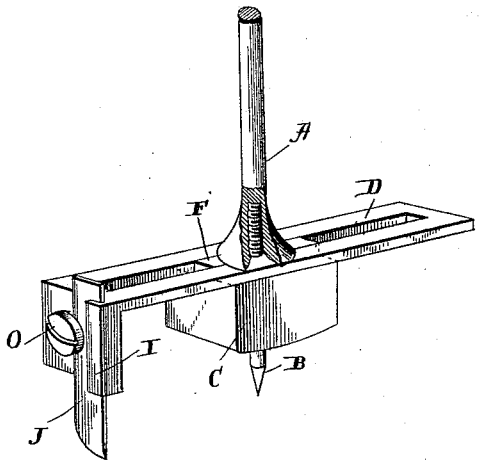
(No Model.)

# J. L. SIGSBEE.

## DEVICE FOR CUTTING DISKS AND WASHERS.

No. 457,227. Patented Aug. 4, 1891.




WITNESSES
Geo. E. Finch.
Roland N. Fitzgerald

INVENTOR-
J. L. Sigsbee,
per
Lehmann & Allison,
Attys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

JOHN L. SIGSBEE, OF CANAJOHARIE, NEW YORK.

## DEVICE FOR CUTTING DISKS AND WASHERS.

SPECIFICATION forming part of Letters Patent No. 457,227, dated August 4, 1891.

Application filed May 15, 1891. Serial No. 392,926. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN L. SIGSBEE, of Canajoharie, in the county of Montgomery and State of New York, have invented certain new and useful Improvements in Devices for Cutting Disks and Washers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawing, which forms part of this specification.

My invention relates to an improvement in devices for cutting disks and washers; and it consists in a mandrel or shaft having a screw-threaded socket formed in its enlarged inner end, a sharp-pointed centering device having its inner or upper end threaded so as to fit the socket in the end of the mandrel, and a block secured to the centering device and which is provided with a guiding-flange, combined with a slotted arm which carries an adjustable knife or cutter at its outer end, as will be more fully described hereinafter.

The object of my invention is to provide an appliance for cutting disks of sand or emery paper for use in dentistry or for cutting washers of leather or other similar material, and which appliance is cheap and simple in construction and easy of operation.

The accompanying drawing represents a perspective of a device embodying my invention, shown partly in section.

A represents the mandrel, which is to be attached to a revolving shaft or other device, and which can also be applied to a brace or other similar instrument for the purpose of being made to rapidly revolve. The inner end of this mandrel or shaft is enlarged, so as to form a shoulder or bearing for one side of the slotted arm, and in the inner end of this mandrel is formed a screw-threaded socket of any desired depth. Fitting in this socket in the end of the mandrel or shaft is the screw-threaded end of the sharp-pointed centering device B, which passes through the clamping-block C, which bears against the under side of the slotted arm D, and which has a guiding-flange F formed upon its inner side for the purpose of catching in the slot in the arm, and thus holding the arm so that it cannot revolve except when the mandrel is turned at the same time. This flange fits snugly in the slot of the arm, and the arm being clamped between the block and the enlarged end of the mandrel it is rigidly held in any position into which it may be adjusted.

The arm D is provided with a slot, so that it can be adjusted back and forth, according to the size of the disk or washer that is to be cut, and has its outer end turned downward at a right angle, so as to form a bearing for the knife or cutter I.

In order to secure the knife in position, a slotted shoulder J is formed, into which the outer edge of the knife or cutter catches, and then a clamping-screw O is passed through the vertical end of the arm upon the other side of the blade, and the head of this screw clamps the blade rigidly in any position into which it may be adjusted. This blade can be adjusted endwise upon the end of the arm, and thus adapt it for cutting through materials of different thicknesses. If used for cutting disks of sand or emery paper to be used for dental work of any kind, the cutting-edge of the blade needs to project but a very slight distance below the end of the arm; but if used for cutting leather or rubber washers the point of the blade will have to be made to project a greater distance below. By attaching the end of the mandrel to a revolving shaft or other similar appliance and then pressing the mandrel which is to be cut against the centering-point and the blade washers or disks of any desired size or thickness can be cut with great rapidity.

In cutting disks of sand-paper or emery-cloth, the paper or cloth is held against a suitable pad, and then it is pressed against the revolving device with the smooth side of the paper or cloth next to the cutter. The blade being held between the grooved shoulder and the clamping-screw and being made to press backward against the shoulder as the arm is made to revolve, it cannot possibly become disarranged or loosened after it has once been adjusted.

Having thus described my invention, I claim—

1. A mandrel having a socket in its inner end, the threaded centering-point, and the

clamping-block, combined with the slotted adjustable arm, the knife or cutter, and means for securing the knife or cutter in position, substantially as shown.

2. The mandrel having an enlarged inner end and a socket formed in this end, combined with the threaded centering-point, the clamping-block through which the centering-point passes and which is provided with a guiding-flange, the slotted arm provided with an end that is turned at right angles, a grooved shoulder formed upon this end, the blade or cutter, and a clamping-screw for holding the blade or cutter in position, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN L. SIGSBEE.

Witnesses:
JOS. C. MELICK,
W. J. ROSER.