

(No Model.)

E. S. SMITH.
COMB.

No. 497,353.

Patented May 16, 1893.

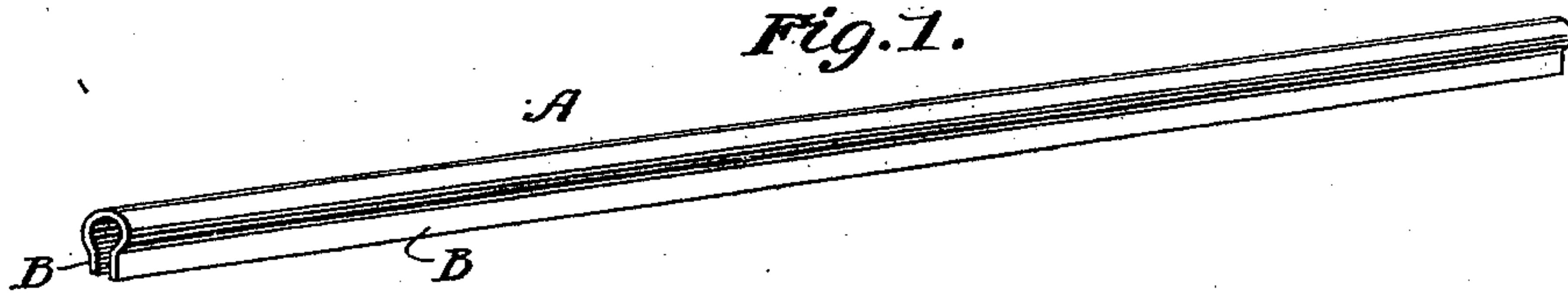


Fig. 2.



Fig. 3.

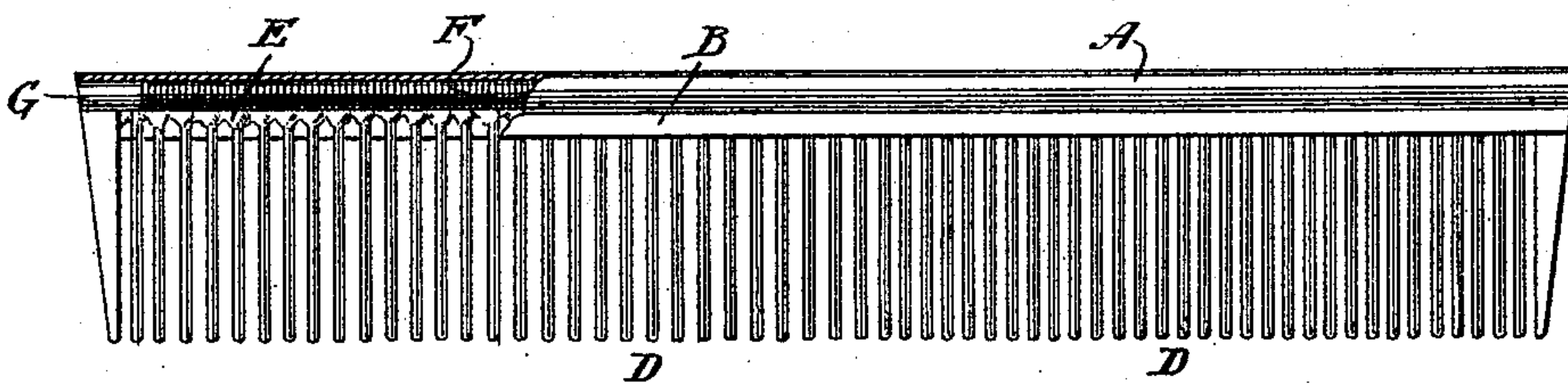
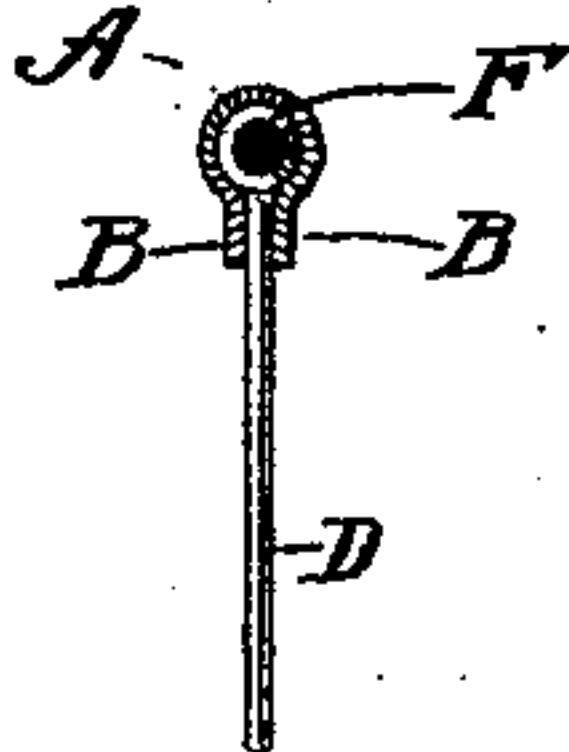


Fig. 4.



WITNESSES:

Frank S. Ober
H. B. Brownell

INVENTOR

Edward S. Smith.

BY

W. H. Mitchell.

ATTORNEY

UNITED STATES PATENT OFFICE.

EDWARD S. SMITH, OF WATERBURY, CONNECTICUT.

COMB.

SPECIFICATION forming part of Letters Patent No. 497,353, dated May 16, 1893.

Application filed November 16, 1892. Serial No. 452,214. (No model.)

To all whom it may concern:

Be it known that I, EDWARD S. SMITH, of Waterbury, in the county of New Haven and State of Connecticut, have invented certain
5 new and useful Improvements in Combs, of which the following is a full, clear, and exact specification.

My invention relates to certain improvements in combs, and relates particularly to
10 combs constructed of metal in such a manner as to be light, strong and economical, and that shall, inasmuch as in almost all metal combs the teeth are soldered in, be so constructed that the solder is only allowed to flow where it
15 will be of service in securing together the several parts, and prevent any unnecessary waste of the solder.

My invention is illustrated by the accompanying drawings, in which—

20 Figure 1 is a perspective view of one of the details of my invention. Fig. 2 is a side elevation of another detail. Fig. 3 is a side elevation of the comb showing the handle or back partly broken away, and Fig. 4 is a cross-
25 section on the line 1—1 Fig. 3.

A is the handle or back of the comb. This back is hollow as shown clearly in Fig. 1 and on one side has longitudinal protruding lips B B which are adapted to hold the teeth D D
30 of the comb. These teeth D D are held in place by the solder E. A coil spring F having its coils closely wound is inserted into the hollow back. The diameter of this spring is sufficiently great so that the spring will fit
35 snugly inside the back A, into which it is placed. Into each end of the back A is then driven a plug G. The teeth D D are then

placed in the back and the parts thus assembled are held together in any suitable manner while the back is partially immersed into
40 melted solder. The solder runs in around the inner ends of the teeth, but is not allowed to fill the hollow back of the comb, owing to the presence of the closely coiled spring F therein, experience having demonstrated the fact
45 that the coils may be so tightly wound as to prevent the solder from running through them, and therefore a great saving of solder is made. Furthermore, the fact that the back is hollow makes the comb lighter as a whole.
50 It is desirable to have an enlarged back A as shown for the reason that it gives strength to the comb. It is very desirable to utilize a closely coiled spring in place of a hollow core,
55 for the reason that the spring can be made for a very small fraction of what it would cost to make a hollow core.

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

60 1. A comb consisting of a hollow back having closed ends, and a therein contained coil spring as described, and having the lips B B for holding the comb teeth which are permanently secured in place by solder, substantially as described.
65

2. The combination in a comb of the hollow back, a therein contained coil spring and teeth adapted to be held by solder in the back, substantially as and for the purpose described.
70

EDWARD S. SMITH.

Witnesses:

R. C. MITCHELL,
FRED SCHLESINGER.