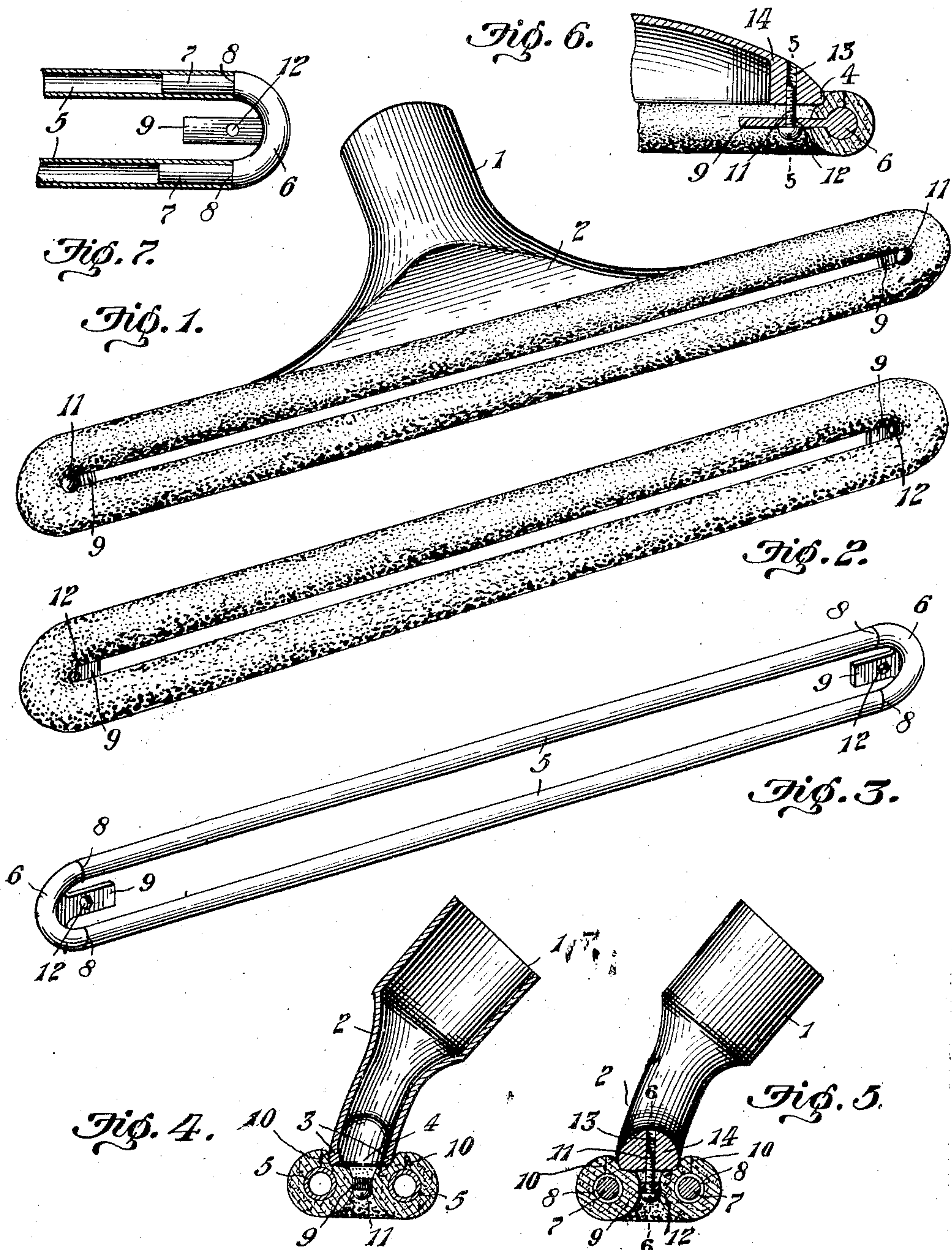


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 SUCTION NOZZLE.
 APPLICATION FILED DEC. 9, 1909.

993,772.

Patented May 30, 1911.



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SUCTION-NOZZLE.

993,772.

Specification of Letters Patent. Patented May 30, 1911.

Application filed December 9, 1909. Serial No. 532,192.

To all whom it may concern:

Be it known that I, CHARLES L. GOUGHNOUR, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Suction-Nozzles, of which the following is a specification.

The invention relates to intake nozzles for suction cleaning machines, wherein it is desired to cover the rim of the mouth of the nozzle with felt or other soft material; and the object of the improvement is to provide means for conveniently securing such a cover to the rim and for readily renewing the felt thereon.

When nozzles of this character are employed for cleaning smooth and polished surfaces, as of hard wood floors and furniture, it is desirable to protect the same from being defaced by the contact of metal and it is also desirable to use the rim of the nozzle for polishing the surface during the suction cleaning process; for which purposes a covering of soft material is provided on the rim of the nozzle, and such material must necessarily be frequently renewed for efficient use.

The mouths of suction nozzles are usually formed as an elongated slot having a rim with straight parallel sides connected by short curves at the ends; and the present invention involves the use of a pair of tubular bars corresponding to the sides of the rim, with U-shaped end bars connecting the ends of the side bars and corresponding to and adapted to be connected with the ends of the nozzle; around the side and end bars of the frame thus formed, a covering of felt is wrapped and the edges sewed together, after which the felt covered frame is secured and clamped against the rim of the nozzle mouth.

A preferred embodiment of the invention is illustrated in the accompanying drawing, forming part hereof, in which—

Figure 1 is an under side perspective view of the nozzle with the felt-covered frame secured to its mouth; Fig. 2, a detached perspective view of the felt-covered frame; Fig. 3, a detached perspective view of the frame without the felt cover; Fig. 4, a sectional view on the middle line of the nozzle; Fig.

5, a section through one end of the nozzle, as on line 5—5, Fig. 6; Fig. 6, a fragmentary section of one end of the nozzle, as on line 6—6, Fig. 5; and Fig. 7, an under plan view of one end bracket showing the connected tubular bars in section.

Similar numerals refer to similar parts throughout the drawing.

The nozzle is composed of the tubular shank 1 and the laterally elongated flattened mouth portion 2 terminating in the straight parallel side rims 3 and the curved connecting ends as 4. The felt frame is composed of the tubular side bars 5 and the U-shaped round end bars having the curved portions 6 preferably of the same diameter as the outside of the side bars and the straight side portions 7 reduced in diameter and adapted to be entered and secured as by soldering in the end portions of the tubes, with the annular shoulders 8 abutted against the ends of the tubes.

The tongues 9 are preferably provided in the brackets of the frame, and extend inward from the end portions between the side portions thereof, thus leaving an interval between the edges of the tongue and the sides of the frame for the entrance of the felt. A covering of felt is wrapped around the side and end bars of the frame, and the adjoining edges 10 are sewed or otherwise secured together, the bracket tongues being passed through slits in the felt when not extending between the edges thereof; after which the frame with the felt covering thereon is secured and clamped on the rim of the nozzle by the screws 11 passed through the apertures 12 in the tongues into the screw holes 13 in the body 14 of the end of the nozzle.

I claim:

1. A frame for the mouth rim of a suction nozzle composed of tubular side bars, curved end bars having reduced side portions entered in the hollows and shoulders abutting the ends of the side bars, and tongues extending inward from the end bars at an interval from the side bars and adapted to be secured to the rim.

2. A frame for the mouth rim of a nozzle composed of tubular side bars, curved end bars having reduced side portions entered

in the hollows and shoulders abutting the ends of the side bars, and tongues on the end bars adapted to be secured to the rim.

3. A frame for the mouth rim of a nozzle
5 composed of tubular side bars, curved end bars having reduced side portions entered in the hollows and shoulders abutting the ends

of the side bars, and means for securing the frame to the rim.

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