C. F. PHESAY.

TWEEZERS.

APPLICATION FILED FEB. 5, 1908.

964,181. Patented July 12, 1910.

Fig. 1.

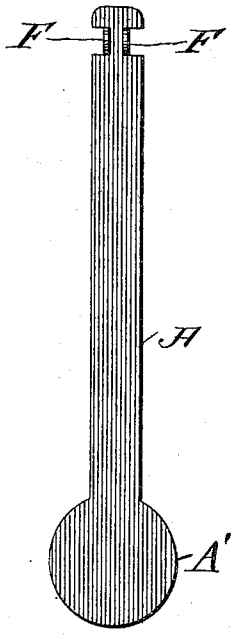


Fig. 2.

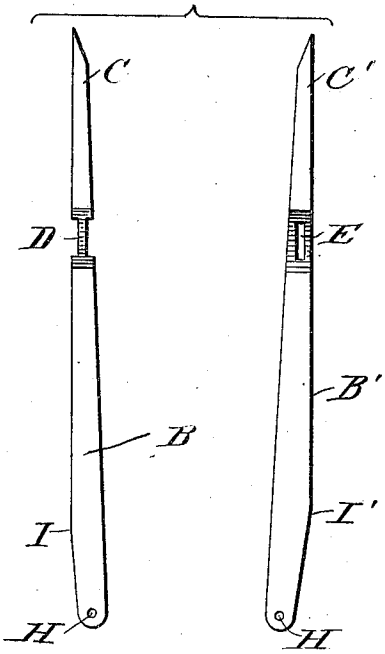


Fig. 3.

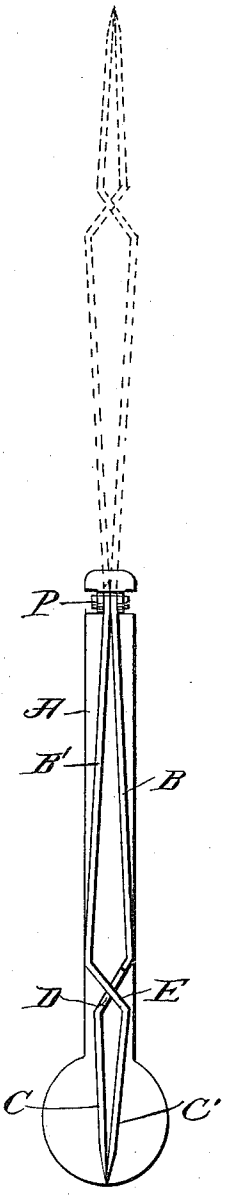
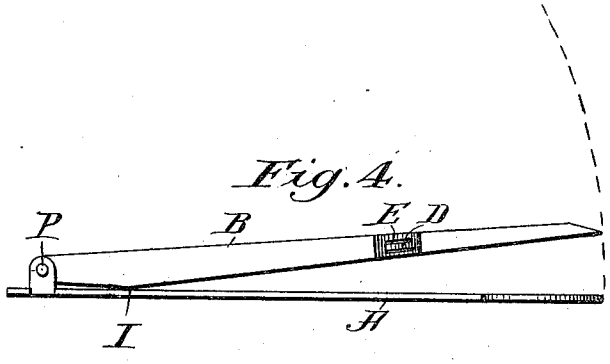


Fig. 4.



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UNITED STATES PATENT OFFICE.

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TWEEZERS.

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To all whom it may concern:

Be it known that I, CHARLES F. PHESAY, a citizen of the United States, residing in the borough of Manhattan, city, county, and State of New York, have invented an Improvement in Tweezers, of which the following is a specification.

My present invention relates to tweezers and particularly to that class of such instruments adapted to be employed by jewelers in soft solder work, the object of my invention being the provision of cheap and simply constructed tweezers for such uses.

In carrying out my invention, the tweezers made in accordance therewith preferably comprise a plate and a pair of arms, said arms being so constructed that the jaws at the free ends thereof form self-closing tweezers, while the opposite ends of these arms are preferably connected together and to the said plate in such a manner that the arms may be swung to a position in substantial alinement with the plate and may also be swung to a position over the plate in which the said jaw ends of the arms are spaced apart from the adjacent end of the plate, so that in the use of the instrument, the arms and plate may be moved to a position of substantial alinement and one member of an article to be soldered may be placed in the jaws of the arms, and the arms then turned to the position over the plate so that the other member of the article to be soldered may be supported upon the said plate and between the same and the member held between the jaws of the arms in order to facilitate the soldering operation.

In the drawing; Figure 1 is a plan view of a blank from which the plate member of my improved tweezers is made. Fig. 2 shows side elevations of the arms comprising the self-closing spring tweezers of my improved instrument. Fig. 3 is a plan view of the instrument showing in dotted lines the tweezer arms in the position of substantial alinement with the plate member, and Fig. 4 is a side elevation of the instrument.

Referring to the drawing, I prefer to employ a plate member A provided at one end with an enlarged and preferably circular extremity A′ and at the other end with oppositely disposed lugs indicated at F, each of which is perforated as shown in Fig. 1. By reference to Fig. 2 it will be seen that I also employ a pair of arms indicated respectively at B B′. The arm B is provided with notched portions, in the opposite edges thereof as indicated at D and the arm B′ with a slot indicated at E. As plainly indicated in Fig. 3, these arms B B′ are bent first in one direction and then in the other and the end C of the arm B passed through the slot E in the arm B′ in such a manner that the ends C C′ of the arms B B′ form the jaws of a pair of tweezers. Adjacent to their opposite ends each of the arms B B′ is provided with an aperture indicated at H and also these arms B B′ on their corresponding edges are provided with projecting portions indicated at I I′ respectively.

Now in assembling the parts of the instrument as hereinbefore described and after the end of the arm B has been passed through the slot E in the arm B′, the lugs F on the plate A are turned upwardly to a position substantially at right angles to the plate A, and the ends of the arms B B′ in which are the apertures H, are brought together and placed between these upturned lugs F F′ and these ends of the arms B B′ are secured together and to the upturned lugs F by means of a pivot P which is passed through the apertures in the lugs F and also through the apertures H in the ends of the arms B B′. This bringing together of the inner ends of the arms B B′, as will be understood, causes the outer or jaw ends C C′ to be self-closing and as hereinbefore stated, the arms B B′ may be swung from the position shown in full lines, Figs. 3 and 4, to the position shown in dotted lines in Fig. 3, in which position these arms are in substantial alinement with the plate and in which the edges of the arms contact with that portion of the plate extending beyond the lugs F which forms a stop therefor. In the other position of these arms,—that shown in full lines Figs. 3 and 4,—the projecting portions I I′ of the arms B B′ contact with the adjacent surface of the plate A and the jaw ends C C′ of these arms are spaced apart from the free end A′ of the plate A in such a manner that one part of the article to be soldered may be held between the jaws of the arms B B′ and the other part between the aforesaid part so held and the adjacent portion of the plate A, it being understood that there is sufficient resiliency in the plate A to effect a spring action to hold the parts of the article together while the soldering is being done. That is to say, when the thickness of the

parts of an article to be soldered is less than the distance between the self-closing jaws and the adjacent portion of the plate A, as shown in Fig. 3, it will be necessary to move the plate A toward the self-closing jaws to hold the parts of the article to be soldered to position during the soldering operation, in which instance as will be understood, it is desirable to have the plate A made of resilient material.

I claim as my invention:—

1. As a new article of manufacture, a jeweler's tweezers, comprising a plate and a pair of arms, at one of their corresponding ends connected together and pivotally connected to the said plate and at their other corresponding ends forming the jaws of self-closing spring tweezers, the said arms being adapted to be swung on their pivotal connection with said plate into a position in substantial alinement with the said plate and also to be swung back over said plate to a normal position in which the said jaw ends of the said arms are spaced apart from the adjacent surface of the said plate.

2. As a new article of manufacture, a jeweler's tweezers, comprising a plate having an enlarged end at one extremity thereof and up-turned lugs adjacent to the other extremity thereof, and a pair of arms having projections in corresponding positions in the corresponding edges thereof, the said arms at one of their corresponding ends being connected together and pivotally mounted between the said up-turned lugs and at their opposite corresponding ends forming jaws of self-closing spring tweezers, the said arms being adapted to be swung to a position in substantial alinement with the said plate, in which position the outer portion of the plate extending beyond the said lugs forms a stop therefor, and the said arms being also adapted to be swung back over the said plate to a normal position in which said projections on the said arms strike the upper surface of the said plate and form stops therefor so that the said jaw ends of the said arms assume a spaced apart position over the enlarged end of the said plate.

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