

J. S. Templeton,

Carpet Loom.

No. 107,979.

Patented Oct. 4, 1870.

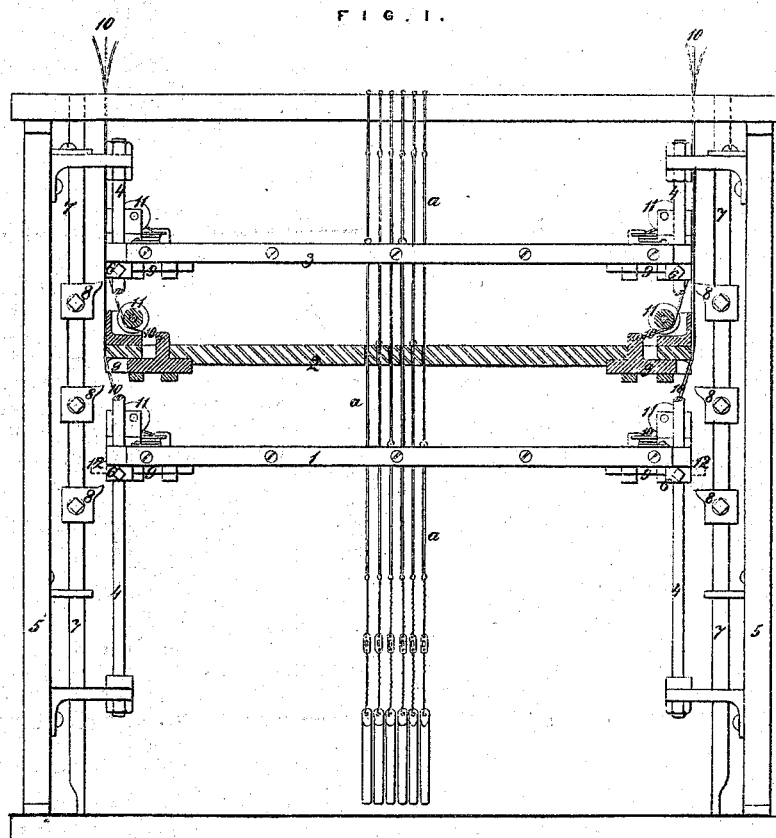
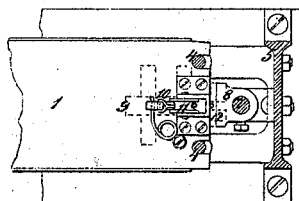


FIG. 2.



Witnesses
J. W. Adams
Robert Rose

J. S. Templeton
by *W. H. Boyce*
Att'y.

United States Patent Office.

JOHN STEWART TEMPLETON, OF GLASGOW, GREAT BRITAIN.

Letters Patent No. 107,979, dated October 4, 1870.

IMPROVEMENT IN MECHANISMS FOR OPERATING COMBER-BOARDS.

The Schedule referred to in these Letters Patent and making part of the same

I, JOHN STEWART TEMPLETON, of Glasgow, in the county of Lanark, Kingdom of Great Britain and Ireland, have invented certain Improvements in Carpets, of which the following is a specification.

Nature and Objects of the Invention.

My invention relates to the working of the comber-board or boards, in connection with the jacquard, as will be hereinafter more fully set forth.

The usual jacquard apparatus of the carpet-loom may, with suitable interpolated cards, be used for controlling the action of the colored warps on the under side, in addition to producing the usual figuring effect, and may, if wished, even form a pattern on the under side, or separate jacquard apparatus may be used for the under-side action.

In either case, the comber-board or hole-board will not be used in the ordinary way to raise the whole of the colored warps, for the passage underneath of each ground-shoot; at the same time a modified effect may be obtained by using the ordinary single comber-board, to raise the whole of the colored warps at intervals, so regulated that only every second or other more distant ground-shoot passes under them.

Heddles or healds, or their equivalent, may be used instead of the jacquard apparatus for controlling the under-side action, and for twilling and so binding in the colored warps that are thrown to the under side sufficiently to form a regular compact surface. For example: Such heddle action may be obtained by making the comber-board or hole-board in sections, and by working such sections in rotation, like ordinary heddles.

Description of the Accompanying Drawing.

Figure 1 is a front elevation, partly in section, showing the arrangement of the weaving apparatus.

Figure 2 is a sectional plan, to show better certain parts not fully seen in fig. 1.

Description of the Apparatus.

The harness-threads *a* (of which only a few are shown) are passed through holes in three comber or hole-boards, 1 2 3, but these boards are made to act

on separate sections of the threads, by knotting the threads at different heights, and so that, for example, a third of the whole may be acted on by board 1, a second third by board 2, and a third third by board 3. The boards 1 2 3 are guided by vertical rods 4, fixed by means of brackets to the side frames 5, and the boards rest on collars 6, fixed in position by pinching-screws.

For lifting the boards, there is a couple of vertical rods, 7, which is moved up and down, at proper periods, by any suitable cam motion, and which has catch-pieces 8 fixed on it, for acting on the several boards.

Each board has at each end a slide or bolt, 9, which is pressed inward by a spring, but which has attached to it a cord, 10, passing round a guide-pulley, 11, and thence upward to the jacquard apparatus above, (not shown in the drawing.)

At the time for lifting each board, the corresponding cords 10 are drawn up by the jacquard, and the bolts 9 are moved out, as indicated by dotted lines at 12, so that, on the rods 7 rising, that board is caught and lifted.

The parts of the jacquard-cards corresponding to the cords 10 are, of course, perforated to suit the order in which it is desired to have the separate boards 1 2 3 successively lifted.

It is obvious that instead of three comber-boards or sections any other convenient number may be used.

Claim.

The comber or hole-boards, made to act on separate sections of the threads, and guided by the vertical rods 4, in combination with a cam for lifting the rods 7, which elevate the boards with the clutch-pieces 8 and slide-bolt 9, and its spring, with the cord 10 passing around the guide-pulley 11, and operating in connection with the jacquard, substantially as described, for the purpose specified.

J. S. TEMPLETON.

Witnesses:

EDMUND HUNT,
CARL H. ZIESE.