

(No Model.)

A. BÖCHER.
DARNING IMPLEMENT.

No. 475,659.

Patented May 24, 1892.

Fig. 1.

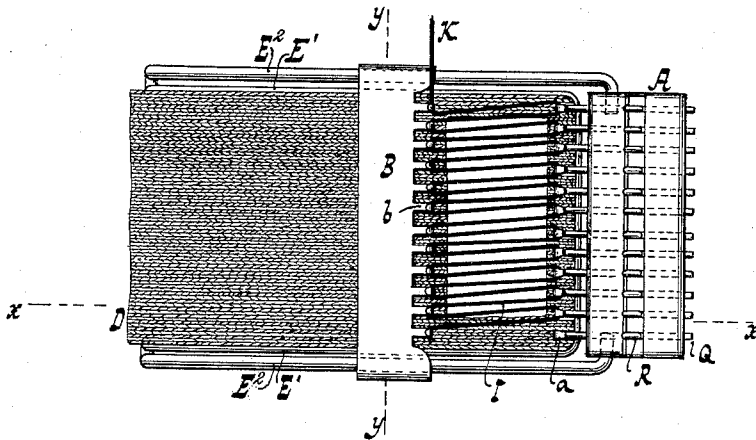


Fig. 2.

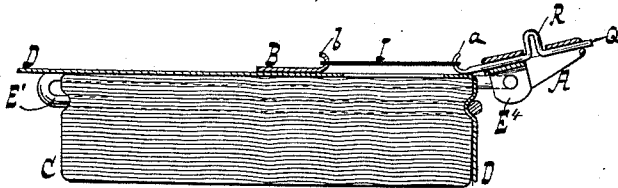
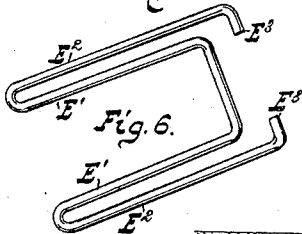
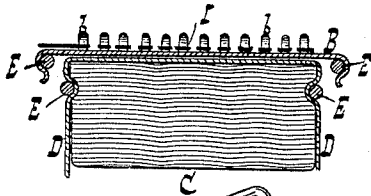


Fig. 3.



WITNESSES:
William Miller
Edward Wolff.

Fig. 4.

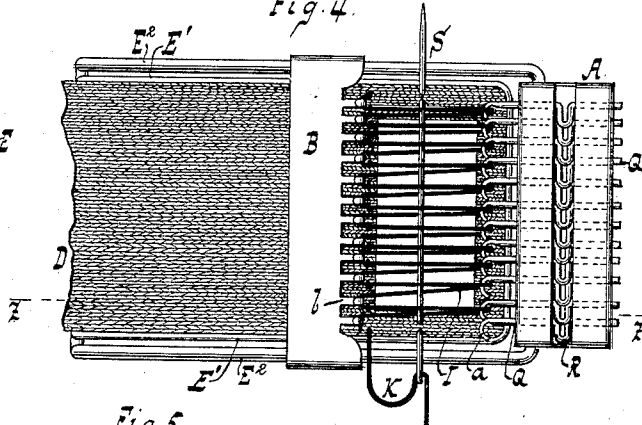
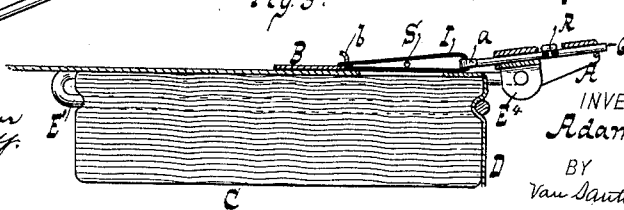


Fig. 5.



INVENTOR:
Adam Böcher
BY
Van Santvoord & Hauff
his ATTORNEYS

UNITED STATES PATENT OFFICE.

ADAM BÖCHER, OF NEW YORK, N. Y.

DARNING IMPLEMENT.

SPECIFICATION forming part of Letters Patent No. 475,659, dated May 24, 1892.

Application filed October 15, 1891. Serial No. 408,772. (No model.)

To all whom it may concern:

Be it known that I, ADAM BÖCHER, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Darning Implements, of which the following is a specification.

This invention relates to a darning implement; and the invention consists in the details of construction set forth in the following specification and claims, and illustrated in the annexed drawings, in which—

Figure 1 is a plan view of the darning implement. Fig. 2 is a section along *xx*, Fig. 1. Fig. 3 is a section along *yy*, Fig. 1. Fig. 4 is a view similar to Fig. 1 with parts in a different position than in Fig. 1. Fig. 5 is a section along *zz*, Fig. 4; and Fig. 6 is a detail perspective view of the clamp.

In the drawings, the letters A B indicate two heads, each having a series of needles, hooks, or other attaching devices *a b*.

The material D having the rent or hole to be darned is stretched over a frame or support C and is confined thereupon through the medium of a spring-clamp, composed of an elastic strip of metal—such as wire—bent to form a pair of parallel arms E', which grip opposite sides of the support C. The arms E' are bent backward and extended parallel therewith to provide a pair of supporting-arms E², arranged in a plane above the gripping-arms E', and having their extremities bent or turned laterally toward each other to form lugs E³, which are engaged with ears E⁴ at opposite sides of the head A.

The adjustable head B is formed or otherwise provided at its ends with hooks or eyes B', through which pass the parallel supporting-arms E² of the clamp, so that such supporting-arms sustain the head B and constitute a guide for the latter in its adjustment toward and from the head A. The elasticity of the arms E² in a direction away from each other exert sufficient pressure on the hooks or eyes B' to hold the head B in any position to which it may be adjusted relatively to the head A.

The hooks *a* are supported by rotary shafts Q in the head A, and said shafts can be rotated or oscillated by the handles R. The object of such rotation will be presently explained.

The thread to be used for darning is first passed back and forth over the hooks or at-

taching devices *a b*, as indicated by letter I, Figs. 1 and 2, the part I of said thread forming what may be called the "warp" and the part K of the thread the "woof." The hooks *a* are then swung or rotated to the position shown in Figs. 4 and 5, so that part of the thread portion I forms an upper shed and the other part a lower shed, and the needle S, with the thread portion K, is then stitched into the material D and passed along between the sheds in one direction. The hooks *a* are then rotated through an arc of one hundred and eighty degrees, or nearly so, to bring the thread portion I, which formed the lower shed, into position to form an upper shed, and vice versa. The needle S and thread portion K are then run between the sheds in the opposite directions, and so on, back and forth until the rent or hole is filled up or mended.

The weaving or shedding attachment formed by the hooks *a* enable a neat and even finish to be given to the mended part while allowing the work to be carried on rapidly.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a darning implement, of a clamp composed of a strip of metal bent to form a pair of elastic gripping-arms, and a pair of supporting-arms, a head A, engaged with the supporting-arms and having oscillatory hooks *a*, and the head B, provided with attaching devices *b*, and having its opposite ends engaged with and slidable along the supporting-arms of the clamp, substantially as described.

2. The combination, in a darning implement, of a support C, a clamp composed of a strip of metal bent to form a pair of elastic gripping-arms, and a pair of supporting-arms arranged in a plane above the gripping-arms, a head A, engaged with the extremities of the supporting-arms and having oscillatory hooks *a*, and a head B, provided with attaching devices *b*, and having its opposite ends engaged with and slidable along the supporting-arms, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

ADAM BÖCHER.

Witnesses:

WM. C. HAUFF,
E. F. KASTENHUBER.