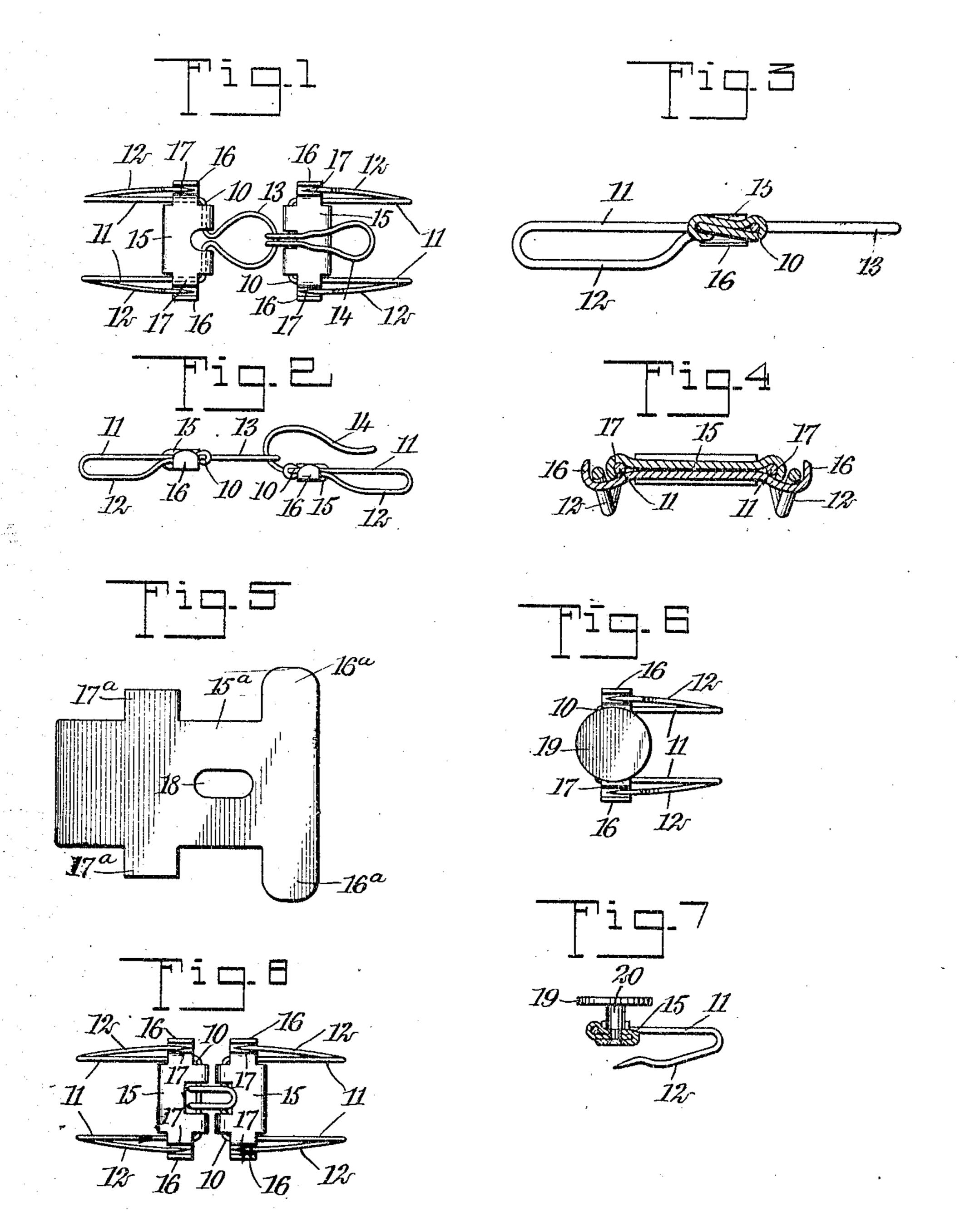
## D. W. PALMER. FASTENER. APPLICATION FILED JUNE 11, 1907.



ATTORNEYS.

## UNITED STATES PATENT OFFICE.

DENNIS WILSON PALMER, OF HERMON, MAINE.

## FASTENER.

No. 871,620.

Specification of Letters Patent.

Patented Nov. 19, 1907.

Application filed June 11, 1907. Serial No. 378,383.

To all whom it may concern:

Be it known that I, Dennis Wilson Palmer, a citizen of the United States, and a resident of the town of Hermon, in the 5 county of Penobscot and State of Maine, have invented a new and Improved Fastener, of which the following is a full, clear, and exact description.

This invention is an improvement in fas-10 teners for garments and other like purposes, the same being of either the hook and eye type or in the form of a button, whereby the relation in which the fastener may be used

is both extended and varied.

An object of the invention is to provide a construction embodying a U-shaped wire member composed of a cross-piece connecting two side arms, the free ends of which are bent upon themselves and sharpened to form piercing prongs, and a sheet metal cross-bar embracing both the cross-piece and side arms and having projecting catches adapted to engage the pointed extremities of the prongs.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan of a form of my invention in the nature of a hook and eye; Fig. 2 is a side view of the same; Fig. 3 is a longitudinal section through the eye shown in Figs. 1 and 2; Fig. 4 is a cross section of the same through the sheet metal crossbar; Fig. 5 is a plan of the blank from which said sheet metal crossbar is made; Fig. 6 shows a form of my invention in which either the hook or eye is replaced by a button; Fig. 7 is a longitudinal section of the construction shown in Fig. 6, and Fig. 8 is a plan of a modified form of hook and eye embodying my invention.

Referring more particularly to Figs. 1 to 5 inclusive wherein is shown a form of my invention of the hook and eye type, the hook and eye are each composed of a U-shaped 45 wire member comprising a cross-piece 10 connecting together side arms 11, the free ends of which are bent upon themselves to form piercing prongs 12 which lie substantially parallel to and underneath the side 50 arms, and provided with inset pointed extremities, the inset being best shown in Figs. 2 and 3. The cross-piece 10 of the U-shaped wire member in producing the hook and eye, is bent at its center into the form of a loop 13 55 and an upwardly-turned hook 14, respectively, as clearly shown in Fig. 1.

In producing the hook and eye, I employ in connection with the U-shaped wire member, a sheet metal crossbar 15 made from a blank 15<sup>a</sup> as shown in Fig. 5, said blank be- 60 ing constructed with extending tabs 16a at opposite sides adjacent to one end thereof, and projections 17<sup>a</sup> somewhat shorter in length and arranged at opposite sides of the blank at an intermediate point. Centrally 65 between the tabs 16<sup>a</sup> and projections 17<sup>a</sup> a longitudinal slot 18 is formed for receiving either the projecting hook or eye of the fastener when the blank is applied to the Ushaped wire member. In applying the blank 70 to this member, it is bent crosswise upon itself at the center of the slot 18 to embrace the cross-piece 10, which brings the tabs 16a and projections 17<sup>a</sup> into alinement. The portion of the blank extending beyond the 75 projections 17° is again bent upon the blank. to embrace its under side, as best shown in Fig. 3. The tabs 16<sup>a</sup> which project beyond the side arms 11 from the under side thereof, are curled upwardly to form catches 16 80 adapted to engage with the pointed inset extremities of the piercing prongs 12, after the latter have been passed through the garment, curtain or other device to which it is applied. The projections 17<sup>a</sup> are bent down- 85 wardly to form eyes 17 in close embrace with the side arms 11, thus forming the head of the fastener extremely strong and rigid.

That form of my invention shown in Figs. 6 and 7 is the same as that just described for 90 either the hook or eye, except that the crosspiece 10 of the U-shaped member runs continuously straight across from one side arm 11 to the other, the hook or eye being omitted and in the place thereof a button 19 is 95 substituted. The button 19 is provided with a stem 20 which is riveted or otherwise effectively secured to the upper face of the sheet

metal crossbar 15.

That form of my invention illustrated in 100 Fig. 8 is the same as that shown in Figs. 1 to 4 inclusive, except in the matter of the particular form of the hook and eye and also the slot in the crossbar 15. In this type of hook and eye the cross-piece 10 of the U- 105 shaped wire member of the eye portion of the fastener runs continuously straight across from one side arm 11 to the other, and the cross-piece 10 of the hook member is also slightly but not materially modified in form, 110 as clearly shown. The cross-bar 15 for both the hook and eye in this type of my inven-

tion, has the slotted portion thereof, through which the engagement between the hook and eye is effected, formed slightly enlarged, whereby engagement and disengagement 5 between these two parts can be easily accomplished.

The invention is also susceptible of numerous other modifications not herein shown but falling within the scope of the annexed

10 claims.

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

1. A fastener consisting of a U-shaped wire 15 member composed of a cross-piece and side arms, with the free ends of said side arms bent upon themselves to provide piercing prongs having pointed ends, and a sheet metal crossbar embracing both side arms 20 and the cross-piece and having projecting catches adapted to engage with said pointed

prongs.

2. A blank of sheet material for forming the cross piece of a fastener, consisting of a body portion having projecting tabs at op- 25 posite sides contiguous to one end thereof, and projections disconnected from each other at their outer ends and arranged at opposite sides intermediate the length of the blank, said blank having an aperture sub- 30 stantially centrally located between said tabs and projections for the purpose described.

In testimony whereof I have signed my name to this specification in the presence of

two subscribing witnesses.

## DENNIS WILSON PALMER.

Witnesses:

R. G. Rollins, D. M. Snow.