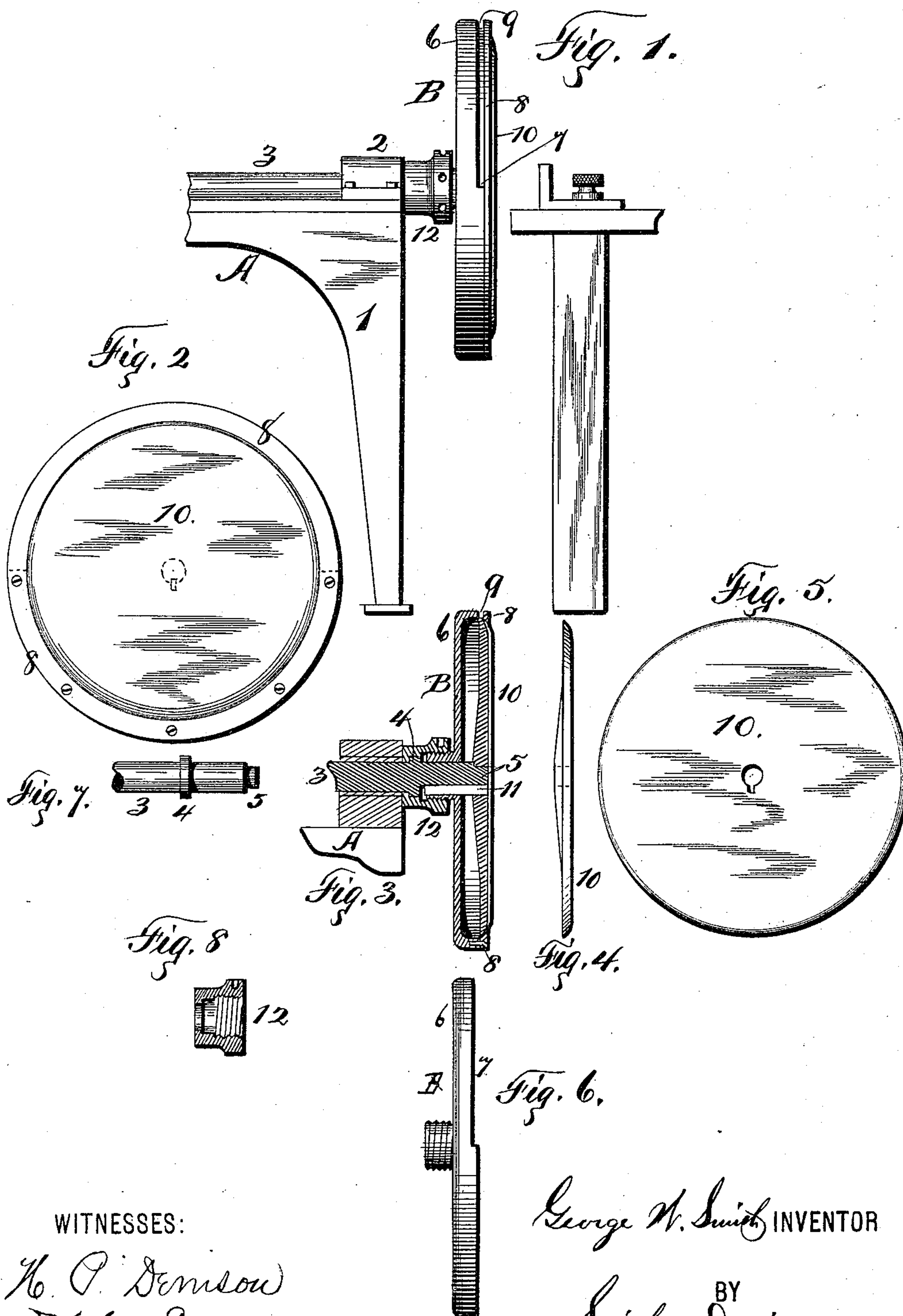


(No Model.)

G. W. SMITH.
SAND PAPER HEAD.

No. 434,210.

Patented Aug. 12, 1890.



WITNESSES:

H. P. Demison
D. Van Epps

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BY
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UNITED STATES PATENT OFFICE.

GEORGE W. SMITH, OF SENECA FALLS, NEW YORK.

SAND-PAPER HEAD.

SPECIFICATION forming part of Letters Patent No. 434,210, dated August 12, 1890.

Application filed May 31, 1890. Serial No. 353,696. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. SMITH, of Seneca Falls, in the county of Seneca, in the State of New York, have invented new and
5 useful Improvements in Sand-Paper Heads, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to what are known as
10 "sandpapering-machines," and to that class in which the sand-paper is detachably secured upon a rotating disk.

My object is to improve the mode of holding the sand-paper upon the disk, as well as
15 to improve it in other particulars, so that the paper will lie smooth, will be firmly held, cannot bag or sag, and can be readily changed without removing the disk from the shaft.

My invention consists in the several novel
20 features of construction and operation hereinafter described, and which are specifically set forth in the claims hereto annexed.

It is constructed as follows, reference being had to the accompanying drawings, in
25 which—

Figure 1 is a side elevation of a disk, with a part of the table carrying it, and also of the work-table in front of the disk. Fig. 2 is a front plan view of the disk. Fig. 3 is a
30 vertical section of the disk, its journal-bearing, and part of its shaft. Fig. 4 is an edge view of the bed upon which the paper lies detached. Fig. 5 is a front elevation of same. Fig. 6 is an edge view of the body of the
35 disk with the ring left off. Fig. 7 is a detail showing the construction of the outer end of the shaft. Fig. 8 is a section of the locking-nut.

A is the table, carried upon legs 1, and 2 is
40 an ordinary journal-bearing for the shaft 3, which is driven in any ordinary manner, and upon its outer end the disk B is secured. The outer end of the shaft is provided with a collar 4 and with a stud 5. The disk consists of three parts—a body 6, having an out-
45 ward flange or rim and cut away vertically on the outer edge of the rim for one-half of its width, as at 7 in Fig. 6; a ring 8, secured upon the lower or projecting edge of the
50 body, the ring being of the same diameter as the disk, and being also beveled on its inner edge, as shown in Fig. 3, thus creating a ver-

tical slot 9, Fig. 1, and a bed-piece 10, consisting of a disk of metal having a beveled edge and adapted to be secured upon the
55 stud on the end of the shaft by a key 11, driven in in an ordinary way. Upon the back of the body 6 is a threaded hub adapted to fit freely upon the shaft and key, and 12 is a nut adapted to screw onto the thread of the
60 hub and having in its rear end an inward flange engaging with the collar on the shaft, and the periphery of this nut is provided with a series of holes adapting it to receive the
65 nib of a spanner-wrench. When the nut is unscrewed, the body slides forward toward the paper bed, opening the slotway by bringing the bed back into the body, so that I can then drop a sheet of paper previously cut to size
70 down into the then open slot, the lower side of the paper catching in the then existing groove between the body and the lower half of the bed, and this holds and supports the paper until it is fastened by screwing upon
75 the nut, which draws the body backward until the inner edge of the ring grips and clamps the paper. By unscrewing the nut a worn piece can be removed and a new one inserted.

What I claim as my invention, and desire
80 to secure by Letters Patent, is—

1. A sand-paper holder comprising an outwardly-flanged body and a vertical slot in the flange, in combination with a bed adapted to engage with the inner edge of the flange, and means to hold them in engagement.
85

2. A sand-paper holder comprising an outwardly-flanged body having part of the flange cut away, and a ring secured upon the flange creating a slotway between it and the body, and beveled inwardly, in combination with
90 a bed-plate beveled on its periphery and adapted to engage with the inner edge of the ring.

3. A paper-holder comprising a vertically-slotted body and a bed-plate engaging there-
95 with, and means for holding them together, as set forth.

In witness whereof I have hereunto set my hand this 20th day of May, 1890.

GEORGE W. SMITH.

In presence of—

H. P. DENISON,
D. F. VAN EPPS.