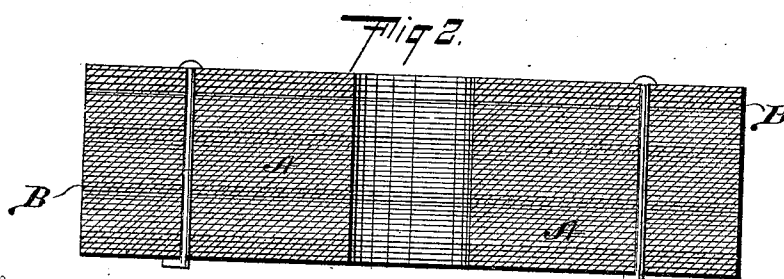
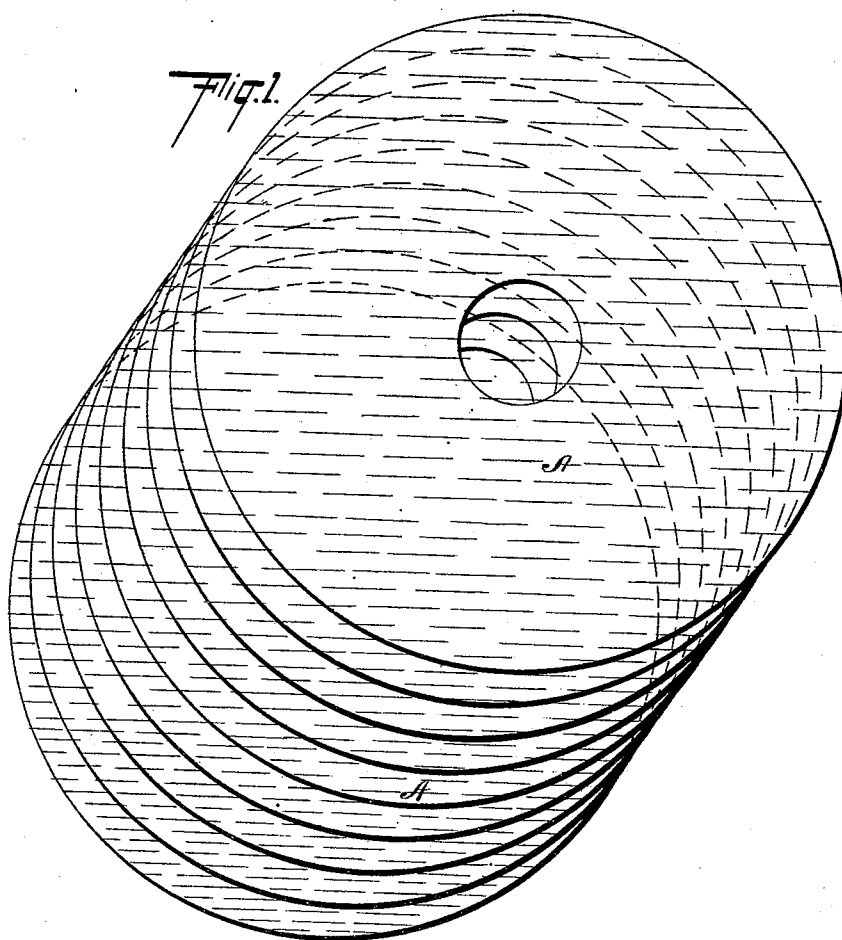


(No Model.)

T. J. CLEARY
BUFFING WHEEL.

No. 520,516.

Patented May 29, 1894.



WITNESSES:

John Kenny Jr.
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UNITED STATES PATENT OFFICE.

THOMAS J. CLEARY, OF WESTFIELD, MASSACHUSETTS.

BUFFING-WHEEL.

SPECIFICATION forming part of Letters Patent No. 520,516, dated May 29, 1894.

Original application filed June 13, 1893, Serial No. 477,425. Divided and this application filed October 7, 1893. Serial No. 487,480. (No model.)

To all whom it may concern.

Be it known that I, THOMAS J. CLEARY, a citizen of the United States, residing at Westfield, Hampden county, and State of Massachusetts, have invented a new and useful Buffing-Wheel, which was described in my original application for patent for buffing-wheel, filed June 13, 1893, and serially numbered 477,425, of which this application is a division.

The following is a full, clear, and exact specification.

My invention relates to improvements in polishing or buffing wheels particularly of that class which are built up of disks of suitable substances, and consists in building up a wheel of disks of cloth and paper and the novel arrangement of said disks which are secured together in the wheel.

The objects of my invention are to construct a very strong and serviceable buffing wheel which will present a very hard and strong cutting or polishing surface and that will readily hold rouge, or other agent that may be applied to the periphery of the wheel, to assist it in the act of polishing.

My invention is illustrated by the accompanying drawings, in which—

Figure 1 is a perspective side elevation of a series of paper disks used in the wheel, the fibers of the paper of the several disks being indicated by the dotted lines, and Fig. 2 is a cross section through the center of the buffing wheel of my improved construction, the cloth disks being indicated by the darker shading.

Similar letters refer to similar parts throughout both views.

A A are disks of paper. The paper used by preference in this wheel is a heavy rope manila.

B B are disks of any suitable fabric, for instance, cotton cloth, or muslin.

My invention consists in placing the several disks of cloth against each other, then placing several disks of paper upon the disks of cloth, and so on, as shown in Fig. 2, in which the cloth disks are indicated by the darker shading and the paper disks are indicated by the lighter shading.

It will be observed by reference to Fig. 2

that there is a predominance of paper used in the construction of the wheel, the purpose of which will be hereinafter explained.

D D are suitable pins or rivets which are passed through the several layers of cloth and paper, and headed or otherwise fastened on both sides of the wheel to hold the various layers of cloth and paper tightly together.

The main feature of my invention, and the one feature which makes a wheel built up of disks of paper and disks of cloth in the above manner, practicable, is the important arrangement of the paper disks.

It should be mentioned that any paper having a sufficiently marked and heavy fiber can be used to great advantage in this wheel.

In placing the disks of paper in this wheel, it is necessary that the fiber of the paper of the several disks shall run in substantially the same direction.

I am aware that wheels have been built heretofore of disks of paper and cloth, but this important feature, of placing the fiber of the several disks of paper throughout the wheel in the same direction, has never been appreciated and its value known.

It has been practically demonstrated that a wheel constructed of cloth disks and paper disks, as above described, in which the fiber of the several disks of paper run in various directions,—that such a wheel is thoroughly impractical, the periphery or cutting surface of the wheel offering no distinct grain. The periphery of such a wheel will almost instantly, upon being revolved against any hard substance, fray out, soften and become useless. On the contrary, it has been practically demonstrated that a wheel built of exactly the same material and of the same number and size of disks of cloth and paper, when arranged as above described, with the fiber of the paper all running substantially one way, will instantly cut and polish the hardest of metallic substances without fraying or becoming soft. A wheel thus constructed, in which is interposed occasional disks of cloth will more readily hold rouge, or other polishing agent which may be applied to the periphery of the wheel to facilitate the act of polishing, than a wheel built entirely of paper.

Having thus described my invention, what

I claim, and desire to secure by Letters Patent, is—

5 The combination in a polishing or buffing wheel of disks of paper, the fibers of which run in substantially the same direction throughout the wheel, with occasionally interposed between the disks of paper the disks of fabric,

all secured together, substantially as and for the purpose specified.

THOMAS J. CLEARY.

Witnesses:

GEORGE GEHLE,
GEO. E. WHIPPLE.