(No Model.)

C. E. RAMUS. CUTTING DIE.

No. 419,357.

Patented Jan. 14, 1890.

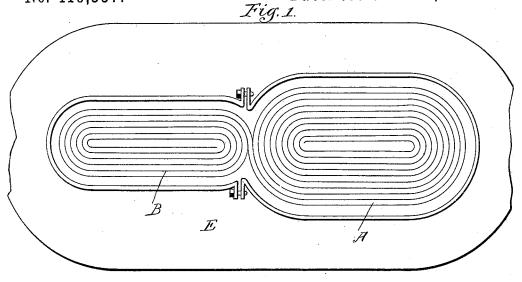
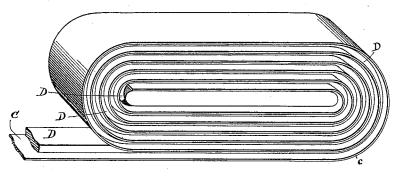
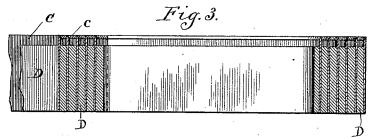


Fig.R.





Witnesses IJM ann Martin Olsen

Charles E. Ramus, By, 6 & Linthicumany

UNITED STATES PATENT OFFICE.

CHARLES E. RAMUS, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO HENRY R. REINHART AND MYNDERS C. RUSSELL, OF SAME PLACE.

CUTTING-DIE.

SPECIFICATION forming part of Letters Patent No. 419,357, dated January 14, 1890.

Application filed June 13, 1889. Serial No. 314,138. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. RAMUS, a citizen of the United States, residing at Chicago, Illinois, have invented certain new and useful Improvements in Dies for Cutting Fabric, of which the following is a specification.

My invention relates to an improved means for cutting scraps of leather or other fabric of irregular form into a continuous strip; and my invention consists in a device comprising a two-part die, each part provided with cutting-knives, concentrically arranged with their cutting-edges lying in the same plane, the parts being secured in juxtaposition, whereby it is adapted to cut a single scrap of leather or other fabric of irregular form into a continuous strip. Such strips, when made of leather, are adapted to be used for horse fly-20 nets, shoestrings, and for similar purposes.

In the accompanying drawings, Figure 1 is a plan view of the two dies. Fig. 2 is a perspective view of one of the dies and showing the method of forming it, and Fig. 3 is a longitudinal section through the body of one of the dies.

In the drawings, A B represent the two parts, which are preferably elliptical in form, and consist of the strip C, having the cutting30 edge c, wound with the blank D, of less width than the strip C, the winding being performed from the center outwardly, so that when the die is completed the cutting-edges c or knives are concentrically arranged. The 35 parts A B are secured preferably end to end in a suitable chuck E, and the outer knives of each die are in close juxtaposition, so that if a single scrap of leather be laid upon the cutting-faces of the two dies and the latter 4c forced into the leather a continuous strip will be cut therefrom, the ends of which will be at

It will be seen that one of the parts or sections of the die has cutting-edges which describe a spiral generated in one direction, while the other part or section has cutting-edges which describe a spiral generated in the opposite direction. From this it results

the central part of the dies, respectively.

that the strip or thong is formed by the outer knives at the point of junction between the 50 two parts or sections, and thereby is made continuous.

The form of the die may be varied—as, for example, the parts may be circular instead of elliptical, and the cutting-edges may be 55 formed in any convenient way. I do not limit myself, therefore, to the precise arrangement and construction of parts, as my invention includes, broadly stated, the two-part dies when adapted, substantially as 60 herein described, to cut a continuous strip from a single scrap of leather or other fabric.

In the foregoing I have spoken of the device as consisting of two parts; but I do not mean to be understood that the device comprises, when arranged for use, two separate dies, as the parts marked A B in the drawings are soldered or otherwise secured together side by side, so as to form practically one die with two centers and having the knife 70 or cutting-edges continuous.

I claim—

1. A cutting-die composed of two reverse sections, each provided with spiral cutting-edges bounding intervening blank spaces and 75 lying in the same plane, the cutting-edges of one section describing a spiral generated in one direction and the cutting-edges of the other section describing a spiral generated in the opposite direction, whereby the die is 80 adapted to cut a scrap of fabric of irregular form into a continuous strip or thong, substantially as described.

2. A cutting-die comprising a flexible ribbon-knife coiled spirally with a blank spacing strip from the center outward to form one section of the die and from the outside inward to form the second section, said die being clamped, as described, and adapted to cut a continuous thong or strip from an irregular 90 blank or scrap, substantially as set forth.

CHARLES E. RAMUS.

Witnesses: T. D. BUTLER, FREDERICK C. GOODWIN.