

Thos. G. Porter.
Champion, Duster.

117456

PATENTED JUL 25 1871.

Fig. 1

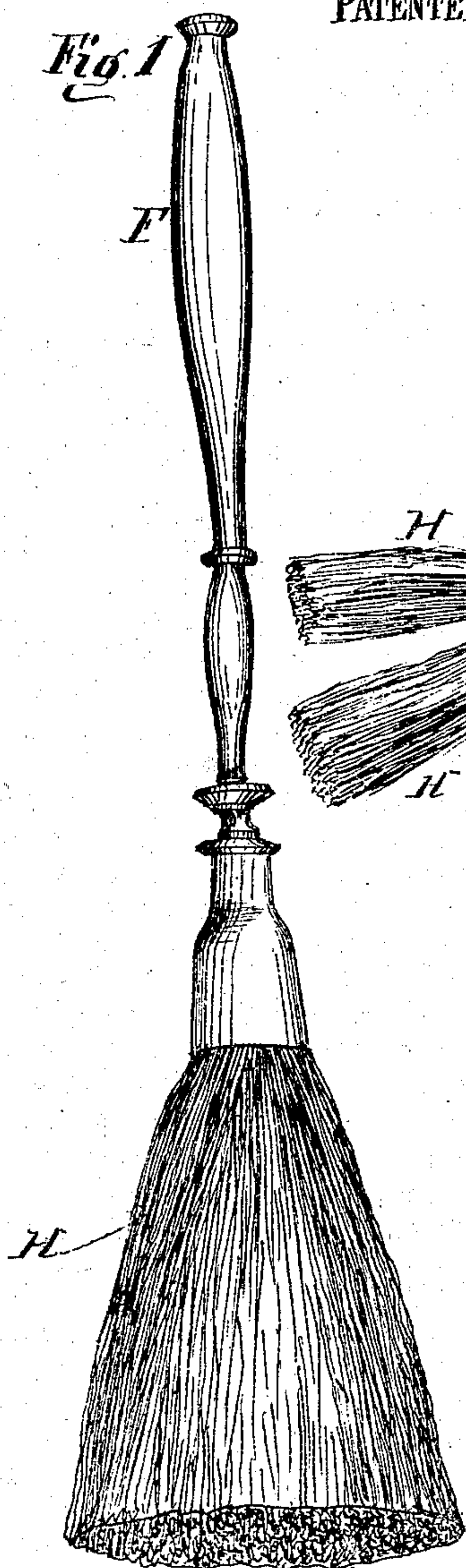


Fig. 2

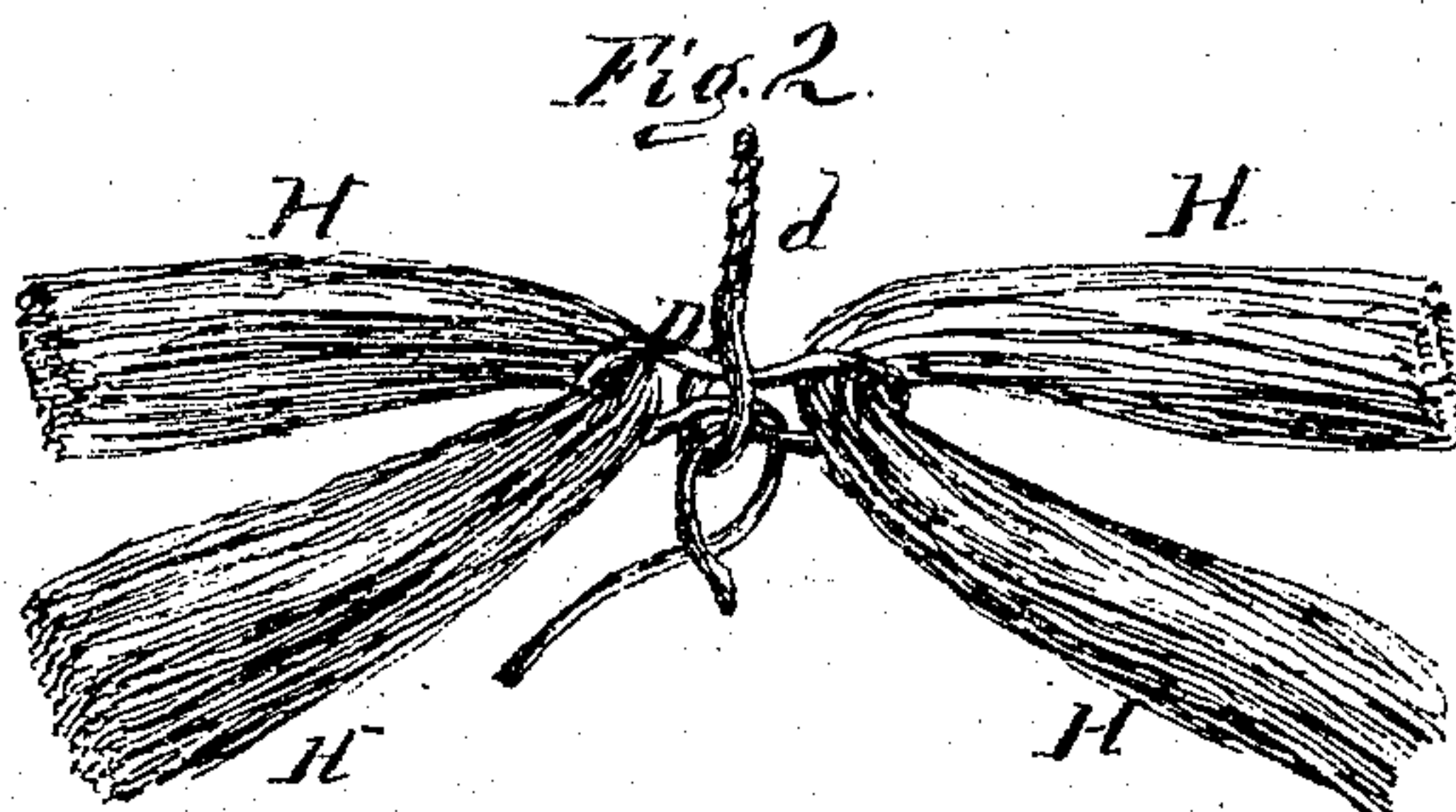
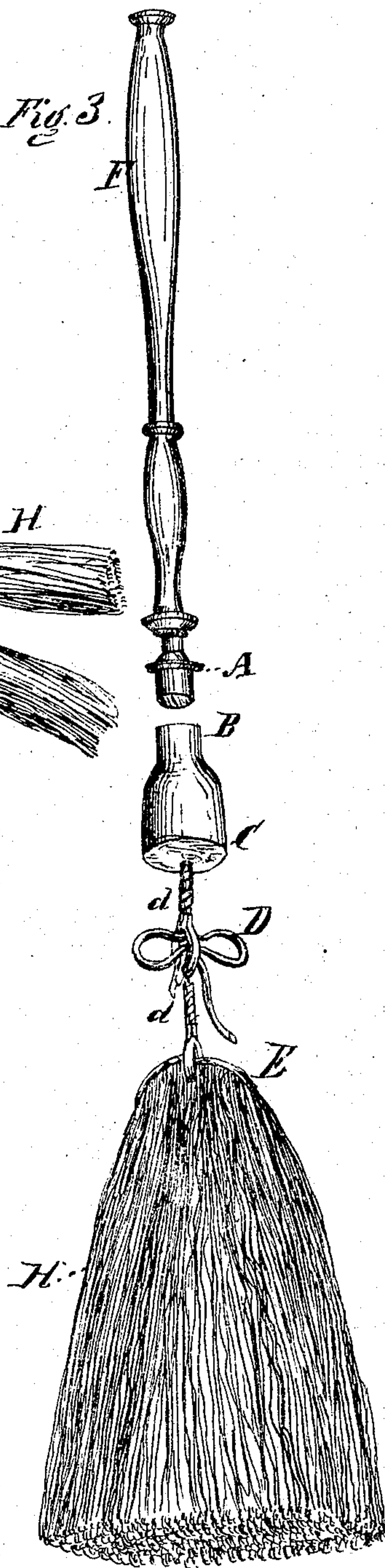


Fig. 3



Witnesses.

J. C. Wildman
B. Burns.

Inventor.

Thomas G. Porter
by his atty.
C. M. Stovitt

UNITED STATES PATENT OFFICE.

THOMAS G. PORTER, OF LOUISVILLE, KENTUCKY.

IMPROVEMENT IN DUSTING-BRUSHES.

Specification forming part of Letters Patent No. 117,456, dated July 25, 1871.

To all whom it may concern:

Be it known that I, THOMAS G. PORTER, of the city of Louisville, in the county of Jefferson and State of Kentucky, have invented a new and Improved Mode of Constructing Dusting-Brushes; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the letters of reference marked thereon.

The nature of my invention consists in fastening the material of the brush to the handle thereof in such a manner that in use there shall be no friction of the parts of which the brush is composed, and that the seams and joining parts shall be covered so as to exclude dust and dirt, and present a neat and elegant appearance.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Figure 1 represents a side view of the brush when complete; Fig. 2, a perspective view of the screw-loop and bundles of the material, with the wire inserted; and Fig. 3, a like view of all the parts in a state of readiness to be put together.

The screw-loop, as seen in Figs. 2 and 3, may be made of a round rod of any suitable length, bent, and its ends lapped and welded together, so as to form a round bolt, leaving an opening or eye for the insertion of the wires, as hereinafter mentioned, and that both may be tapered a little toward its top and a convex screw-thread cut upon it from near the eye upward. Then I take two equal portions of sea-grass, hair, or other suitable material, and of about twice the length desired for the brush, and pass the wire around the middle of each and through the eye, as shown in Fig. 2, and with it fasten both bundles securely together to the eye, so that the sea-grass or hair, or other material, may hang and appear as at E in Fig. 3. I then make the socket or cap B C as shown in Fig. 3. It is a hollow tube of irregular bore, and may be cast in molds. Its upper portion is made to correspond with and fit over the lower part A of the handle,

and to abut up against and form a close joint with the shoulder of the handle, as shown in Fig. 1, and the lower part is made to swell out into a conical form, to fit over snugly and confine the bent bundles of fibers composing the brush. The lower end of the handle, if of wood, merely may be bored for the insertion of the screw-bolt, or else bushed with metal and a convex screw-thread cut in it for the screw-bolt. The socket is then forced down over the brush material until the upper end of the screw-bolt projects one-half inch or so above the upper edge of the socket. Then, for the purpose of cementing the parts together and preventing friction, and excluding dirt, dust, and water, I make a cement composed of one part of bees-wax, one part of common resin, and one part of residuary gum, or that substance which is left in the stills after the fatty acids have been distilled off in the manufacture of star candles. These three materials are melted together and constantly stirred, and when thoroughly intermixed the cement is ready for use. The upper end of the socket is then nearly filled with the cement. The lower end of the handle is then placed over the upper end of the screw-bolt and screwed down upon it until the upper edge of the socket comes in close contact with the shoulder of the handle at A, and the brush material is drawn tightly up into the large portion of the socket, and thus the handle and the brush become as of one piece.

What I claim as new, and desire to secure by Letters Patent, is—

The dusting-brush, composed of the handle F, the cap or socket B C, the wire D, the screw-loop *d*, and the brush material H H, in combination with each other and with the described composition, when constructed and arranged substantially as set forth and described, as a new article of manufacture.

THOS. G. PORTER.

Witnesses:

F. H. KEAN,
J. R. LINGENFELTE.