(No Model.)

E. VAN VALKENBURG.

RIPPING KNIFE.

No. 525,477. Patented Sept. 4, 1894.

Fig. 4.

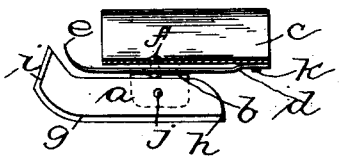


Fig. 1.

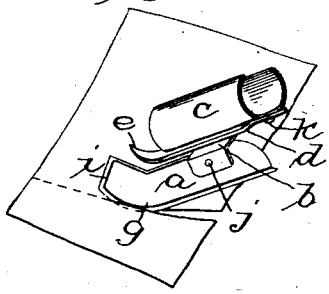


Fig. 3.

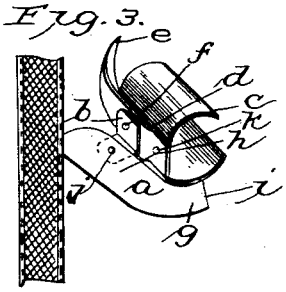
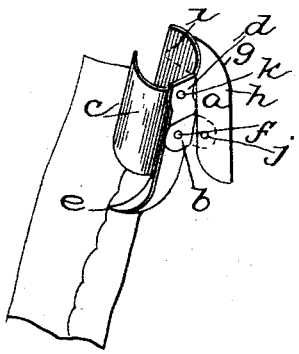


Fig. 2.



Attest
Wm. T. Hall.
F. L. Middleton

Inventor
E. Van Valkenburg
by Jas. F. Pettit
Atty

UNITED STATES PATENT OFFICE.

EDWARD VAN VALKENBURG, OF BINGHAMTON, NEW YORK.

RIPPING-KNIFE.

SPECIFICATION forming part of Letters Patent No. 525,477, dated September 4, 1894.

Application filed May 29, 1893. Serial No. 475 927. (No model.)

To all whom it may concern:

Be it known that I, EDWARD VAN VALKENBURG, a citizen of the United States of America, residing at Binghamton, in the county of Broome and State of New York, have invented certain new and useful Improvements in Ripping-Knives, of which the following is a specification.

My invention relates to improvements in devices for ripping seams, hems and bindings in sewed fabrics, and consists in the construction hereinafter described and particularly pointed out in the claims.

The accompanying drawings illustrate my invention.

Figure 1 represents the mode of using the knife for ripping ordinary seams, the blade standing at an angle of about thirty degrees from the socket. Fig. 2 represents the device with the basting thread puller in position for operation. Fig. 3 represents the knife with the blade turned round against the socket so as to bring the straight edge of the blade in position for ripping bindings and narrow hems. Fig. 4, is a part side and sectional elevation of the device.

The blade, *a*, is arranged to rotate on the pivot, *f*, as a center, and may be of any desired shape. The rounded part, *g*, of the longer cutting edge is designed for ripping ordinary seams, and the straight part, *h*, for bindings and narrow hems. The shorter cutting edge, *i*, may also be used for the same purpose by using the knife in an inverted position with the blade standing parallel to the socket. The blade-plate, *b*, is a narrow piece of metal forming a right angle; to one face of which the socket is attached, and to the other the blade is secured by the rivet, *j*. This plate provides a flat surface for the spring *d* to rest upon, and by means of which the blade is made to stand away from the center of the socket so as not to interfere with the thumb of the hand operating the knife. The upper part of the blade may be made to form the plate, or it may be a separate piece, as described above.

The socket, *c*, is formed by taking a piece of flexible metal of the desired shape and bending it into the form of a tube, leaving both ends and the top open. The bottom of the socket is flattened so that it can be adjusted to any finger and still retain the requisite shape.

The spring, *d*, is a narrow piece of metal used between the socket and the blade-plate, and is designed to hold the blade at any angle desired by the operator. One end of the spring ends in the hook, *e*, the other end is bent near the end so that, when secured to the bottom of the socket by the rivet, *k*, the hook end stands away from the socket. When the socket and the blade are attached, the spring is sprung up nearly to the socket and presses against the blade-plate upon which it rests. The socket and blade are attached by means of the pivot, *f*, which passes through the blade-plate, spring and the bottom of the socket.

The basting thread puller, *e*, is a continuation of the spring, bent into the shape of a hook. The end is pointed so that it can be passed readily under the thread. The knife is attached to, and operated by the index finger, thus leaving both hands free, with the exception of one finger, to manipulate the work.

The advantage of this ripping knife over others in use, lies in the adjustable blade, which can be used for ripping at any angle desired by the operator or that the work may require; that is, with the blade standing parallel to the socket, or at any angle up to ninety degrees, for ripping ordinary seams, and at an angle of about one hundred and sixty degrees for hems and bindings. It enables the operator to rip from and toward himself, or in any desired direction with but little or no changing of the work, and allows the hand operating the knife to be held in an easy and natural position. The hand may be changed to different positions in order to rest it, and still keep the blade straight with the seam by turning it to the requisite angle by a simple pressure of the finger.

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

1. In combination with the socket, the knife blade pivotally connected thereto and the spring located between the socket and blade and bearing against said blade to hold it in any position to which it may be adjusted, said spring having one end extended beyond the socket and curved to form a hook, substantially as described.

2. In combination, the finger socket, the knife blade carried pivotally thereby and adapted to be adjusted to different positions relative to the socket, and the hooked piece extending from the socket, substantially as described.

3. In combination, the socket, the knife blade having front and rear cutting edges, and pivotally connected to the socket at a point intermediate of the front and rear cutting edges, whereby the knife blade may be reversed to lie parallel with the axis of the socket with either cutting edge to the front and the spring for holding the knife blade in any position relative to the socket, substantially as described.

4. In combination, the socket for the finger, the right angular blade plate pivoted to the socket and the blade secured to the blade plate, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD VAN VALKENBURG.

Witnesses:

C. E. DARUN,

A. M. SPERRY.