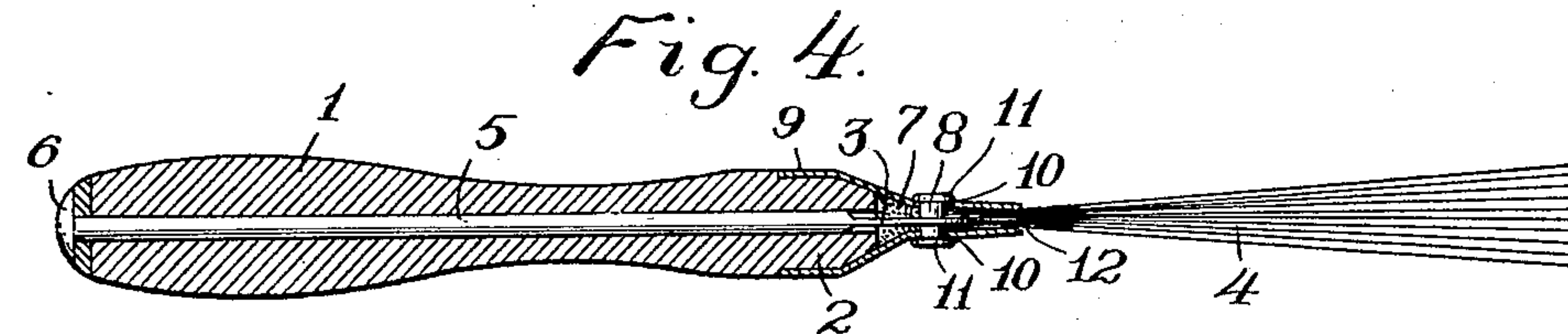
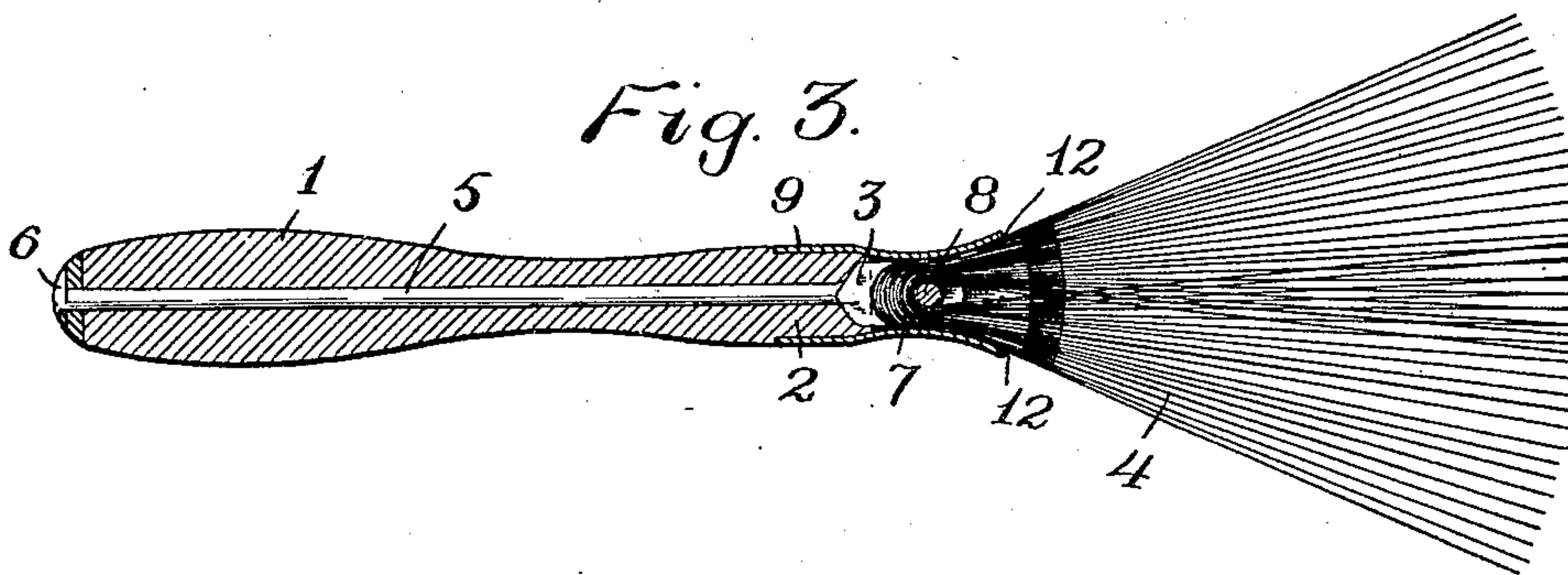
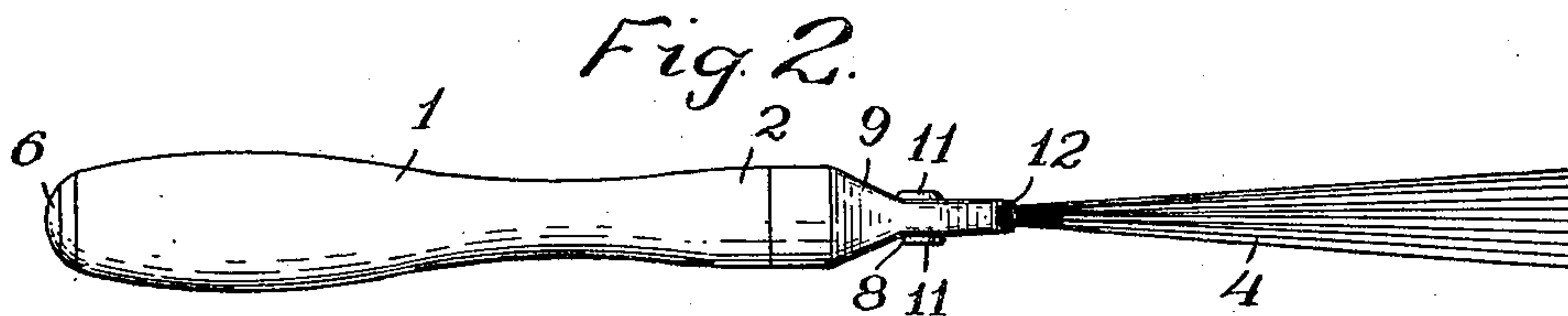
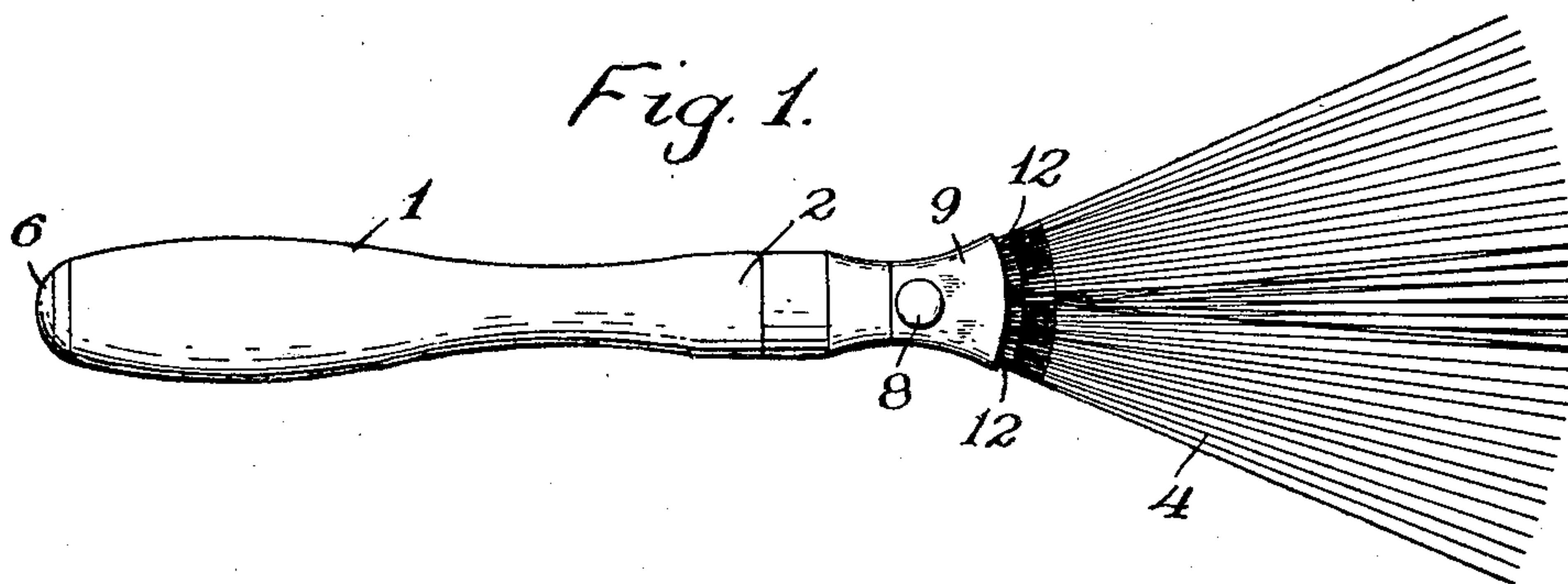


F. MARTIN.
WIRE BRUSH.
APPLICATION FILED FEB. 24, 1908.

999,820.

Patented Aug. 8, 1911.



Witnesses

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WIRE BRUSH.

999,820.

Specification of Letters Patent.

Patented Aug. 8, 1911.

Application filed February 24, 1908. Serial No. 417,265.

To all whom it may concern:

Be it known that I, FRANK MARTIN, a citizen of the United States, residing at Worcester, in the county of Worcester and Commonwealth of Massachusetts, have invented new and useful Improvements in Wire Brushes, of which the following is a specification, accompanied by drawings forming a part of the same, in which—

Figure 1 is a top view of my improved wire brush. Fig. 2 is a side view of the same. Figs. 3 and 4 are central sectional views on planes at right angles to each other.

Similar reference figures refer to similar parts in the different views.

My invention relates to wire sink brushes in which the brush wires are attached to a suitable handle and to means for securing them to said handle, and it consists in the construction and arrangement of parts as hereinafter described and pointed out in the annexed claim.

Referring to the accompanying drawings 1 is the handle, preferably of wood, but which may be made of any suitable material. Secured to the brush end 2 of the handle is a flattened metal plate 3 in a plane approximately parallel with the plane of the extended brush wires 4. In the present instance, I have shown this flattened plate 3 integral with a rod 5 extending longitudinally through the handle 1 and secured at its outer end 6, but any method of securing the metal plate 3 to the brush end 2 of the handle would come within the scope of my invention. In the present construction, the plate 3 and rod 5 are held from rotation by the insertion of the inner end of the metal plate into a groove arranged to receive it in the brush end 2 of the wooden handle 1.

The brush wires 4, arranged parallel, are bent in the center at 7 in the usual manner, and the wires comprising the bend 7 are placed in contact with preferably both sides

of the metal plate 3. The wires at 7 are held from longitudinal movement on said plate 3 by a pin 8 inserted approximately through the center of the flattened metal plate 3.

An approximately cylindrical ferrule 9, attached to the brush end 2 of the handle, is then compressed, as shown in Figs. 2 and 4, about the brush wires in contact with the plate 3, thereby securing them in position. Opposite openings 10 are made in the ferrule 9 to receive the ends of the pin 8 which are then riveted to the ferrule at 11, thereby holding it in its flattened position and securing the pin 8 from displacement. As the brush wires at the outer end 12 of the ferrule occupy a more extended position than at the curve 7, in the compression of the ferrule the opposite sides are brought nearer together at 12, thereby restricting the opening and affording additional security against the withdrawal of the brush wires. By this extended contact of the ferrule with the brush wires at 12 the latter are also held extended in a suitable position, by which the serviceability and durability of the brush are greatly increased.

I claim,

A wire brush having a handle and comprising a plate attached to said handle, wires bent at their center to form loops, with said loops arranged parallel with and upon each side of said plate, a pin passing through said plate, with the ends of said pin arranged to engage said loops, and a ferrule attached to the end of said handle, with the sides of said ferrule parallel with said plate in contact with said wires and arranged to receive the ends of said pin.

Dated this seventeenth day of February 1908.

FRANK MARTIN.

Witnesses:

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