

FRANCIS F. FIELD.

Improvement in Helical Wire Brushes.

No. 119,752.

Patented Oct. 10, 1871.

Fig. 1

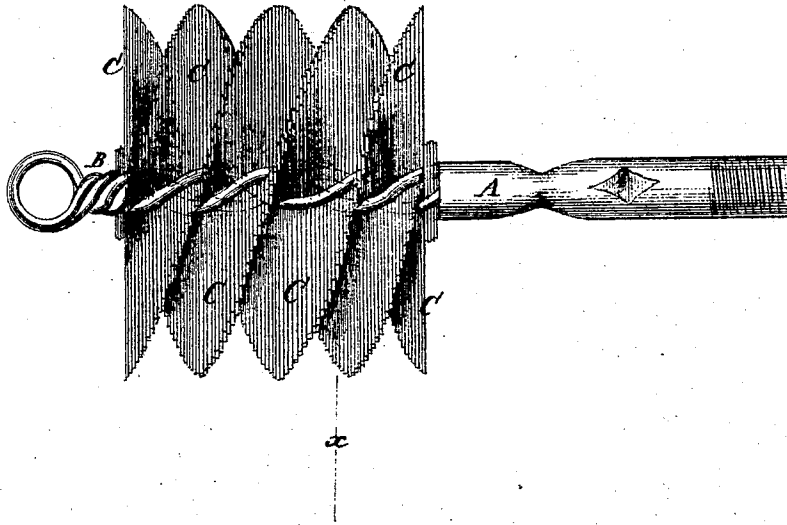
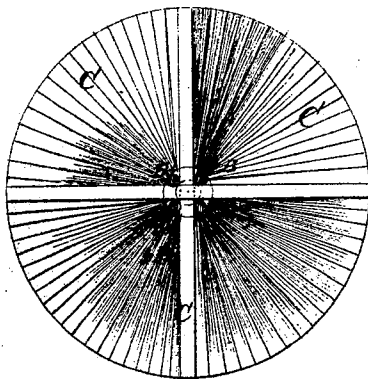


Fig. 2



Witnesses:

A. W. Almquist
Francis McClellan

Inventor:

Francis F. Field

PER

Munroe
Attorneys.

UNITED STATES PATENT OFFICE.

FRANCIS F. FIELD, OF STAPLETON, NEW YORK.

IMPROVEMENT IN HELICAL WIRE-BRUSHES.

Specification forming part of Letters Patent No. 119,752, dated October 10, 1871.

To all whom it may concern:

Be it known that I, FRANCIS F. FIELD, of Stapleton, in the county of Richmond and State of New York, have invented a new and useful Improvement in Wire-Brushes; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a side view of my improved brush. Fig. 2 is a detail cross-section of the same taken through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved wire-brush for cleaning boiler-flues and other uses, and which shall be simple in construction, strong, and durable; and it consists in a wire-brush in which the contiguous wires are arranged at right angles with each other at their centers, as hereinafter more fully described.

A is the tube that receives the ends of the binding-wires B at the base of the brush, and which has a screw-thread cut upon its outer end for the attachment of the rod by which it is operated. B are the binding-wires, four of which are used,

and the ends of which are secured in the tube A. C are the wires, which are arranged between the four wires B at right angles with each other at their centers, so that each wire may project to an equal distance upon the opposite sides of the binding-wires B, a side view of the brush thus showing a spiral row of wires C between each coil of the wires B. If desired, the wires C may be made small or thin and two of them used together, the pairs being arranged alternately at right angles with each other, as herein described. When the wires C have been arranged the wires B are coiled and their ends secured in the ordinary manner.

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

An improved wire brush, in which the adjacent wires C, singly or in pairs, are arranged between the binding-wires B at right angles with each other at their centers, substantially as herein shown and described.

The above specification of my invention signed by me this 24th day of August, 1871.

FRANCIS F. FIELD.

Witnesses:

JAMES T. GRAHAM,
T. B. MOSHER.