(No Model.)

# C. F. WICKWIRE.

## LOOM FOR WEAVING WIRE.

No. 282,430. Patented July 31, 1883.

Fig. 1.

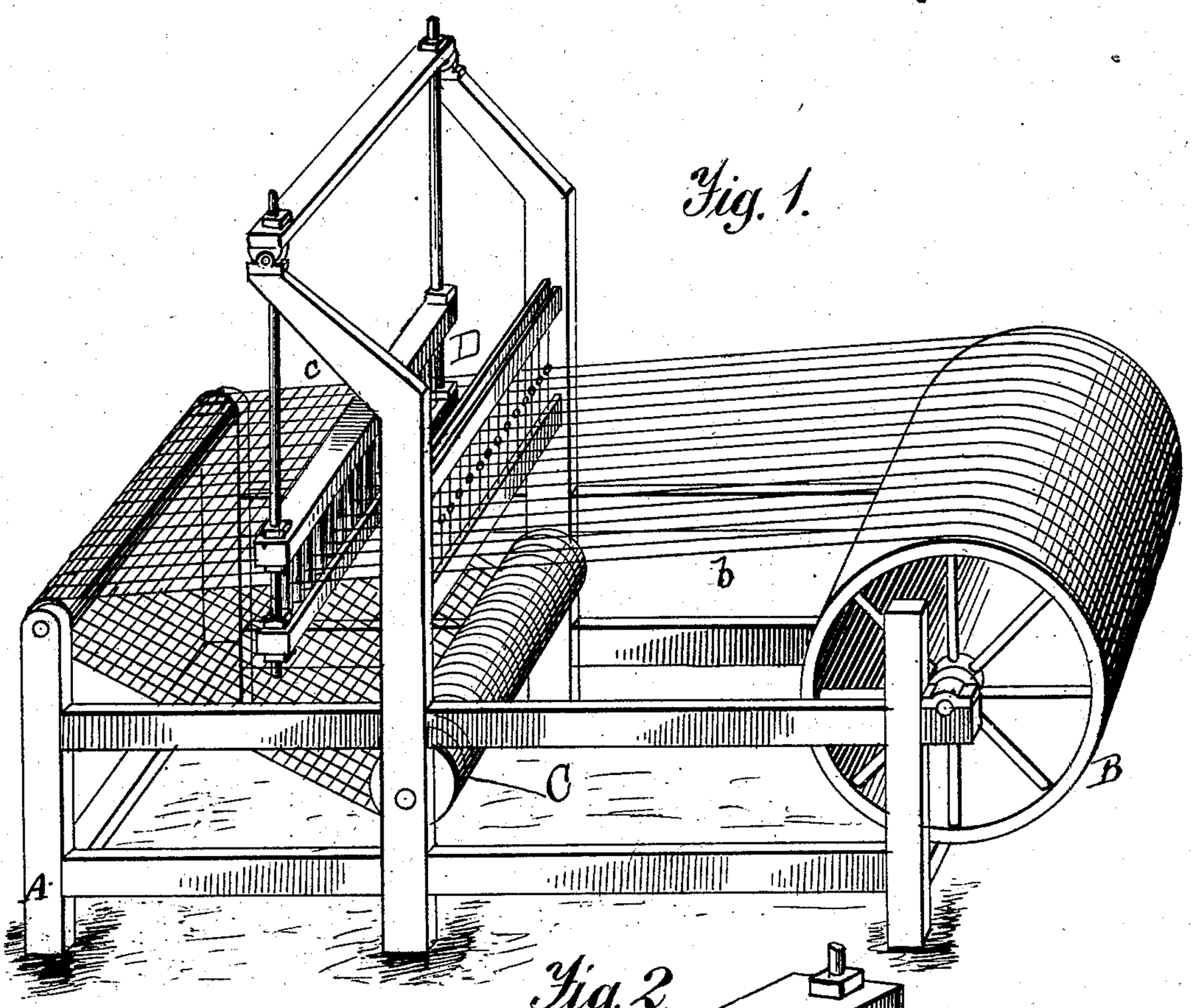



Fig. 2.

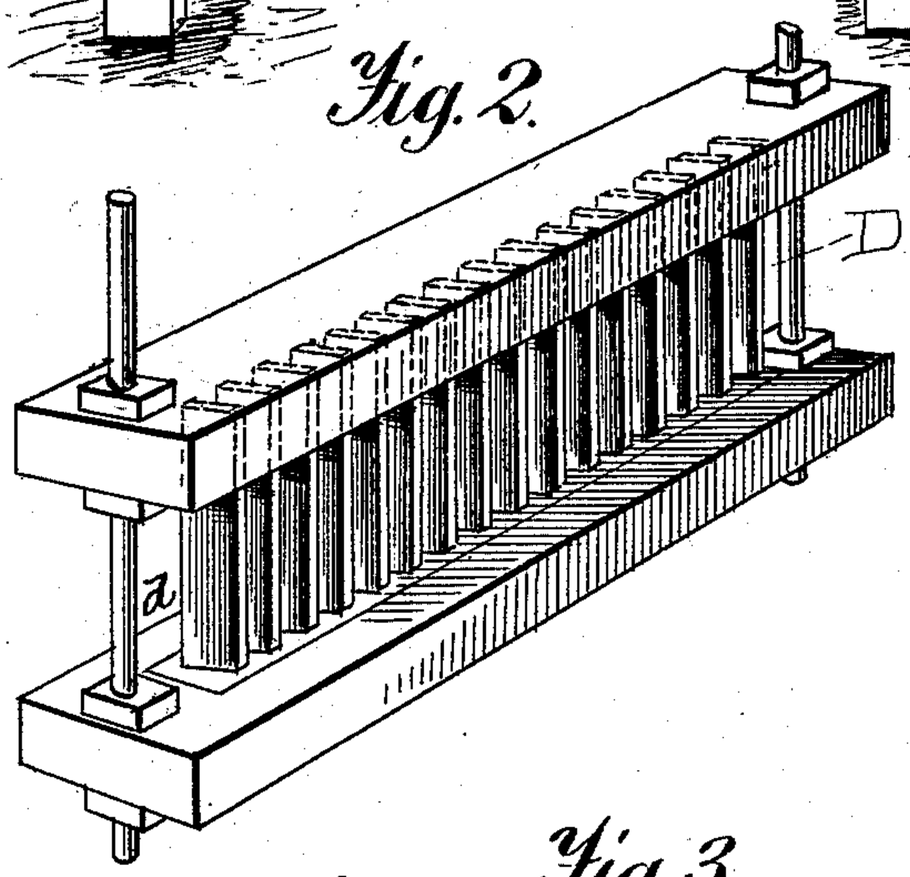
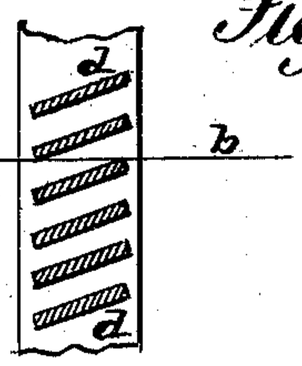



Fig. 3.




Witnesses.
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# UNITED STATES PATENT OFFICE.

CHESTER F. WICKWIRE, OF CORTLAND, NEW YORK.

## LOOM FOR WEAVING WIRE.

SPECIFICATION forming part of Letters Patent No. 282,430, dated July 31, 1883.

Application filed March 7, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, CHESTER F. WICKWIRE, a citizen of the United States of America, residing at Cortland, in the county of Cortland and State of New York, have invented certain new and useful Improvements in Looms for Weaving Wire; and I do declare the following to be a full, clear, and exact description of the invention, such as 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 letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to looms for weaving wire; and the novelty resides in the peculiar construction and arrangement of parts, hereinafter fully set forth in this specification, and pointed out in the claims.

In looms for weaving wire-cloth the dents in the reed have been arranged so close together, in order to prevent lateral play of the warp-wires and consequent irregularity in the form and size of the mesh in the cloth, due to the changes in the position of the wires as they unwind from the warp-drum, that knots, kinks, or irregularities in the wires have caught between the dents, and mischief and delay ensued.

The object of this invention is to give to each warp-wire a perfect and arbitrary bearing upon the dents of the reed, and thus not only insure that the warps shall retain their relative equal distance from each other, but at the same time provide a means whereby the knots, kinks, and the like will be permitted to pass freely through the reed, the dents of which will tend to straighten out such kinks, &c., without obstructing the feed of the warp or the movement of the reed.

The invention consists, essentially, in a reed secured in the lay of the loom, in any suitable manner, at right angles to the direction of the warp and parallel with the warp-drum and cloth-beam. The reed is formed with dents made of flat strips or pieces of metal, which are arranged diagonally in the reed-bars, with the front edge of one dent approximately opposite the rear edge of the adjacent dent upon the plane of the warp, in such manner that a warp-wire will have a bearing upon both these edges, and that the front edge of one dent will bear against one side of one warp-wire and its rear edge against the opposite side of the next adjacent warp-wire.

The devices for causing the vibration of the lay, forming no part of this invention, are not shown, it being understood that any approved and suitable means may be used.

The invention is fully illustrated in the accompanying drawings, in which Figure 1 is a perspective view of a loom with my improved reed in position; Fig. 2, an enlarged detail view of the reed and lower part of the lay displaced; and Fig. 3, a sectional detail view, showing the position of a warp-wire in passing between two dents.

Referring to the drawings, A represents the loom-frame; B, the warp-drum; *b*, the warp-wires, and C the cloth-roll.

D represents the reed, having dents *d* arranged obliquely or diagonally to the plane of the warp-feed in such a manner that the warp-wires *b* will at all times bear upon the opposite edges of adjacent dents thereof; and the weft is represented by *c*. The lay and reed are placed transversely in the loom, at right angles to the direction of the warp and parallel with the warp-drum B and cloth-beam C, and the dents are arranged obliquely, as shown, so as to nearly cover all the space in the reed between its ends. The lay is supported in any approved manner, and operated by proper means. By this construction a less number of dents are necessary, and all danger of clogging and breaking the warp is obviated, while the warp is held and fed steadily, avoiding all lateral play.

The invention being essentially confined to the reed, only such parts of the loom as will illustrate its relation and position are shown.

What I claim as new is—

1. A cloth-beam supported at right angles to the direction of the warp-threads, in combination with a lay and supports for the same, as described, whereby the said lay is held parallel with the cloth-beam, and a reed provided with oblique dents, as set forth, whereby a bearing is secured at the front of said reed for one side of a warp-thread, and a bearing at the rear of the reed for the opposite side of the warp-thread, as and for the purposes set forth.

2. A cloth-beam supported at right angles to the direction of the warp-threads, in combination with a lay and supports for the same, as set forth, whereby the same is held parallel with the cloth-beam, and a reed composed of flat metal strips set obliquely to said lay, as and for the purposes set forth.

3. The combination of a lay and supports for the same with a reed having dents composed of flat metal strips, which are set obliquely in said lay, with the front edge of one dent adapted to bear against one side of a warp and its rear edge adapted to bear against the opposite side of the adjacent warp, substantially as set forth.

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

CHESTER F. WICKWIRE.

Witnesses:
CYRUS D. SMITH,
WILLIAM POLLEY.