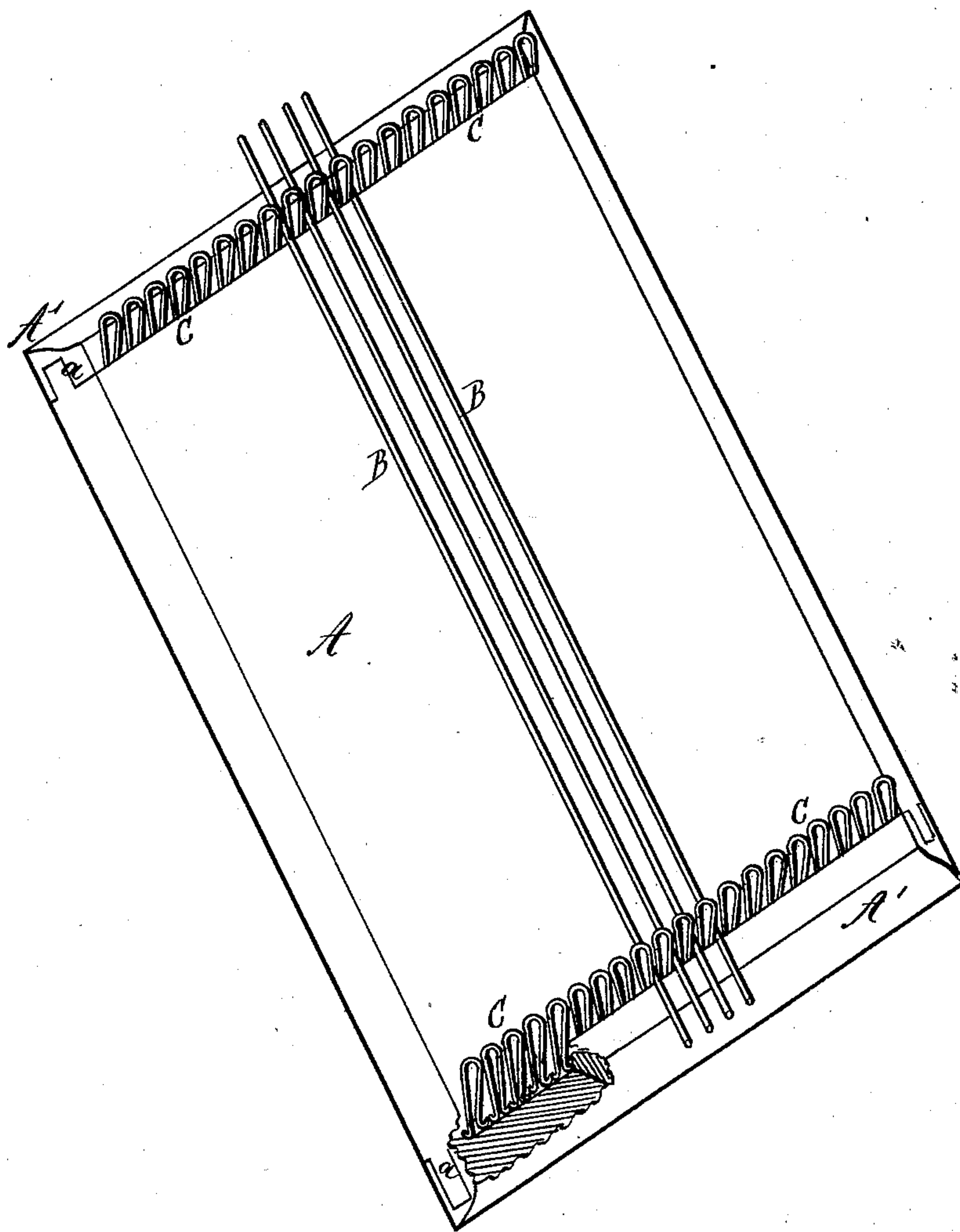


M. M. MACDONALD.
PLAITING-MACHINE.

No. 170,869.

Patented Dec. 7, 1875.



Witnesses

Henry Orth
Henri Guillaume

Inventor

Manille M Macdonald
by W H Doubleday atty

UNITED STATES PATENT OFFICE.

MANVILL M. MACDONALD, OF SYRACUSE, NEW YORK.

IMPROVEMENT IN PLAITING-MACHINES.

Specification forming part of Letters Patent No. **170,869**, dated December 7, 1875; application filed November 27, 1875.

To all whom it may concern:

Be it known that I, MANVILL M. MACDONALD, of Syracuse, in the county of Onondaga and State of New York, have invented certain new and useful Improvements in Side Plaiter; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

The invention relates to the construction of a device or machine for plaiting or fluting cloth or other fabrics, and is intended to produce a cheap, efficient, and durable article.

In the drawings, A A' is the bed-piece or bottom, of either wood or metal. On account of its cheapness, its light weight, its being a non-conductor of heat, and its capability of being easily held together by glue, I usually prefer to make this bed-piece of wood. Each end has a tongue, rib, or tenon, *a*, formed upon it, the end piece A' having corresponding grooves extending across their inner faces, which fit accurately these end ribs *a*. B B are the needles, or rods, or bars. For the purpose of holding the rods B in place I employ a series of wire loops, C, arranged across the bed-piece near each end. By preference, I make all of the loops, which are at either end of the bed-piece, from a single piece of wire, and propose to use any suitable wire-working machine to bend them into the proper shape.

Although I prefer brass wire into which temper has been rolled or drawn, yet I do not wish to be limited to such material, and, un-

der some circumstances, I may use thin narrow strips of brass or other metal; or I may use single loops placed a short distance apart.

The loops are placed against the shoulder above the tenon or rib *a*; the grooved end piece A' is then pressed firmly upon the rib and against the lower ends of the loop, in which position it is held by glue, or by nails, screws, or other equivalent.

I prefer to use glue or other cement for this purpose, as it can be made to flow freely about and between the lower ends of the loops, and thus assist in holding them properly in place.

The rods are firmly held in position by the friction of the loops C, and the size of the loops and their distance apart may be governed by the character of the work to be done, as will be readily understood without further explanation.

Any of the methods of manipulation usually employed upon similar fluting or plaiting devices may be adopted.

I do not claim, broadly, the employment of the wires, rods, or needles B, supported at their ends, for plaiting, as such devices have been heretofore employed for that purpose.

What I claim is—

The combination, with the bed-piece A, of the spring-loops C, for supporting the wires or rods B, substantially as set forth.

In testimony that I claim the foregoing as my own, I affix my signature in presence of two witnesses.

MANVILL M. MACDONALD.

Witnesses:

A. G. ALGER,
W. R. JOHNSON.