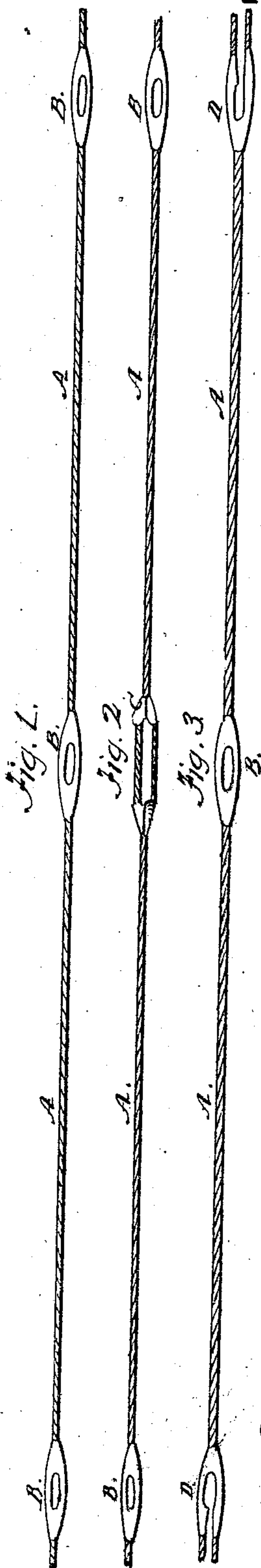


J. Sennett.
Heddle for Loom.

N^o 72917

Patented Dec. 31, 1867



Witnesses
Chas. F. Glauson
E. Murphy

Inventor;
Jacob Sennett
by
D. P. Newberry
his atty.

United States Patent Office.

JACOB SENNEFF, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 72,917, dated December 31, 1867.

IMPROVEMENT IN HEDDLES FOR LOOMS.

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, JACOB SENNEFF, of Philadelphia, in the county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Metallic Clasps and Metallic Eye-Heddles; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 shows a metallic eye-heddle with a metallic eyelet at each end for attaching it to the rods.

Figure 2 shows a metallic clasp-heddle similarly arranged.

Figure 3 shows a device for attaching a metallic clasp or metallic eye-heddle to the wires to replace one that may have been broken.

The same letters are employed in all the figures for the indication of the same parts.

In the use of metallic eyes and metallic clasps in heddles heretofore, they have been attached to form the warp-eyes on a continuous cord or wire, which was wound around the shafts and secured in place by a tape fastened to the upper and lower edges of the shafts. In consequence of this arrangement it was necessary to provide a great variety of harness to manufacture different grades of cloth. The present improvement consists in attaching upon each end of the cords or wires forming a heddle, metallic eyelets, which may be slid on to a rod on the harness-shafts, whereby the metallic eye or clasp-heddle may be used, so that one frame may be employed for weaving in any kind of cloth, however fine or coarse, by putting a sufficient number of single heddles on the rod.

Great inconvenience was experienced in the old mode of using the metallic clasps or eyes in making repairs in case of the heddle becoming broken. Another improvement of mine consists in constructing the eyes upon the ends of the single heddles in such manner that they may be attached to the rods without interfering with any of the other heddles.

In the drawings, A A are single heddles; B is a metallic eye cast upon the wire or cord, according to the manner set forth in Letters Patent heretofore granted to me. C is the metallic clasp, also covered by a former patent granted to me. These have heretofore been used, as already mentioned, on a continuous single or double cord or wire wound around the harness-shafts, and only for the purpose of forming the warp-eyes. I now propose to adapt them to single heddles by attaching, also on the ends of the heddles above and below, metallic eyelets B', through which the rods on the harness-shafts may be passed for the purpose of attaching them. As the eyelets may be moved on the rod, it will no longer be necessary to have sets of shafts for the different grades of cloth, but by attaching a sufficient number of heddles, more or less may be used, according to the degree of fineness required in the intended fabric. I have shown at D a mode of forming eyelets for attaching the heddles to the rods in case a heddle should be broken. To effect this, I form the eyelet by splitting the part extending from the eye towards the end of the heddle, as shown in fig. 3, the cord or wires being divided and a strand carried through each of the parts. The broken heddle being removed, the adjustable eyelet D may be placed around the rod, and secured by tying the projecting ends of the cord, or twisting the ends of the wire, or the projecting end of the eyelet, as the case may be. It is not necessary that the eyelet should be divided precisely in the manner represented, for the division may be on the side. Nor is it necessary, in the case either of the permanent eyelets B', or the adjustable ones D, that they should be cast on the heddle, for they may be attached in other modes. I shall not limit my claim to the mode of attaching them.

I do not claim attaching the heddles so as to slide upon the rods, for this has been done before, but

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

1. The heddles of looms, when constructed with metallic clasps C or metallic eyes B, and also with metallic eyelets D cast upon twine or wire, substantially as set forth.

2. So constructing the removable eyelets, for attaching the heddles to the rods, that they may be clamped upon the same independently for the purpose of replacing a broken heddle, substantially in the manner set forth.

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

JACOB SENNEFF.

Witnesses:

R. MASON,

L. MURPHY.