

No. 696,325.

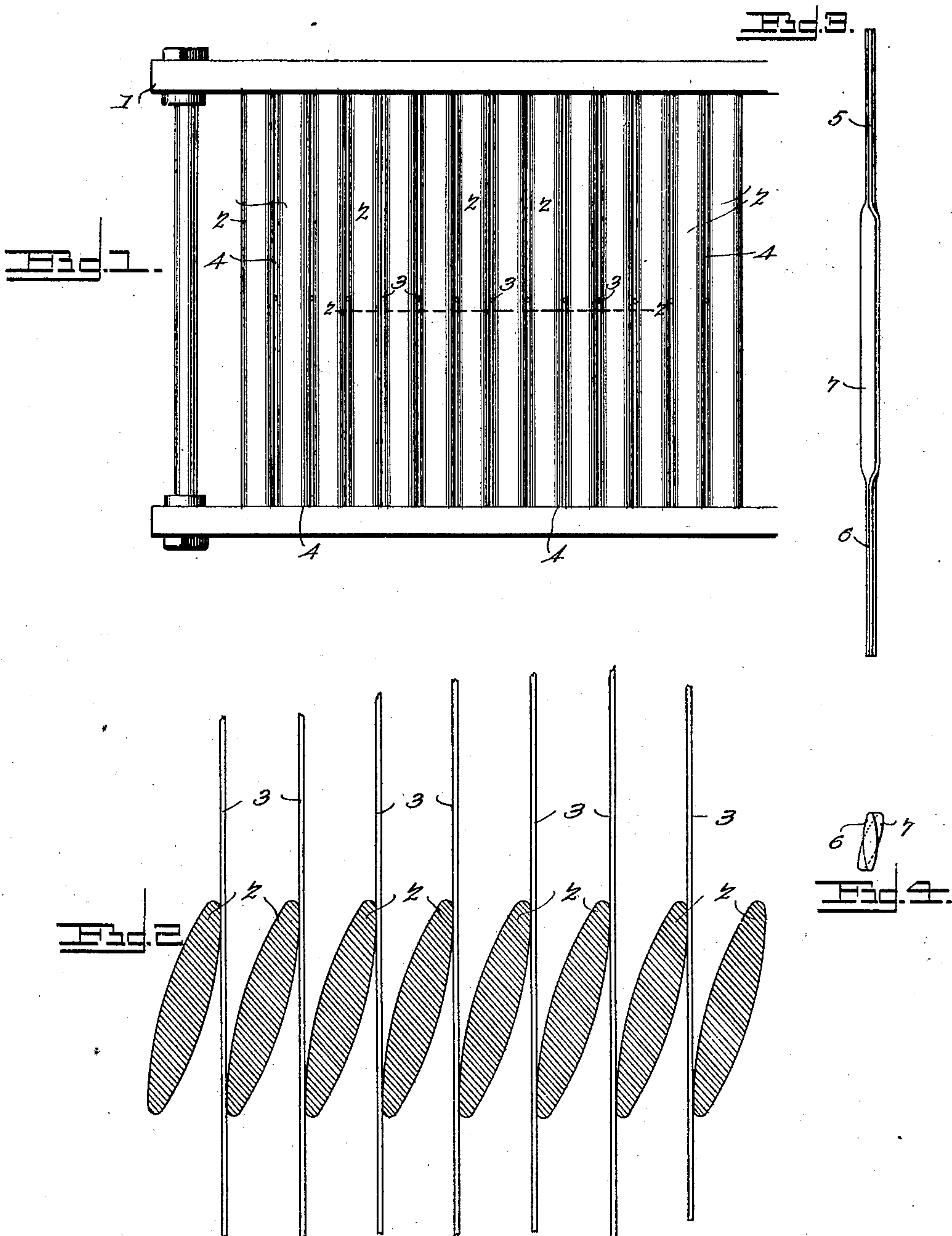
Patented Mar. 25, 1902.

F. S. GABLE.

REED FOR LOOMS FOR WEAVING WIRE CLOTH.

(Application filed Apr. 18, 1901.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

FRED S. GABLE, OF GLENROCK, PENNSYLVANIA, ASSIGNOR OF THREE-FOURTHS TO WILLIAM T. GABLE, OF BALTIMORE, MARYLAND.

REED FOR LOOMS FOR WEAVING WIRE-CLOTH.

SPECIFICATION forming part of Letters Patent No. 696,325, dated March 25, 1902.

Application filed April 18, 1901. Serial No. 56,465. (No model.)

To all whom it may concern:

Be it known that I, FRED S. GABLE, a citizen of the United States, residing at Glenrock, in the county of York and State of Pennsylvania, have invented a new and useful Reed for Looms for Weaving Wire-Cloth, of which the following is a specification.

This invention relates to reeds for use in looms for weaving wire-cloth; and the object of the same is to so shape the dents and dispose them at such an angle as to cause the reed to swing more readily over the wires and prevent the catch of the dents on knots or joints in the wires and also to provide a reversible reed, or one having dents that may be located at either side of the reed, and thereby produce a strong, durable, and simple form of reed that will be efficient in its work and possessing a prolonged wearing characteristic.

The invention relates to the construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

In the drawings, Figure 1 is a side view of a portion of the improved reed. Fig. 2 is a cross-sectional view taken in the plane of the line 2 2, Fig. 1. Fig. 3 is an elevation of a modified form of the dent. Fig. 4 is a plan view of the dent shown by Fig. 3.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

The numeral 1 designates the reed-frame, 2 the dents, and 3 the wires. The dents 2, as shown, are of elongated elliptical form in cross-section throughout their full length, the said dents being constructed as bars which extend completely from the lower to the upper rail of the reed and disposed at an oblique angle to said rails. All of the dents have the same angle, so that their longitudinal or greater axes are parallel, and are also separated by spaces 4 of similar width. The maximum width of the said spaces 4 is equal to the distance between adjacent wires 3, and the opposite sides of each dent form guiding-surfaces for two adjacent wires. The wires, while positively guided against lateral play, have a freedom of movement between the dents to permit passage of irregularities. The bearing of the several wires, as shown

at the opposite extremities only of the dents, and the diagonal or oblique arrangement of the latter, causes the wires to be entirely clear of the dent-surfaces in the central portions of the spaces 4, whereby the wires are properly held and correctly spaced when they are crimped, and as the reed returns the wires are then disposed in the center of the spaces 4 where there is ample room for the travel of the said wires without liability of cutting the same or wearing the dents. In many of the reeds now in use in looms for weaving wire-cloth the spaces between the dents are so reduced and the dents of such impractical shape that the wires are cramped and cut in their travel therethrough, and by reason of the diagonal arrangement of the present improved dent construction this disadvantage is avoided. It is also proposed to arrange dents of other cross-sectional shape in diagonal planes to obtain the same advantageous operation as by the shape shown. As stated, the improved reed is particularly adapted for use in looms for weaving wire-cloth; but it will be understood that it is intended to use the same on any other kind of loom to which it is applicable.

The form of the dent shown by Figs. 3 and 4 embodies upper and lower straight portions 5 and 6 and an intermediate obliquely-bent portion 7, the modified dent having an elongated elliptical contour in cross-section, as shown by Fig. 4. The warp-wires pass between the dents at about the center, and enough extent is given to the portions 7 of the modified dents to obtain the operation and advantages of the form of dents shown by Figs. 1 and 2. In fact, the principle involved is the same in both forms of the improved device, said principle being the diagonal disposition of portions of dents that engage wire warps or the like that have an elongated elliptical contour, with the greater axes of said portions parallel to each other and spaces between them for the free passage therethrough of the warp wires or strands.

Having thus described the invention, what is claimed as new is—

1. A loom-reed having dents of elongated flattened elliptical form to provide opposing pairs of convex faces and arranged so that

their major axes are diagonally disposed and parallel to each other to engage warp-strands longitudinally passing between the same, the said dents having interspaces with the front
5 and rear divergent maximum portions thereof between the terminals of the dents equal in width to the transverse distance between the warp-strands, the said spaces converging toward the minor axes of the dents, so that
10 the strands will contact with the alternate ends of adjacent sides of the dents approximately at the terminals of the major axes of the latter, whereby splices in the strands will be prevented from catching on the ends of
15 the dents when passing between the latter.

2. A loom-reed having dents with upper and lower straight portions and intermediate obliquely-arranged portions.

3. A loom-reed having dents with upper and lower straight portions and intermediate 20 obliquely-arranged portions with opposite convex faces.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

FRED S. GABLE.

Witnesses:

ADAM S. ROLLER,
URIAH S. DISE.