

Nov. 27, 1945.

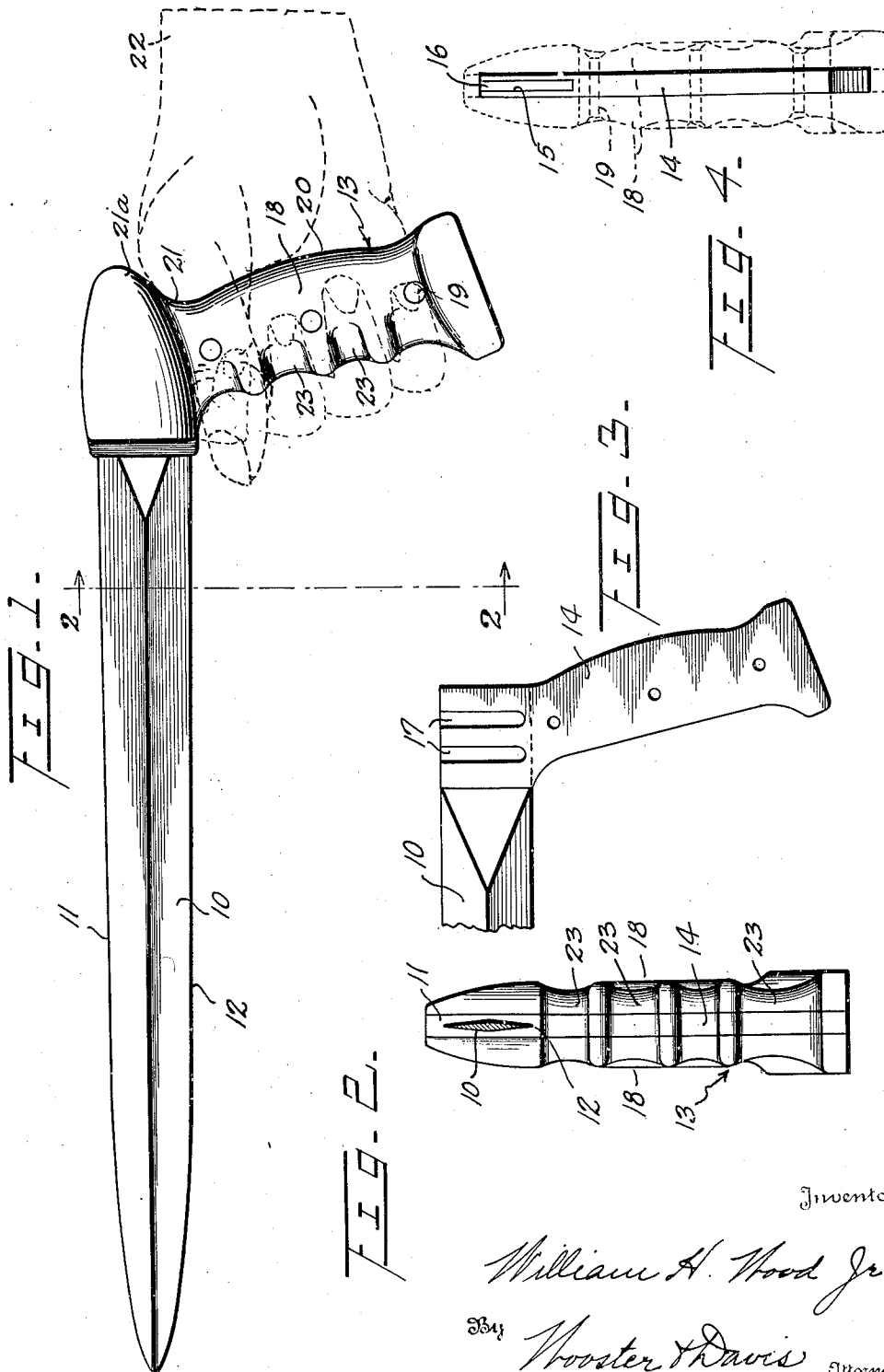
W. H. WOOD, JR

2,389,882

COMBAT KNIFE

Filed June 22, 1944

2 Sheets-Sheet 1



Inventor

William H. Wood Jr.

By: Wooster Davis Attorneys

Nov. 27, 1945.

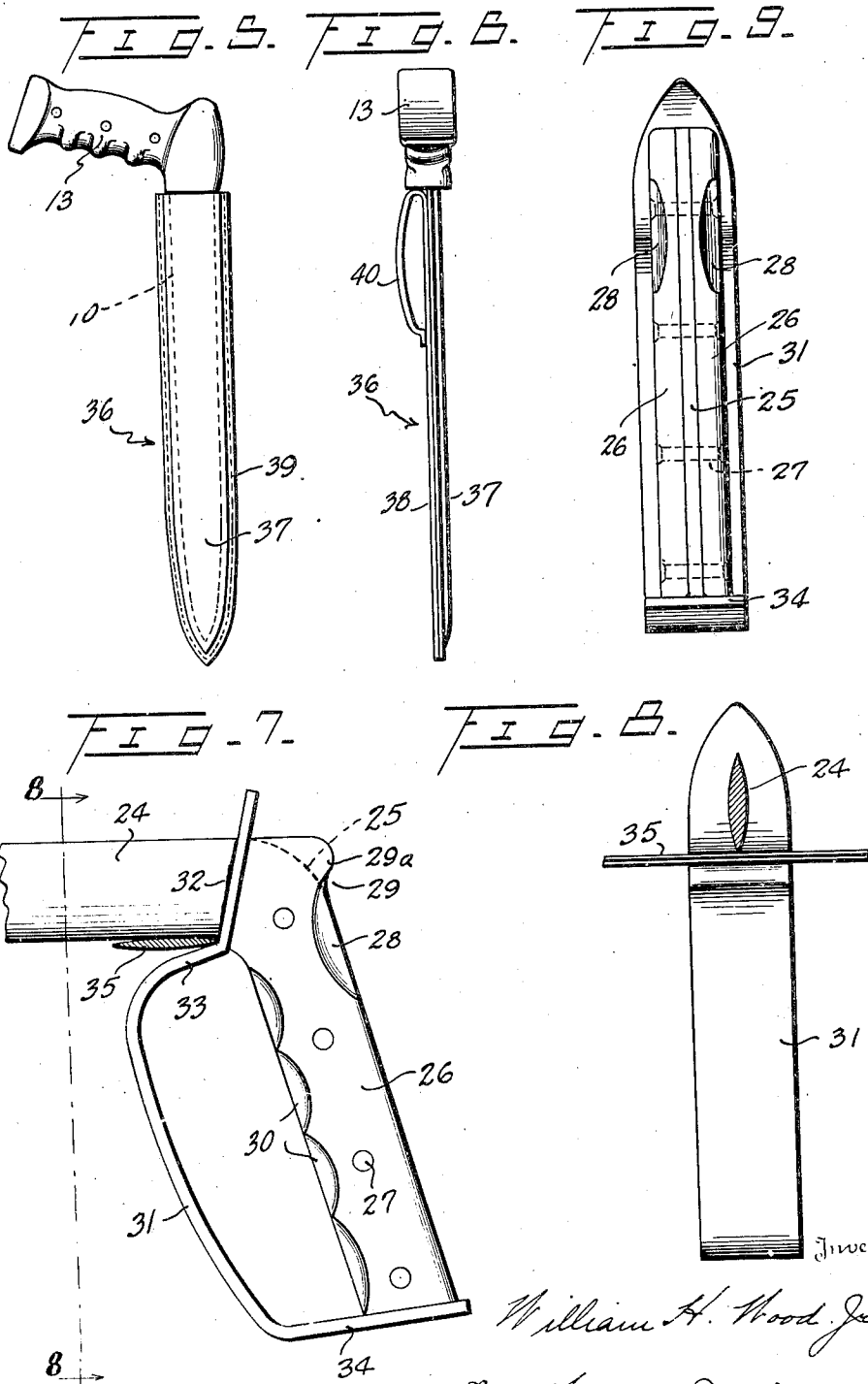
W. H. WOOD, JR

2,389,882

COMBAT KNIFE

Filed June 22, 1944

2 Sheets-Sheet 2



Inventor
William H. Wood, Jr.
By Hooster & Davis Attorneys

UNITED STATES PATENT OFFICE

2,389,882

COMBAT KNIFE

William H. Wood, Jr., Ansonia, Conn.

Application June 22, 1944, Serial No. 541,584

6 Claims. (Cl. 30—340)

This invention relates to a combat knife and has for an object to provide a knife of this character which is so shaped and constructed that it will be much more difficult to disarm a man armed with this knife than it would be with a man armed with the usual knife provided with the straight handle which is now commonly employed.

It is also an object to provide a knife in which the grip is so arranged that in actual combat it would be very difficult or practically impossible for the opponent to twist the knife backwardly to stick the man using it.

Another object is to provide a knife of this character with a grip so arranged that after the knife is stuck into an opponent it may be more easily pulled or withdrawn from the wound than a straight handled knife, and in which there is greater leverage for twisting the blade in the wound.

A particular object is to provide a knife with an improved grip or handle whereby the thrust longitudinally of the blade is made with the forearm and wrist of the user substantially straight and substantially in alignment with the blade so that the greater proportion of the force of the thrust is substantially in alignment with the blade, and it is not necessary to twist the wrist to an angle which will weaken the force of the thrust or expose the wrist to nearly as great danger of injury from an opponent's knife, and the thrusting power is greatly increased as it is in direct line with the straight forearm and wrist.

A still further object is to provide a construction and arrangement in which with a slashing stroke of the blade in any direction the user has complete and full control.

Another object is to provide a construction in which there is no danger of the hand slipping from the grip down onto the blade in a thrusting operation with consequent serious cutting of or injury to the hand.

Another object is to provide a construction of knife which may be more easily and readily withdrawn from a sheath or carrier, and which when placed in such sheath does not extend to as great a height above the sheath as would a straight bladed knife to interfere with other movements of the body, and which when withdrawn from the sheath is in the natural position for use immediately without bending or twisting the wrist, particularly for a thrusting operation.

Still another object is to provide a construction which may be used for snapping or breaking an

opponent's blade, or readily twisting it from his grasp so as to disarm him.

With the foregoing and other objects in view I have devised the construction illustrated in the accompanying drawings forming a part of this specification. It is, however, to be understood the device is not limited to the specific construction and arrangement shown but may embody various changes and modifications within the scope of the invention.

In these drawings:

Fig. 1 is a side elevation of one embodiment of my improved combat knife showing method of use;

Fig. 2 is a vertical section substantially on line 2—2 of Fig. 1;

Fig. 3 is a side elevation of the hilt end of the blade with a shank connected thereto, the cheek or cover plates of the grip being omitted;

Fig. 4 is a front elevation looking from the right of Fig. 3, showing the outline of the cheek or cover plates in dotted lines;

Fig. 5 is an elevational front view showing the knife in a sheath or carrier;

Fig. 6 is a side view looking from the left of Fig. 5;

Fig. 7 is a side elevation of the hilt end of the blade and handle showing a modified construction;

Fig. 8 is a vertical section substantially on the line 8—8 of Fig. 7, and

Fig. 9 is a view looking from the right of Fig. 7.

With the usual combat knife with the straight handle in direct alignment with the blade as how generally employed any trained man can without a great deal of difficulty disarm a man armed with such a knife, with practically all grips or positions, with the possible exception of a straight forward thrust. However, even in this position with such a handle the wrist must be bent at a sharp and awkward angle greatly reducing the force of the thrust and exposing the wrist to danger of injury from an opponent's knife or weapon. Also, if the knife is gripped so that the blade extends laterally or substantially at right angles to the wrist for a stabbing action and if the blade should meet unusual resistance, as for example hit against a bone, there is danger of the hand slipping from the grip onto the blade with the liability of severely cutting the fingers and hand. There are numerous other disadvantages of the straight handled knife, all of which and the above are greatly reduced or practically eliminated with the present improved construction.

Referring first to Figs. 1 to 6, my improved

knife comprises an elongated pointed blade 10, preferably a double-edged blade having two sharpened edges 11 and 12 running substantially the full length of the blade, and provided at its base or hilt end with a hand grip 13, extending laterally in the plane of the blade so that when the blade is in the horizontal position and lying in a vertical plane this grip is upright below the blade, as clearly shown in Fig. 1. The preferred angle of the grip to the blade is something less than a right angle, preferably inclined backwardly or away from the blade at an angle of about 15 degrees to a line at right angles to the axis of the blade as this makes it possible to bring the thrust more nearly into direct alignment with the blade and the blade into alignment with a straight forearm or wrist, and makes a much more natural position for the blade with relation to the hand and wrist. The handle is formed with a shank 14 of metal of suitable thickness secured to the hilt end of the blade. A very satisfactory construction is to slot the upper end of the shank as indicated at 15, to receive the base end 16 of the blade and to weld the blade to the shank. To insure proper welding the side walls of the shank may be provided with slots 17 and the welding action performed through and at the edges of these slots. This is a preferred way of fastening two members together as it makes a very strong rigid construction, but of course I am not limited to this construction. Other ways may be used for connecting the two elements together or they could be forged in one piece. After the blade and shank are properly connected the shank may be covered with cheek plates 18 of wood or other suitable material and secured by suitable means such as transverse rivets 19, or if preferred the cheek plates or grip could be molded directly on the shank. These plates or covering are shaped to provide a natural grip, the rear edge 20 being preferably curved to fit the palm of the hand and at the upper end is curved inwardly as shown at 21 to form a shallow recess or curved seat to rest naturally in the fork or crotch between the thumb and the first finger. The overhang 21a helps to improve the grip and reduce liability of wrenching the knife from the hand by an upward movement of the point of the blade.

A further advantage of the slight backward incline of the handle or grip is that it puts most of the force of the thrust from the hand directly in the upper part of the palm and more nearly in direct alignment with the blade. In other words, the top of the grip is high and close to or in substantial alignment with the blade, as will be apparent from Fig. 1; also that the blade is substantially in direct alignment with the wrist 22 and the wrist and forearm can be held straight for a direct thrust in substantially direct alignment with the blade. The forward side of the grip may be provided with shallow recesses 23 to receive the fingers of the hand as they are folded about the grip to improve the grip and give a much more reliable gripping action and one which will be more difficult to dislodge.

In Figs. 7, 8 and 9 is shown a somewhat different construction but involving the same principles and advantages. In this construction only the shank or hilt end of the two-edged pointed blade 24 is shown and the shank 25 is forged in one piece with this blade. It is covered with the cheek plates 26 forming a suitable hand grip, the plates being secured thereto by any suitable means such as the transverse rivets 27, or the

grip could be molded directly on the shank if preferred. This grip or handle extends laterally of the plane of the blade and is inclined backwardly the same as in the forms of Figs. 1 to 4. The rear upper edge portion of the grip has curved recesses 28 and it is curved inwardly as shown at 29 to form a seat corresponding to the seat 21 of the first form, to rest naturally in the fork or crotch between the thumb and the first finger at the upper part of the palm, and the forward edge has the recesses 30 for the fingers wrapped about the grip similar to the recesses 23 of the first form. The overhang 29a is similar to the overhang 21a of the first form.

In this form, however, the handle is provided with a guard 31 extending in front of the handle from the blade to the lower end of this handle. This may be a metal strip of suitable thickness. Its upper end portion is provided with an opening through which the blade extends and to which it is welded as shown at 32. It extends forwardly and is inclined downwardly somewhat directly beneath the blade and at the top of the handle as shown at 33, and at its lower end extends backwardly across the lower end of the shank as shown at 34 and is welded or otherwise secured to the end of the shank. This guard forms an effective shield to protect the hand and fingers of the user from the blade of the opponent's knife or other weapon. The forwardly and downwardly inclined portion 33 forms a recess which may be used to receive the blade of an opponent's knife as indicated at 35 between the blade 24 and the upper portion 33 of the guard. Because the handle 26 extends at a substantial angle to the axis of the blade this provides great leverage for the handle and with the opponent's blade 35 in the position shown it readily provides sufficient leverage and force so that this blade can be readily and easily snapped or broken, or the knife can be wrenched from the opponent's hand, thus disarming him. It will be seen such a guard can be applied to the handle or grip of the knife of Fig. 1 if desired.

There are numerous advantages in the above described construction over the usual combat knife using the straight handle now generally employed. It will be readily seen from Figs. 1 and 7 that the grip of the hand may be high on the handle bringing the upper part thereof substantially directly into alignment with the blade. This permits a direct straight thrust forward in substantially direct alignment with the blade and also the blade is in substantially direct alignment with the straight forearm and wrist giving maximum force or power to the thrust and permitting much more power than is possible with a straight handled knife, because with this latter knife for such a stroke the wrist must be bent laterally to a sharp and awkward angle, greatly reducing the possible force and also exposing the bent portion of the wrist to injury from an opponent's weapon. It will be apparent the user is greatly handicapped with such a knife, which handicap is removed with the present construction. Also because the force is in direct alignment with the blade and a straight wrist and forearm the blade may be more readily pulled or withdrawn from the wound in the body than could a straight handled knife. Furthermore, there is no danger should the knife meet with unusual resistance, as for example should the point hit a bone, of the hand sliding off the grip onto the blade and thus severely cutting the hand or fingers. As the handle is at an angle extending laterally from the

blade and the wrist can thus be kept straight, the user has great leverage on the blade and can turn it in the wound, and it makes it much more difficult for an opponent to disarm him as he has complete control at all times. This arrangement also gives greater reach, even with a blade of the same length over a straight handled blade as the wrist is not bent or twisted to an awkward angle, and in the slashing stroke in any direction the user has full control. On account of the straight thrust in substantial alignment with the blade he can not only get complete full power for the thrusting action, but as it is a straightforward direct thrust with a straight wrist position he can secure the full force with a shorter back movement than he can with a straight knife.

Another advantage is that when this knife is carried in a sheath or carrier, as indicated in Figs. 5 and 6, it is much easier to withdraw from the sheath, a simple form of which is shown at 36, than is a straight handled knife because, as it will be seen, the handle extends at an angle laterally from the sheath it may be grasped with a natural grip with the hand in the natural position. Also as the handle is at an angle it doesn't stick up so far or as high above the sheath and thus is less apt to interfere with other movements of the body, such for example as bending movements and the like. If the sheath is carried on the left side the handle projects forwardly or to the right across the body, making a very natural grip with the right hand in a natural position for grasping it and withdrawing it from the sheath. With this knife, after withdrawing it from the sheath, the hand is in a natural position and it is not necessary to bend or twist the wrist to a sharp or awkward angle to bring the blade to a thrusting position. The sheath shown is of a very simple type comprising two pieces of leather 37 and 38 placed side by side and stitched around the edges, as shown at 39, and the rear piece extended and folded over to form a loop 40 to receive and embrace the belt of the wearer.

There is a distinct advantage in the slight backward incline of the handle as it puts most of the force of the thrust directly in the upper part of the palm of the hand and more nearly in direct alignment with the blade. It also permits locating of the top of the grip high and close to or in alignment with the blade to readily secure these advantages.

Having thus set forth the nature of my invention what I claim is:

1. A combat knife comprising a two-edged pointed blade, and a handle for said blade extending laterally thereto in the plane of the blade at an angle approaching but somewhat less than a right angle so that it is inclined backwardly somewhat from the blade and forms a grip provided with an inwardly curved recess in its upper end portion substantially in alignment with the blade forming a seat to rest in the crotch between the thumb and first finger so that the thrust longitudinally of the blade is in substantial alignment with a straight wrist of the user.

2. A combat knife comprising an elongated pointed blade, a shank extending laterally from the base end of the blade in the plane of the blade and approaching but at something less than a right angle, and cover means for said shank forming a grip extending at its upper end into substantial alignment with the blade and provided with a curved recess adapted to fit and rest in the crotch between the thumb and first finger and with its upper part overhanging the crotch so that the thrust longitudinally of the blade will be in substantial alignment with the wrist of the user.

3. A combat knife comprising an elongated pointed blade, and a handle extending laterally in the plane of the blade forming a hand grip extending upright below the blade when the blade is horizontal, said handle at the upper part of its rear edge being curved inwardly toward the blade to form a seat in substantial alignment with the blade to seat in the fork between the thumb and first finger of the hand of the user so that the main portion of the thrust longitudinally of the blade is in substantial alignment with the forearm.

4. A combat knife comprising an elongated pointed blade, and a handle extending laterally in the plane of the blade forming a hand grip extending upright below the blade when the blade is horizontal and on edge, said handle being inclined backwardly somewhat from the blade and concaved somewhat adjacent its upper end in substantial alignment with the blade to form a seat to rest in the upper part of the palm of the hand in the crotch between the thumb and first finger and in substantial alignment with the wrist.

5. A combat knife comprising a pointed elongated blade, a handle extending laterally from the hilt end of the blade in the plane of the blade and at an angle less than a right angle so that it is inclined backwardly somewhat from the blade and providing a grip with the upper part thereof in substantial alignment with the blade, and a guard connected with the blade at the rear part thereof and extending downwardly in front of the handle and including a forwardly and downwardly inclined portion immediately beneath the blade forming a tapered recess therewith adapted to receive the blade of an opponent's knife extending transversely of the blade and to grip it so that by swinging the handle laterally it may snap the opponent's blade.

6. A combat knife comprising a pointed elongated blade, a handle extending laterally from the hilt end of the blade in the plane of the blade and at an angle less than a right angle so that it is inclined backwardly somewhat from the blade, and a guard extending around and secured to the blade at the upper end of the handle and inclined downwardly and forwardly immediately beneath the blade to form a recess therewith and then extending downwardly spaced in front of the handle and backwardly at its lower end and secured to the lower end of the handle.

WILLIAM H. WOOD, JR.