

# C. Kennedy. Heddle for Loom.

N<sup>o</sup> 68,444.

Patented Sept. 3, 1867.

Fig. 3.

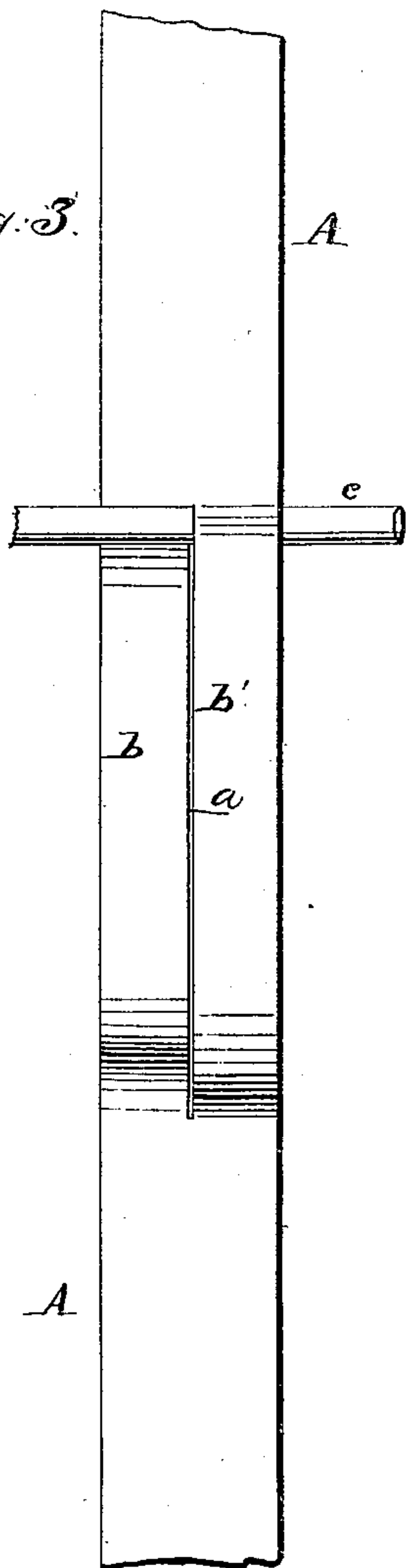


Fig. 1.

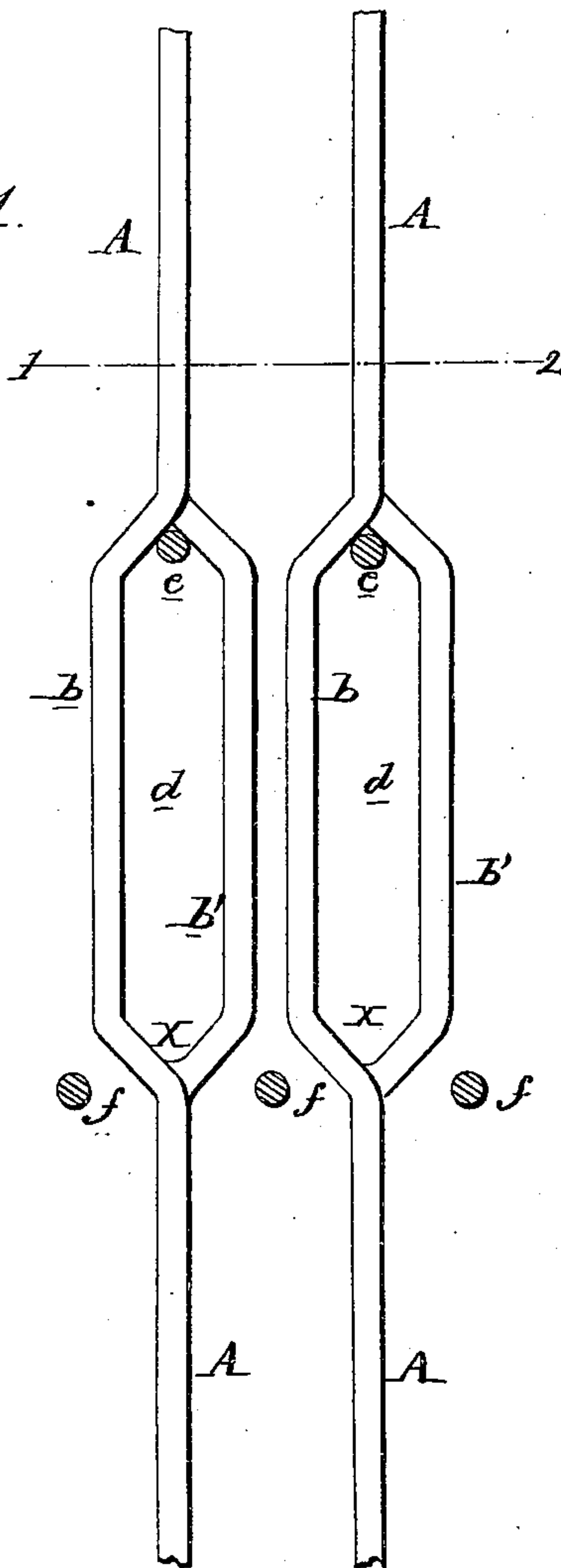
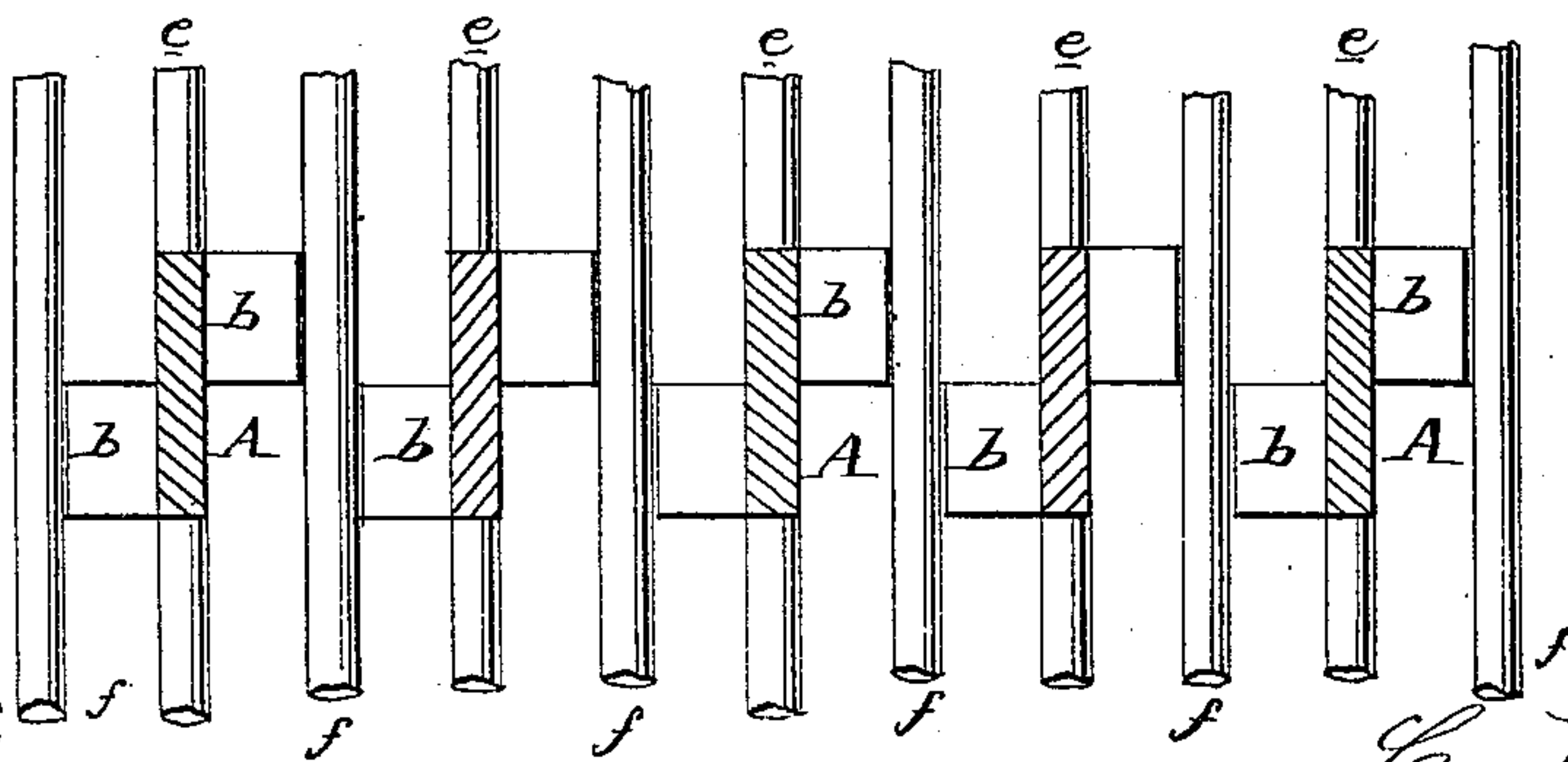


Fig. 2.



WITNESSES:

Wm. Albert Steel  
Wm. L. Latham

INVENTOR:

C. Kennedy  
By his Atty  
H. Howson

# United States Patent Office.

CHARLES KENNEDY, OF PHILADELPHIA, PENNSYLVANIA.

*Letters Patent No. 68,444, dated September 3, 1867.*

## IMPROVEMENT IN LOOM-HEDDLES.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, CHARLES KENNEDY, of Philadelphia, Pennsylvania, have invented an Improvement in the Construction of Heddles for Looms; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

My invention consists of a heddle wire, composed of a flat wire or strip of metal, in which an eye is formed by cutting or splitting the wire and bending the severed parts away from each other, all as described hereafter.

In order to enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Figure 1 represents a front view of two heddle wires, drawn to an enlarged scale, and made according to my improvement.

Figure 2 a sectional plan of a number of the heddle wires on the line 1-2, fig. 1; and

Figure 3 a side view of one of the wires.

In making my improved heddles, I use thin strips of rolled metal, such, for instance, as the light flat wires employed in the manufacture of reeds for looms, two of these wires, A A, being shown in the drawing. By means of a suitable tool I split each wire on the line *a*, midway between its opposite edges, the split being of length sufficient to form the desired eye, which is made by bending one portion, *b*, in one direction, and another portion, *b'*, in an opposite direction, this bending being accomplished by a drop-press or other suitable instrument, or the cutting and bending may be accomplished simultaneously. An elongated eye, *d*, is thus formed in each wire, the upper and lower corners *x x* of the eye being rendered smooth and free from sharp or rough edges, which might cut or fray the warp-threads. The wires are arranged side by side, as seen in figs. 1 and 2, the warp-threads *e e* passing through the eyes, while there is sufficient distance between the wires where the eyes occur to permit the warp-threads *f f* to pass freely. The upper and lower ends of the wires may be attached to the heddle-bars in any desired manner. The plan employed for securing the wires of reeds may, for instance, be used.

It will be seen without further description that a heddle composed of wires constructed as above must be both efficient and durable, and that eyes of any dimensions to suit the warp may be made in the wires.

I wish it to be understood that I do not desire to claim broadly flat heddle wires, having holes made therein for the reception of the warp-threads, as such wires are described in the patent granted to B. Hartford and W. B. Tilton, December 29, 1837; but I claim as my invention, and desire to secure by Letters Patent—

A heddle wire composed of flat wire or metal strip, in which an eye is formed by cutting or splitting the wire and bending the severed parts away from each other, as herein set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHAS. KENNEDY.

Witnesses:

H. HOWSON,

WM. HALL WAXLER.