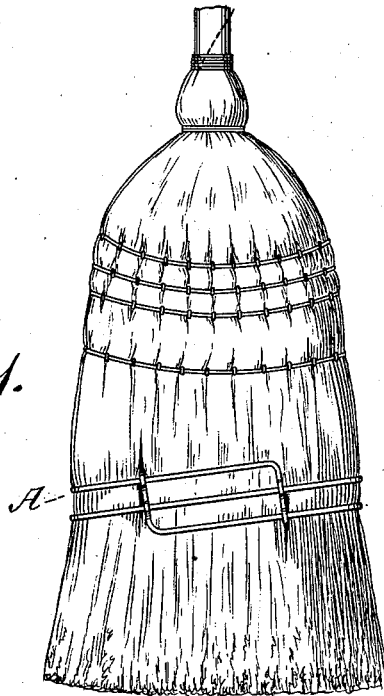


A. R. NORTON.
Adjustable Broom-Protector.

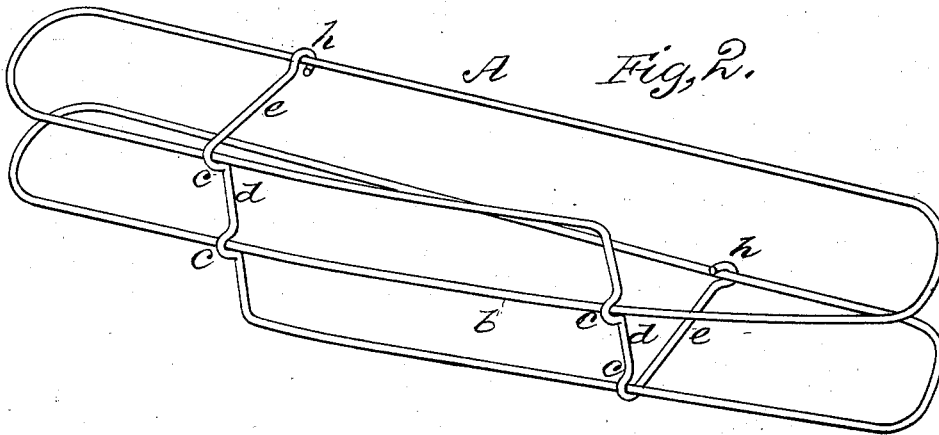
No. 216,054.

Patented June 3, 1879.

Fig. 1.



A Fig. 2.



WITNESSES

Villette Anderson.
F. J. Chas.

INVENTOR

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UNITED STATES PATENT OFFICE.

ARTHUR R. NORTON, OF MARSHALLTOWN, IOWA, ASSIGNOR TO WILLIAM ANDREWS AND CHARLES T. BALLOU, OF SAME PLACE.

IMPROVEMENT IN ADJUSTABLE BROOM-PROTECTORS.

Specification forming part of Letters Patent No. **216,054**, dated June 3, 1879; application filed January 18, 1879.

To all whom it may concern:

Be it known that I, ARTHUR R. NORTON, of Marshalltown, in the county of Marshall and State of Iowa, have invented a new and valuable Improvement in Adjustable Broom-Protectors; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of this invention applied to a broom. Fig. 2 is a perspective view of the same disconnected.

This invention has relation to means for protecting and stiffening brooms; and it consists in the construction and novel arrangement of a binding-wire, bent in form to fit around the brush, and having its vertically-bent and corrugated ends terminating in transverse hooks, adapted to extend horizontally through the brush and connect with the binding-wire on the opposite side, as hereinafter shown and described.

In the accompanying drawings, the letter A designates the binding-wire, which is designed to be twined in the form of an elongated spiral to fit the brush of any ordinary broom. The ends of the wire are extended past each other, one above and the other below the middle branch or portion, *b*, of the band, each end being bent vertically, and corrugated at *c c*, to engage said middle portion and the opposite end of the wire, and thereby fix the position of these parts and prevent them from becoming disarranged and unduly separated when applied.

The vertical corrugated portions *d* terminate in transverse horizontal parts *e*, having hook ends *h*, and forming, when connected with the binding-wire on the opposite side, ties, which pass through the brush and keep the protector in shape.

This device is made of a single piece of wire, and is applied by slipping it first over the handle, and pressing it down over the brush, the hook ends being detached from their engagement with the wire for the purpose of allowing it to expand. When it reaches its proper location on the flattened part of the brush it is brought into shape with the encircling parts of the wire parallel with each other, and the hook ends are passed through the brush and connected with the wire on the opposite side. At the same time the wire is engaged with the holding-corrugations of the vertical portions, and the device is then secured, and will keep its place, protecting the straw, and giving the brush a degree of stiffness, which may be regulated according to requirement by adjusting the band or wire.

What I claim, and desire to secure by Letters Patent, is—

An adjustable broom protector and stiffener made of a single piece of wire, passing in double loop around the broom, and having the corrugated vertical portions *d*, the transverse terminal portions of said wire forming hook-ties *e*, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ARTHUR R. NORTON.

Witnesses:

WM. ANDREWS,
GEO. A. MCINTYRE.