

(No Model.)

J. ZIMERMANN.

JACQUARD MECHANISM FOR LOOMS.

No. 368,903.

Patented Aug. 23, 1887.

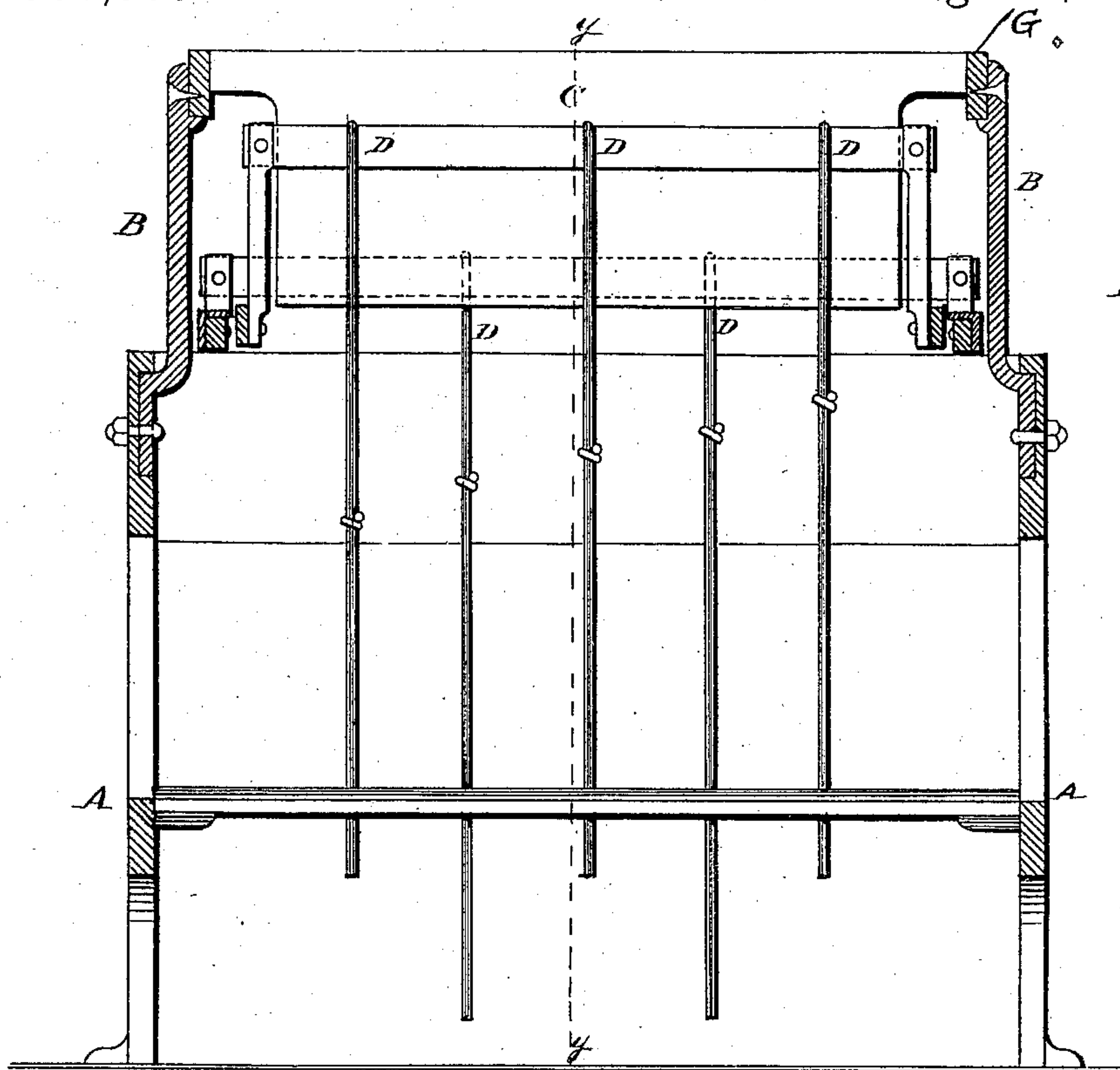


Fig. 1.

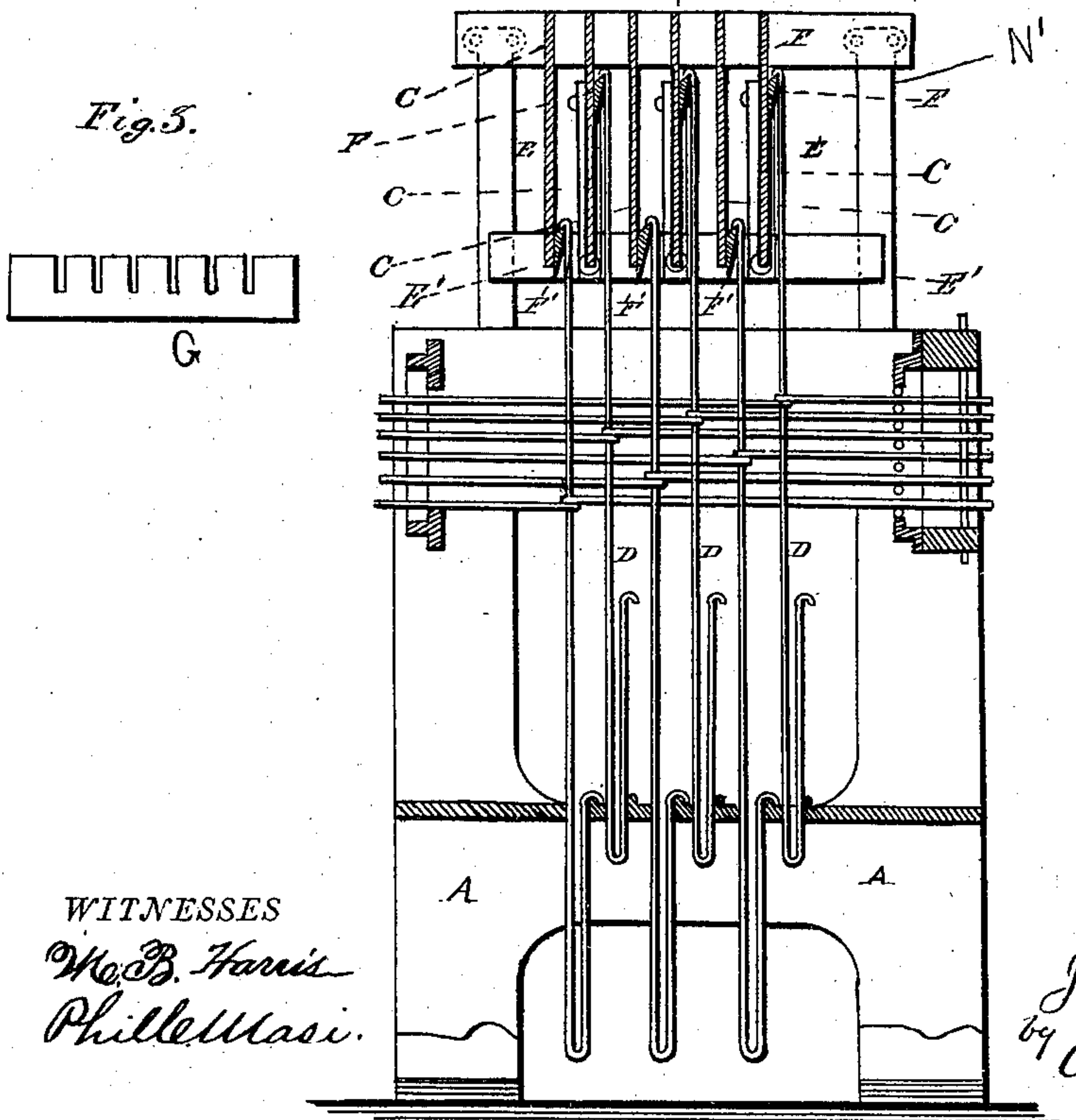


Fig. 2.

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# UNITED STATES PATENT OFFICE.

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## JACQUARD MECHANISM FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 368,903, dated August 23, 1887.

Application filed December 30, 1886. Serial No. 223,025. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN ZIMERMANN, a citizen of the United States, and a resident of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Jacquard Machines; 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 letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a vertical section of a part of a loom embodying my invention, taken on line *xx* of Fig. 2. Fig. 2 is a transverse vertical section on line *yy* of Fig. 1; and Fig. 3 is a detail view of one of the side pieces, in the notches of which the ends of the blades or partitions C rest.

This invention relates to Jacquard machines; and it consists in the construction and novel arrangement of devices, as hereinafter described, and pointed out in the claims.

In the accompanying drawings, the letter A designates the framing of the jacquard, which extends upward, as at B, the extension serving to support the blades C, which are stationary or fixed in position, but removable, and project downward vertically in such a manner as to separate and partition off the upper ends of the hooks D of one linear series from the upper end of another series of hooks, each of the series of hooks being in this way separated or partitioned off from the hooks of the adjacent series. The ends of the partitions rest in the notches of the side pieces, G.

The drawings are designed to illustrate a double-lift jacquard, for which this invention is especially intended, because of the greater liability of the hooks to become bent out of line, although it may be used to advantage in single-lift jacquards.

E indicates one of the griffs provided with the knives F, and E' is the other provided with the knives F'. In the drawings one of the

griffs is shown raised and the other depressed. The partition blades or plates are of sufficient vertical extent to reach just below the lowest position of the hook-heads and above their highest position, so that in the play of the griffs there is no liability of the hooks becoming bent or displaced because of interference or from improper contact with the knives of the griffs.

The object of this invention is not only preventive, but remedial. As the partition-plates serve as effective guides, the griffs may be made narrow, and when it becomes necessary from any cause to make changes or repairs among the great number of hooks or wires which are used in a jacquard, especially of the double-lift character, the operation is greatly facilitated, because the partition can be readily removed from the extension-frame B and taken out, leaving the narrow griffs and hooks fully exposed to view for inspection and manipulation.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. A jacquard-frame having the extension B provided with the vertical partition-blades separating the upper ends of one linear series of hooks from those of the adjacent series, in combination with the hooks and the griffs having the knives secured to opposite sides thereof, said knives extending and reciprocating between the partition-blades, substantially as specified.

2. The combination, with the frame having an extension, B, and reciprocating griffs and hooks, of the removable partition-blades connected to said extension and projecting vertically downward, separating the knives and linear series of hooks, substantially as specified.

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

JOHN ZIMERMANN.

Witnesses:

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