

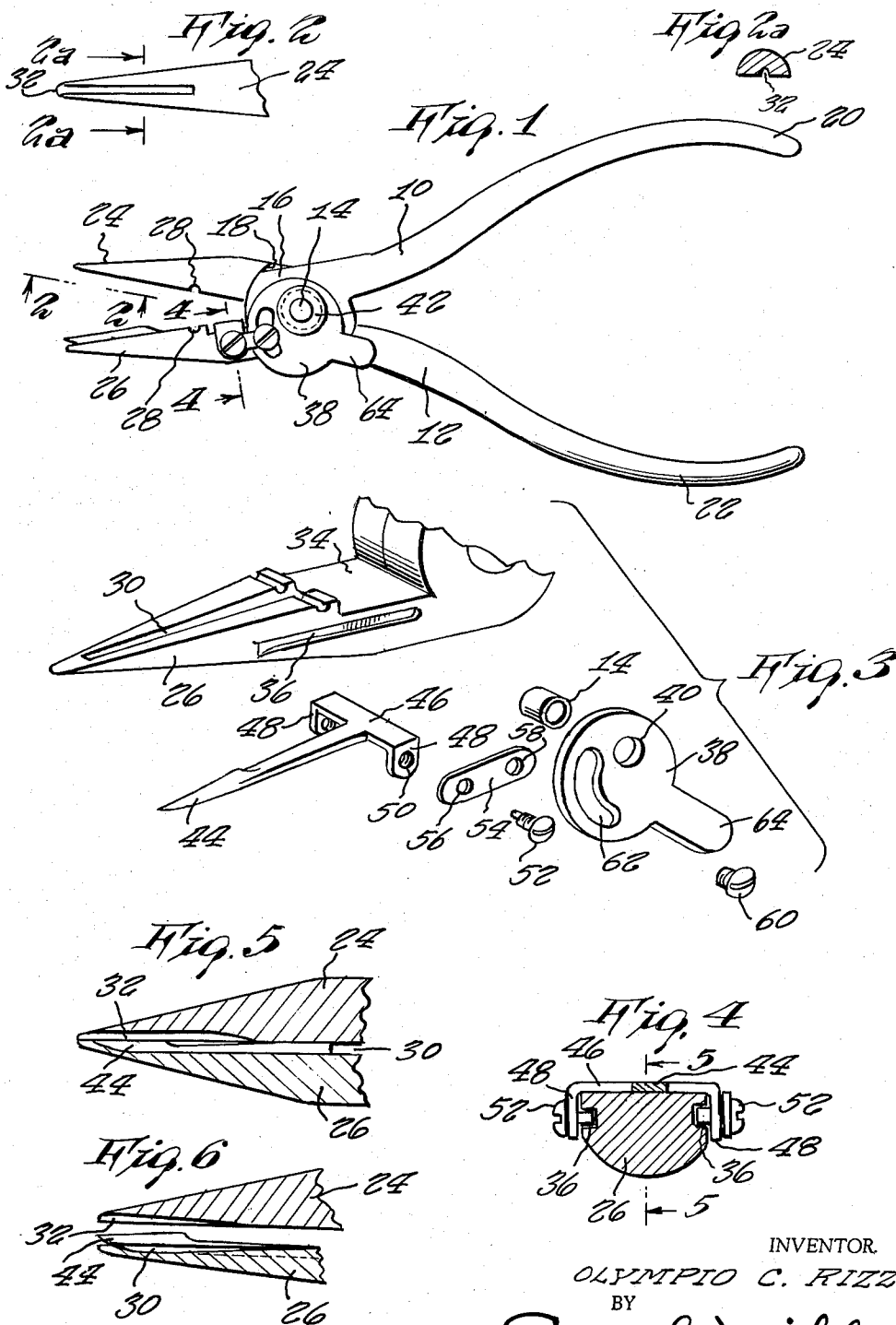
March 9, 1965

O. C. RIZZO

3,172,133

LONG NOSE PLIERS WITH CUTTING ATTACHMENT

Filed May 14, 1962



INVENTOR

OLYMPIO C. RIZZO

BY

Carl Miller

ATTORNEY

1

3,172,133

## LONG NOSE PLIERS WITH CUTTING ATTACHMENT

Olympio C. Rizzo, 269 Cator Ave., Jersey City 5, N.J.  
Filed May 14, 1962, Ser. No. 194,563  
4 Claims. (Cl. 7-5.4)

My invention relates to pliers and more particularly relates to long nose pliers having a cutting attachment.

It is an object of my invention to provide new and improved pliers of the character indicated which can be used for gripping, skinning and cutting and at the same time can be used to cut wires in hard to get at places.

Another object of my invention is to provide new and improved pliers wherein the cutting attachment can be actuated or deactuated under the control of the operator of the pliers.

Still another object of my invention is to provide new and improved pliers of the character indicated which can be easily manufactured at low cost.

All of the foregoing and still further objects and advantages of my invention will now be explained when this specification is studied in conjunction with the accompanying drawings wherein:

FIGURE 1 is a side view of my invention;

FIGURE 2 is a view along the line 2-2 of FIGURE 1;

FIGURE 2a is a cross section through the line 2a-2a of FIGURE 2;

FIGURE 3 is an exploded view of part of my invention;

FIGURE 4 is a cross section through line 4-4 of FIGURE 1;

FIGURE 5 is a cross section through line 5-5 of FIGURE 4; and

FIGURE 6 is a view similar to FIGURE 5 showing the cutter element in operative position for cutting.

Referring now to the drawings, my pliers comprises a pair of levers 10 and 12 disposed in crossing relation to each other and swingably connected to each other by a pivot pin 14 extending through two medial hinge sections 16 and 18 of these levers. The ends of the levers extending to one side are shaped into a pair of opposed handles 20 and 22. The opposite ends of the levers are shaped into an opposing pair of long nose jaws 24 and 26. Both jaws are notched at 28 for skinning wire in conventional manner.

Jaw 24 has a flat surface extending the full length of the jaw into which is cut a longitudinal slot 32. Jaw 26 has a forward flat surface portion provided with a longitudinal centrally positioned slot 30, and at the rear of jaw 26 there is a depressed section 34. Jaw 26 further carries two oppositely disposed side guide slots 36.

A lock button 38 has an eccentric hole 40 through which pivot pin 14 extends. A disc 42 positioned on the end of pivot pin 14 and on the outside of button 38 holds button 38 in place on the pliers.

An arm 44 is positioned within slot 30. The end of arm 44 remote from the tips of the jaws terminates in a transverse arm connector 46. Connector 46 rests in depressed section 34 and is provided with oppositely positioned downwardly bent ears 48, each having a threaded opening for receiving a screw 52. Screws 52 have pin ends which fit into the guide slots 36 to hold connector 46 in place on jaw 26 while allowing connector 46 to be slidable back and forth thereon.

A connecting link member 54 is provided with holes

2

56 and 58. One screw 52 extends through hole 56 to attach link 54 to one ear 48 of connector 46. Another screw 60 extends through arcuate slot 62 in button 38 and hole 58 to connect link 54 to button 38. The button 38 is provided with a lever 64.

With button lever 64 swung up and back, arm 44 lies flush within slot 30, and the pliers can be used conventionally. When arm 44 is to be used for cutting, lever 64 is swung down and forward, raising the arm 44 above the flat surface of the jaw. Arm 44 can be locked into position by button 38. Note that button 38 can be rocked backward and forward for a cutting action.

While I have described my invention with particular reference to the drawings, my protection is to be limited only by the terms of the claims which follow.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A pliers comprising a pair of relatively movable members, each having an elongated tapering long nose jaw and a handle separated by a medial hinge section, said movable members arranged in crossed relation with both hinge sections in side by side relation, a pivot pin connecting said hinge sections together, whereby to place said jaws one above the other, each jaw having a flat surface in opposed relation to that of the opposing jaw, a longitudinal slot in the flat surface of the upper jaw, a longitudinal slot in the flat surface of the lower jaw, a depressed section in the lower jaw between the flat surface and the hinge section thereof, an arm positioned in the slot of the lower jaw, a transverse connector at the end of said arm seated in said depressed section, control means disposed at the side of one of said hinge sections, and means connecting said control means to said transverse connector, whereby in one position of said control means the arm is moved rearwardly to lie wholly within its associated slot flush with the flat surface of the lower jaw and inoperative, and in another position of said control means the arm is moved forwardly and upwardly in its associated slot to lie above the flat surface of the lower jaw to co-act with the slot in the upper jaw in a cutting action.

2. The pliers of claim 1, said control means comprising a circular button eccentrically mounted on said pivot pin for turning movement thereon, a lever fixed with respect to said button and extending rearwardly thereof, and said connecting means comprising a link pivotally and slidably connected at one end to said circular button and at its other end pivotally connected to said transverse connector.

3. The pliers of claim 2, wherein said circular button is provided with an arcuate slot, said link pivotal and sliding connection comprising a screw carried by said link at said first mentioned end and extending into said arcuate slot for movement therein.

4. The pliers of claim 3, including a depending ear at each end of said transverse connector, each overlying a side of said lower jaw, a longitudinal guide slot formed in each side of said lower jaw, and a screw carried by the depending ear at the same side as the circular button forming the pivotal connection of the other end of said link to said transverse connector, said last mentioned screw having a pin end positioned in the longitudinal guide slot adjacent thereto, and a similar screw with pin end carried by the other ear of the transverse connector with the pin end thereof positioned in the longitudinal guide slot on the other side of said lower jaw, whereby

on movement of the button lever upwardly said link will pull the arm rearwardly to place the same in its inoperative position within its associated slot, and on movement of the button lever upwardly, said link will push the arm forwardly to project the same out of its slot and above the flat surface of the lower jaw into operative position with relation to the slot in the upper jaw.

## References Cited in the file of this patent

## UNITED STATES PATENTS

594,852 Brunell ----- Dec. 7, 1897

608,919  
1,431,421  
2,300,516  
2,583,346  
2,840,082  
3,014,387  
3,044,081  
3,078,485

10

108,654

Sell ----- Aug. 9, 1898  
Prince ----- Oct. 10, 1922  
Mesch ----- Nov. 3, 1942  
Sprunger ----- Jan. 22, 1952  
Salvatore ----- June 24, 1958  
Medlin ----- Dec. 26, 1961  
Robinson ----- July 17, 1962  
Carter ----- Feb. 26, 1963

## FOREIGN PATENTS

Sweden ----- Oct. 5, 1943