

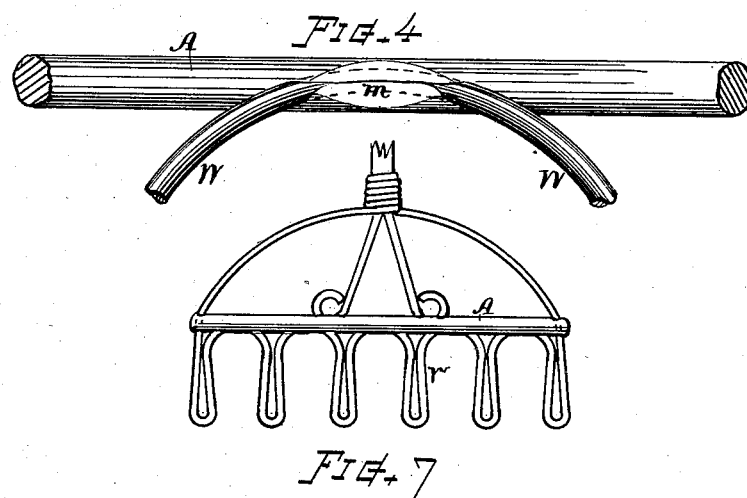
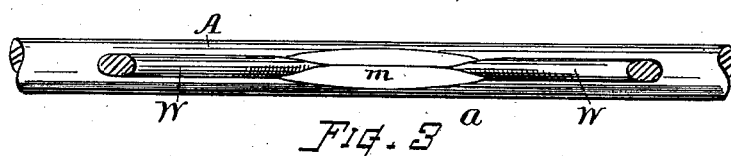
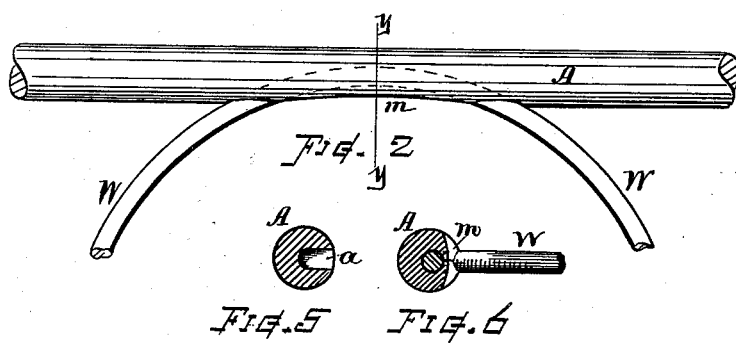
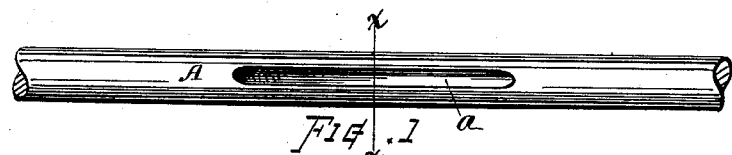
(No Model.)

L. A. WOOD.

METHOD OF ATTACHING WIRES AND RODS TOGETHER.

No. 345,655.

Patented July 13, 1886.



WITNESSES.

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# UNITED STATES PATENT OFFICE.

LUCIUS A. WOOD, OF WORCESTER, MASS., ASSIGNOR OF ONE-HALF TO JOHN S. BRAND AND FRED J. BRAND, BOTH OF NEW BRITAIN, CONN.

## METHOD OF ATTACHING WIRES AND RODS TOGETHER.

SPECIFICATION forming part of Letters Patent No. 345,655, dated July 13, 1886.

Application filed April 3, 1886. Serial No. 197,751. (No model.)

### *To all whom it may concern:*

Be it known that I, LUCIUS A. WOOD, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in the Method of Attaching Wires and Rods Together; and I do declare the following to be a description of my said invention sufficiently full, clear, and exact to enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

The object of my present invention is to afford a method whereby small rods or wires of different sizes can be securely fastened together laterally, or at positions between their ends, in a neat and efficient manner, said method being adapted for the lateral attachment of curved or bent wires to straight or curved rods, or straight wires to curved rods, and is applicable for use in the construction of wire lattice-screens, rake-heads, and other articles wherein it is required to connect wires of moderate size to borders or frames of somewhat larger wire or rods in a permanent and finished manner. These objects I attain by the method of attachment illustrated in the drawings and herein described.

In the drawings, Figure 1 is a view of the larger rod with cavity formed therein. Fig. 2 is a plan view of the rod and wire attached together. Fig. 3 is a front view of same. Fig. 4 is a front view of the rod with the wire attached at a side position. Fig. 5 is a transverse section at line *x x*, Fig. 1. Fig. 6 is a transverse section at line *y y*, Fig. 2; and Fig. 7 shows the manner in which the wire may be attached in the construction of a rake-head.

In my improved method of attaching the wires or rods I first form a longitudinal groove or cavity, *a*, in the side of the larger wire or rod, *A*, which cavity is made so as to correspond in width and curvature to the size and curvature of the wire, *W*, to be connected therewith. At the point of greatest depth the cavity *a* is cut into the cylindrical rod somewhat deeper than the diameter of the wire *W*. These recesses or cavities *a* may be formed by the means of a suitable

milling-cutter, and are cut straight into said rod *A* directly toward its axis, or more or less to one side, according to the construction desired, and so as to conform to the loop or shape of the wire, accordingly as it is straight or on a longer or shorter curve. The loop or connecting portion of the wire *W* is inserted into said groove or cavity *a*, with its ends projecting out at either end in the manner indicated, and the overhanging metal along the edges of the groove *a* is then pressed down or closed together about the wire, so as to embrace the central part of the loop or curve, as at *m*, and thus securely confine it, in connection with the rod *A*, in the manner shown in Figs. 3 and 5. The overhanging edges can readily be forced down by means of suitable dies and pressure, so as to leave a smooth even surface about the connecting joint, and a very neat, strong, and desirable connection is thus made, which is applicable for many classes of wire and rod goods, and which can be economically and rapidly produced.

What I claim as of my invention, and desire to secure by Letters Patent, is—

1. The method of attaching wires and rods together laterally, which consists in producing in the larger wire or rod a longitudinally-disposed groove or cavity corresponding to the size and curvature of the smaller wire or rod, inserting the bend or loop of said smaller rod laterally into said groove, then pressing down the overhanging metal of the larger rod to embrace the smaller rod at the center of the curve, substantially as shown and described.

2. The method of attaching wires to larger wires or rods, which consists in forming a lateral groove in the side of the larger rod to receive a portion of the smaller wire, inserting said smaller wire into such groove, and then pressing down the metal at the sides of the groove to firmly embrace the wire, substantially as set forth.

Witness my hand this 20th day of October, A. D. 1885.

LUCIUS A. WOOD.

Witnesses:

CHAS. H. BURLEIGH,  
FRANK A. HUMPHREY.