

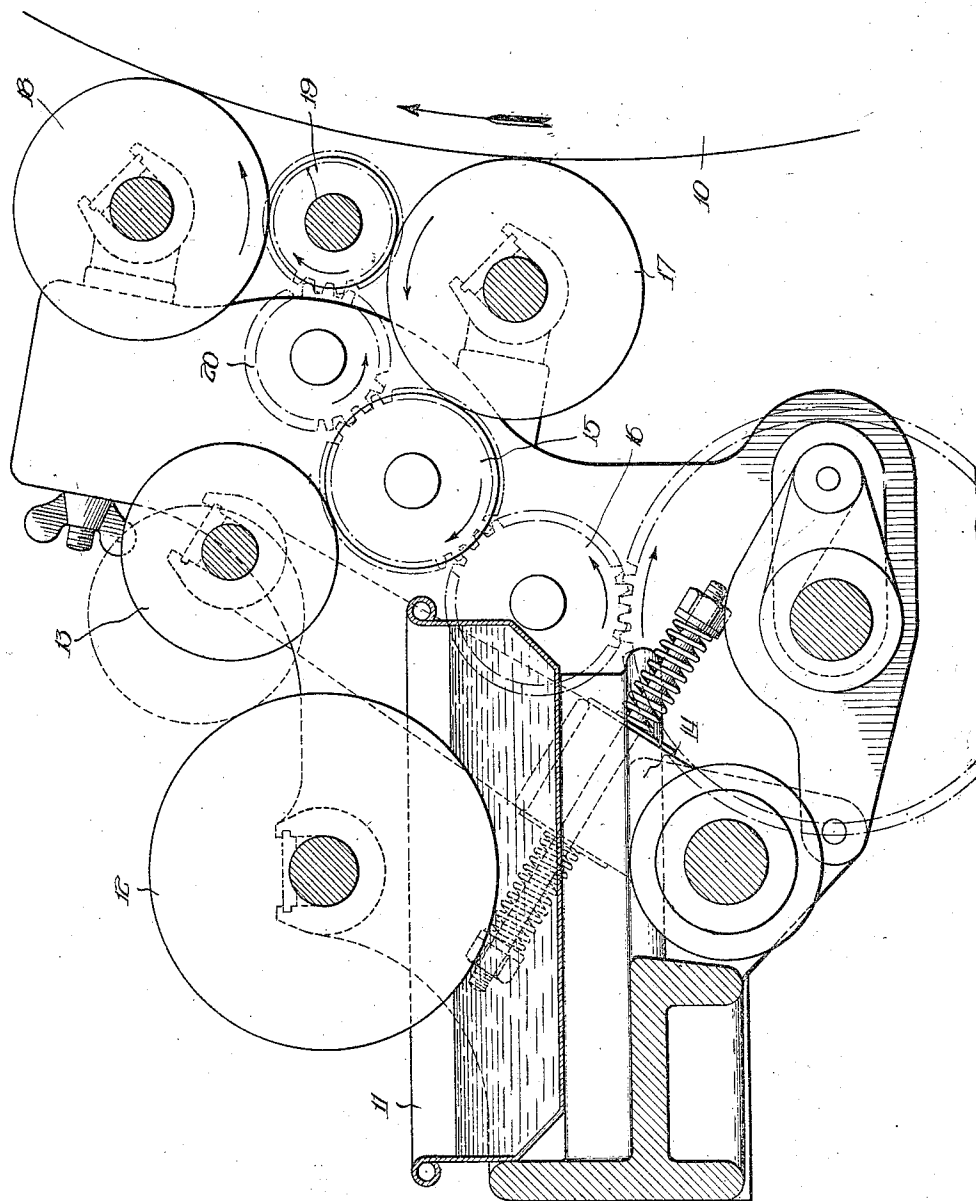
Oct. 30, 1923.

1,472,626

J. R. BLAINE

WATER FOUNTAIN

Filed Aug. 24, 1921



Witness:
A. Burkhardt

Inventor:
Joseph R. Blaine
By Wilkinson, Hensley, Ogden & Knight
Attys.

Patented Oct. 30, 1923.

1,472,626

UNITED STATES PATENT OFFICE.

JOSEPH R. BLAINE, OF CHICAGO, ILLINOIS, ASSIGNOR TO MIEHLE PRINTING PRESS AND MANUFACTURING COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

WATER FOUNTAIN.

Application filed August 24, 1921. Serial No. 494,993.

To all whom it may concern:

Be it known that I, JOSEPH R. BLAINE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Water Fountains, of which the following is a specification.

This invention relates to printing presses, and more particularly to means for damping the plate cylinder.

It is customary in certain types of printing presses to provide means for applying a small quantity of water to the plates. This is accomplished by use of rolls, one of which is mounted with its periphery in a water container, another being mounted for oscillation between the water take-up roll and one or more distributing rolls.

The object of this invention is to provide a simple and efficient arrangement whereby the water may be conveyed to and properly distributed upon the plates in a manner to meet the requirements for successful commercial use.

This and other objects are accomplished by means of the arrangement disclosed on the accompanying sheet of drawing, in which the single figure is a fragmentary side elevation of a printing press embodying my invention.

The invention is disclosed in connection with a printing press having a plate cylinder 10, to which water is conveyed from a suitable receptacle 11, water being taken up from said receptacle by a take-up roll 12. A ductor roll 13 mounted in an oscillating arm 14 intermittently conveys the water from the take-up roll 12 to an intermediate roll 15, which is driven by a gear 16. Water is then transferred from the intermediate roll 15 to a lower roll 17, which conveys water directly to the plate cylinder 10. A second plate cylinder engaging roll 18 is provided which receives its supply of water from the first plate cylinder engaging roll 17 through an intermediate roll 19 driven by an intermediate gear 20.

It is seen, therefore, that the supply of water to the plate cylinder 10 is divided at the roll 17, the larger amount of water being supplied to the cylinder through the roll 17 and the remainder of the water being supplied to the cylinder 10 through an intermediate roll 19 and second plate cylinder-

engaging roll 18. Although the second cylinder engaging roll 18 does convey some water to the plate cylinder 10, its main function is to distribute water placed on the cylinder by the first roll 17. It also acts to relieve the plate cylinder of any excess of water which may be supplied by the roll 17. By means of this arrangement the plates on the cylinder 10 are properly provided with water which is distributed and any excess of water absorbed in a manner to meet all of the requirements for successful commercial use.

While I have referred to roll 17 as the lower roll, I wish to make it clear that I refer particularly to the roll which first engages the plate regardless of the direction of rotation of the plate cylinder 10.

It is my intention to cover all modifications of the invention falling within the spirit and scope of the following claims.

I claim:

1. In a printing press, the combination of a plate cylinder, a water receptacle, means for conveying water from said receptacle to said cylinder including a plurality of rolls engaging the cylinder and an intermediate roll, water being supplied to one of the cylinder engaging rolls and some water being supplied from said first cylinder engaging roll by said intermediate roll to another cylinder engaging roll whereby water is supplied to and distributed on said cylinder, a gear for driving one of said cylinder engaging rolls, and a separate gear for driving the intermediate roll.

2. In a printing press, the combination of a printing cylinder, a water supply, means for conveying water from said supply to said cylinder including a plurality of rolls engaging the cylinder, all of the water being supplied to one of said cylinder engaging rolls, an intermediate roll out of engagement with said cylinder for conveying some water from said first cylinder engaging roll to another cylinder engaging roll whereby water is supplied to and distributed on the cylinder, a gear for driving the cylinder engaging roll first receiving all the water, and a separate gear for driving the intermediate roll.

Signed at Chicago, Illinois, this 12th day of August, 1921.

JOSEPH R. BLAINE.