

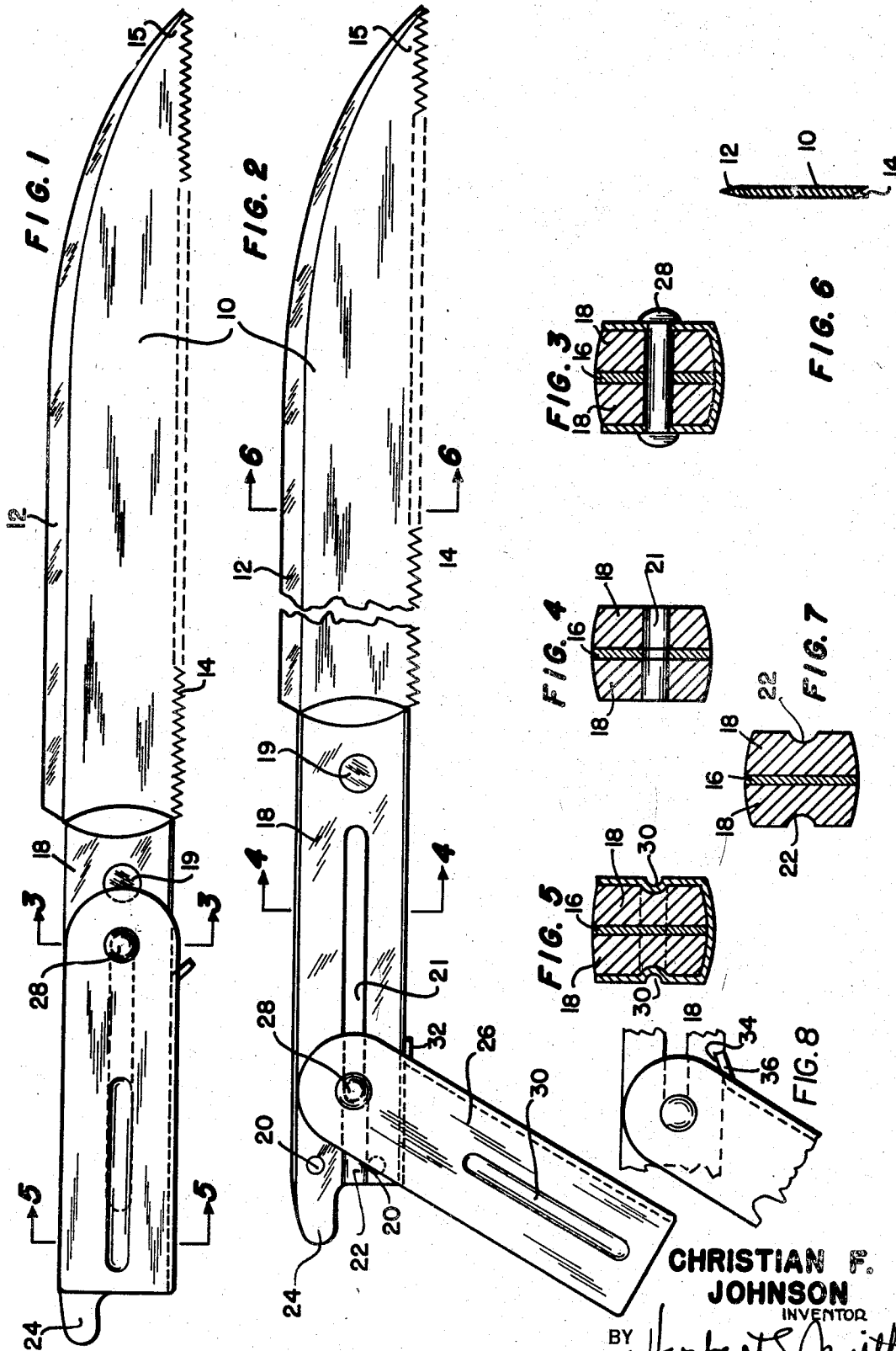
Dec. 15, 1942.

C. F. JOHNSON

2,305,476

SAW KNIFE

Filed July 25, 1941



CHRISTIAN F.
JOHNSON
INVENTOR

BY *Herbert E. Smith*
ATTORNEY

UNITED STATES PATENT OFFICE

2,305,476

SAW KNIFE

Christian F. Johnson, Pierce, Idaho

Application July 25, 1941, Serial No. 404,037

5 Claims. (Cl. 30—144)

This invention relates to a saw knife in which is combined the elements of a slicing knife and a saw blade coupled together by means of a single handle so that, in one tool, slicing and sawing operations can be performed alternately.

It is well known that with campers and hunters, and around the household there are many occasions when a toothed element having the characteristics of a saw would be extremely useful for severing bones and the like, which are otherwise difficult to handle with a knife alone.

It is not always convenient to have such a saw readily available at all times, but by combining it with a knife blade in a single tool in a simple and efficient manner it can be easily and usefully accomplished according to the principles of my invention.

More particularly my invention relates to a handle that is useful for both the slicing and the sawing operation, and in the latter operation the handle is arranged in the manner of a pistol grip in order to facilitate the sawing operation. Yet, during the slicing operation, there is no material difference in operation or convenience between my handle and a conventional knife handle.

An important object of my invention is the provision of an improved saw knife in which are combined a slicing blade and a toothed sawing blade associated with a unitary handle in order to facilitate the alternate use of the saw or knife elements.

Another object of my invention is the provision of a handle arrangement for a saw-knife which is easy to construct, simple to assemble, and may be adjusted and arranged for varying uses, quickly and efficiently even by those who are not skilled mechanics.

A further object of my invention relates to the provision of a U-shaped pistol grip adapted to enclose a handle of a knife in one position but which can be adjusted to form a pistol grip and is so arranged as to stay in either position without slipping or dislodgement.

Other objects and advantages of the invention will be apparent during the course of the following description:

In the drawing forming a part of this specification and in which I have illustrated a preferred form of my invention:

Figure 1 is a plan view of my saw knife,

Figure 2 is a plan view with portions broken away for convenience of illustration, of the saw knife of Figure 1 but with the handle member arranged for the performance of the sawing operation,

Figures 3, 4, 5 and 6 are cross-sectional views taken through the handle and blade as variously indicated throughout Figures 1 and 2,

Figure 7 is a cross sectional view of the handle end, and

Figure 8 is a fragmentary elevational view illustrating a modified arrangement by which my handle is lodged in the pistol grip position.

Throughout the drawing, where like reference numerals refer to like parts, the numeral 10 designates the blade of the saw knife having the slicing edge 12 and the toothed edge 14 which are on opposite side edges of the body 10. As shown in Figures 1 and 2, the knife edge 12 curves on its forward end to the tip 15 where it intersects the line of the saw teeth that are shown as arranged in substantially a straight line.

On its rear end the blade 10 has the narrowed handle extension 16 on each side of which are fastened handle halves 18, 18 by means of rivets 19 and 20. The slot 21 is formed through the handle halves 18 and the member 16 and, adjacent the rear end of the slot the handle halves are grooved at 22 all for a purpose to be described later. The end extremity of the handle has a horn 24 that extends from the edge of the handle that is approximately in line with the knife blade 12 and overhangs a portion of the hand at times.

A U-shaped metal handle sheath 26 has the pivot pin 28 that passes through the slots 21 so that the sheath is slidably movable with relation to the handle comprising elements 16 and 18 and also permitted to swing about the axis of the pin 28. Towards the outer end and on either side of the sheath 26 I form elongated indentations 30 which cooperate with the grooves 22 when the sheath is in the position shown in Figure 1.

In order to arrange the sheath in the position shown in Figure 2 from that of Figure 1, the sheath is drawn outwardly or longitudinally so that the pin 28 slides in the slot 21 until the indentations 30 are disengaged from the groove 22 on either side of the handle. The sheath may then be swung about the axis of the pivot pin 28 until the lip 32 engages the edge of the handle to act as a stop and to maintain the angle of the sheath as well as to act as a guard against the sheath swinging further forward.

The sheath is grasped in the manner of any tool having a pistol grip and with the saw teeth directed downwardly, the sawing operation may be easily performed.

As shown in Figure 8 there is a notch 34 formed in the edge of the handle with which the lip or stop 36 engages to prevent, under certain

circumstances, the handle sliding forward from its adjusted position.

To close the handle again into its compact arrangement, the U-shaped member or sheath is swung into longitudinal alignment with the slot 21 so that the indentations 30 may slip into the grooves 22—then the sheath is shoved the full limit of travel permitted the pin by the slot 21.

While I have shown and described the preferred form of my invention, it will be apparent that changes and alterations in the invention may be made within the scope of the subjoined claims, without departing from the spirit thereof.

Having thus described my invention, I claim:

1. In a saw knife of the type wherein a blade is edged as a knife on one side and as a saw on the other, a handle extension on one end of said blade having a longitudinal slot, a sheath of U-shaped cross-section adapted to closely enclose said handle extension and having a pivot pin slidable in said slot, grooves in said handle parallel to said slot, indentations in said sheath slidably cooperable with said grooves to prevent unintentional swinging of said sheath about the axis of said pivot pin on occasion, and a stop lip on said sheath cooperable with the handle side when the sheath is adjusted to the pistol grip position to maintain that position.

2. In a saw knife of the type wherein a blade is edged as a knife on one side and as a saw on the other, an extension on one end of said blade having handle halves on each side and a longitudinal slot therethrough, a sheath of U-shaped cross-section adapted to closely enclose said handle extension and having a pivot pin in said slot, a groove in each said handle half parallel to said slot, and indentations in said sheath slidably cooperable with said grooves to prevent unintentional swinging of said sheath about the axis of said pivot pin on occasion.

3. In a saw knife of the type wherein a blade is edged as a knife on one side and as a saw on the other, a handle extension on one end of said blade having a longitudinal slot, a sheath of U-shaped cross-section adapted to closely enclose said handle extension and having a pivot pin in said slot, grooves in said handle extending in alignment with said slot to the end of the handle, and elongated indentations in said sheath slidably cooperable with said grooves to prevent unintentional swinging of said sheath about the axis of said pivot pin on occasion.

4. In a saw knife of the type wherein a blade is edged as a knife on one side and as a saw on the other, a handle extension on one end of said blade having a longitudinal slot, a sheath of U-shaped cross-section adapted to closely enclose said handle extension and having a pivot pin slidable in said slot, grooves in said handle parallel to said slot, and indentations in said sheath slidably cooperable with said grooves to prevent unintentional swinging of said sheath about the axis of said pivot pin on occasion.

5. In a saw knife of the type wherein a blade is edged as a knife on one side and as a saw on the other side, a handle having substantial thickness on one end of said blade and provided with a longitudinal slot, a sheath of U-shaped cross-section adapted to closely enclose said handle and slidably movable with relation thereto, a pivot pin passing through said sheath and said slot, and means between said sheath and said handle to prevent unintentional swinging of said sheath about the axis of said pivot pin on occasion.

CHRISTIAN F. JOHNSON.