(No Model.)

G. R. JENKING.

MOISTENING ROLLER.

No. 435,606. Patented Sept. 2, 1890.

Fig. 1.

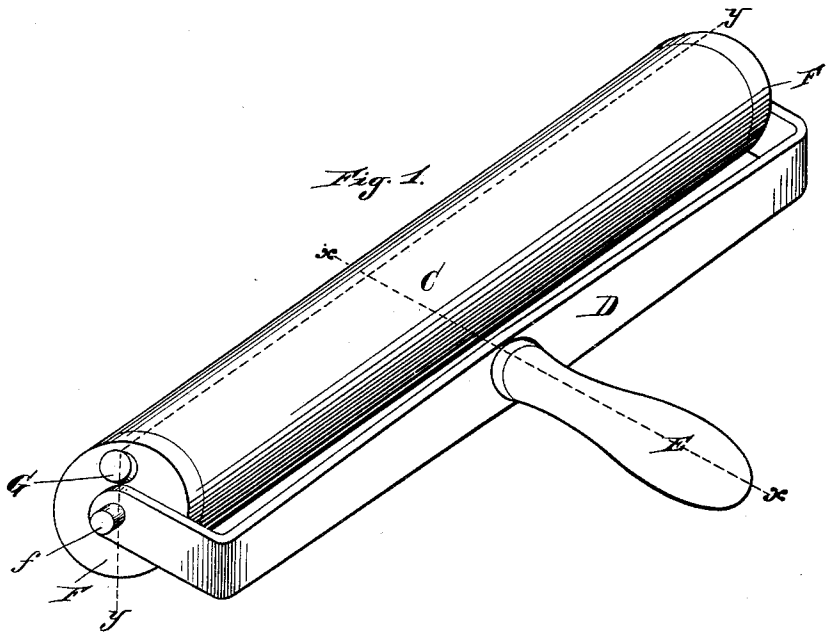


Fig. 2.

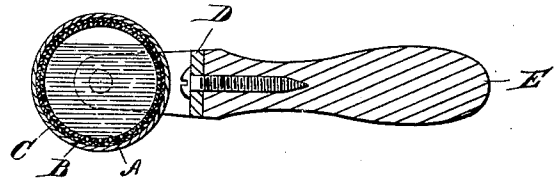
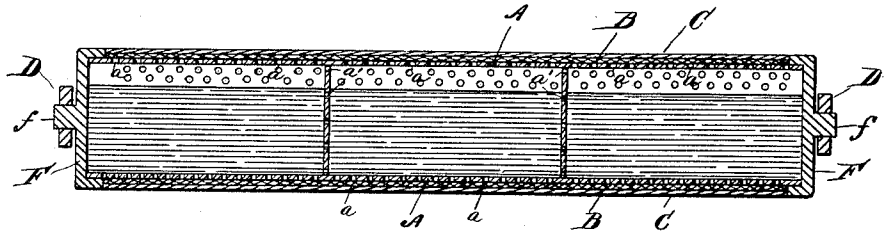


Fig. 3.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

GEORGE R. JENKING, OF DETROIT, MICHIGAN, ASSIGNOR OF ONE-HALF TO HENRY H. CUSHING, OF SAME PLACE.

MOISTENING-ROLLER.

SPECIFICATION forming part of Letters Patent No. 435,606, dated September 2, 1890.

Application filed October 24, 1888. Serial No. 289,051. (No model.)

To all whom it may concern:

Be it known that I, GEORGE R. JENKING, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Moistening-Roller; and I do hereby declare the following to be a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain new and useful improvements in apparatus for copying letters, and more particularly to that class of devices which are employed to moisten the sheet upon which the impression is to be made prior to its being subjected to pressure.

The objects of my invention are, first, to provide a suitable roller adapted to be used to moisten the sheet on which it is desired to take an impression of a written page, which shall be cheap, durable, and effective in its operation, simple in its construction, and not liable to get out of order, and, second, to provide a suitable moistening-roller of such construction that it will distribute the moistening-liquid uniformly over the surface of the paper on which the impression is to be made, leaving it sufficiently moistened to make a perfect impression, but removing all the surplus moisture, so that there shall be no danger of blurring or blotting either the original or the copy, as so often happens in the use of the ordinary brush or wet blotter.

The various features of my invention will be more fully described and pointed out in the following specification and claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my improved device. Fig. 2 is a section on line *x x*, Fig. 1. Fig. 3 is a section on line *y y*, Fig. 1.

A represents a suitable cylinder of metal, hard rubber, or other suitable material.

B is a covering of any suitable material—as, for instance, a tubular wicking—located around the outer surface of the cylinder A and adapted to retain the moisture.

C is a covering of any suitable absorbent material—as, for instance, chamoise-skin—located on the outside of the fabric covering B and adapted to distribute moisture from its surface as the cylinder is caused to revolve in contact with the surface of the paper.

D is any suitable frame, and E a handle.

F are suitable caps located upon the ends of the cylinder A and provided with trunnions *f*.

G is a filler.

A represents perforated partitions separating the interior of the cylinder A into any number of compartments. These partitions partially restrain the liquid from all flowing to one end of the cylinder, in case the same should be tilted into an oblique position, and thus insure the uniform saturation of the distributing-cover along its whole length, and hence the uniform moistening of the page.

The operation of my device is as follows: The interior is filled with water through the filling-aperture G. The water will pass through the perforations *a'* and fill the compartments on the interior of the cylinder A. The filler is replaced in position and the water will ooze through perforations *a*, saturating the covering B, which in turn supplies moisture to the distributing-cover C. Now upon being rolled over the surface of the paper a sufficient quantity of water will be deposited by the distributing-cover C to produce a perfect impression of the written copy. The copy is laid upon the page in the usual manner and the operation repeated until the entire amount of manuscript which it is desired to copy has been placed between the leaves of the press-copy book, when the same is subjected to pressure in the usual manner.

The advantages gained by my improvement are many and obvious. The use of the ordinary brush is very unsatisfactory, as it is impossible to moisten the surface of the page uniformly, and there is great danger of blotting some portions of the page, while others will not have been moistened sufficiently to copy at all. So, also, in the use of wet blotters the operation must be very speedily performed to prevent spoiling the copy, and consequently but few impressions can be taken at a time. With my improvement, however, these difficulties are all effectually overcome, and the operator may moisten page after page

of manuscript until he has placed in the book his entire amount of copy, and by subjecting the whole to pressure once completes the process of copying. I have found in practice that the capacity for copying by this improved apparatus is practically unlimited, having produced as high as two hundred perfect impressions at one time.

Another advantage in the use of my improved roller is that when the operator has moistened a page in the letter-book by running the roller out to the edge of the page the leaf will adhere to the roller, so that it can be carried over and deposited upon the page of copy, thus obviating the necessity of handling the page of the letter-book with the fingers—a very troublesome and tedious operation. Thus it will be seen that by my improvement the process of copying letters is rendered very much more expeditious than in the ordinary manner, and the necessity of great care in the manipulation of the apparatus is entirely done away with, and the perfection of the impressions is insured.

Having thus described my invention, what I claim is—

1. A moistening-roller consisting of a cylindrical receptacle for water, the same being perforated to permit the escape of the water and provided with a suitable distributing-cover located upon the outside of the cylinder, an intermediate retaining-cover located between the cylinder and the distributing-cover, and in connection therewith a suitable filler located at one end of the cylinder, whereby the moistening-liquid may be replenished, and an operating-handle, whereby the device is adapted for use in moistening the sheets of press-copy books, substantially as described.

2. A moistening-roller consisting of a cylindrical receptacle for water, the same being provided upon its exterior with a suitable distributing-cover and being perforated to permit the escape of the moistening-liquid, and provided upon its interior with one or more partitions, the same being perforated to permit the passage of water from one compartment to the other, substantially as described.

GEORGE R. JENKING.

Witnesses:
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M. M. WILES.