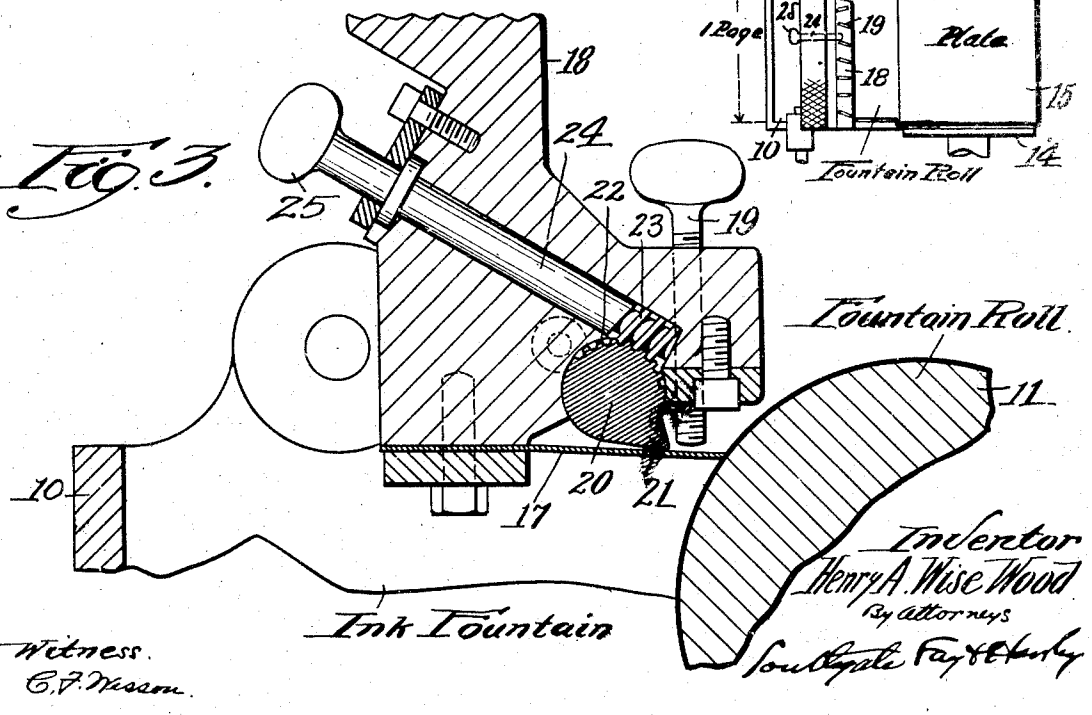


Fig. 3.



Witness.
C. F. Wesson.

Inventor
Henry A. Wise Wood
By attorneys
Southgate Fay & Hanby

Patented May 27, 1930 1,760,573

UNITED STATES PATENT OFFICE

HENRY A. WISE WOOD, OF NEW YORK, N. Y., ASSIGNOR TO WOOD NEWSPAPER MACHINERY CORPORATION, OF NEW YORK, N. Y., A CORPORATION OF VIRGINIA

PAGE CUT-OFF FOR INK FOUNTAINS

Application filed November 15, 1926, Serial No. 148,442. Renewed October 23, 1929.

This invention relates to a printing press and comprises means for cutting off any page individually at the ink fountain so that ink will not be delivered to that plate. The principal object of the invention is to provide means for cutting off any page at will independently of the blade adjusting means. The means provided is of such a nature that the adjustment of the blade will be restored to its exact original position when the cut-off means is released.

Other objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawings in which

Fig. 1 is a side view of an inking device for a printing press partially diagrammatic in form;

Fig. 2 is a plan of the regulating means partly in section; and

Fig. 3 is an enlarged transverse sectional view.

It has been customary to provide the ink fountain for a newspaper printing press with a blade which scrapes the surplus ink from the surface of the fountain roll. The desired thickness of the film of ink on the surface of the fountain roll to be delivered to the ductor roll has been regulated by thumb screws arranged at regular intervals along the length of the blade. Heretofore when it was desired to cut off all the ink from that portion of the fountain roll which supplies an entire page, it has been customary to tighten all of the above-mentioned screws opposite that section of the fountain blade and to fasten it down through the desired length. Being employed for one particular part of the cylinder, this necessitated the loss of the adjustment of these screws and their re-adjustment whenever it was desired to feed the ink to that page again. This invention is devised for the purpose of easily cutting off the ink from one or more pages without stopping the operation of the press, if desired, and without interfering with the adjustment of the blade for ordinary printing work. In other words, after a printing plate has been cut off by movement of the blade into contact with the roller to keep the ink from it, the blade can be let back at will and its original adjustment retained.

I have shown the invention as applied to an ordinary fountain 10, and fountain roll 11 delivering ink to a ductor roll 12 and then to an ink drum 13 and from there to the usual plate cylinder 14. On this plate cylinder are a series of plates 15. Each plate is the width of a page ordinarily so that in the form illustrated a web is printed four pages wide.

A series of blades 17 are located on the stationary back 18, one for each page of the printed product. Each blade is equal to the length of one of the plates 15. Each blade is adjusted by a series of thumb screws 19 in the usual way so that normally the blade, by its own resiliency, will engage the bottom of its adjusting screws and clear the fountain roll just enough to allow a film of ink to be delivered therefrom which will give the proper blackness for the particular kind of printing required. This obviously can be adjusted at will. No change is made in this part of the device, as the adjusting screws serve their usual purpose. Within the back 18 I arrange a series of separate bars 20, each having a projection 21 extending along the same of the width of one of the printing plates or one page of the newspaper. On these bars 20 are formed teeth 22 constituting part of a worm wheel. Each bar is mounted in a recess in the back 18 so that it can turn on its own axis. They are adapted to be turned by a worm 23 individually. This worm has a stem 24 and a thumb handle 25 for turning it.

Assume that the blades are adjusted so as to give the proper thickness of ink along the whole width of the press. Now, if it is to be desired to cut off one page, the worm 23 corresponding to that page is turned and the projection 21 will come down on the blade as shown in Fig. 3 to move it out of contact with the adjusting screws 19 and its edge into contact with the surface of the fountain roll. Now the roll does not deliver ink in this area. If it is desired afterwards to supply that particular area of the plate cylinder, the proper bar 20 is turned back and its projection 21 brought up above the bottom of the screws 19. Now the blade 17, by its own re-

siliency, springs back to engage the bottoms of the screws 19. It will be seen that its original adjustment is preserved. No re-adjustment of the screws 19 will be necessary, unless there is some change which would have required it anyway.

This obviates the necessity of re-adjusting the screws 19 to get exactly the right film of ink on the roll 11. This is a delicate matter and requires considerable time ordinarily. The use of this invention results in a great saving in time over the methods heretofore employed.

Although I have illustrated and described only a single form of the invention I am aware of the fact that modifications can be made therein by any person skilled in the art without departing from the scope of the invention as expressed in the claims.

Therefore I do not wish to be limited to all the details of construction herein shown and described, but what I do claim is:—

1. In an inking device for a printing press, the combination with a fountain roll and a plurality of blades for regulating the thickness of the ink on the roll, of means for adjusting each blade toward or from the roll, and means independent of said adjusting means, for moving each blade against the roll to cut off the ink delivery from the area regulated by that blade.

2. In an inking device, the combination with a plurality of blades each of a length of the width of a printed page for regulating the thickness of the ink on a roll constituting a part of the inking device, of means for adjusting each of said blades toward the roll, and means, independent of said adjusting means, for moving each of said blades independently of any other blade toward the roll to cut off the ink delivery therefrom in the area of a blade thus adjusted, whereby when the last-named means has been used and restored, the blade will retain its original adjustment.

3. In an ink supplying device, the combination with a roll and a plurality of blades for regulating the film of ink delivered thereby, of a series of adjusting screws adapted to engage one side of each of the blades to regulate the thickness of the film, a plurality of bars, one for each blade extending along the blades and each bar having a projecting portion, and means for turning each of said bars independently of any other bar to bring the projecting portion of said bar against the blade and depress it and for turning it back to normal position independently of said adjusting screws.

4. In an ink supplying device, the combination with a fountain roll and a plurality of blades one for each sheet, of a series of adjusting screws adapted to engage one side of each of the blades to force it toward the roll and regulate the thickness of the film of ink on the roll, a plurality of bars extending along the blades, and means for moving each of said bars independently of any other bar to depress a blade away from its adjusting screws and for moving it back to normal position when the blade will again engage said adjusting screws and retain its original adjustment.

5. In an ink supplying device, the combination with a roll and a plurality of blades for regulating the film of ink delivered thereby, of a plurality of bars extending along the blades, each bar having a projecting portion, and means for turning each of said bars independently of any other bar to bring its projecting portion against one of the blades and depress it to cut off the ink supply throughout the length of said bar.

6. In an ink supplying device, the combination with an ink fountain and fountain roll, said ink fountain having a back, of a blade supported by the back, a series of bars oscillatably carried by said back, each one having a length equal to the width of a printed page and each having a projection thereon of the same length, each bar having worm wheel teeth thereon, and operating means for each bar comprising a worm meshing with the worm teeth, whereby the projection can be turned into contact with the blade to cause the blade to engage the roll to cut off the entire supply of ink throughout that area.

7. In an ink supplying device, the combination with an ink fountain and fountain roll, said ink fountain having a back, of a blade supported by the back, a series of adjusting screws carried by the back for engaging the blade for regulating the thickness of the film of ink delivered by the fountain roll, a series of bars oscillatably carried by said back, each one having a length equal to the width of a printed page and each having a projection thereon of the same length, each bar having worm wheel teeth thereon, and operating means for each bar comprising a worm meshing with the worm teeth, whereby the projection can be turned into contact with the blade to cause the blade to engage the roll to cut off the entire supply of ink throughout that area or to release the blade from its influence and allow it to come back into contact with the adjusting screws.

8. In an ink supplying device, the combination with an ink fountain and fountain roll, said ink fountain having a back, of blades supported by the back, a series of bars oscillatably carried by said back, each one having a length equal to the width of a printed page and each having a projection thereon of the same length, and operating means for each bar for forcing the projection into contact with a blade to cause the blade to engage the roll to cut off the entire supply of ink throughout that area.

9. In an inking device for a printing press,

the combination with a fountain roll and a blade for regulating the thickness of the ink thereon, of means for adjusting the blade toward or from the roll, and means independent of said adjusting means for moving a portion of the blade against the roll whereby to cut off the ink delivery from the roll in the area of contact by that portion of the blade and still permit delivery of the ink to the remainder of the roll.

10. In an inking device for a printing press, the combination with a stationary back, of a yielding blade carried thereby for engaging the fountain roll, a stop screw for limiting the distance of the end of this blade from the fountain roll, an oscillatable bar having a projection thereon for engaging the blade and forcing it down on the fountain roll to cut out the part of the roll covered by said blade and to prevent ink from passing down the blade, said bar having a rack thereon, and a worm for engaging the rack for turning the bar down when desired.

In testimony whereof I have hereunto affixed my signature.

HENRY A. WISE WOOD.