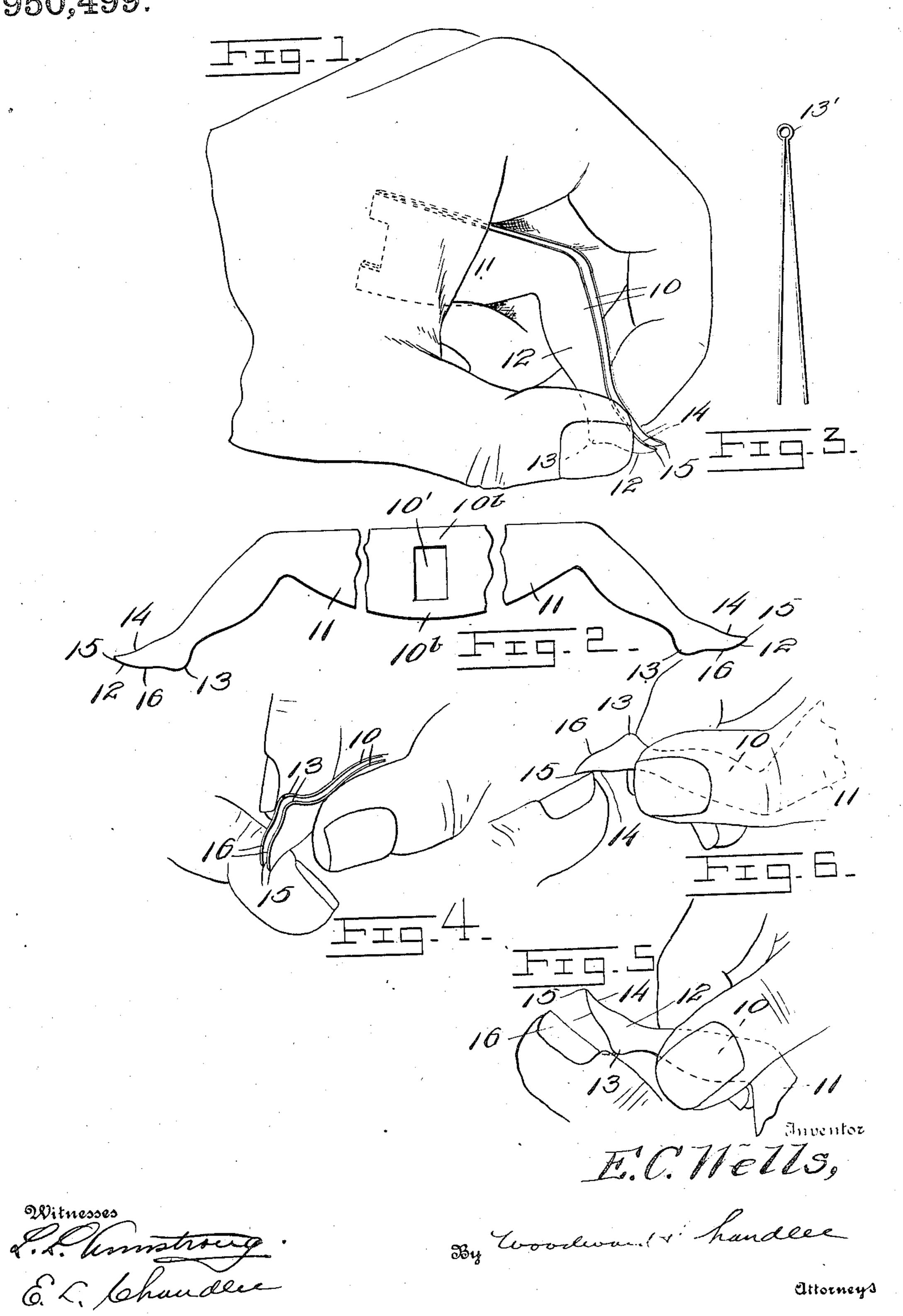
E. C. WELLS. TWEEZERS.

APPLICATION FILED APR. 16, 1909.

950,499.

Patented Mar. 1, 1910.



attorneys

## UNITED STATES PATENT OFFICE.

EUGENE C. WELLS, OF STOCKTON, CALIFORNIA, ASSIGNOR OF ONE-HALF TO GEORGE H. DIETZ AND ONE-HALF TO EDWARD L. WRIGHT, BOTH OF STOCKTON, CALIFORNIA.

## TWEEZERS.

950,499.

Specification of Letters Patent.

Patented Mar. 1, 1910.

Application filed April 16, 1909. Serial No. 490,233.

To all whom it may concern:

Be it known that I, Eugene C. Wells, a citizen of the United States, residing at Stockton, in the county of San Joaquin and State of California, have invented certain new and useful Improvements in Tweezers, of which the following is a specification.

This invention relates to manicuring instruments, and has for its object to provide a pair of tweezers of novel construction adapted for efficient use as tweezers and adapted

A particular object of the invention is to provide a tool the body portion of which is especially shaped to be conveniently grasped for the removal of a splinter, or for like operations involving the use of tweezers.

Another object is to provide tweezers having point portions having concave edges adjacent to the point adapted to insure engagement with a splinter on a rounded portion of the anatomy.

Another object is to provide tweezers having—besides sharpened points for engagement with small splinters—rounded jaw portions adapted for engagement with large splinters. Another advantage gained in having the rounded engaging portions is the avoidance of liability of breakage of splinters of rotten wood or other similar weak material.

A most important object of the invention is to provide a novel design of blank from which the tweezers may be formed to facilitate its manufacture in an economical man-

Other objects and advantages will be apparent from the following description, and it will be understood that changes in the specific structure shown and described may be made within the scope of the claims without departing from the spirit of the invention.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a perspective view of the device grasped in a hand, Fig. 2 is a plan view of the blank for the tweezers, Fig. 3 is an edge view of the tweezers in constructed form, Fig. 4 is a detail of the points showing the method of engaging a small splinter in the finger, Fig. 5 is a similar view showing the method of engaging a splinter of easily pliable material, Fig. 6 is a similar

view showing the device in use as a nail trimmer.

Referring to the drawings, there is shown a pair of tweezers comprising opposite spring arms 10 connected integrally at their 60 upper ends and extending divergently as shown.

The device is made of suitable resilient metal preferably sheet steel, and may be formed by the usual method of stamping.

In producing the device, a blank is stamped having similarly shaped end portions, and having a rectangular opening 10' at its center which thus presents attenuated connecting portions 10<sup>b</sup>. The blank is 70 bent centrally of the connecting portions and suitably tempered to hold the arms extending slightly diagonally from each other. Each of the arms comprises an enlarged upper grip portion 11 and a tapering lower 75 portion 12 extending in an oblique angle therefrom, as shown. The extreme outer end portions of the arms are again turned slightly at an angle to the portion 12 and taper to a point 15. These points are adapt- 80 ed for the removal of small splinters. A slightly enlarged and rounded heel 13 is formed at its inner end, for engagement with pliable splinters, or splinters beneath the ends of the finger nails as shown in Fig. 85 5. The edges 14 on the sides of the arms are concave adjacent to the points 15, and the edge 16 is convex to strengthen the outer portion of the arm and converges toward the edge 14 meeting that edge at the point 15. 90. The enlargement 13 consists of a rounded projection inwardly of the edge 16 adapted for use in a manner similar to that for which the points 15 are intended. The portion 13 is especially adapted for use with splinters 95 of weakened wood, which might be liable to breakage if engaged between the points 15, or on which the points 15 could not obtain a sufficient hold for extraction. These broad portions are less liable to sever or break a 100 splinter than the usual sharply pointed tweezer points.

As shown in Fig. 1, the device is adapted to be grasped in the hand with the portion 11 extending centrally of the hand to be 105 grasped between the palm and the second and third fingers of the hand while the fore finger and thumb are utilized to manipulate the arms 10. The implement is thus steadied against the firmest part of the hand and it 110

will be apparent that by forming the device in this manner the grasp thereon may be more steady than with tweezers of rectilinear

shape.

Fig. 4 shows a method of using the device where the splinter is very small and the tweezers is presented against the finger, as-splinters and similar operations. suring the engagement of the splinter.

The points of the device are unusually well adapted for use in cleaning finger nails, 15 and by the use of the flat edge produced in stamping, the nails may be easily trimmed by scraping their ends as shown in Fig. 6. The concave edge 14 serves to round the edges of the nails and remove their sharp-

20 ness.

It will be seen that a pair of tweezers is presented of especially desirable construction, improvements over tweezers of the ordinary type being attained without addi-25 tional expense in manufacture. The joining portions on opposite sides of the opening 10' are depended upon for the resilience of the device, the cut away central portion of the device serving to prevent undue re-30 sistance to the operation of the tweezers. To strengthen the junction of the arms without affecting their resiliency, the bight is formed in tubular shape as indicated at 13'.

What is claimed is —

1. An article of the class described, comprising a blank of sheet material having a perforated middle portion folded centrally of the perforation to bring the end portions of the blank into registering resilient spaced relation, the outer end portions of said sides

extending at an oblique angle with relation to the inner portion, the extremities being curved and pointed, said sides being provided with enlarged lateral extensions adjacent their extremities, the central portion 45 of the device being adapted to be held beeyes of the operator may not be sufficiently tween the palm and middle fingers of the strong to discern the projecting portion of hand of an operator, and the extremities the splinter clearly. By the use of the con- being adapted to be grasped between the caved edge 14, a larger portion of the thumb and forefinger for extraction of 50

2. As an article of manufacture, a pair of tweezers comprising resiliently divergent arms stamped from sheet metal said arms comprising broadened handle portions co- 55 engaged at one end and adapted for engagement between the palm and middle fingers of the hand of an operator, and tapered operating portions extending obliquely from the handle portion and adapted to be com- 60 pressed into contact by the extended thumb and forefinger of an operator while the handle portions are grasped in the palm, said operating portions having their extremities pointed and extended at an angle 65 therefrom the reverse of that of the operating portion and handle portion, the edges at one side being curved for engagement with splinters on rounded portions of the anatomy, said operating portions having 70 lateral enlargements spaced inwardly of the points for engagement with splinters of friable material.

In testimony whereof I affix my signature,

in presence of two witnesses.

EUGENE C. WELLS.

Witnesses:

R. W. Dodge, P. H. FANNING.