July 15, 1941. O. MAHLER 2,249,390

HEDDLE

Filed March 2, 1940

Fig. 1

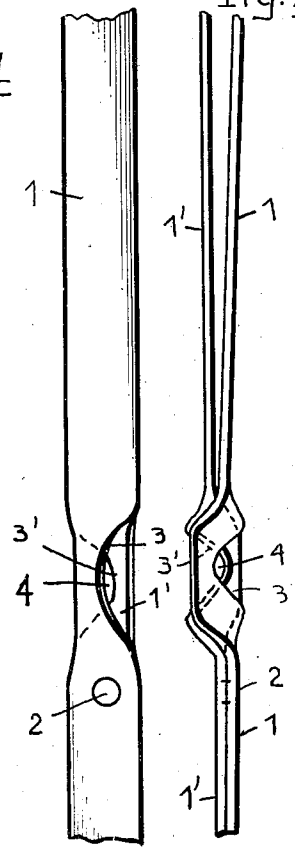


Fig. 2

Fig. 4.

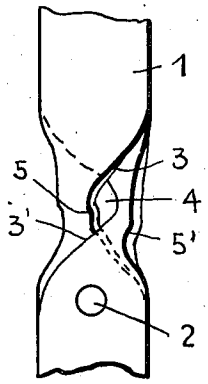


Fig. 6.

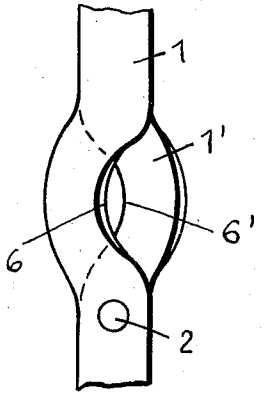


Fig. 5.

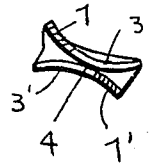


Fig. 7

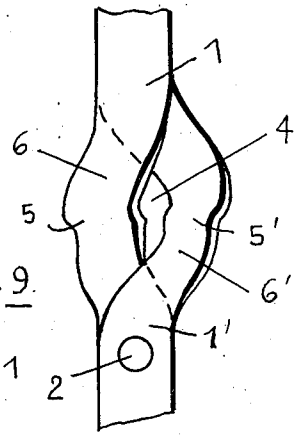


Fig. 3.

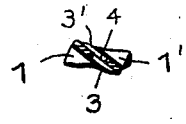


Fig. 8.

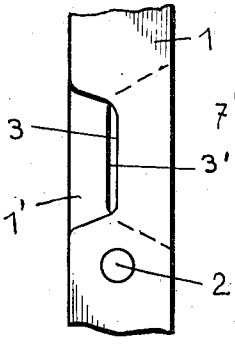
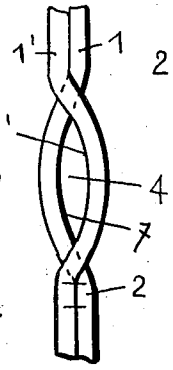


Fig. 9.



Inventor:

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2,249,390

HEDDLE

Otto Mahler, Monbard, France

Application March 2, 1940, Serial No. 321,944
In Switzerland February 26, 1939

6 Claims. (Cl. 139—93)

My invention relates to improvements in weaving heddles as used, in particular, for weaving endless fabrics and which are made of steel flats; and the objects of my improvement are, first, to provide means for engaging and disengaging the heddle with and from the warp thread by a single turn of the heddle and without the necessity of bending back and straightening the latter; second, to prevent the cutting in or spring out of the warp thread upon a downward movement of the warp; third, to permit of manufacturing a heddle with an eyelet open on one side and which also can be locked, from steel flats; and, fourth, to generally decrease the number of and time required for manual operations in weaving and to produce a better fabric.

I attain these and related objects by the heddle illustrated in a number of modifications in the accompanying drawing, in which—

Figs. 1, 2 and 3 show one modification respectively in front elevation, side elevation and horizontal section through the eyelet; Figs. 4 and 5 show another modification respectively in front elevation and in horizontal section through the eyelet; Fig. 6 is a front elevation of a third modification; Fig. 7, a front elevation of a fourth modification; and Figs. 8 and 9, a fifth modification respectively in front and in side elevation.

1 and 1′ are the two legs of the heddle, 2 is the riveted or welded juncture of the legs, and 4 is the eyelet.

In the modification shown in Figs. 1–3 the recesses 3 and 3′ of the legs form the eyelet 4. The leg 1 stays in front, and the leg 1′ in the rear, while the eyelet 4 is turned out of the plane of the legs, e. g. to the amount of 45°.

In the second modification according to Figs. 4 and 5, the legs are cranked at the eyelet, at right angles to their plane. In this case the leg 1 extends from the top front to the bottom rear, and the leg 1′ from the top rear to the bottom front. Here also, the eyelet 4 is turned out of the plane of the legs.

In the modification shown in Fig. 6, the eyelet 4 is formed by the lateral bends 6, 6′ in the plane of the legs and also turned out thereof. The leg 1 stays in front, and the leg 1′ stays in the rear.

In the design according to Fig. 7, the legs are cranked at 5, 5′ at right angles. The leg 1 extends from the top front to the bottom rear, and the leg 1′ from the top rear to the bottom front, while the eyelet 4 is turned out of the plane of the legs.

In the design according to Figs. 8 and 9, the eyelet 4 is formed by the bends 7, 7′ of the legs projecting out of the plane of the latter.

What I claim and desire to secure by Letters Patent is:

1. A heddle particularly adapted for manufacturing endless fabrics, comprising at least two flat legs arranged in juxtaposition to each other, said legs being deformed intermediate the ends thereof and the resultant deformations defining an eyelet, and a juncture of said legs located to one side of said eyelet and in close adjacence thereto whereby, in effect, a closure for said eyelet is formed, the remainder of the eyelet being open throughout, whereby the heddle may be readily engaged with and disengaged from warp thread.

2. A heddle particularly adapted for manufacturing endless fabrics, comprising at least two flat legs arranged in juxtaposition to each other, each of said legs being provided on one edge thereof intermediate its ends with a recess, said recesses being formed in opposite edges and being of such extent as to overlap each other to define an eyelet, and a juncture of said legs located to one side of said eyelet and in close adjacence thereto whereby, in effect, a closure for said eyelet is formed, the remainder of the eyelet being open throughout, whereby the heddle may be readily engaged with and disengaged from warp thread.

3. A heddle particularly adapted for manufacturing endless fabrics, comprising at least two flat legs arranged in juxtaposition to each other, each of said legs being deformed intermediate the ends thereof to form a laterally offset bend, said bends extending in opposite directions to such extent as to define an eyelet, and a juncture of said legs located to one side of said eyelet and in close adjacence thereto whereby, in effect, a closure for said eyelet is formed, the remainder of the eyelet being open throughout, whereby the heddle may be readily engaged with and disengaged from warp thread.

4. A heddle particularly adapted for manufacturing endless fabrics, comprising at least two flat legs arranged in juxtaposition to each other and extending in side-by-side parallel relationship substantially along the entire extent thereof, said legs being deformed intermediate the ends thereof and the resultant deformations defining an eyelet, and a juncture of said legs located to one side of said eyelet and in close adjacence thereto whereby, in effect, a closure for said eyelet is formed, the remainder of the eyelet being open throughout, whereby the heddle may be readily engaged with and disengaged from warp thread.

5. The heddle defined in claim 1, the sections of said legs in the eyelet-defining zone being turned out of the plane of the legs.

6. The heddle defined in claim 2 ,said recessed portions comprising lateral bends projecting from the plane of the legs.

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