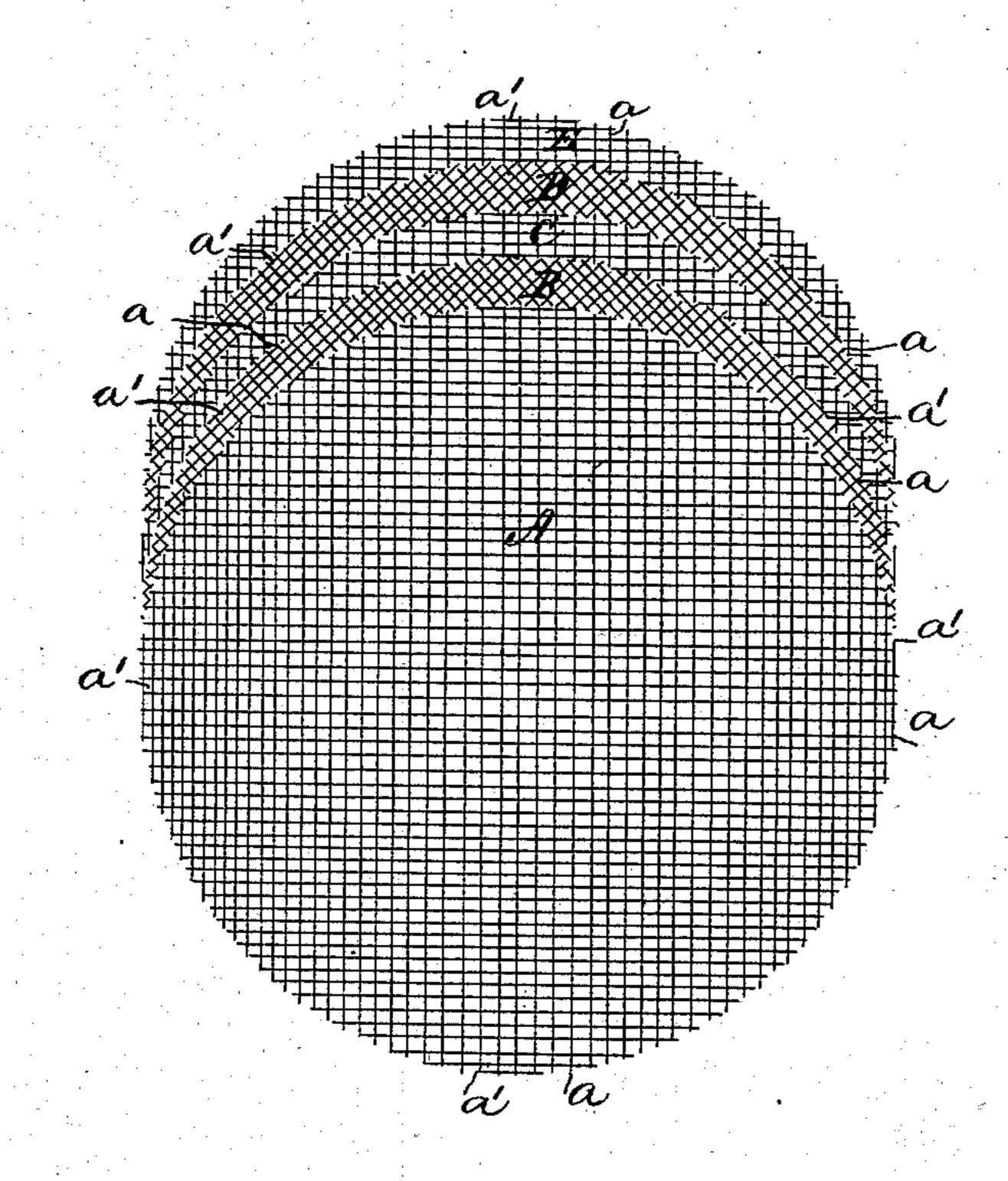
(Model.)

A. LEVETT.
Buffing Wheel.

No. 237,395.

Patented Feb. 8, 1881.



WITNESSES: Welliam Fellott Ing John H. Steenwerth INVENTOR: Alexander Levett

BY Asgustt

## United States Patent Office.

ALEXANDER LEVETT, OF NEW YORK, N. Y.

## BUFFING-WHEEL.

SPECIFICATION forming part of Letters Patent No. 237,395, dated February 8, 1881.

Application filed September 15, 1880. (Model.)

To all whom it may concern:

Be it known that I, ALEXANDER LEVETT, of the city of New York, in the county of New York, and State of New York, have invented a new and useful Improvement in Buffing or Polishing Wheels; and I do hereby declare that the following is a full, clear, and exact description thereof, and of its mode or manner of operation, reference being had to the accompanying drawing, making a part of this specification.

My invention relates to the soft, pliable, or bushy wheels used for buffing or polishing, which are made of layers of woven materials.

15 All such materials, when cut into circular shape, have, at different portions of their edges, relatively long and short threads; and the object of my invention is a soft and pliable buffing-wheel composed of such materials in loose layers, constructed so that it will wear longer and keep an even operating surface than such wheels as now constructed.

The drawing shows my improvement as applied to buffing-wheels made of woven ma-25 terials. The top-sheet, A, shows the threads running vertically and horizontally, and the sheets below this, B C D, &c., are slipped up to expose their edges, and to indicate the direction of the threads of the different sheets 30 when all are slipped into position over each other. It will be seen that the alternate sheets A C E, &c., have their threads all running in the same direction, while the intervening sheets, BD, &c., have their threads 35 all running in the same direction, but at an angle to the direction of the threads in the sheets A C, &c. By this arrangement the short threads a' a' a' a' of one set of sheets have next to them the long threads a a a a of 40 the other set of sheets throughout the entire thickness of the wheel. The same arrangement will apply to such wheels made of any soft and pliable materials having relatively weak and strong parts on their edges or pe-45 ripheries.

As buffing-wheels have been heretofore made, sheets or layers of the material to be used have been folded and stamped out or cut out to shape, and then sewed together, or the stamped or cut out. These wheels are then

provided with a hole in the center, to be fastened between washers, or in some other convenient manner upon the spindle of the machine. In so placing the material the threads 55 or fibers of all the sheets or layers lie in the same direction, and thus all the short threads (which quickly ravel out) or weak parts of all the layers come upon the same portions of the periphery or bearing part of the wheel. The 60 result of this arrangement has been that the bearing-surface has quickly worn away in use at the weak parts and the wheel become angular and uneven. The object of my improvement is to avoid this. I accomplish this by 65 alternating the sheets or layers in such manner relatively to each other that where one sheet presents the shortest threads or weakest part to the periphery, the adjoining layers present the longer threads or strongest parts 70 to the periphery, so on continuously until enough layers have been arranged to make a wheel of the thickness desired. The sheets are then fastened in such position by being stitched near their center, or in any other con- 75 venient manner. By this arrangement the polishing-surface of the wheel remains for comparatively a very long time even and unbroken, and a soft, pliable, buffing-wheel constructed on this plan works better and more evenly, 80 and lasts much longer, than those now in use. Of course when the material is very thin it is not absolutely necessary that each alternate sheet should be so placed; but the best results are obtained by having each layer or sheet 85 present its weakest part to the bearing-surface next to the strongest part of its adjoining sheet or layer.

Having thus described my invention, what I claim as new, and desire to secure by Letters 90 Patent, is—

A soft pliable buffing wheel composed of sheets of unbleached muslin or other woven material, disposed so that the sheets will present, alternately, long and short threads to the operating surface of the wheel, at the same part of the periphery of the wheel, substantially as described and shown.

ALEXANDER LEVETT,

Witnesses:

A. T. GURLITZ, JOHN H. STEENWERTH.