No. 718,549. PATENTED JAN. 13, 1903.

T. B. VAN AUKEN.

MACHINE FOR CLEANING AND POLISHING THE OUTER SURFACES OF RODS, TUBES, OR PIPES.

APPLICATION FILED JULY 22, 1902.

NO MODEL.

Fig. 1.

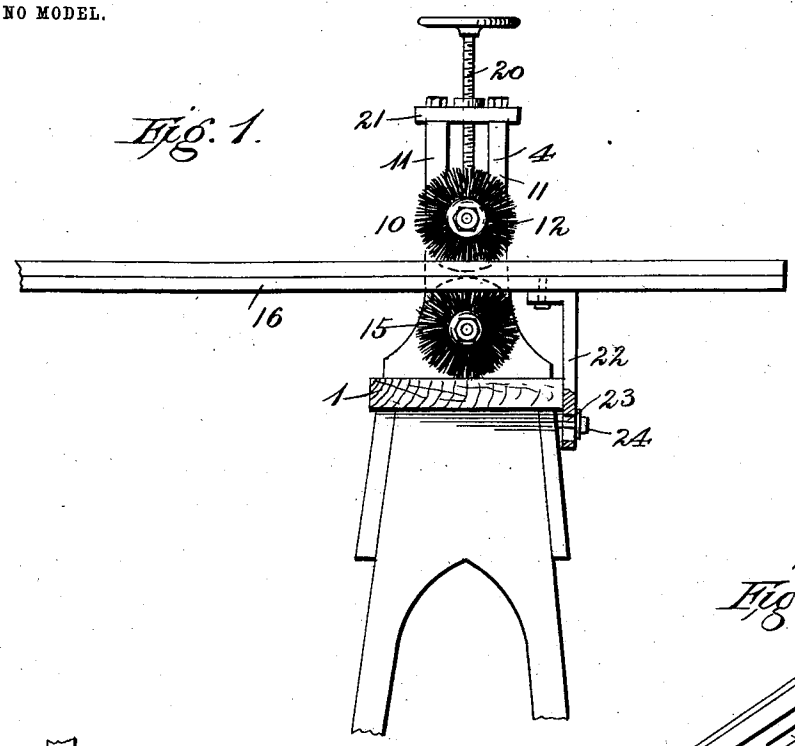


Fig. 3.

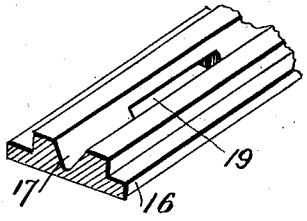
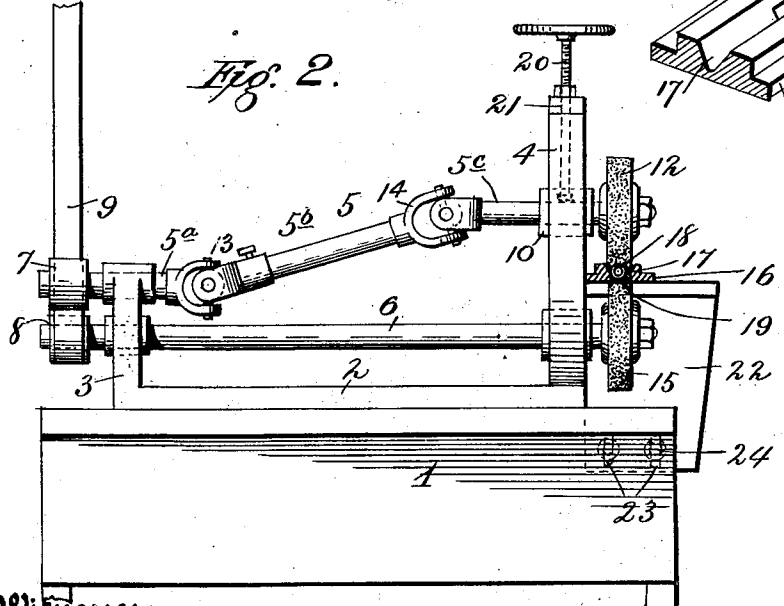


Fig. 2.



Witnesses:
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

THOMAS B. VAN AUKEN, OF LYONS, NEW YORK.

MACHINE FOR CLEANING AND POLISHING THE OUTER SURFACES OF RODS, TUBES, OR PIPES.

SPECIFICATION forming part of Letters Patent No. 718,549, dated January 13, 1903.

Application filed July 22, 1902. Serial No. 116,569. (No model.)

To all whom it may concern:

Be it known that I, THOMAS B. VAN AUKEN, a citizen of the United States, residing at Lyons, in the county of Wayne and State of New York, have invented new and useful Improvements in Machines for Cleaning and Polishing the Outer Surfaces of Rods, Tubes, or Pipes, of which the following is a specification.

My invention relates to a machine for cleaning and polishing the outer surfaces of rods, tubes, or pipes; and the object of the same is to design a device of this character which will be simple in construction and efficient in operation.

The novel construction employed by me in carrying out my invention is fully described in this specification and claimed and illustrated in the accompanying drawings, forming a part thereof, in which—

Figure 1 is a front elevation of my device. Fig. 2 is a side elevation of the same, partially in section. Fig. 3 is a detail of the table.

Like numerals of reference designate like parts in the different views of the drawings.

The numeral 1 designates a bench on which is mounted a base 2, bearing two standards 3 and 4. Journaled in the standard 3 are two shafts 5 and 6, bearing pulleys 7 and 8, respectively, which are driven by a belt 9, connected with some source of power.

The shaft 5 is jointed and comprises three sections 5^a, 5^b, and 5^c. The end section 5^a is held rigid in its bearing in the standard 3; but the other end section 5^c is journaled in a box 10, adjustably mounted in parallel guides 11, formed on the standard 4. A wire brush 12 is keyed on the sections 5^c. The middle section 5^b is connected to the sections 5^a and 5^c by joints 13 and 14, respectively, arranged at right angles to each other.

The lower shaft 6 is straight and rigid, is journaled in the standard 4, and carries a stiff-wire brush 15, located in the same plane with the brush 12. This brush 15 is designed to coöperate with the brush 12 in polishing tubes.

Mounted at right angles to the shafts 3 and 4 and extending intermediate the brushes 12 and 15 is a long table 16, having a V-shaped groove 17 therein. The groove 17 forms a guide for the tube 18 to be cleaned or polished and has a short slot 19 in the bottom thereof to enable the lower brush 15 to come in contact with the lower half of the tube 18.

In order to regulate the interval between the brushes 12 and 15 for different sizes of tubes or to compensate for the wearing down of the upper brush 12, a screw 20 is mounted in a cross-bar 21, connecting the upper ends of the guides 11, and the lower end of the screw is secured in the box 10. To compensate for the wearing off of the lower brush 15, the table 16 is made adjustable in height by supporting it on a leg 22, which has slots 23 thereon engaged by bolts 24.

In operating my device one of the tubes 18 to be cleaned is laid in the groove 17 and the brushes 12 and 15 adjusted to come in contact therewith, after which the belt 9 is started and the tube is reciprocated by hand to pass all parts of it between the brushes, which are revolved in opposite direction.

Instead of the jointed shaft 5 I may employ a straight shaft journaled in sliding boxes mounted in slotted standards; but as this would require a corresponding tightener for the belt the jointed-shaft construction is preferred.

I do not wish to be limited as to details of construction, as these may be modified in many particulars without departing from the spirit of my invention.

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

1. In a device of the class described, the combination with a guide for a tube, a brush located on one side of said guide, and a flexible shaft bearing a brush located on the opposite side of said groove, substantially as described.

2. In a device of the class described, a table having a guide-groove therein for tubes, a brush located on one side of said table, and a flexible shaft bearing a brush located on the opposite side of said groove, means for adjusting said shaft transversely, and means for driving said brushes, substantially as described.

3. In a device for cleaning and polishing

rods and tubes, the combination, of a transversely-adjustable table having a guide-groove therein for rods, a brush mounted on one side of said table, a jointed shaft mounted to be adjusted transversely and bearing a brush, and means for driving said brushes, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

THOMAS B. VAN AUKEN.

Witnesses:
EDWARD P. BOYLE,
JULIUS STOLZ.