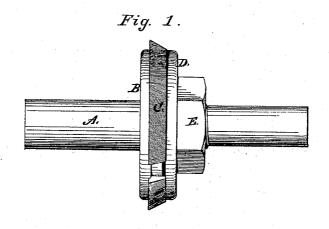
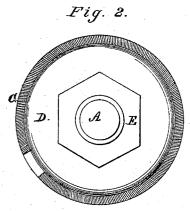
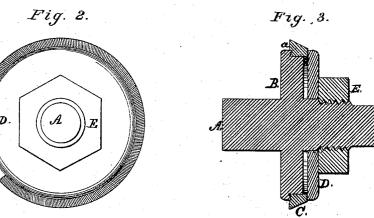
## B. D. WHITNEY. Circular Files.

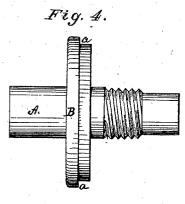
No.147,535.

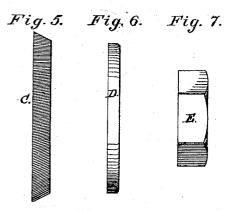
Patented Feb. 17, 1874.











Witnesses:~ Clarence Poole. Inventor:~
Buxter Hhitrary.

## UNITED STATES PATENT OFFICE

BAXTER D. WHITNEY, OF WINCHENDON, MASSACHUSETTS.

## IMPROVEMENT IN CIRCULAR FILES.

Specification forming part of Letters Patent No. 147,535, dated February 17, 1874; application filed November 19, 1873.

To all whom it may concern:

Be it known that I, BAXTER D. WHITNEY, of Winchendon, in the county of Worcester and State of Massachusetts, have invented a certain new and useful Improvement in the Construction of Circular Rotating Files, and the method of holding the same; and the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a side view of the rotating file, collars, nut, and mandrel. Fig. 2 is an end view of the same, showing the open space between the two ends of the file. Fig. 3 is a sectional view of Fig. 1. Fig. 4 shows the mandrel and stationary collar. Fig. 5 shows an edge view of the file detached. Fig. 6 is an edge view of the movable collar. Fig. 7 is an edge view of the nut.

My invention consists in the construction and method of holding a file for saw-filing ma-

chines.

The mandrel A is made with a stationary collar, B, which is provided with an angular projection, a, which engages a corresponding angle in the file C. A portion of the collar B extends inside and supports the file, as shown in Fig. 3. D is a movable collar, which is pressed against the file C by the screw-nut E

on the mandrel  $\Lambda$ , which holds the file C securely in its place.

The advantages of my inventions are, the cheapness and perfection with which the files

can be produced.

The file is made of a piece of steel rolled to the same section of the finished file, and cut the proper length, and is then bent to a circular form by dies. The file being of equal section the entire length, there is very little tendency to spring in tempering, and the shrinkage in tempering does not prevent the file from fitting the circle of the grasping parts of the collar, the opening allowing the file sufficient adjustment, which it would not have if it was a complete circle.

What I claim is-

1. The annular file C, having an opening, G, for adjustment, and an annular groove or projection to lock it to the holding-collar, substan-

tially as described.

2. The combination of the fixed collar B, having an angular projection, a, the circular file C, and the movable collar D, constructed and operating to lock and hold the same, substantially as described.

BAXTER D. WHITNEY.

Witnesses:

J. B. WOODRUFF,

S. Kemon.