

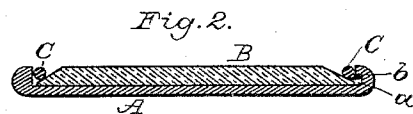
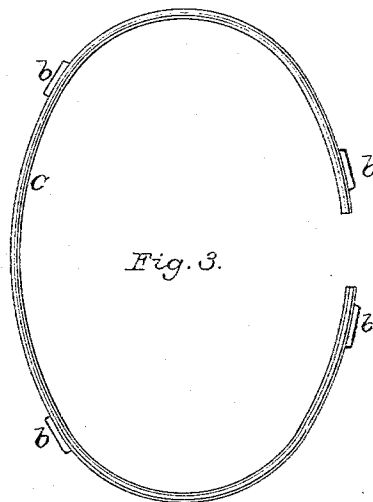
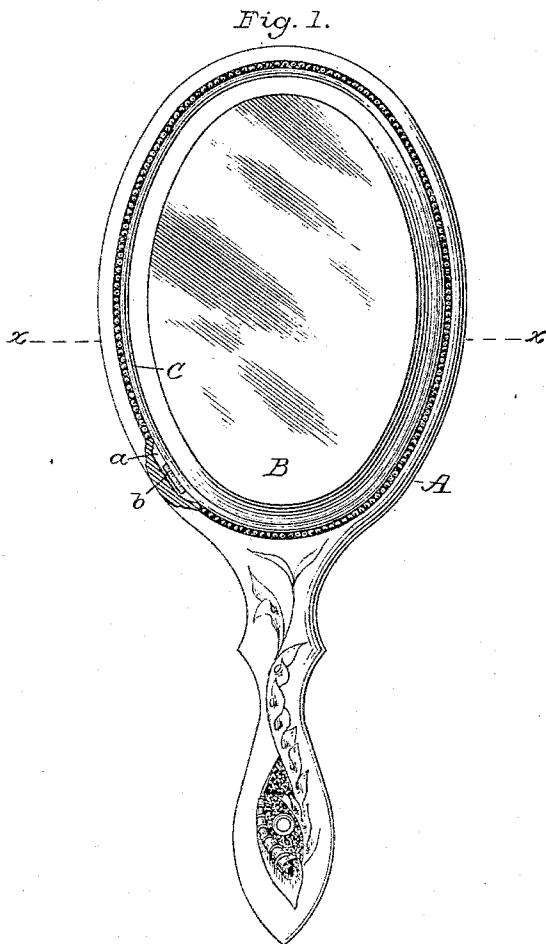
(No Model.)

A. C. ESTABROOK.

HAND MIRROR.

No. 323,649.

Patented Aug. 4, 1885.



Attest:
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UNITED STATES PATENT OFFICE.

ALANSON C. ESTABROOK, OF FLORENCE, MASSACHUSETTS, ASSIGNOR TO
THE FLORENCE MANUFACTURING COMPANY, OF SAME PLACE.

HAND-MIRROR.

SPECIFICATION forming part of Letters Patent No. 323,649, dated August 4, 1885.

Application filed June 4, 1884. (No model.)

To all whom it may concern:

Be it known that I, ALANSON C. ESTABROOK, of Florence, town of Northampton, in the county of Hampshire and State of Massachusetts, have invented certain new and useful Improvements in Hand-Mirrors; and I do hereby declare that the following specification, taken in connection with the drawings furnished and forming a part of the same, is a clear, true, and complete description of my invention.

My said improvements relate to the union of the mirror-plate with its casing or back, and although devised with special reference for use in connection with that class of hand-mirrors which have handles and backs composed of molded plastic material, they are applicable to other varieties.

The object of my invention is to economically provide a positively-reliable union of the glass and frame, and to secure a neat and desirable finish adjacent to the boundary of the glass.

In one variety of hand-mirrors as heretofore constructed the glass has been inclosed peripherally by a split or open frame, which is annularly recessed at its inner edge to receive the glass, and also annularly recessed at its outer edge to receive a binding-ring composed of wire, and having projecting ends for entering a handle, and thereby uniting the frame, the glass, the binding-wire, and handle. My present invention is applicable to such mirrors, and will enable a glass to be applied to or removed from its frame without detaching it and its binding-ring from the handle.

In my prior Letters Patent, No. 123,008, dated January 23, 1872, I show, describe, and claim a beveled edge in the recess containing the mirror-plate, and an open-joint hoop, which is sprung into said recess against the outer surface of the mirror-plate near its periphery.

Another prior method has involved the use of thin flexible metallic tags or strips, embedded in the material of which the mirror-back is composed, and so located in the plate-receiving recess adjacent to the walls thereof that said strips can be passed over and secure a retaining-wire to the back, said wire being placed in position after the glass has been seated.

I now use the retaining or holding wire; but

instead of relying upon a recess for its peripheral reception I provide said wire with one or more laterally-projecting fins or plates, and also provide the plate-recess in the back with as many lateral recesses as there are fins, so that when said wire is sprung into its position upon the mirror its fins or plates occupy said lateral recesses, and thus render the separation of the parts thus united practically impossible except after careful and skillful manipulation.

Referring to the drawings, Figure 1 is a front view of a hand-mirror embodying my improvement, with a portion of the frame broken away to disclose one of the lateral recesses therein. Fig. 2 is a lateral section of the same on line *x*, Fig. 1. Fig. 3 is a front view of the holding-ring detached.

The back A is as heretofore, excepting that it is provided at one or more points at the sides or ends of the glass-receiving recess with a lateral recess, *a*. I prefer that four of these lateral recesses be provided, although even one will serve a good purpose. If the back be of molded material said recesses *a* are readily formed by means of pieces of metal corresponding therewith in form and size and readily detachable from other portions of the mold; but if a non-moldable material is employed said recesses can be readily cut with a routing-tool.

The glass or mirror plate B is as heretofore. The holding-wire C is bent to conform to the outline of the glass-receiving recess. As here shown, it has an oval outline, and it is so bent that its ends are sprung apart, resulting in an open joint, so that when in proper position it may spring outwardly, laterally, and snugly occupy the usual concave oval recess in the frame. At one or more points on its under side the holding-wire has a laterally-projecting fin or plate, *b*. As here shown, there are four of these plates or fins, and they may be made separately and soldered to the wire; or it will be possible with suitable mechanism to develop said fins integrally on the wire, if such should be desired. If soldered to the wire, as is deemed preferable, the operation can be cheaply performed by soldering them to each wire after it has been cut and bent to form, and still more cheaply if the wire be coiled upon a suitable metal mandrel provided with

spiral scores, and with seats at proper points to receive the fins, and to hold them and the solder in proper position with relation to the wire, so that after all the fins on all the coils have been soldered the coils can be cut and removed separately from the mandrel.

In order that the soldering can be easily performed, it is desirable that the mandrel be kept warm enough to prevent the wire and fins from radiating heat too rapidly when under the blow-pipe or other flame-jet for soldering.

It will be seen that when the holding or retaining wire is in position the fins or plates are wholly concealed, and that said wire can only be displaced after carefully moving one end of the wire inwardly at its joint, so as to release the adjacent fin from its recess. I have shown four of these fins, and prefer to use that number; but if, say, three only be used, one should be applied opposite the joint in the wire and one at each side of the joint. If one only be used, the joint at the wire should be cut angularly, and the fin applied to that end of the wire, which, because of the angular cut, would measurably serve to confine the other end; and if but two fins be used one of them should be as last described, and the other directly opposite. The holding-wires thus provided with fins can be profitably made a special article of manufacture and sale to makers of

this class of mirrors, and the same is true of the mirror-backs and retaining-wires applied thereto as described, because dealers in hand-mirror plates can readily detach the holding-wires, insert the mirror-plates, and replace the wires without the employment of any skilled labor.

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

1. The mirror-retaining wire having an open joint and provided with one or more laterally-projecting fins or plates, substantially as described.

2. The combination of the mirror-back recessed to receive a glass plate, and also laterally recessed at one or more points, and a retaining-wire having an open joint and provided with one or more laterally-projecting fins or plates, substantially as described.

3. The combination of the glass plate, the back recessed for the glass, and also laterally recessed at one or more points, and a retaining-wire having an open joint and provided with one or more laterally-projecting fins or plates, substantially as described.

ALANSON C. ESTABROOK.

Witnesses:

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