B. E. HERVEY. NEEDLE AWL.

APPLICATION FILED NOV. 10, 1902 NO MODEL.

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## United States Patent Office.

BEN E. HERVEY, OF RITZVILLE, WASHINGTON.

## NEEDLE-AWL.

SPECIFICATION forming part of Letters Patent No. 722,105, dated March 3, 1903.

Application filed November 10, 1902. Serial No. 130,758. (No model.)

To all whom it may concern:

of Washington, have invented a new and use-5 ful Improvement in Needle-Awls, of which the following is a specification.

My invention is in the nature of an improved awl for sewing horse-collars, mattresses, brooms, and other thick material and so which I term a "needle-awl," since it performs the function of both a needle and an awl.

It consists in a detachable handle portion having a socket for receiving the needle por-15 tion when forcing the latter through the material and one or more hooks combined with a needle having an elongated eye which receives the thread and also gives a hold for the hook of the handle portion for pulling the 20 needle through the material after having been started through the material by a thrust or pushing movement of the handle-socket, as hereinafter fully described with reference to the drawings, in which—

Figure 1 is a side view of the complete needle-awl, the handle being in section. Figs. 2 and 3 are cross-sections through the needle on lines 2 2 and 3 3, respectively; and Fig. 4

is a modification of the needle. In Figs. 1 and 4 are shown two forms of my needle-awl which only differ from each other in that Fig. 1 shows a straight needle and Fig. 4 a curved one. The needle has a point F, triangular in cross-section, and just back 35 of the triangular portion is an elongated eye A, and from this eye to the heel of the needle there is formed on each side a longitudinal groove B to receive the thread or whang, so that it may lie within the circle of the nee-40 dle and constitute no enlargement beyond the transverse dimensions of the hole formed by the needle. The rear end of the triangular portion at H is somewhat larger in transverse dimension than the other portion of the 45 needle, so that the hole formed by the pas-

sage of the point through the material to be sewed will give easy clearance for the passage | of the balance of the needle and thread. The handle E as shown is a solid casting; but it 50 may be made in the usual way of wood with a metal ferrule. Its peculiarity consists in that it is formed at its small end with a socket C of a size to snugly fit the heel end D of the needle, and on one or both sides of this socket 55 is formed a hook G.

The manner of using my needle-awl is as Be it known that I, BEN E. HERVEY, of | follows: The needle is threaded in the usual Ritzville, in the county of Adams and State | way by passing the thread through the elongated eye A, the thread thence being extended back in the parallel grooves B. The socket 6c C of the handle is then slipped over the heel portion D of the needle, and the needle is then thrust partly through the material to be sewed until the eye A appears on the other side of the material. Then the handle E is 65 detached and applied to the point end of the needle and one of the hooks G is inserted in the eye A, as shown in dotted lines, and the needle pulled entirely through. This makes easier work, avoids any doubling or bending 70 of the needle, and forms a very convenient and efficient tool for the use of harnessmakers, mattress-makers, broom-makers, and other trades in which heavy or thick material is to be sewed.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A needle-awl comprising a needle having at one end a point and an elongated eye and 80 at the other end a blunt heel, and a handle having in its end a socket fitting the heel end of the needle and one or more hooks fitting in the eye of the needle said handle being adapted to be shifted from one end of the nee- 85 dle to the other substantially as and for the purpose described.

2. A needle-awl comprising a needle having a pointed end triangular in cross-section, an elongated eye just behind the triangular por- 90 tion and grooved sides extending to the heel of the needle, and a handle portion having in its end a socket fitting the heel end of the needle and one or more hooks adapted to engage the eye substantially as and for the purpose 95 described.

3. A needle having a pointed end triangular in cross-section, and thicker than the body of the needle with an elongated eye immediately behind the triangular portion and 100 grooved sides extending from the eye to the extreme heel end of the needle forming threadoutlets at the heel substantially as described.

BEN E. HERVEY.

Witnesses: H. F. KLAAT, ORRIS DORMAN.