

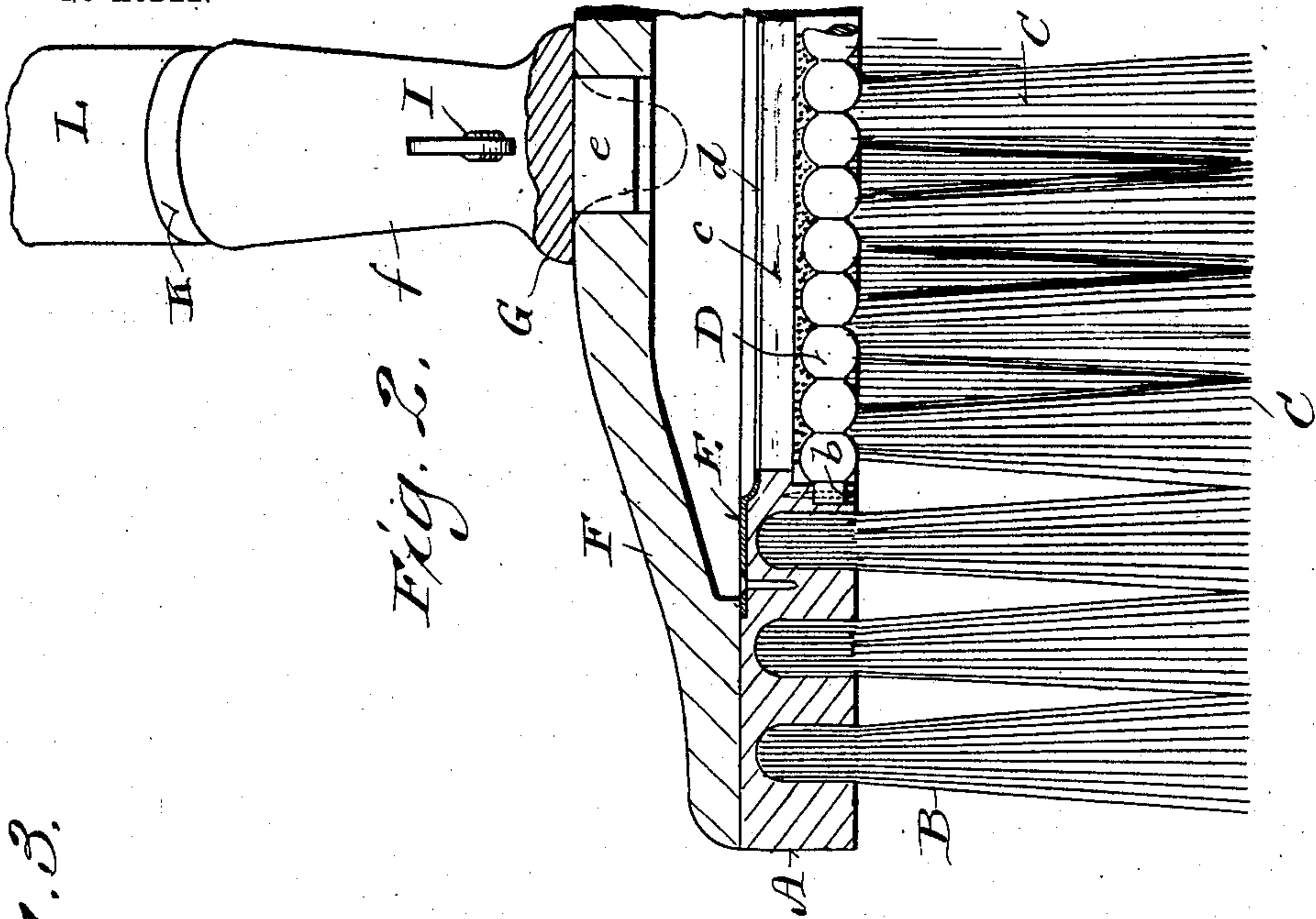
No. 746,217.

PATENTED DEC. 8, 1903.

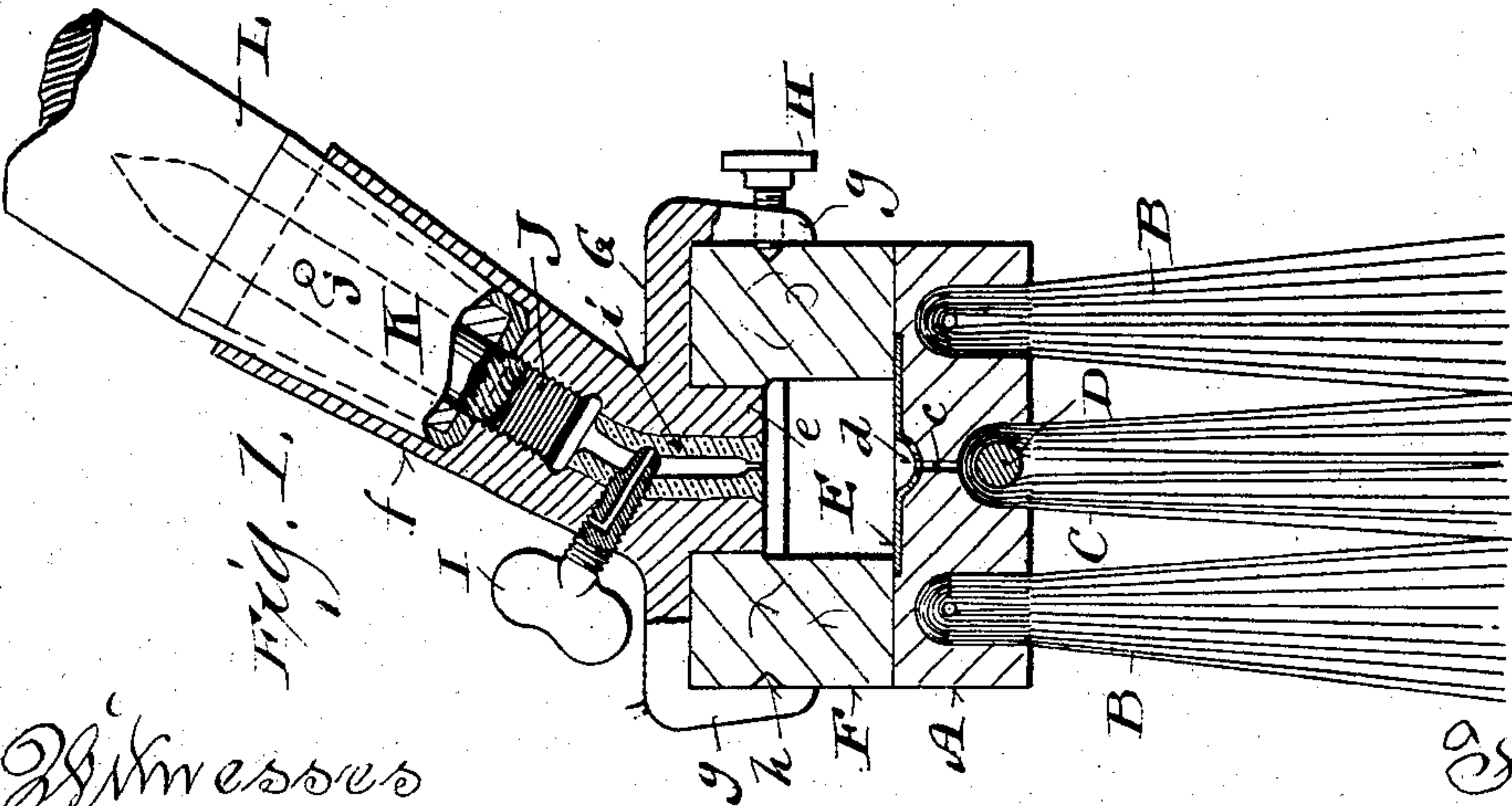
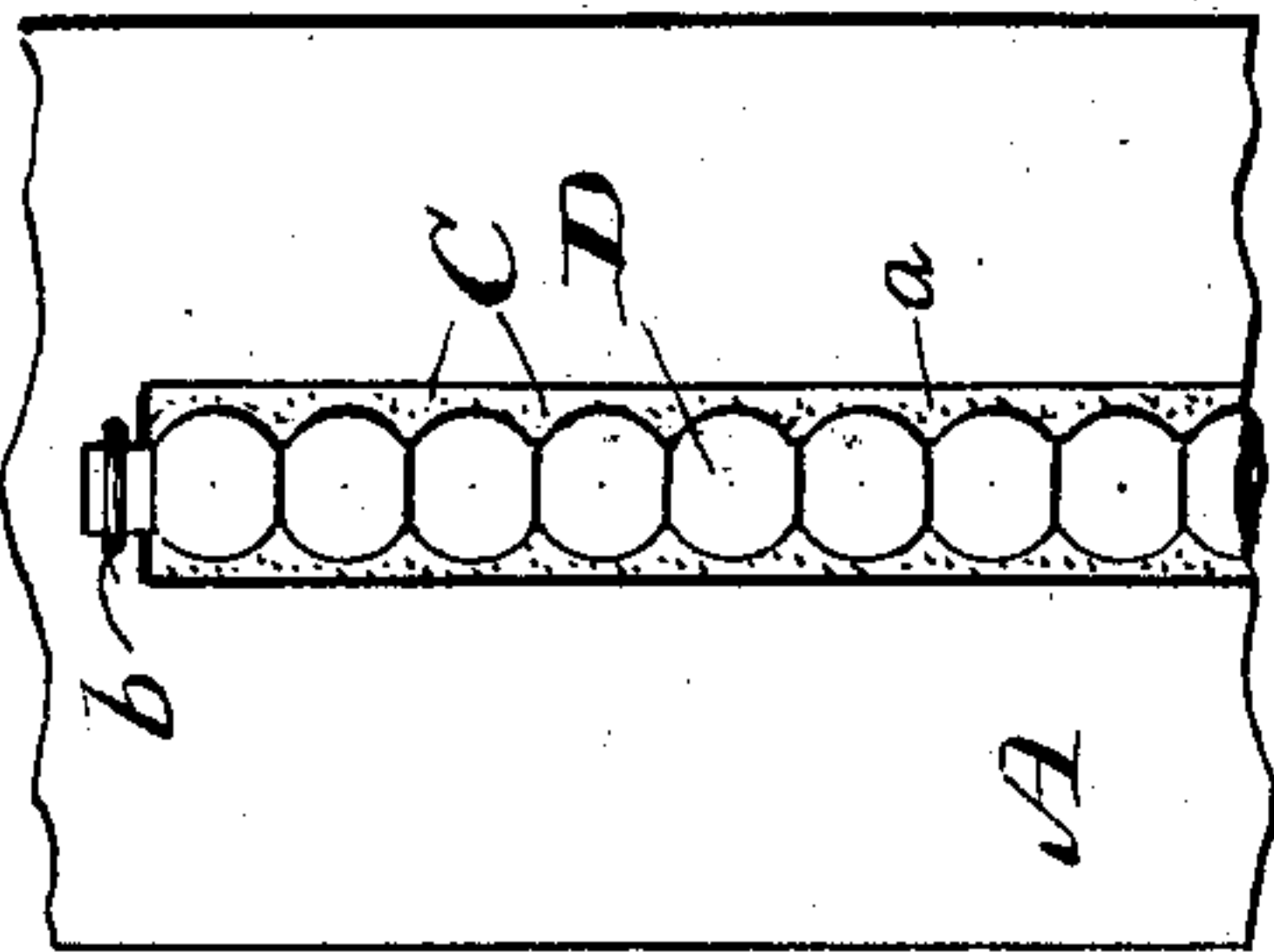
A. R. WIENS.  
BRUSH.

APPLICATION FILED JAN. 18, 1902.

NO MODEL.



*Fig. 3.*



Witnesses  
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## UNITED STATES PATENT OFFICE.

ADOLPH R. WIENS, OF MILWAUKEE, WISCONSIN.

## BRUSH.

SPECIFICATION forming part of Letters Patent No. 746,217, dated December 8, 1903.

Application filed January 18, 1902. Serial No. 90,248. (No model.)

*To all whom it may concern:*

Be it known that I, ADOLPH R. WIENS, a citizen of the United States, and a resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Brushes; and I do hereby declare that the following is a full, clear, and exact description thereof.

The improvements relate particularly to that class of brushes in which provision is had for intermittent saturation of absorbent tufts thereof with kerosene-oil or other liquid, the object of the improvements being simplicity, economy, durability, convenience, and satisfactory results with respect to the manufacture and utilization of the brushes, these objects being attained by certain peculiarities of construction and combination of parts hereinafter particularly set forth with reference to the accompanying drawings and subsequently claimed as my invention.

Figure 1 of the drawings represents a central transverse section view of a brush made to include the several features of my invention, parts of the same being shown in elevation; Fig. 2, a central longitudinal section of the brush, showing some parts thereof in elevation; and Fig. 3, a plan view of a fragment of said brush inverted.

Referring by letter to the drawings, A indicates a brush-back provided with sockets in which tufts B of non-absorbent material are wire-drawn or otherwise secured, and recurved absorbent material C is shown held in a central longitudinal recess of the brush-back by means of a stay-core D, that lies in the bend of the said material, this core being fastened in place by staples b or other suitable means. The stay-cord D is corrugated so as to form a succession of heads, and in the manufacture of the brush the absorbent material C is laid across the brush-back recess and forced therein with said stay-core, so as to be compressed in the wave-like space between core and back, said core being stapled or otherwise secured in place. While I have shown and described this means for holding absorbent material in a brush-back, the same means may be employed for holding any kind of fibrous material in such a back.

A longitudinal slot c is shown in the brush-

back, vertically thereof, between the aforesaid recess and a central upper gutter of said back. A longitudinally-slotted gutter-matching metal plate E is shown set flush in the wood of brush-back A, and the slot d of this plate is in register with the brush-back slot c, whereby an even distribution of liquid from an upper reservoir to the absorbent material of the brush is insured.

A cover F is made fast on brush-back A by any convenient means, and in practice it is preferable to treat the opposing surfaces of back and cover with a cement that will insure a joint impervious to water, oil, or other liquid used with the brush. In the present showing cover F is hollowed out to provide a reservoir having the above-described guttered and slotted plate E for its bottom.

A central opening in the reservoir portion of back-cover F is shown engaged by the depending nozzle portion e of a metal fixture G in connection with said cover, an upper inclined portion f of the fixture being made to constitute a socket for the brush-handle. It is preferable, as herein shown, to make fixture G with depending diametrically opposite ears g, one of which is provided with an inner spur h and the other with a set-screw H by which to hold said fixture in detachable connection with sides of the brush-head and provided for its reversal on the same. The nozzle e of fixture G is shown as having a crooked channel provided with a soft-metal bushing i, and the minute outlet of the bushing herein illustrated may be readily enlarged at any time increase of area is necessary or desirable, a pointed round nail being serviceable as an expanding-tool.

A vented screw I is shown adjustable in fixture G to cross the bore of soft-metal bushing i above the outlet end of same, and the point of the screw seats in said bushing, said screw serving as means for controlling admission of air to the reservoir aforesaid.

The upper end of the inclined socket portion f of fixture G is preferably taper-bored, and extending down from the socket is a reduced center bore screw-tapped for the engagement of a screw-threaded end of a central stem J, projecting through a socket-fitting ferrule K on a handle L, preferably flush with the same, the stem being driven into



the handle through an aperture in the ferrule and held by a rivet *j*, extending through said ferrule and handle.

By this construction and arrangement of parts economical provision is had for firmly holding the brush-handle in readily-detachable connection with its socket and the ferrule, with the screw-threaded stem, serves as a stopper for the channel through fixture G aforesaid.

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

1. A brush-back having a longitudinal recess therein, recurved fibrous material in the recess, a stay-core corrugated to form a succession of beads, and means for holding the core in the bend of the fibrous material.

2. A wooden brush-back having a lower longitudinal recess, a vertical slot extending into the recess, absorbent material held in said recess, a metal plate on the brush-back provided with a slot in register with the one aforesaid, and a reservoir from which liquid is supplied through the plate and brush-back slots to said absorbent material.

3. A wooden brush-back having an upper longitudinal gutter and a lower longitudinal recess, a vertical slot between gutter and recess, absorbent material held in said recess, a longitudinally-slotted gutter-matching metal plate, and a reservoir from which liquid is supplied through the plate and brush-back slots to said absorbent material.

4. A wooden brush-back having a lower longitudinal recess, a vertical slot extending into the recess, absorbent material held in said recess, a metal plate on the brush-back provided with a slot in register with the one aforesaid, a hollow back cover, a reservoir in connection with said cover, and means controlling flow of liquid from the reservoir.

5. A brush-head having a socket-fixture provided with a depending nozzle, a socket-fitting handle-ferrule, and a screw-threaded

stem extending down from the ferrule to engage a tapped portion of the fixture below the socket therein.

6. A brush-head having a socket-fixture provided with a depending nozzle and attaching-ears, a socket-fitting handle-ferrule, and a screw-threaded stem extending down from the ferrule to engage a tapped portion of the bore of said fixture below the socket therein.

7. A brush-head having a fixture provided with a depending nozzle and taper bored at its outer end, the non-tapered remaining portion of the bore being tapped at the upper extremity thereof, a handle provided with a ferrule engageable with the taper portion of the fixture-bore, and a screw-stem extending from the ferrule end of the handle to engage the tapped portion of said fixture-bore.

8. A brush-head having a handle-socket fixture provided with a lower channel, a soft-metal bushing in the channel, and a vented screw adjustable in the fixture to cross the bore of the bushing above the outlet end of same and seat at its point in said bushing.

9. A brush-head having a socket-fixture provided with a lower channel and an upper socket, a socket-fitting handle, and a screw-threaded stem extending down from the handle to engage a tapped portion of the bore of said fixture between its socket and channel aforesaid.

10. A wooden brush-back provided with absorbent tufts, an apertured metal liquid-distributing plate on the brush-back, and a reservoir from which liquid is supplied through the plate and brush-back to said tufts.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

ADOLPH R. WIENS.

Witnesses:

N. E. OLIPHANT,  
B. C. ROLOFF.