

March 6, 1951

P. S. VOSBIKIAN ET AL

2,544,197

LOCKING MECHANISM FOR HANDLES OF BLADED TOOLS

Filed Feb. 28, 1947

FIG. 1.

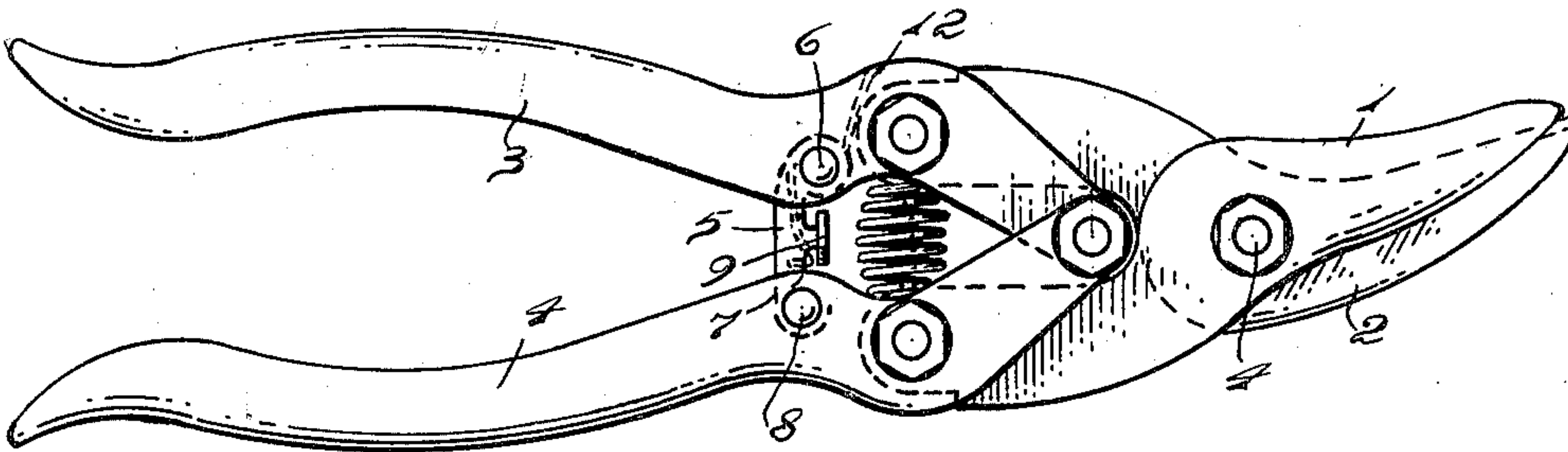


FIG. 2.

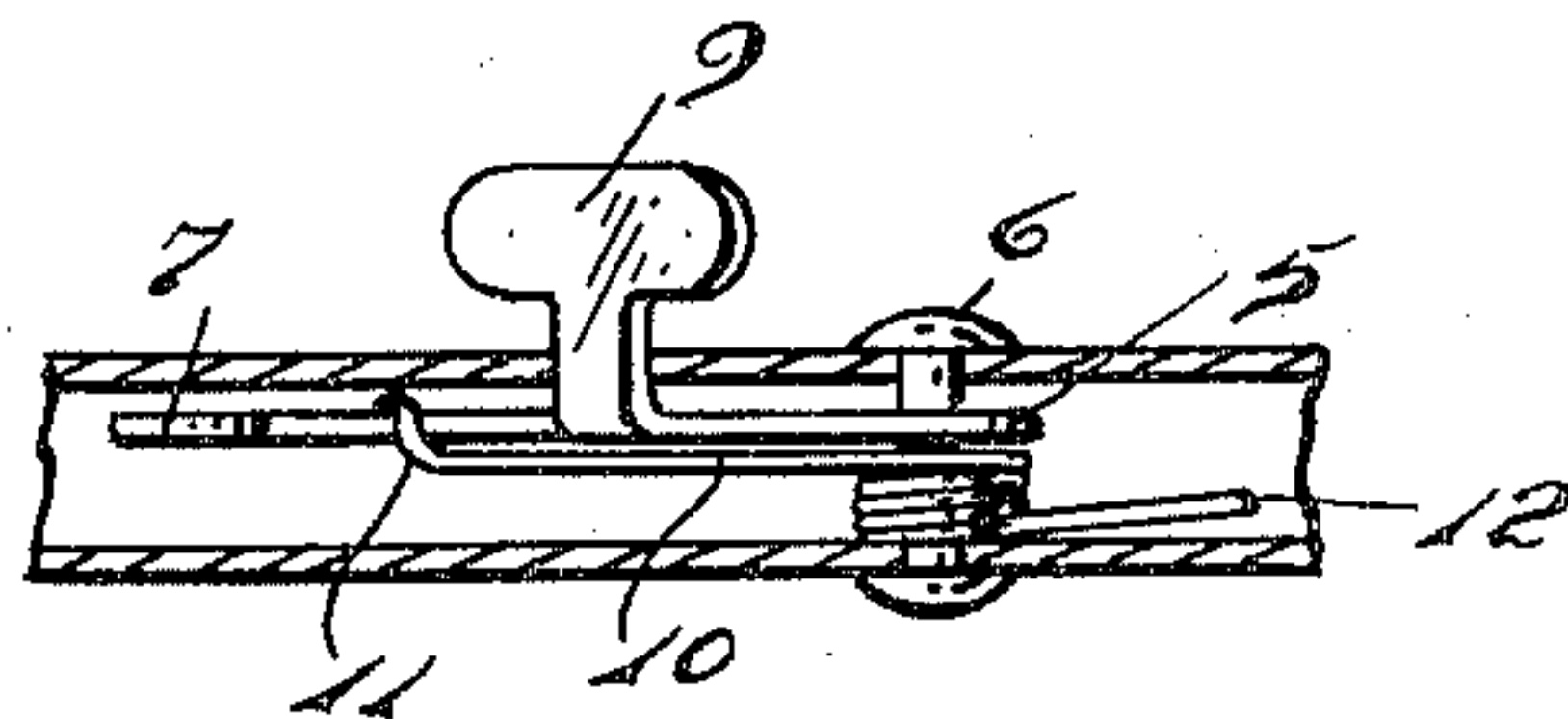
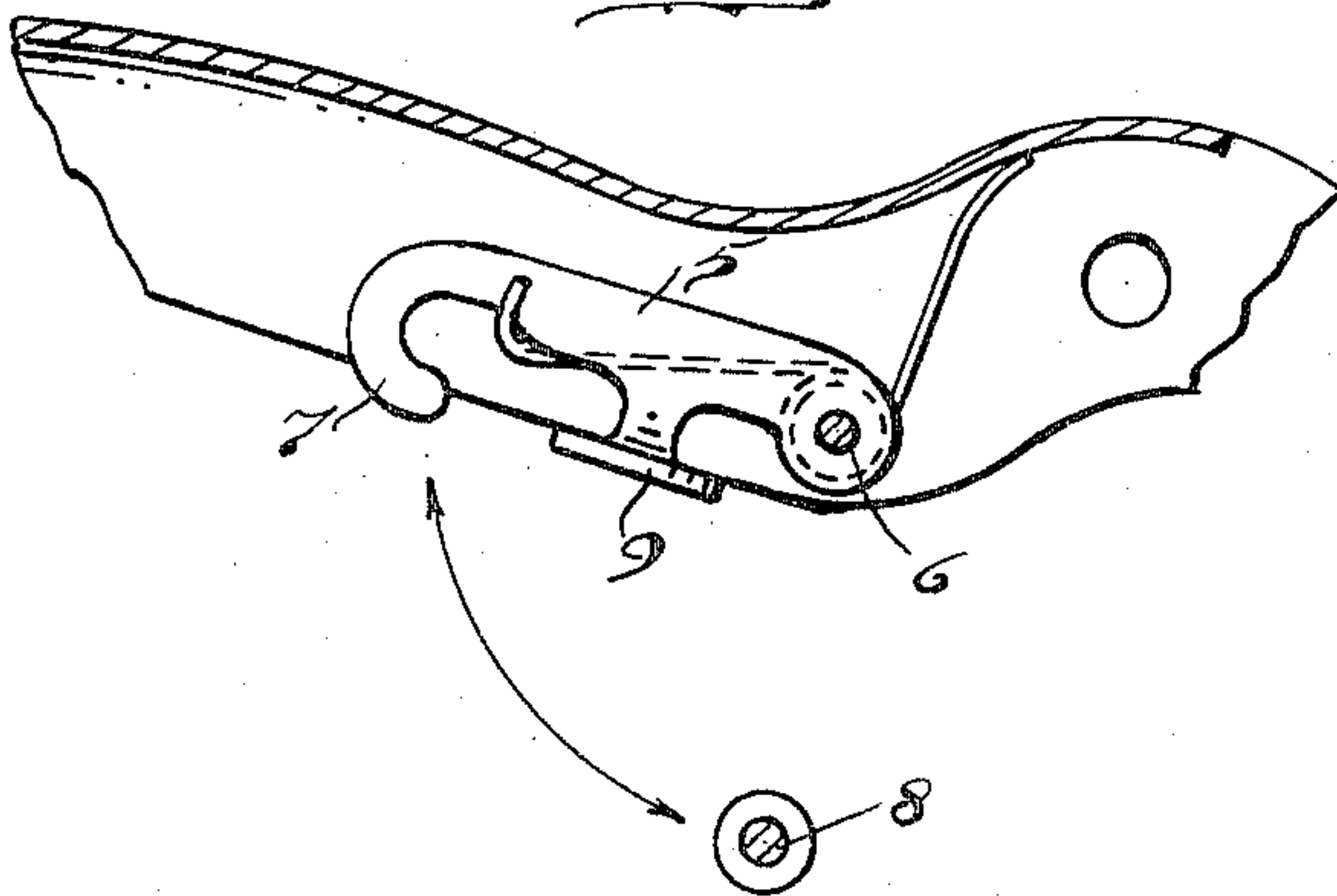


FIG. 3.



INVENTORS,
Peter S. Vosbikian
Thomas S. Vosbikian
By
Herbert S. Fairbanks
ATTORNEY.

UNITED STATES PATENT OFFICE

2,544,197

LOCKING MECHANISM FOR HANDLES OF
BLADED TOOLSPeter S. Vosbikian and Thomas S. Vosbikian,
Melrose, Pa.

Application February 28, 1947, Serial No. 731,600

1 Claim. (Cl. 30—262)

1

The object of this invention is to devise novel means for securing the handles of bladed tools in their closed condition.

A further object of the invention is to devise novel latching mechanism having a latch pivotally mounted within one of the handles and adapted to latch with a pin or rod within one of the handles.

A further object is to mount the latch mechanism in such a manner that it will not interfere with the normal operation of the tool and will be substantially concealed within the handles.

A further object is to tension the latch in a novel manner so that when the handles are pressed towards their closed position, the latch will be automatically released and will swing into its open position.

With the foregoing and other objects in view as will hereinafter clearly appear, our invention comprehends novel latching mechanism for securing the handles of bladed tools in their closed position.

For the purpose of illustrating the invention, we have shown in the accompanying drawings a preferred embodiment of it which we have found in practice to give satisfactory and reliable results. It is, however, to be understood that the various instrumentalities of which the invention consists can be variously arranged and organized and the invention is not limited to the exact arrangement and organization of these instrumentalities as herein set forth.

Figure 1 is a plan view of a pair of shears with handle locking mechanism, embodying our invention.

Figure 2 is a section on line 2—2 of Figure 1.

Figure 3 is a fragmentary plan view with part of the handle removed to show the latch in its open position.

Similar numerals of reference indicate corresponding parts.

Referring to the drawings:

It is to be understood that it is immaterial whether the blades are adapted for cutting, gripping or holding.

As illustrated for purpose of explanation, the tool has blades 1 and 2, pivotally connected with handles 3 and 4, the connection providing a compound leverage action if desired. The handles are channel shaped in cross section and within the channel of one handle one end of a latch 5 is pivoted on a pivot pin 6 riveted or otherwise secured to the handle. The free end of the latch forms a hook 7 adapted to engage a pin 8 riveted or otherwise secured within the

2

channel of the other handle. The latch is provided with an offset portion 9 which is pressed by the operator to move the latch into its locking position.

In order to effect the automatic release of the latch a tension device is provided in the form of a spring 10 one end of which bears against the latch at 11 and the other end is fixed at 12 to a notch in the handle to which the latch is pivoted. It will thus be clear that the latch except for the offset portion 9 forming a pressure member is within the planes of the handles. The offset portion 9 does not extend outwardly beyond the handles a sufficient distance to form an obstruction to the normal use of the tool, and therefore does not interfere with such normal use.

The arrangement of the spring is such as to cause the automatic opening of the latch when released from the pin with which the hook of the latch cooperates.

When the latching mechanism is in its locked condition and the handles are pressed together, the latch is released and is moved by the spring into its unlatched position and retained in such position.

To lock the handles in their closed position, the handles are pressed together and by means of the pressure member 9 the latch is moved into engagement with its keeper formed by the pin 8.

Our present invention solves the problem of a locking mechanism for bladed tools which is substantially concealed within the handles, which secures the blades and handles in their locked condition, and which will automatically release when the handles are pressed together, and at the same time will not form an obstruction extending beyond the planes of the handles to interfere with the manipulation of the tool in its operation.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is:

Locking mechanism for the handles of bladed tools, comprising the combination with blades pivoted together and handles having grasping portions channel shaped in cross section, pivoted to the rear ends of the blades and having forward extensions pivoted together at their forward ends, of a latch comprising a flat strip having a hook at one end and having the other end pivoted within the channel of one handle in advance of its grasping portion and having an offset pressure portion midway between its hook and pivot and extending laterally of the median

3

line of the tool when the handles are latched, a spring for the latch and tending to move the latch into concealed position within its channel except for the pressure portion which extends longitudinally of and in close proximity to the inner face of the handle to which it is pivoted, and a keeper in the channel of the other handle in advance of its grasping portion, said pressure portion when the latch is in latched position being disposed between the handles and extending exterior thereof at one side of the tool.

PETER S. VOSBIKIAN.
THOMAS S. VOSBIKIAN.

4

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

| Number | Name | Date |
|--------------|--------------------|---------------|
| 309,888 | Shepard ----- | Dec. 30, 1884 |
| 670,416 | Cronk ----- | Mar. 26, 1901 |
| 1,104,768 | Bernard ----- | July 28, 1914 |
| 10 1,546,317 | Rogers ----- | July 14, 1925 |
| 1,741,109 | Heimerdinger ----- | Dec. 24, 1929 |