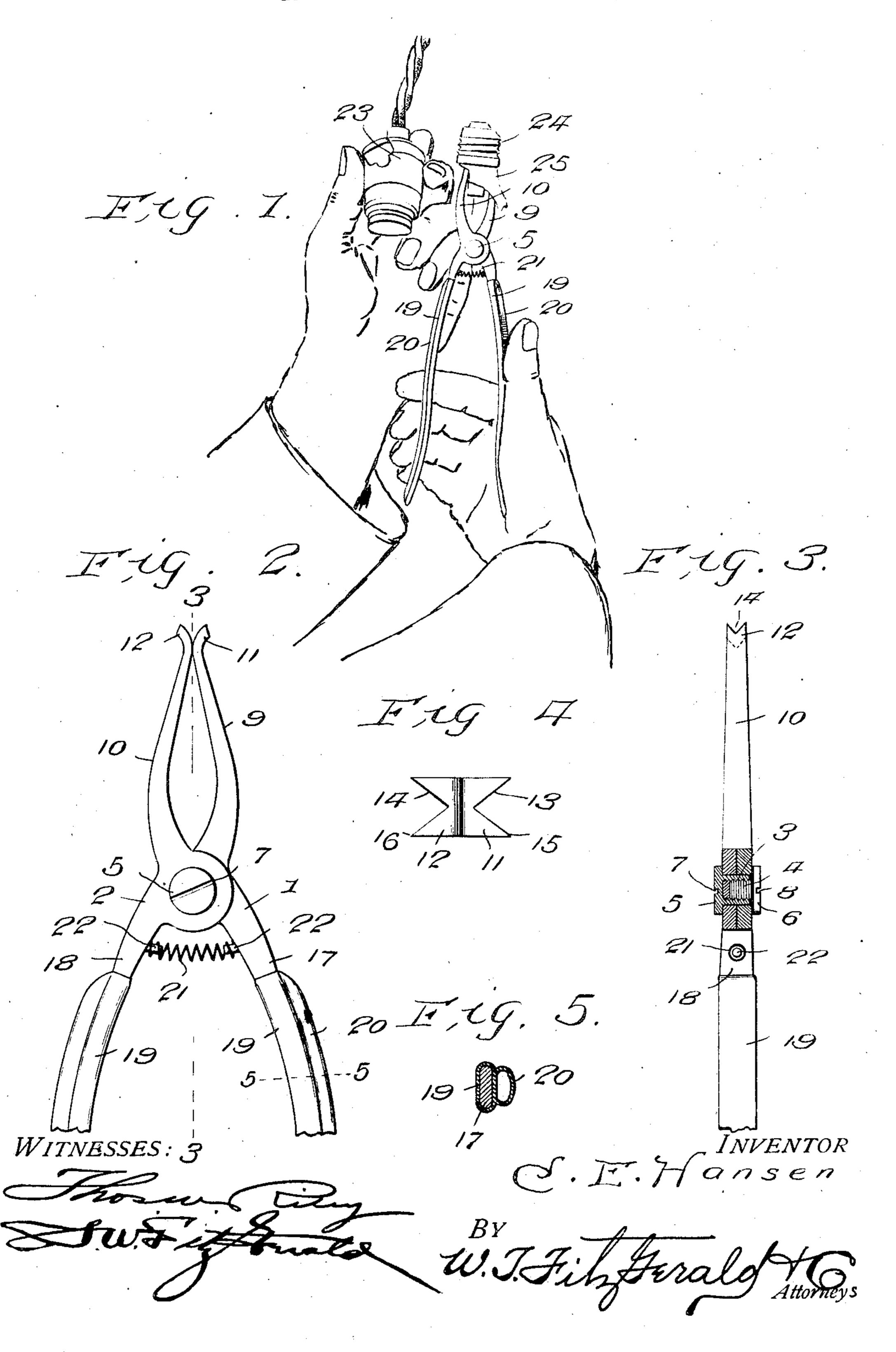
C. E. HANSEN.

TONGS.

APPLICATION FILED JAN. 20, 1908.



## UNITED STATES PATENT OFFICE.

CARL EINAR HANSEN, OF CINCINNATI, OHIO.

## TONGS.

No. 891,061.

Specification of Letters Patent.

Patented June 16, 1908.

Application filed January 20, 1908. Serial No. 411,826.

To all whom it may concern:

SEN, a citizen of the United States, residing at Cincinnati, in the county of Hamilton 5 and State of Ohio, have invented certain new and useful Improvements in Tongs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art 10 to which it appertains to make and use the same.

My invention relates to new and useful improvements in tongs and more particularly to that class adapted to be used for removing 15 the base of incandescent bulbs from their sockets and my object is to provide a device of this class whereby the base of the bulb may be positively and quickly removed from

its socket.

A further object is to provide means for insulating the handles of the tongs, whereby the base may be removed from its socket,

while charged with electricity.

A still further object is to provide a cush-25 ioning device for the handles of the tongs and a still further object is to provide means at the upper ends of the tongs adapted to break the glass remaining in the base and positively engage the metal portion of the base.

Other objects and advantages will be hereinafter referred to and more particularly

pointed out in the claims.

In the accompanying drawings which are made a part of this application, Figure 1 is 35 a perspective view showing my improved tongs applied to use. Fig. 2 is an enlarged elevation of the tongs showing portions of the handles thereon broken away. Fig. 3 is a sectional view as seen on line 3-3, Fig. 2. 40 Fig. 4 is an enlarged view of the gripping ends of the tongs, and, Fig. 5 is a sectional view through one of the handles as seen on line 5-5, Fig. 2.

Referring to the drawings in which similar 45 reference numerals designate corresponding parts throughout the several views,  $\bar{1}$  and  $\bar{2}$ indicate the sections of my improved tongs, which are pivotally secured together by introducing an interiorly threaded socket 3 50 through openings in the sections 1 and 2 and entering a threaded stem 4 into the socket 3, said socket and stem having heads 5 and 6, respectively, extending across which are channels 7 and 8 to receive the pointed end 55 of a screw driver, or the like, by which means the socket and stem are tightened or loosened.

Be it known that I, Carl Einar Han- point, are formed into jaws 9 and 10, respectively, the upper ends of said jaws having outwardly curved terminals 11 and 12, each 60 of which are provided with a substantially V-shaped notch 13 and 14, said notches forming cutting edges 15 and 16, at each edge of the terminal, for a purpose to be herein described. That portion of the sections 1 and 65 2 below their pivot point, is formed into handles 17 and 18, respectively, which are surrounded by any suitable form of insulating material 19, preferably rubber and on the outer faces of the insulating material, are 70 formed cushions 20, which cushions preferably consist of hollow members filled with air. The jaws 9 and 10 are normally held in their closed position by introducing a spring 21 between the handles 17 and 18, said spring 75. being preferably coiled and held in position between the handles, by introducing the ends of the spring over studs 22 on the inner faces of the handles, said spring exerting outward pressure on said handle at all times.

This instrument is adapted more particularly to be used in cases where the bulb has become broken, for removing the base of the bulb from the socket and, to this end, the socket 23, containing the base 24, is grasped 85 in one hand and the tongs in the other hand, the jaws 9 and 10 being then introduced into the opening in the base 24 and inward pressure directed on the handles 17 and 18, which will force the cutting edges of the terminals 90 11 and 12 into engagement with that portion of the bulb 25 remaining in the base and destroy the same, so that by a continued pressure on the handles, the terminals will be directed into engagement with the inner face of 95 the wall of the base 24, when by holding the socket firmly, the base may be removed therefrom by rotating the tongs and it will be readily seen that by providing the insulation on the handles of the tongs, the base may be 100 removed while charged with electricity without communicating the charge to the person using the tongs.

This instrument is expressly applicable in connection with display signs, or where a 105 number of bulbs are energized from the same feed wire, in view of the fact that any one of the bases may be removed from its respective socket without affecting the use of the remainder of the lights and by forming the free 110 ends of the jaws with outwardly curved terminals and providing cutting edges thereon,

the base 24 will be firmly engaged when pressure is directed on the handles of the instrument and caused to leave its socket when the instrument is rotated.

What I claim is:

An instrument of the class described comprising a pair of sections pivoted together and terminating at one end in bowed jaws and at the opposite end in handles, said bowed jaws terminating in outwardly curved portions, the end face of each curved portion having a V-shaped notch therein, the walls of the

notch merging with the side walls of the curved portion, said notch being of such depth as to terminate adjacent the base of 15 the curved portion.

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

two subscribing witnesses.

CARL EINAR HANSEN.

Witnesses:

GEO. BRAUN, CHAS. CARPENTER.