(No Model.)

C. S. STROWBRIDGE.

REED FOR LOOMS.

No. 457,409. Patented Aug. 11, 1891.

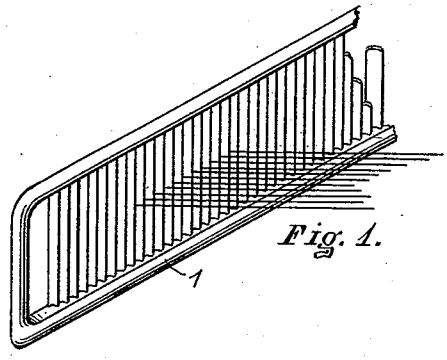


Fig. 1.

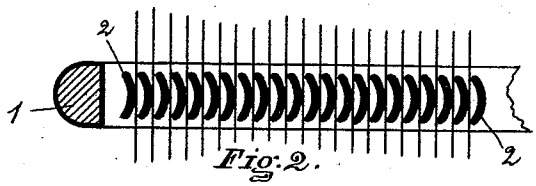


Fig. 2.



Fig. 3.

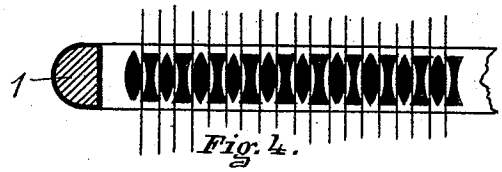


Fig. 4.

WITNESSES.
Rich. A. George.
M. C. Robinson

INVENTOR.
Clarence S. Strowbridge
By Risley & Perry
attys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CLARENCE S. STROWBRIDGE, OF HAMILTON, NEW YORK, ASSIGNOR TO THE HAMILTON WIRE CLOTH COMPANY, LIMITED, OF SAME PLACE.

REED FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 457,409, dated August 11, 1891.

Application filed March 14, 1891. Serial No. 385,021. (No model.)

To all whom it may concern:

Be it known that I, CLARENCE S. STROWBRIDGE, of Hamilton, in the county of Madison and State of New York, have invented certain new and useful Improvements in Reeds for Looms; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form part of this specification.

My invention relates to improvements in reeds for looms, and is more particularly adapted for use in looms for weaving wire.

In the drawings which accompany and form part of this specification, and in which similar figures of reference refer to corresponding parts in the several figures, Figure 1 shows a reed removed from the loom. Fig. 2 shows a longitudinal cross-section of the reed shown in Fig. 1. Fig. 3 shows a longitudinal cross-section of a reed, taken as Fig. 2 is taken, with the dents of the reed arranged in a slightly-different manner. Fig. 4 shows a longitudinal section of a reed, taken as Fig. 3 is taken, with modified form of dents.

The reed 1 is constructed in the ordinary manner, except that it is provided with dents 2, having a convex surface on one side and a concave surface on the other and provided with rounded edges. The warp-threads passing through this reed will be engaged at two points on one side by one of the dents and at one point between the other two points on the opposite side of the thread by the next adjacent dent. The thickness of the dents is, preferably, uniform throughout their whole width, which leaves a passage of uniform width between the dents across the entire width of the dent, which passage-way in width is equal to the distance apart at which the dents are set, so that a knot in the warp would readily pass the reed and yet the warp-threads be constantly engaged on either side, and thereby always held exactly in the same position with reference to each other. The relative relation of the distance between the dents and the curve of the dents and the thickness of the warp-thread is such that the thread will be engaged at three points, as before stated—namely, at each edge of the reed and at points on a line lengthwise in the center of the reed.

In Fig. 3 is shown an arrangement of reeds which accomplish, in the same manner, the same results heretofore described. This reed (shown in Fig. 4) might be used when the number of threads to be used in the reed are few and somewhat far apart.

In Fig. 4 is shown a modified form of construction provided with alternate double-convex dent 10^a and double-concave dent 10^b, which will engage the threads of the warp, as before set forth; but I deem the construction shown in Fig. 3 preferable.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a reed, of dents having concave surfaces on the one side and convex surfaces on the other, the convex surface being presented to the concave surface of the next adjacent dent, substantially as set forth.

2. In a reed for a weaving-loom, the combination of dents having rounded edges and a convex surface on the one side and a concave surface on the other, substantially as set forth.

3. The combination, in a reed, of dents curved transversely, with the front and rear edges of the dent adapted to bear against one side of a warp-thread, and the middle portion of the opposite side of the dent adapted to bear against the adjacent warp-thread, substantially as set forth.

4. The combination, in a reed, of a dent having a concave surface and a dent having a convex surface presented to the concave surface of the other dent, whereby a thread passing between the dents is engaged at two points on one side and at one point intermediate the two points on the opposite side, substantially as set forth.

In witness whereof I have affixed my signature in presence of two witnesses.

CLARENCE S. STROWBRIDGE.

Witnesses:
FRED R. ALVORD,
G. E. SPERRY.