## A. D. POOLE.

BUFFING OR TAKE-OFF ROLL FOR FINISHING PRINTED PAPER.

No. 188,670. Patented March 20, 1877.



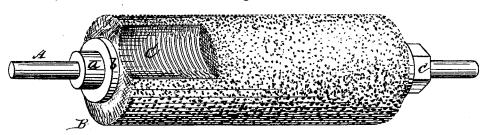


Fig. 2.

Fig.4.



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## IMPROVEMENT IN BUFFING OR TAKE-OFF ROLLS FOR FINISHING PRINTED PAPER.

Specification forming part of Letters Patent No. 188,670, dated March 20, 1877; application filed March 8, 1877.

To all whom it may concern:

Be it known that I, ALFRED D. POOLE, of the city of Wilmington, county of New Castle, and State of Delaware, have invented a new and useful Improvement in Machines for Finishing Printed Paper; and I do hereby declare that the following specification, taken in connection with the drawings furnished and forming a part of the same, is a full, clear, and exact description thereof.

In the accompanying drawing, Figure I represents, in perspective, a take-off buffing-roll, partly cut away to show the construction. Fig. II represents a section of the same. Figs. III and IV represent views of one of each of the series of disks which form the body of the roll.

My invention relates to that class of machines for finishing or surfacing printed sheets of paper or other material in which the printed sheets are passed between and in direct contact with smooth rotating rolls, the surfaces of which are kept clean by buffer-rolls arranged to rotate in contact therewith, as shown, for example, in the patent granted to James Morris, January 20, 1874. In the patent referred to the buffing or take-off rolls are constructed of a series of disks of calico or other woven fabric, of an equal diameter, arranged upon a spindle, and compressed together by means of clamping devices.

The object of this device is to remove the ink or other substance from the surfaces of the set-off rolls; and it is found in practice that, in order to compress the disks sufficiently to prevent them from turning upon the spindle when in use, they present a hard, unyielding

surface, which renders them ineffective. My improved construction is designed to remedy this defect, and I accomplish the same by placing between adjoining disks of the woven fabric a disk of smaller diameter, composed of the same or any suitable material—such as metal or paper—which enables me to compress the same firmly together and preserve the proper degree of flexibility upon the surface of the buffing-roll to secure a wiping action.

In the drawing, A represents the spindle or shaft; B, the woven disks, and C the intermediate disks. The spindle is constructed with a collar, a, and removable washers b b, inclosing the series of disks forming the body of the roll, and which are compressed firmly together by means of the nut c.

The arrangement and operation of these buffing rolls are well understood in the use of the class of machines to which they are applied, and it is, therefore, not deemed necessary to explain the same.

Having thus described my invention, I claim as new and desire to secure by these Letters Patent—

In a machine for finishing printed paper, a buffing or take-off roll composed of a series of disks of fibrous material and a series of disks of smaller diameter, composed of any suitable material, arranged alternately upon a spindle or shaft, and compressed together by suitable clamping devices, substantially as described.

ALFRED D. POOLE.

Witnesses:

THOMAS S. POOLE, J. MORTON POOLE, Jr.