Cooper. 4. Southworth. Bonnet.

10.53274.

Patented Mar. 20.1866.

Ty 1.

Fig 2

Fy 3

Fig 4

Mikneszes:

The Quice

Inventors:

GACoopen

6. Southwerth

Jon mun He

attenners

United States Patent Office.

GEORGE A. COOPER AND CONSIDER SOUTHWORTH, OF STOUGHTON, MASS.

IMPROVEMENT IN BONNET-FRAMES.

Specification forming part of Letters Patent No. 53,274, dated March 20, 1866.

To all whom it may concern:

Be it known that we, George A. Cooper and Consider Southworth, of Stoughton, in the county of Norfolk and State of Massachusetts, have invented a new and useful Improvement in the Manufacture of Bonnet-Frames; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a view of a piece of brace-wire made according to our invention. Fig. 2 is a view of the same with a portion of the covering removed, showing the sizing applied to the wire. Fig. 3 is an end view of Fig. 1. Fig. 4 is a view of a piece of ordinary brace-wire, introduced to show how readily the covering uncoils.

Similar letters of reference indicate corre-

sponding parts.

Our invention relates to an improvement in brace-wire such as is used in the manufacture of bonnet-frames. In using the wire now made for that purpose great trouble is experienced and the work delayed by the covering slipping off at the ends where the wire is cut as it is being used.

Our invention obviates this difficulty; and it consists in the use, in the manufacture of such wire for bonnet-frames, of sizing or other

adhesive material applied to the "bonnet-wire," so called, for causing the fibers of the thread or silk to stick to the wire and to each other, whereby the wire can be cut at any point and the covering remain perfectly in place.

In the manufacture of bonnet-frames bracewire is used, and it is made in this way: The necessary quantity of soft iron wire known to the trade by the name of "bonnet-wire" is provided, and we cover it by winding around it yarn or cotton, and sometimes silk. Previously, however, to covering it we coat the wire with some adhesive substance, which, when the wire is covered, causes the fibers of the covering to adhere to the wire and to each other. Thus the wire can be cut at any point and the covering will be in nowise loosened. Not so, however, with the ordinary wire, for the covering of this, so soon as cut, slips off the ends and unwinds, and causes a great deal of trouble and delay, as before stated.

We do not claim, broadly, sizing wire; but We do claim as new, and desire to secure by

Letters Patent—
A bonnet-frame constructed of sized wire, substantially as described.

GEORGE A. COOPER. CONSIDER SOUTHWORTH.

Witnesses:

CHAS. S. RICHARDSON, CHAS. E. FISHER.