

(No Model.)

A. JACKSON.
TUBE OR PIPE CLEANER.

No. 572,994.

Patented Dec. 15, 1896.

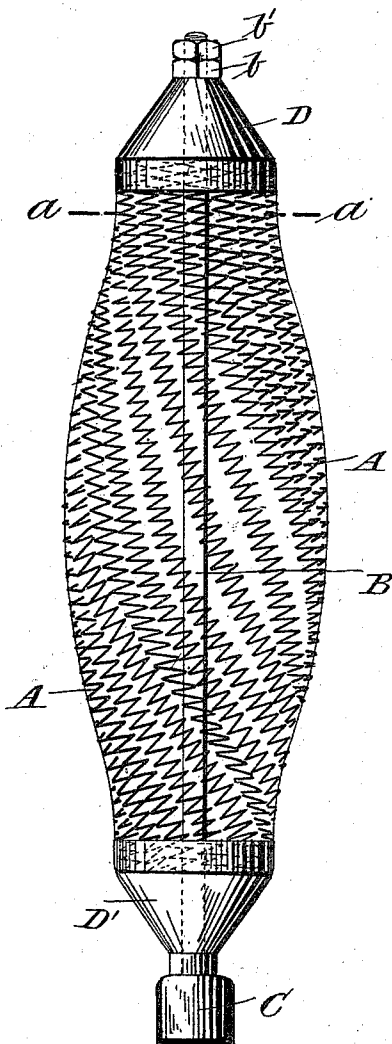


Fig. 1

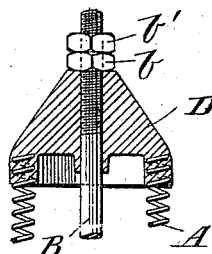


Fig. 2

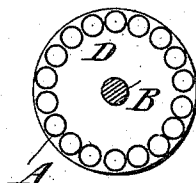


Fig. 3

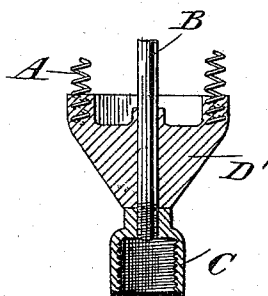


Fig. 4

Witnesses
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UNITED STATES PATENT OFFICE.

ALBERT JACKSON, OF NORTH FITZROY, VICTORIA.

TUBE OR PIPE CLEANER.

SPECIFICATION forming part of Letters Patent No. 572,994, dated December 15, 1896.

Application filed June 30, 1896. Serial No. 597,836. (No model.)

To all whom it may concern:

Be it known that I, ALBERT JACKSON, nail manufacturer, a subject of the Queen of Great Britain and Ireland, and a resident of Barkly Street, North Fitzroy, in the British Colony of Victoria, have invented a certain new and useful Improved Tube or Pipe Cleaner, of which the following is a specification.

10 This invention consists of an improved tube and pipe cleaner, the scraping medium of which is formed of a number of short lengths of tubularly and obliquely arranged coiled steel wires whose ends are supported by being cast or otherwise secured in end bosses
15 carried by a central rod or bar. One of said bosses is provided with a screwed socket to receive the usual hand-rod, while the other boss is so arranged upon the central rod or bar as that its position thereon can be adjusted in order to compress the coiled wires
20 and so bulge them outward to the requisite degree or size to suit the tube or pipe in which it is to be used.

25 The attached drawings illustrate my invention.

Figure 1 shows it by a side view, and Fig. 2 a central section of the adjustable end; Fig. 3, a section on line *a a*, Fig. 1; and Fig. 4, a
30 section of the end which receives the hand-rod.

The series of coiled wires A, forming the cleaner, are arranged about a spindle or rod B, which is preferably round and provided
35 at one end with a screw-coupling C for attachment to the usual long hand-rod, the aforesaid lengths of coiled wire A being cast or otherwise secured in end bosses or collars D and D', and the coiled wires are so placed
40 as to lie obliquely to the central spindle B

and be supported at their ends only by said bosses or collars D and D' and without being directly attached to the spindle. The outer end of said spindle is threaded to receive an adjusting and a lock nut *b* and *b'*, respectively, in order that when the two collars or
45 bosses which support the series of oblique coiled wires are slipped on the spindle the inner collar D' will bear against the end of said coupling C, and then by placing the adjusting-nut in position and screwing it up the
50 collars will be forced toward one another and the coils be bulged out or extended to the requisite diameter; also, by the coiled wires being pliable they adjust themselves to suit
55 any variation in the size or form of the tube or pipe.

Although I have described the cleaner as being made on a round spindle, it may also be made on a square spindle and with the
60 outer end furnished with a series of holes through which to place a pin for adjusting purposes. Further, the coils may be made of wire, either round or polygonal in section.

As shown in the drawings, the bosses and
65 coils are cast together.

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

A flue-cleaner consisting of a central rod or
70 stem, bosses D, D', thereon, and a series of helical coils arranged spirally between the bosses, said coils and bosses being cast together, substantially as described.

In witness whereof I have hereunto set my
75 hand in presence of two witnesses.

ALBERT JACKSON.

Witnesses:

BEDLINGTON BODYCOMB,
W. J. S. THOMPSON.