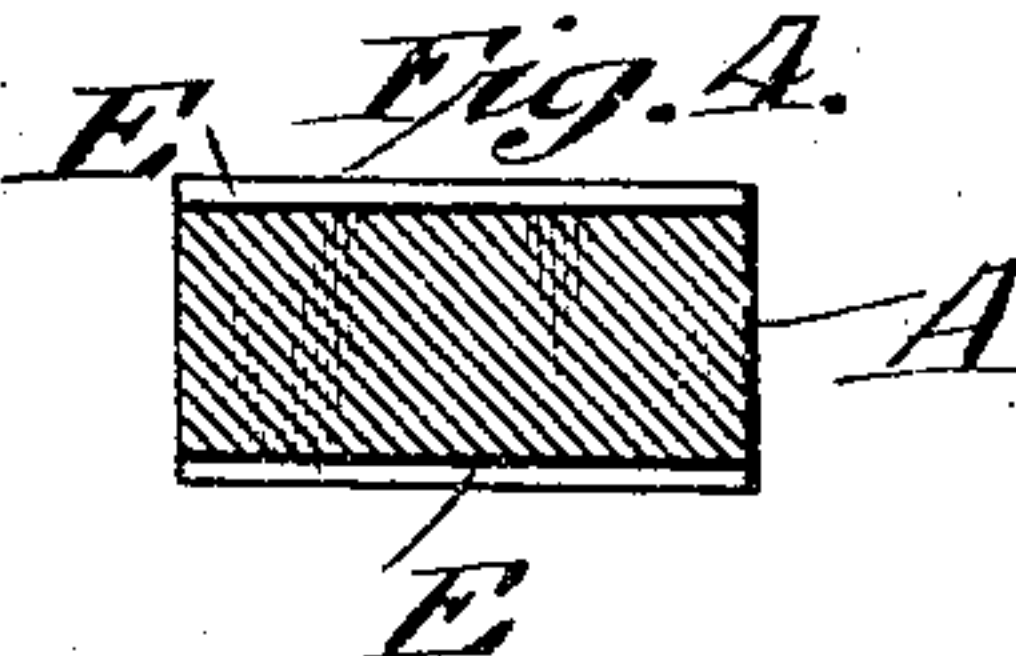
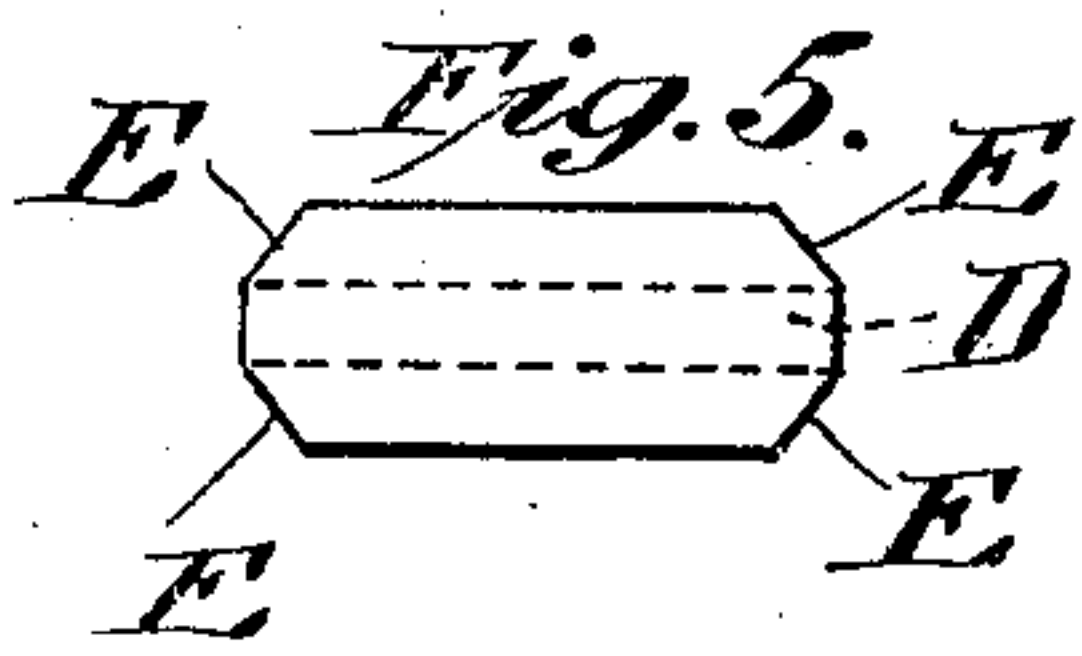
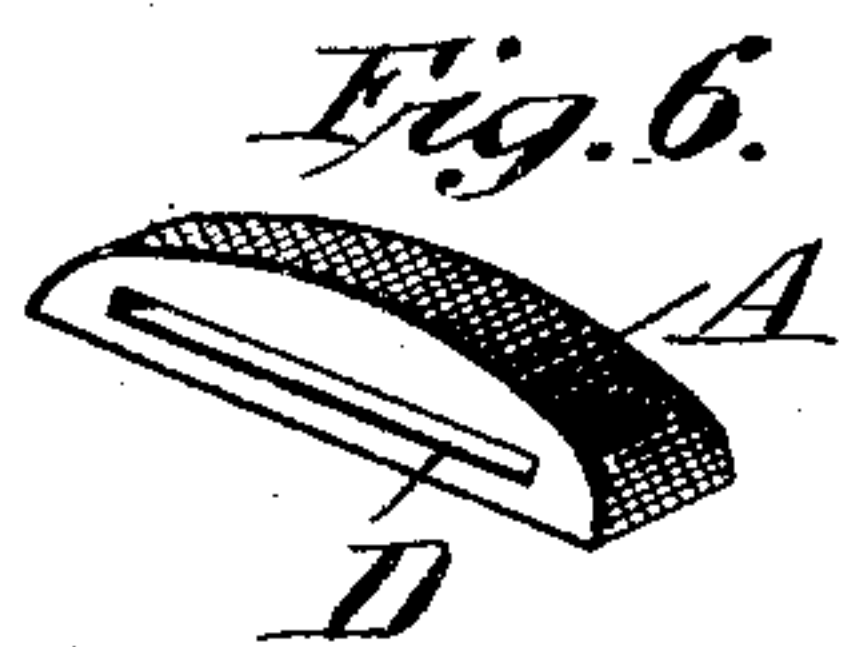
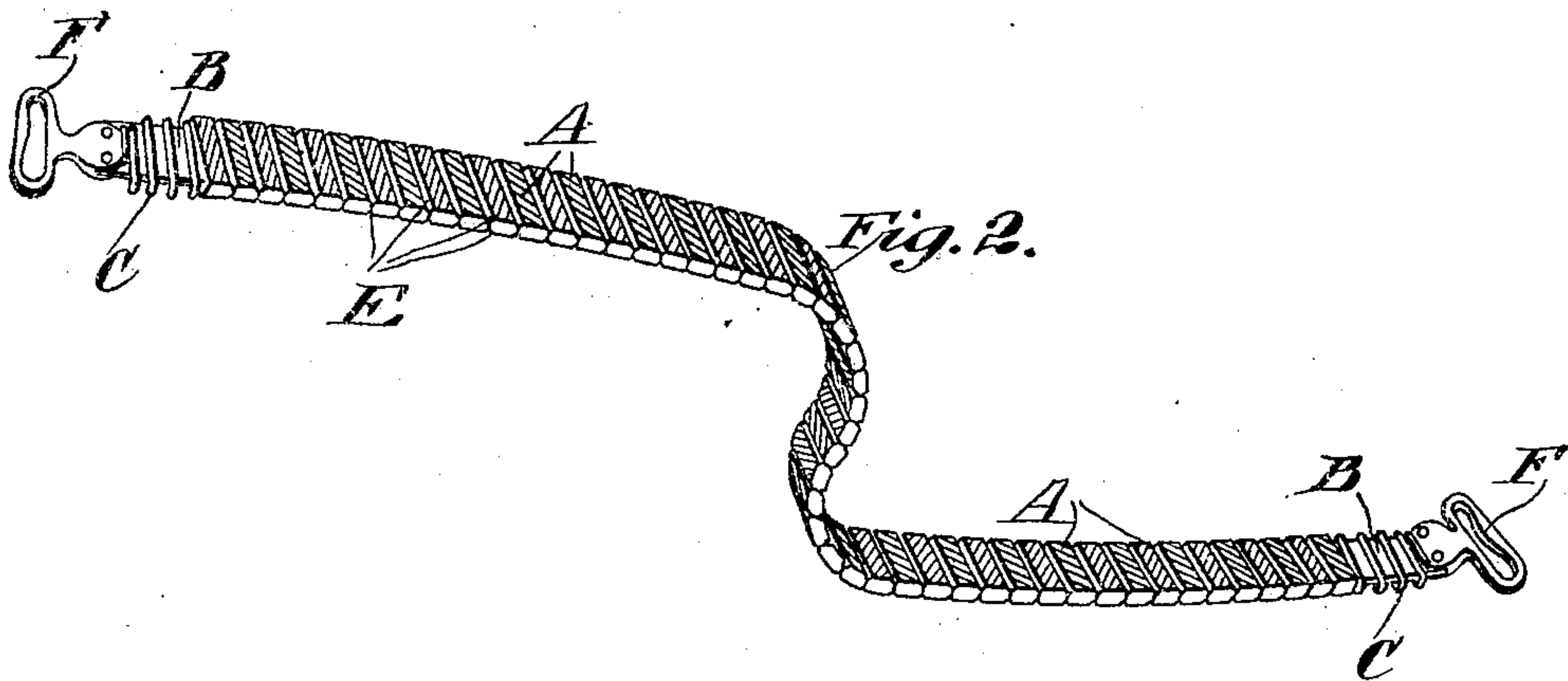


No. 863,389.

PATENTED AUG. 13, 1907.

H. E. HARKIN.
FLEXIBLE FILE.

APPLICATION FILED JUNE 7, 1906.



Attest:
Committee
Geo. H. J. J. J.

by

Harry E. Harkin Inventor:
E. N. Durham Atty

UNITED STATES PATENT OFFICE.

HARRY E. HARKIN, OF NEW YORK, N. Y., ASSIGNOR OF ONE-THIRD TO E. N. DICKERSON, OF STOVALL, NORTH CAROLINA.

FLEXIBLE FILE.

No. 863,389.

Specification of Letters Patent.

Patented Aug. 13, 1907.

Application filed June 7, 1906. Serial No. 320,590.

To all whom it may concern:

Be it known that I, HARRY E. HARKIN, of the city, county, and State of New York, have invented certain new and useful Improvements in Flexible Files, of which the following is a specification.

This invention relates to an improvement in flexible files. It is exceedingly desirable for some purposes, to produce a file capable of accommodating itself to curved and irregular surfaces. By my invention I accomplish this result and also the further result of being able to replace worn portions of the filing surface and thus prevent the entire loss of the file. I propose to make the filing surface in suitable short sections and then thread them upon a support preferably flexible. These sections may be made of any suitable shape and when threaded upon a flexible support should preferably have their adjacent edges beveled to allow a greater flexibility of the file.

My invention will be readily understood from the accompanying drawing, of which

Figure 1 is a plan view, Fig. 2 a lateral elevation, Fig. 3 a side view of one of the sections, Fig. 4 a top view of the same, Fig. 5 an end view of the same, and Fig. 6 an elevation showing a modified form.

In my drawings, A represents short sections of suitable length having a filing surface, B the support preferably flexible, C springs at the end of the support for holding the sections A A in contact, F handles at the ends of the file, D transverse slots through the sections and E the beveled edges of the same.

The construction and operation is apparent from the drawing. I thread upon the support preferably flexible the desired number of short sections which may be held in contact with each other by springs C, C, abutting against the handles F, F, attached in any suitable way to the supports.

In order to allow greater flexibility, the edges of the sections may be beveled as at E, E. This is not essential for certain purposes. The advantages of this arrangement evidently are that the file can reach places ordinarily practically inaccessible and can file considerable irregular surfaces at once. And further, if part of the file is worn, a sufficient number of sections can be replaced.

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

1. A file comprising a series of transversely slotted substantially rectangular shaped sections each having beveled edges, a flexible support extending through said slots, a handle at each end of the support, and spring means for positively maintaining the abutment of said sections.

2. A file comprising a series of transversely slotted substantially rectangular shaped sections each having beveled edges, a flexible support extending through said slots, a handle at each end of the support, and spring means mounted upon the support and interposed between each end section of the series and each handle for positively maintaining the abutment of said sections.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

HARRY E. HARKIN.

Witnesses:

GEO. H. JAEKEL,
OLIN A. FOSTER.