No. 612,945. Patented Oct. 25, 1898.

# N. HOCKERSON, JR.

## KNIFE.

(Application filed Sept. 8, 1897.)

(No Model.)

Fig. 1.

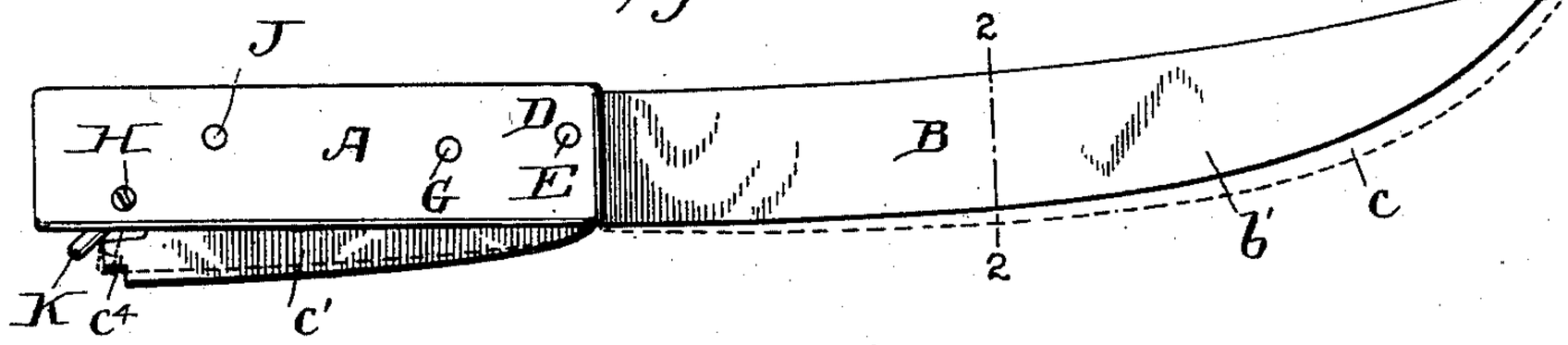



Fig. 5.

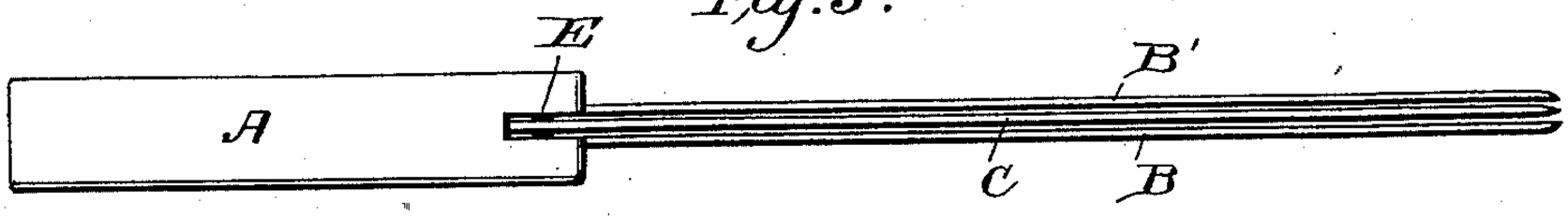



Fig. 3.

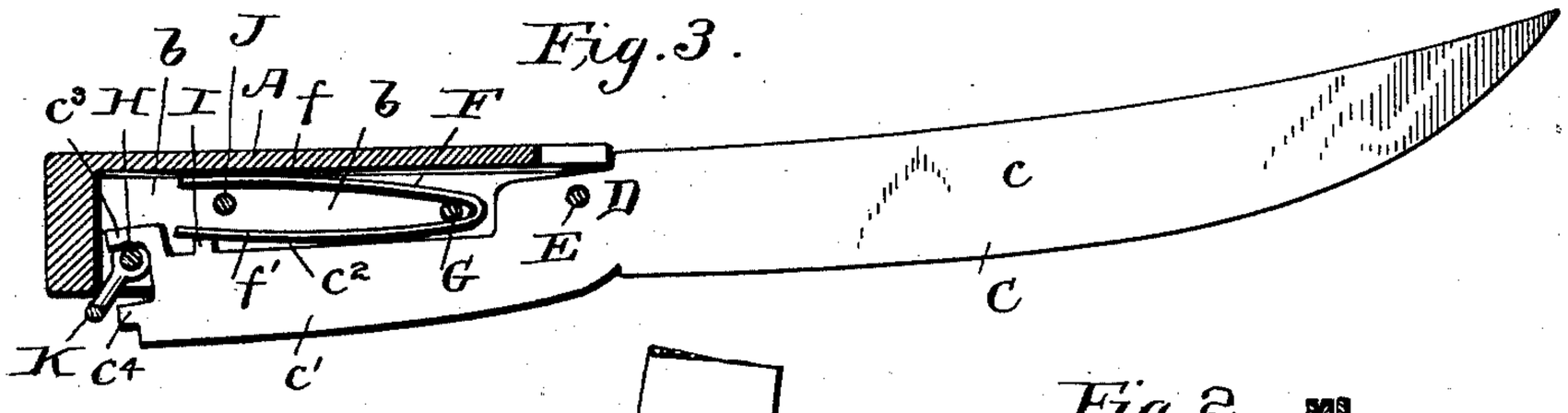



Fig. 2.

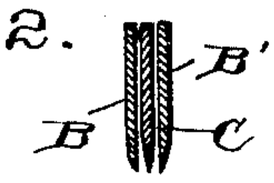
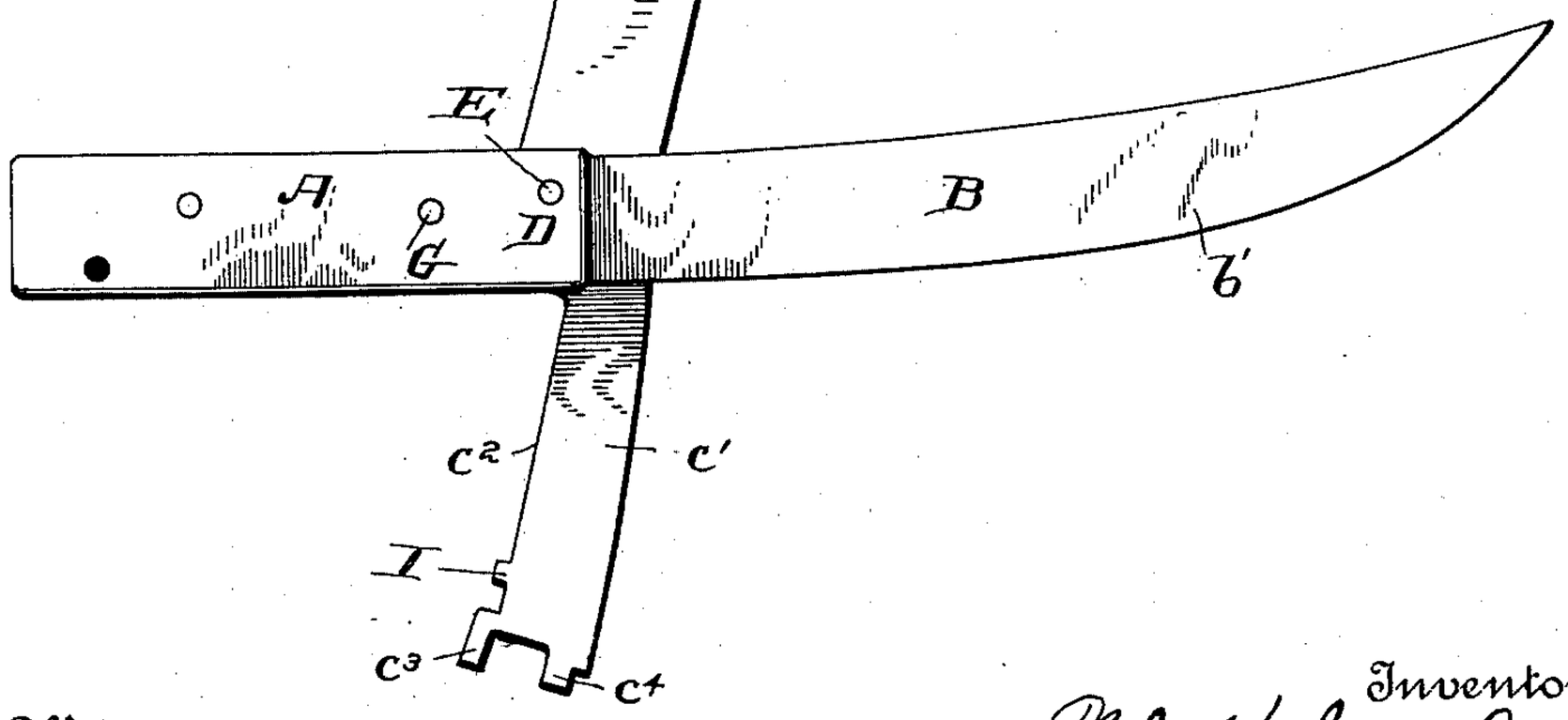



Fig. 6.


Fig. 4.




Witnesses
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# UNITED STATES PATENT OFFICE.

NELS HOCKERSON, JR., OF STILLWATER, MINNESOTA, ASSIGNOR OF THREE-FOURTHS TO ALBERT WILSON AND GEORGE E. WILSON, OF SAME PLACE.

## KNIFE.

SPECIFICATION forming part of Letters Patent No. 612,945, dated October 25, 1898.

Application filed September 8, 1897. Serial No. 650,968. (No model.)

*To all whom it may concern:*

Be it known that I, NELS HOCKERSON, Jr., a citizen of the United States, residing at Stillwater, in the county of Washington and State of Minnesota, have invented certain new and useful Improvements in Knives; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to an improved sheath-knife particularly adapted for removing the skins of animals; and the object of the invention is to provide a construction in which the cutting-blade can be normally retained within the sheath while separating the skin and flesh, but can instantly be brought into play when necessary.

Figure 1 is a side elevation of a knife embodying my improvements. Fig. 2 is a transverse section. Fig. 3 shows the interior parts of the device when one of the side parts of the sheath is removed. Fig. 4 shows the blade in the relative position to which it can be turned when it is to be sharpened. Fig. 5 is a back edge view. Fig. 6 shows the adjustable or supplemental stop for the blade.

In the drawings the handle of the knife is indicated by A, it being capable of variation as concerns its shape, dimensions, and the material of which it is formed. From the handle there projects forward the sheath, which latter may also be made in any of several ways. I prefer to form it substantially as illustrated—that is to say, in two halves or parts B B′, arranged parallel to each other and each having a stock or stem *b*, which lies within and is rigidly secured to the handle A, and with an upwardly-projecting sheath part proper, *b′*, which is shaped to correspond to the shape of the cutting blade.

The cutter is indicated as a whole by C, it having the outward-projecting blade *c* and a stem or shank *c′*. As above stated, the cutting-blade proper is of substantially the conformation of the sheath and of the same or slightly less width.

At D the blade is secured to the handle and the sheath by means of the pivot E.

F is a spring, preferably of the form shown—that is to say, made of a bent wire or rod—having legs *f f′*. It is covered by and concealed within the handle, the leg *f* bearing against the upper part or wall of the handle and the leg *f′* bearing against the stem of the cutter. The spring is held permanently in position within the handle by means of a pivot or rivet at G, around which it can swing, and a stop J. The stem or shank part of the cutter is recessed, as shown at $c^2$, to receive the spring. At the rear end of the cutter-shank a stop is provided, as shown at H, which when in place serves to limit the movement of the blade in either direction. The stem or shank has lugs $c^3$ $c^4$, which alternately engage with the stop H for this purpose. This stop H is readily removable from the handle and sheath for purposes to be described.

I am aware of the fact that knives of this general character have been heretofore proposed or used, but believe myself to be the first to have provided one which is possessed of the advantageous features of construction and relationship of parts that I have shown and described.

In an implement of the character of that herein shown it is not necessary to remove the cutter for sharpening, which in many cases has to be frequently accomplished. It is merely necessary to remove the stop H to allow the blade to swing into a position substantially at right angles to the longitudinal line of the handle and sheath, as shown in Fig. 4, and at such time the sharpening of the cutting edge $c^5$ can be readily accomplished, and thereafter it is merely necessary to again force the stem *c′* back to its position in the handle and reinsert the stop H.

Numerous other features of advantage will be found incident to a device of the character described. It will be seen that the parts can be so related that normally when out of use the blade and its cutting edge can be housed entirely within the sheath, so that said edge can be maintained with extreme sharpness without danger of accident to person or liability of breaking or dulling, and yet so as to

permit this cutting edge to be caused to protrude from the front edge of the sheath when the handle is being grasped by the hand of the operator, the blade having combined with it means (here shown to be the bar or stem $c'$) adjacent to the handle and therefore accessible to the hand of the operator whenever he is normally manipulating the implement. When this bar or stem or blade moving device $c'$ is arranged as shown, the pressure exerted thereon by the very act of grasping the handle is utilized to cause the protrusion of the cutting edge.

The blade is longitudinally stationary relative to the sheath and handle, but is connected to them by a fixed pivot, which permits the blade to swing in either direction—that is, so as to have its cutting edge either pass beyond the front edge of the sheath, as indicated in Fig. 1, or pass beyond the rear edge of the sheath, as shown in Fig. 4.

By having a stop of the character described for the blade which is movable the blade can be allowed a limited vibration under ordinary circumstances or can be allowed to move through a longer path, as in Fig. 4.

It will be understood, of course, that there can be modifications in several respects as concerns the construction and arrangement of the several parts without departing from these essential features of the invention.

At K there is shown an adjustable or supplemental stop which may be also employed, if desired. It consists of a pivoted loop or equivalent device adapted to engage with the shank or stem part of the blade. When arranged as illustrated, it can engage with the outer edge of the lug $c^4$, and at such time it will insure that the cutting edge $c^5$ shall slightly protrude independently of the operator's hand, or it can be engaged with the outer edge of the stem $c'$ and still more of the cutting edge will then be exposed; but when it is desired to allow the cutter to be adjusted by the hand to any point within its normal limits this stop K can be moved back out of engagement with the blade, as shown in Fig. 3.

If metal is lost along the edge of the cutter by sharpening or in case of breakage or otherwise, the edge can be readily adjusted in proper relation to the spring and to the edge of the sheath as follows: I is a projection on the stem $c'$ of the cutter, and all that is necessary is to remove more or less of the metal from the edge of this projection by filing it or otherwise to allow the cutting edge to lie in proper lines under the action of the spring, or a set-screw can be substituted for the projection, if preferred.

What I claim is—

1. The combination of the handle, the sheath, the cutting-blade pivotally connected to the handle and adapted to have its cutting edge swing below the front edge or above the back edge of the sheath and means connected to the blade for causing it to move around said pivot and lying adjacent to the handle whereby they are accessible to the hand of the operator grasping the handle, and are adapted to cause the cutting edge of the blade to protrude from the front edge of the sheath under the pressure of such grasp, substantially as set forth.

2. The combination of the handle, the sheath, the blade pivotally connected to the handle and adapted to have its cutting edge swing beyond either the front edge or the back edge of the sheath, means connected to the blade for causing it to move around said pivot and lying adjacent to the handle, whereby they are accessible to the hand of the operator when grasping the handle, to cause the said cutting edge to protrude from the front edge of the sheath and a movable stop for the handle, substantially as set forth.

3. The combination of the handle, the sheath, the normally-vibratable blade, the pivot for the blade carried by the handle, means for normally moving the blade around said pivot to hold it within the sheath, and a bar or stem $c'$ connected to the blade, and having a part protruding from the handle whereby it is accessible to the hand of the operator when grasping the handle, and adapted to permit the pressure of such grasp to cause the edge of the blade to protrude from the sheath during the time of cutting with said blade, substantially as set forth.

4. The combination of the handle, the sheath rigid with the handle, the blade held against longitudinal movement upon a fixed pivot connecting it to the handle, whereby the blade can swing transversely relatively to the handle and sheath, means adjacent to the handle for moving the blade about its pivot, and the spring, substantially as set forth.

5. The combination of the handle, the sheath rigid with the handle, the blade held against longitudinal movement by a fixed pivot connecting it to the handle, and means accessible to the hand of the operator for rocking the blade around said fixed pivot to cause its edge to protrude from the sheath, and the returning-spring, substantially as set forth.

6. The combination of the handle, the sheath rigid with the handle, the blade held against longitudinal movement relative to the sheath by a fixed pivot connecting it with the handle, means for normally holding the blade within the sheath, and means accessible to the hand of the operator grasping the handle for causing the edge of the blade to rock around the said fixed pivot to protrude from the sheath, substantially as set forth.

7. The combination of the handle, the sheath rigid with the handle, the blade normally within the sheath, the pivot for the blade connected to the handle, the stem or bar $c'$ connected to the blade, and normally protruding from the handle, and the spring acting to cause the bar or stem $c'$ to protrude from the handle, substantially as set forth.

8. The combination of the handle A, the

sheath B, B′, the pivot E, the blade having the cutting part *c* normally retained within the sheath and adapted to swing around said pivot and the arm or bar *c′* protruding from the handle and swinging around said pivot oppositely to the blade *c*, substantially as set forth.

9. The combination of the handle, the sheath, the blade having the swinging cutting part *c* and the oppositely-swinging part *c′*, the spring for rocking the said parts *c*, *c′*, and the movable stop, substantially as set forth.

10. In a knife of the character described, the combination with the sheath, the handle, and the spring permanently supported by the handle and sheath, of the pivoted blade, adapted to be turned relative to the sheath and handle independently of the spring to permit the sharpening of the blade without adjustment, substantially as set forth.

11. In a knife of the character described, the combination with the sheath, the handle, and the spring permanently supported upon the handle and sheath, of the pivoted blade adapted to be turned to a position substantially at right angles to the sheath, and the removable stop for the blade-shank, adapted to limit the movement of the blade in either direction, substantially as set forth.

12. In a knife of the character described, the combination with the sheath, the handle and the spring, of the pivoted blade, and means in rear of the sheath and adjacent to the handle for adjusting the blade relative to the spring to vary the position of the cutting edge relative to the edge of the sheath, substantially as set forth.

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

NELS HOCKERSON, JR.

Witnesses:
A. E. REILLEY,
ALBERT WILSON.