(No Model.)

# T. HALTON.

## LINGO FOR LOOMS.

No. 598,865. Patented Feb. 8, 1898.

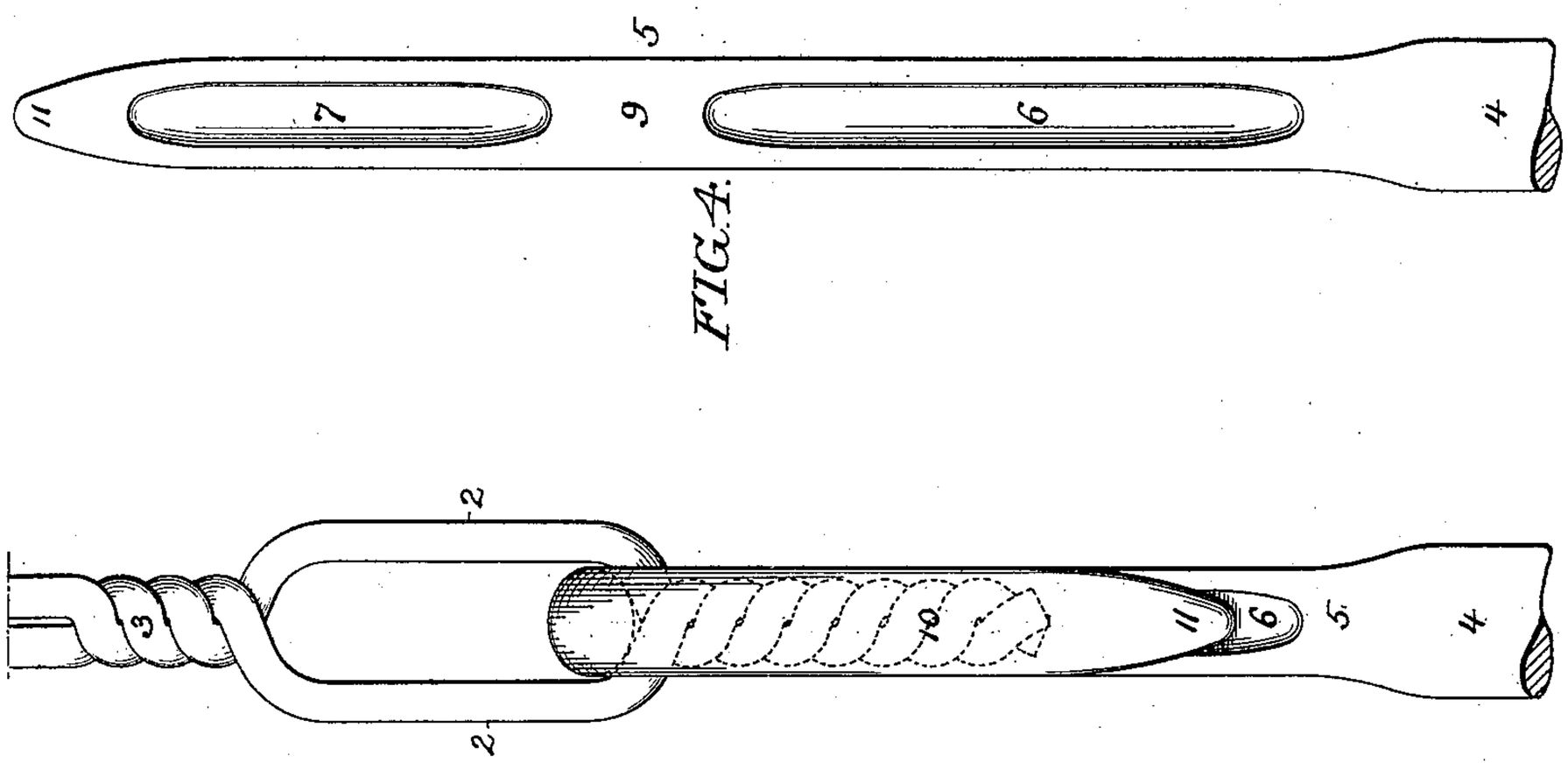


FIG. 4.

FIG. 3.

FIG. 2.

FIG. 1.

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# UNITED STATES PATENT OFFICE.

THOMAS HALTON, OF PHILADELPHIA, PENNSYLVANIA.

## LINGO FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 598,865, dated February 8, 1898.

Application filed September 23, 1897. Serial No. 652,758. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS HALTON, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Lingoes for Looms, of which the following is a specification.

The object of my invention is to so construct a lingo or weight for wire heddles that it will be prevented from swinging on the heddle, and will thus constitute a substantially rigid continuation of the same, thereby overcoming that liability to entanglement which is an objection to ordinary lingoes loosely hung upon the heddles.

In the accompanying drawings, Figure 1 is a view, partly in vertical section and partly in elevation, of the upper end of a lingo constructed in accordance with my invention, showing the lower portion of the heddle to which said lingo is hung. Fig. 2 is a transverse section on the line *x x*, Fig. 1. Fig. 3 is a front view of the upper portion of the lingo and of the hooked lower end of the heddle to which it is hung, and Fig. 4 is a view illustrating the preparation of the blank for the lingo before the head of the same is bent.

All of the views are upon an exaggerated scale.

An ordinary wire heddle is composed of a pair of wires which at the lower end are twisted together, as shown at 1, then separated so as to form an eye or loop 2, and then again twisted above the latter, as shown at 3, the eye or loop 2 being intended for adaptation to the hooked upper end of the lingo or weight with which the heddle is usually furnished. If, however, this lingo is loosely hung to the eye 2 of the heddle, as usual, said lingo is free to swing laterally and entanglement of and injury to both lingoes and heddles frequently results. In order to overcome this objection, I make the lingo in the following manner:

A piece of wire 4 of proper dimensions is slightly reduced at the upper end, as shown at 5 in Fig. 4, this reduced portion of the wire being, by preference, oval in cross-section, as shown in Fig. 2. In one side of this reduced portion of the wire are then formed concave recesses 6 and 7, separated from each other by a portion 9, and the reduced portion 5 of the wire is then bent at the center of this portion 9, so as to form the hook of the lingo and bring the recess 7 opposite to the upper portion of the recess 6, the point 11 of the tongue 10 of the hook being preferably reduced in thickness, as shown in Fig. 3, and depressed, as shown in Fig. 1, so as to enter the lower portion of the recess 6.

The tongue 10 of the hook possesses such resiliency that its point can be readily raised, so as to permit of the slipping of one of the wires of the eye 2 of the heddle beneath the same, and when the lingo is turned around into a position in line with the heddle the lower twist 1 of said heddle will enter between the shank and tongue of the hook and will find a bearing in the opposite recesses 6 and 7 of said shank and tongue. Hence any tendency of the lingo to swing on the heddle is arrested by the engagement of the twisted portion of the heddle with the lingo and entanglement of and injury to lingoes or heddles is prevented.

The depression of the point 11 of the tongue of the hook 10 of each lingo in the lower portion of the recess 6 of said lingo serves to shield the point of the hook and prevent it from catching upon any part of an adjoining vertically-moving heddle, and the depression of the point of the hook also prevents the lingo from playing vertically upon the lower portion of the heddle to which it is hung, thereby preventing wear of the parts and precluding the possibility of the unhooking of the lingo from the heddle.

Having thus described my invention, I claim and desire to secure by Letters Patent—

1. The combination of a wire heddle having a twisted lower end, with a lingo having a hook with internally-recessed shank and tongue with which recesses the twisted portion of the heddle engages, the point of the tongue being bent inwardly beneath the twisted end of the heddle so as to prevent the lingo from slipping upwardly on said heddle, substantially as specified.

2. A lingo for wire heddles, said lingo having a hook with internal recesses in its shank and tongue for the reception of the twisted end of the heddle, the point of the tongue being bent inwardly toward the shank, substantially as specified.

3. A lingo for wire heddles, said lingo having a hook with internally-recessed shank and tongue for the reception of the twisted end of the heddle, the point of the tongue being bent down into the lower portion of the recess in the shank of the hook, substantially as specified.

4. The within-described blank for a lingo for wire heddles, said blank consisting of a wire having in one side of the same concave recesses less in length and width than the wire in which they are formed, said recesses being longitudinally separated from each other by a full portion of the wire.

5. The within-described blank for a lingo for wire heddles, said blank consisting of a wire reduced at one end and having in one side of said reduced portion concave recesses less in width than the wire in which they are formed and longitudinally separated from each other by a full portion of the wire, substantially as specified.

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

THOMAS HALTON.

Witnesses:
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