

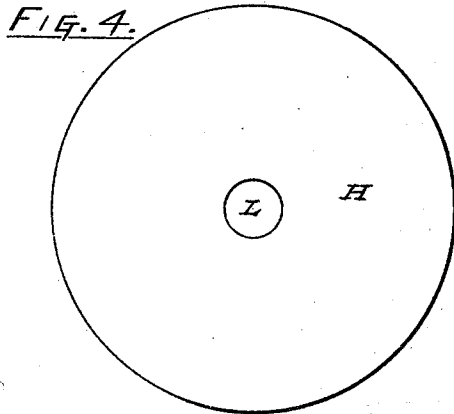
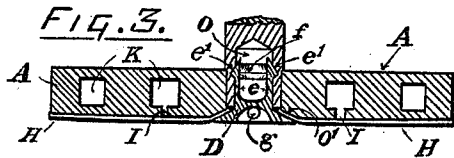
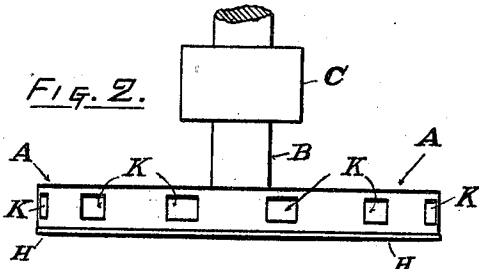
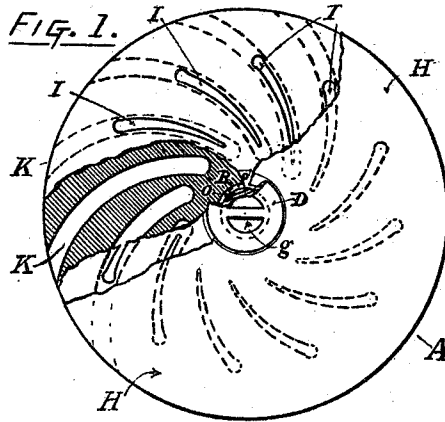
No. 617,233.

Patented Jan. 3, 1899.

A. C. DE WOLFE.  
SANDPAPERING MACHINE.

(Application filed Dec. 29, 1897.)

(No Model.)



WITNESSES:

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# UNITED STATES PATENT OFFICE.

ALMON C. DE WOLFE, OF JACKSON, MICHIGAN.

## SANDPAPERING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 617,233, dated January 3, 1899.

Application filed December 29, 1897. Serial No. 664,489. (No model.)

*To all whom it may concern:*

Be it known that I, ALMON C. DE WOLFE, a citizen of the United States, residing at Jackson, in the county of Jackson and State of Michigan, have invented certain new and useful Improvements in Sandpapering-Machines; and I do declare that the following is a full, clear, and exact description of my invention, which will enable others skilled in the art to which it pertains to make and use the same.

My invention relates to sandpapering-machines, and has for its object to provide improved means by which the sandpaper may be held in place while in use. I attain this object by the device illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of that face of the sandpaper-head to which the sandpaper is attached. A portion of the surface is broken away to show the interior construction of the head. Fig. 2 is a side elevation of the sandpaper-head and the shaft and pulley by means of which the head is rotated. Fig. 3 is a vertical central section of the head and shaft, showing also a shunted rivet for adjusting and holding the sandpaper centrally. Fig. 4 is a plan view of the sandpaper ready to be adapted to the head.

Similar letters refer to similar parts throughout the several views.

A is the sandpaper-head, B is its shaft, and C the pulley by which the shaft and head are rotated.

D is a rivet for adjusting the sandpaper and holding it concentric with and onto the face of the head A.

*e e* are elastic prongs, with sprunts *e' e'*, which spring into the annular groove *f* in the central hole O in the end of the shaft B.

*g* is an eye by which the rivet D may be forcibly removed by means of a hook or its equivalent. The rivet-head projects a little less distance than the sanded face of the sandpaper which it fastens.

I I are apertures through that face of the head A to which the sandpaper is adjusted.

K K are slots extending from within the body of the head A outwardly, terminating at the periphery of the head A, opening out and communicating near their inner ends with the apertures I I. Each of said slots K K communicates with one of the apertures I I and extends in a direction outwardly which slants toward that from which the head A turns.

The sheet of sandpaper H has the form of a disk, conforming to that shape of the face of the head when attached to it, and is usually about the same diameter of the head; but when used only on a plane surface the sandpaper may be circular or otherwise and may extend beyond or within the limit of the periphery of the head A.

L is a hole at the center of the sheet of sandpaper, the diameter of which is a little greater than the diameter of the body of the rivet D.

The operation of my device is as follows: The sheet of sandpaper H is placed with its sanded surface outward against the face of the head A. The rivet D is inserted through the hole L into the central hole O of the shaft and firmly pressed in, so that the sprunts *e' e'* of the elastic prongs *e e* spring into the annular groove *f*, thereby holding the sandpaper between the head of the rivet and the countersunk surface O' in the head A concentric with the sandpaper-head A, as shown in Figs. 1 and 3. The head A is caused to rotate rapidly. The action of the outer air and centrifugal force causes a partial vacuum in the slots K K and apertures I I as the sheet of sandpaper closes against the apertures I I. The paper is held forcibly against the face of the head A by the pressure of the outer air, and by cohesion of the face of the head A and the sandpaper the sandpaper-disk is caused to rotate.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A sandpaper-head adapted to rotate and provided with apertures, I, I, in the surface of said head and slots K, K, communicating with and extending from said apertures to the periphery of the head A, substantially as and for the purposes described.

2. The combination of the sandpapering-head A, adapted to rotate and provided with apertures and slots as described and the rivet with shunted prongs adapted to hold the sandpaper concentric with said head, substantially as and for the purposes set forth.

ALMON C. DE WOLFE.

Witnesses:

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