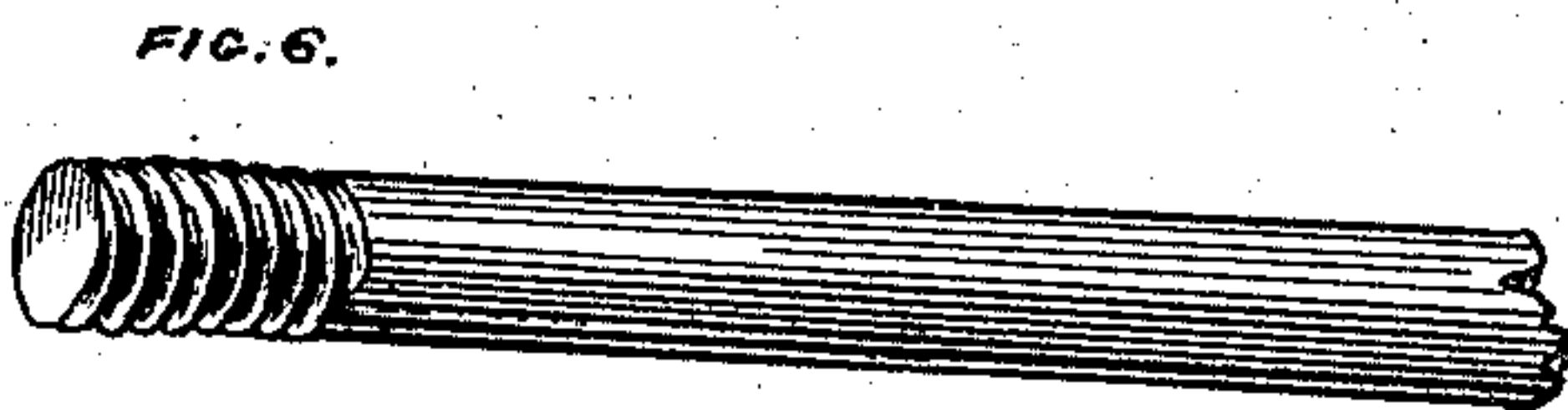
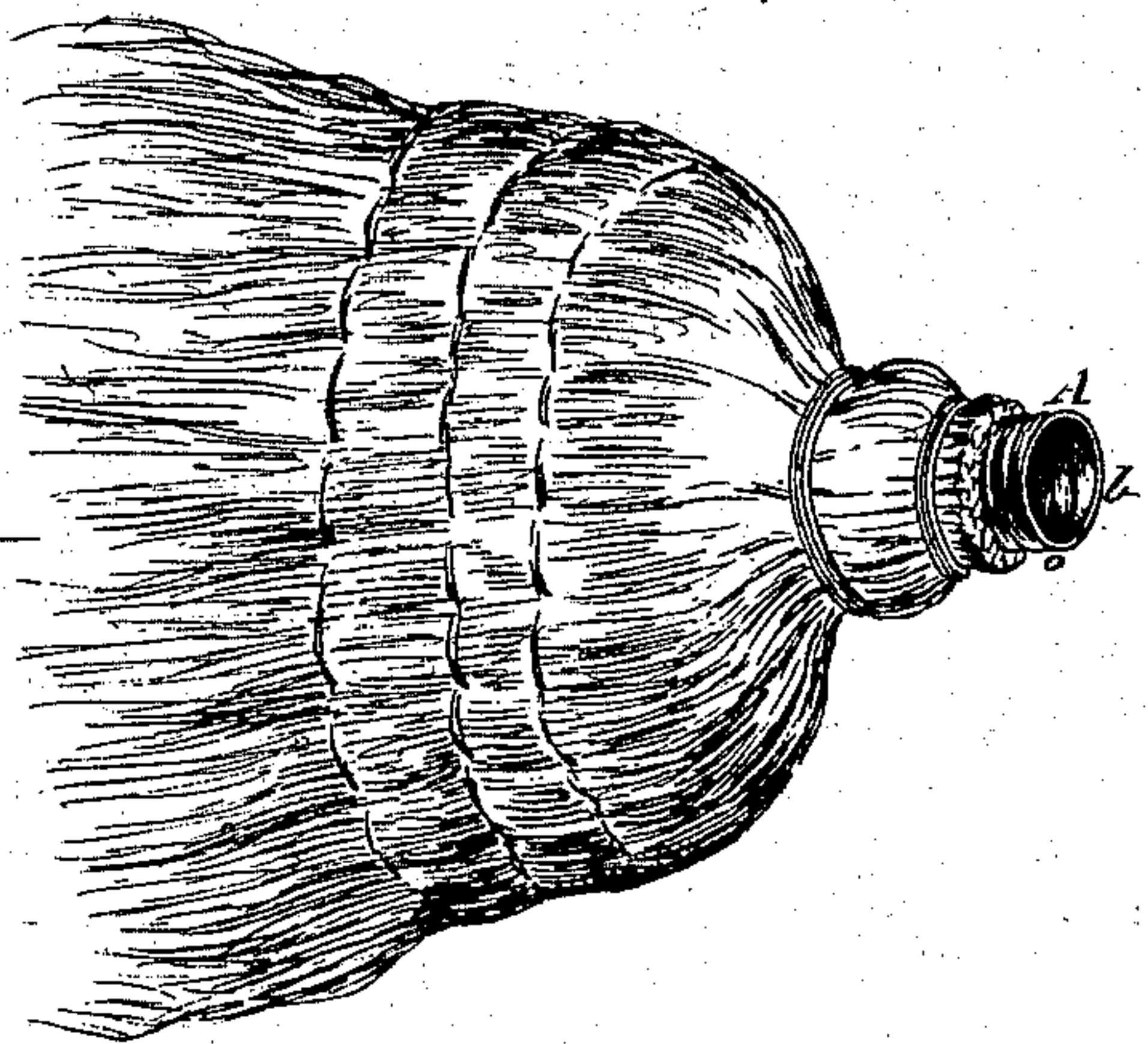
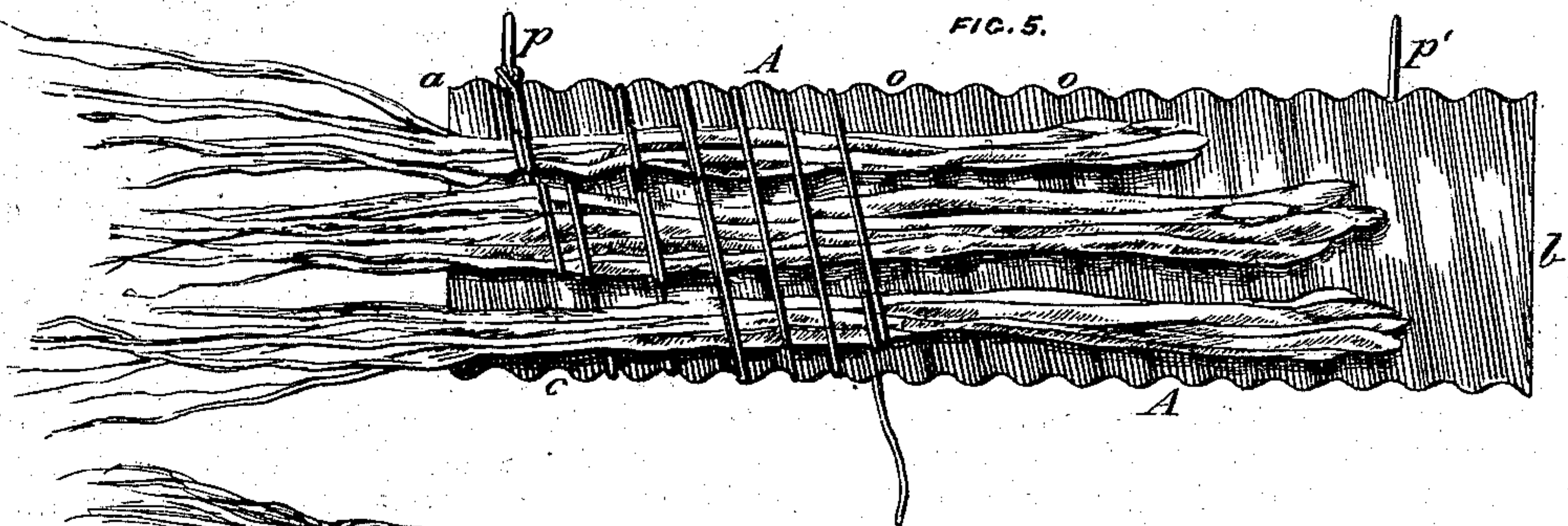
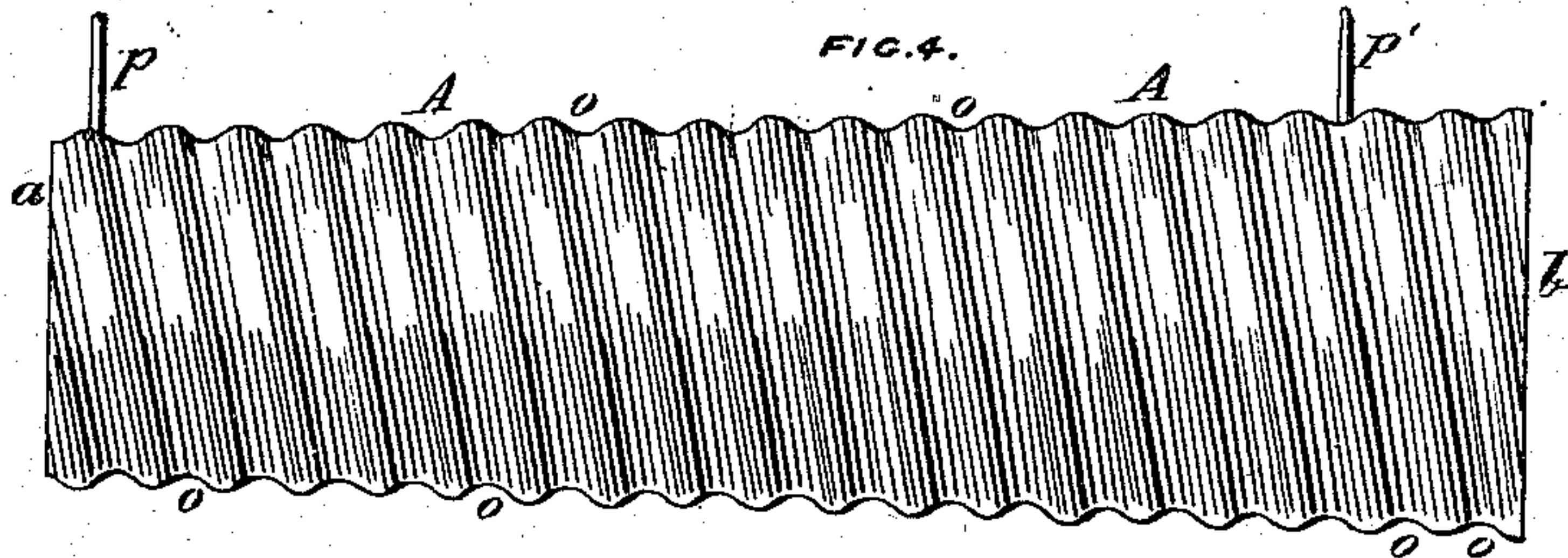
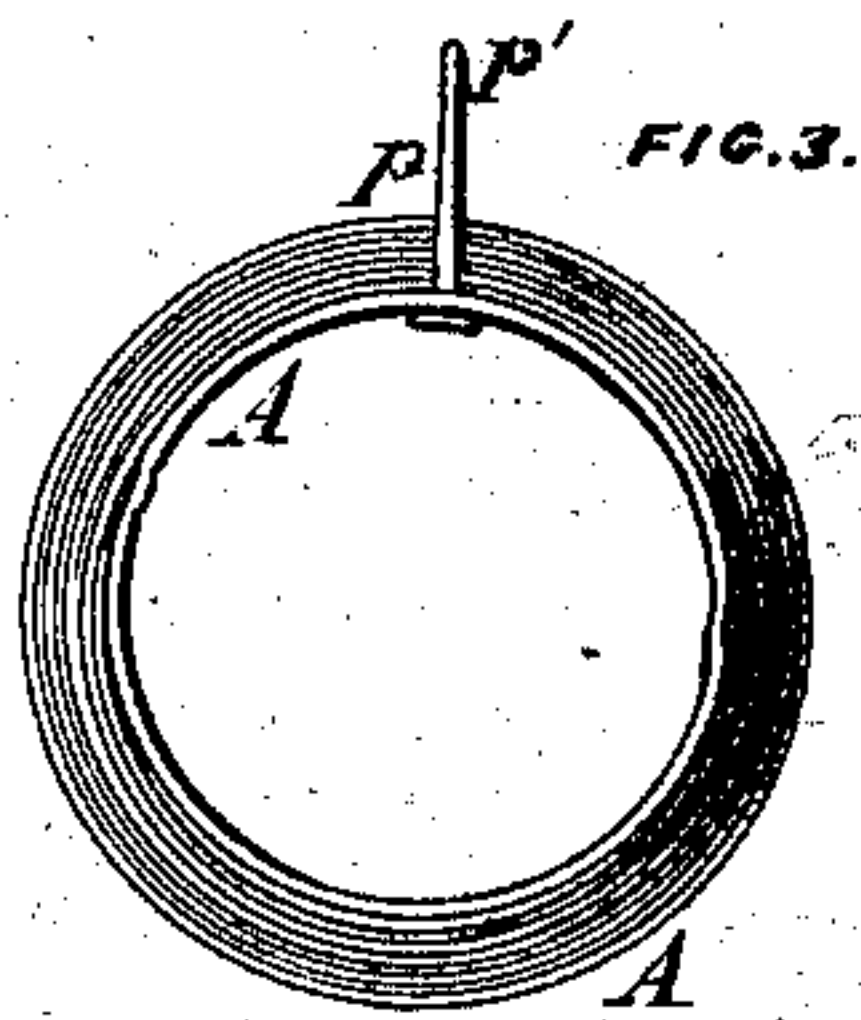
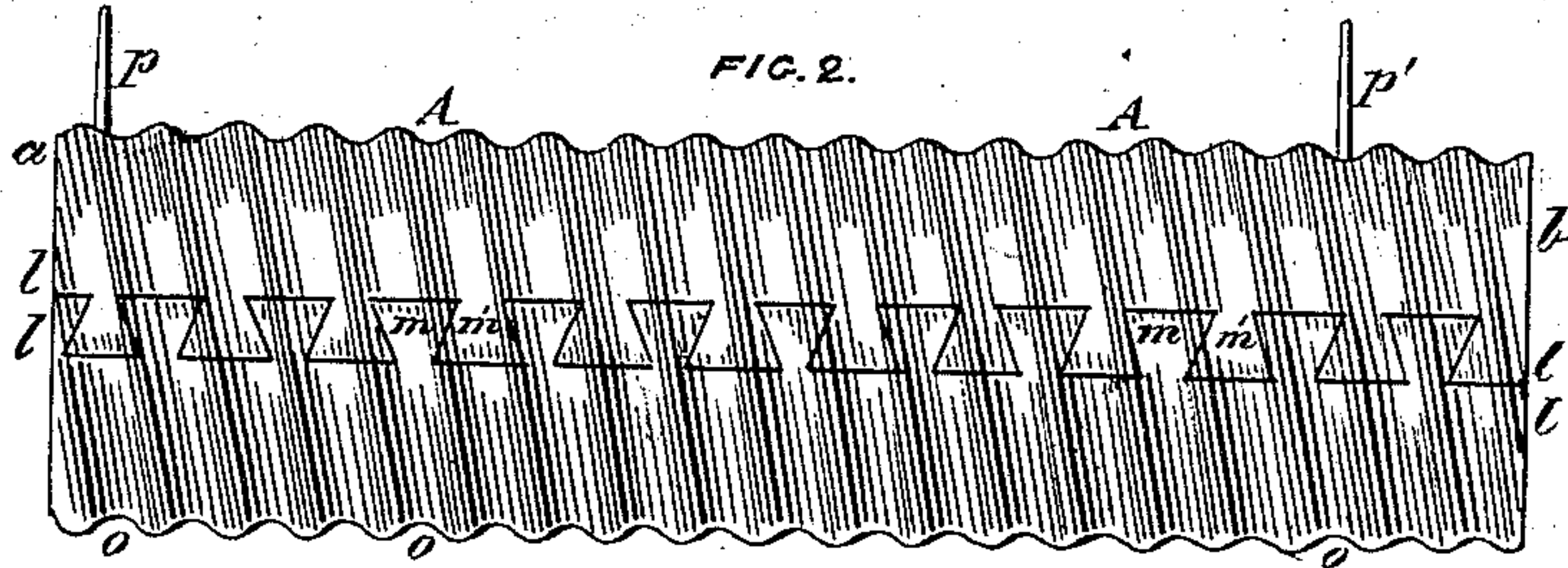
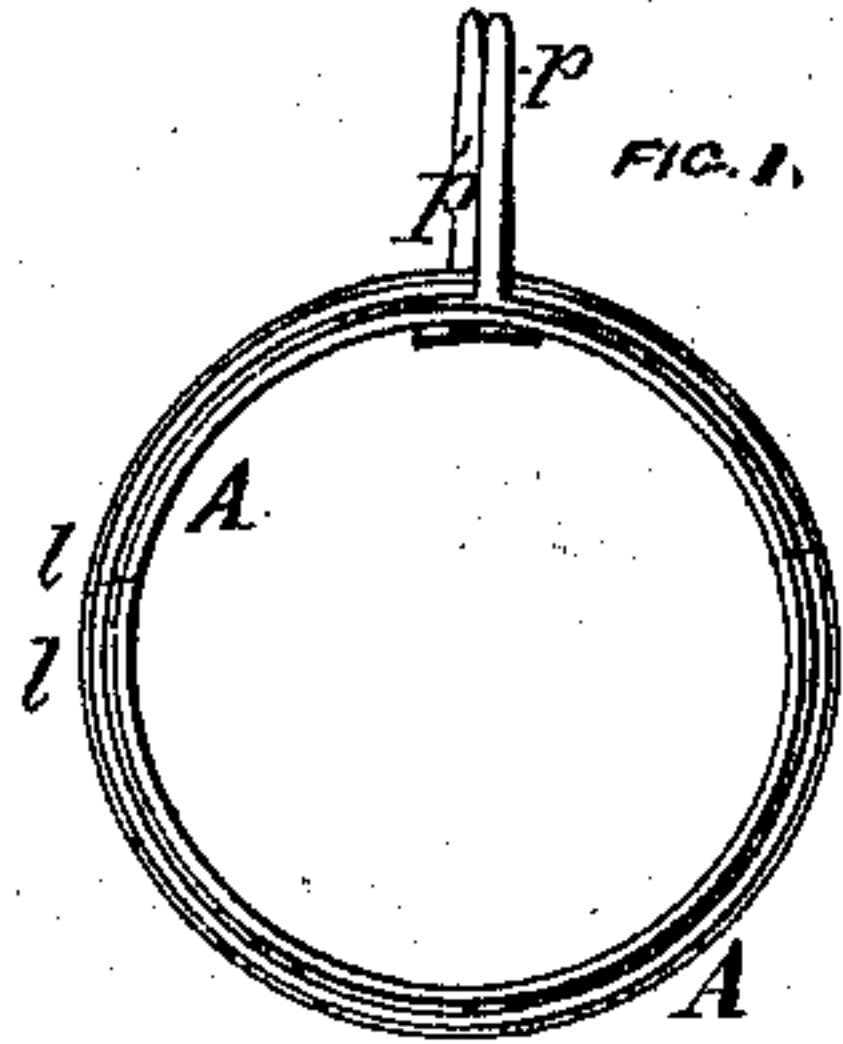


H. ANDERSON & J. F. HOUGHTON.

Sockets for Broom-Handles.

No. 156,324.

Patented Oct. 27, 1874.



INVENTORS:

Henry Anderson
and James F. Houghton
Per atty Lionel Varick

WITNESSES

David H. Kohl
Elbridge L. Arnold

UNITED STATES PATENT OFFICE.

HENRY ANDERSON, OF SAN FRANCISCO, AND JAMES F. HOUGHTON, OF
SACRAMENTO, CALIFORNIA.

IMPROVEMENT IN SOCKETS FOR BROOM-HANDLES.

Specification forming part of Letters Patent No. **156,324**, dated October 27, 1874; application filed
August 20, 1874.

To all whom it may concern:

Be it known that we, HENRY ANDERSON, of the city and county of San Francisco, State of California, and JAMES F. HOUGHTON, of the city and county of Sacramento, State of California, have invented Improvements in Broom-Handle Sockets, of which the following is a specification:

Our invention for detachable brooms consists essentially of a socket corrugated in the form of a screw for adjustment to the end of a broom-handle similarly prepared, the object of our invention being to construct a socket with inner and outer corrugations in screw-shape, so as to both allow of broom-corn being better secured thereto by the binding-wire fitting into these corrugations during the manufacture of a broom, as well as to admit of the broom thus made being screwed onto a handle especially prepared to receive it.

Figures 1 and 2 are a side and end view, respectively, of a corrugated socket embodying our invention. Figs. 3 and 4 are a side and end view, respectively, of a taper socket similarly threaded embodying our invention. Fig. 5 represents the process of attaching broom-corn to this socket, for the manufacture of a detachable broom. Fig. 6 is a perspective view of a broom manufactured on the socket embodying our invention.

With reference to the drawing, A A represent the socket, which is made of sheet tin, iron, zinc, cast metal, or such material as will admit, by compression or otherwise, of inner and outer corrugations in screw-thread form being shaped along its length; and in the event of sheet metal being employed in its manufacture, the meeting ends *l l* are either doubled over one another, so as to form an ordinary joint, or are cut by machinery into dovetailed projections *m m'*, as shown in Fig. 1, so that when they are pressed into one another, and the corrugations *o o* are stamped or molded, they will leave an even joint without seam at their junction.

In the manufacture of brooms with this device, the socket is first secured in a broom-machine by being screwed onto a threaded mandrel, which takes the place of the ordinary broom-handle. The corn-sprigs are then placed along its length in the same manner as with broom-handles having fixed brooms attached, and the binding-wire is secured by being tied round the nail *p*, near the end *a*, while the corn-sprigs are secured by this wire, bunch after bunch, the corrugations *o o* serving the purpose of holding the wire in place, and so on, till the broom is completed, when the top nail, *p'*, near the mouth *b* of the socket, is turned down over the finishing-coil of wire, and buried in the sprigs. These nails *p p'* are either loose or fixed, and are placed with their heads within the socket, so as to rest firmly on a mandrel or form in a broom-machine made expressly for such corrugated sockets.

By these arrangements the strength of a socket thus prepared is so much increased that no top or bottom flanges are necessary, and the wire obtains a better and surer hold of the corn by reason of its fitting into these indentations; also, as in all detachable brooms, they and their handles can be separately stowed away without fear of breakage in a much smaller bulk than that of the fixed kind in general use, while in the case of such breakage it is not necessary to throw away the whole broom as worthless, but simply to release the broken handle, adjust a fresh one, as previously explained, and the broom is as serviceable as before.

We claim as our invention—

The corrugated socket A A, as described, substantially as and for the purposes hereinbefore set forth.

HENRY ANDERSON.
JAMES F. HOUGHTON.

Witnesses:

S. G. HILBORN,
S. E. HUTCHINS.