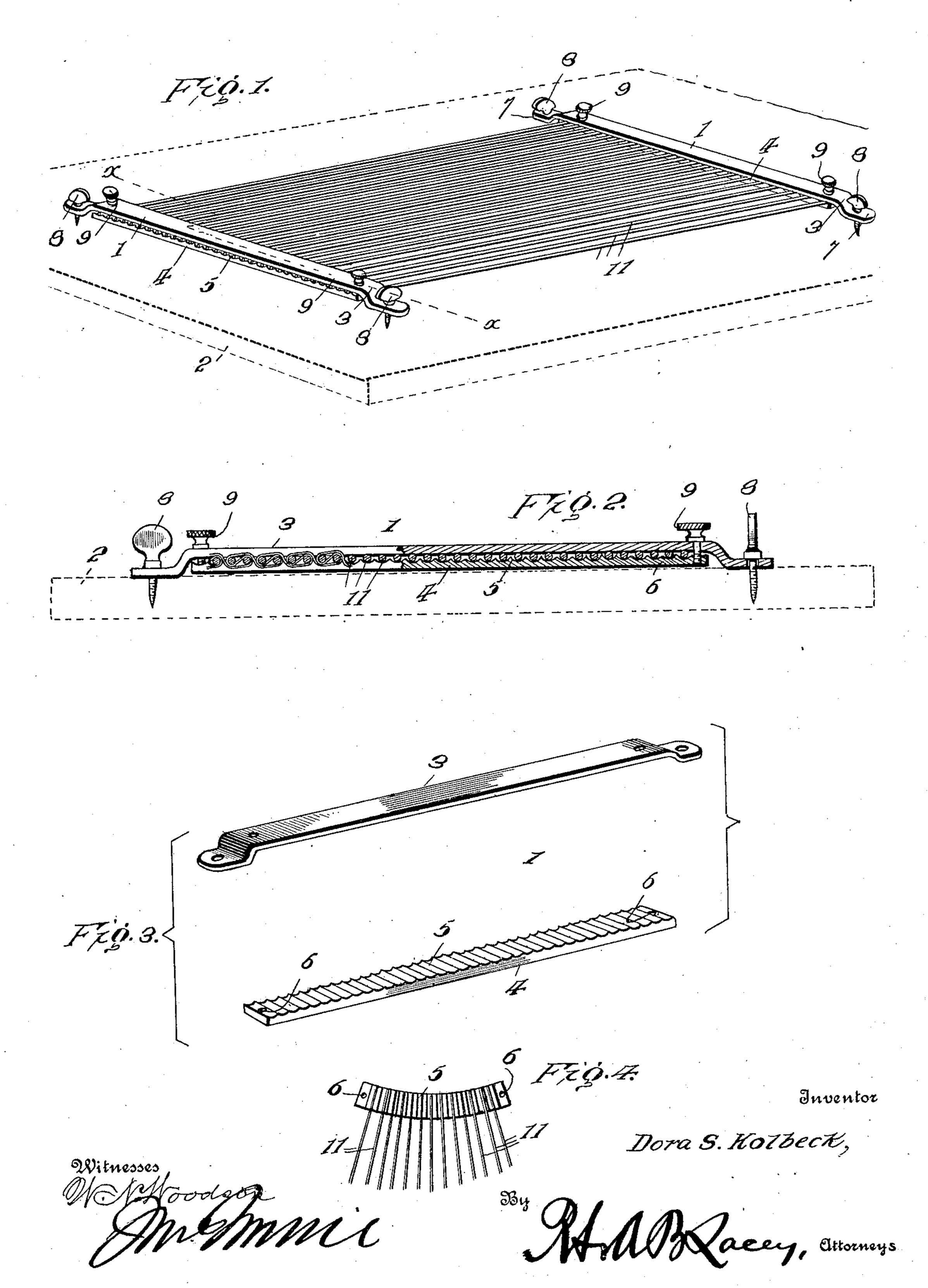
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No. 828,486.

D. S. KOLBECK. PLAITER.

APPLICATION FILED NOV. 15, 1905.



UNITED STATES PATENT OFFICE.

DORA S. KOLBECK, OF GRAND ISLAND, NEBRASKA.

PLAITER.

No. 828,486.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Dora Sophia Kol-BECK, a citizen of the United States, residing at Grand Island, in the county of Hall and 5 State of Nebraska, have invented certain new and useful Improvements in Plaiters, of which the following is a specification.

My invention contemplates an improved construction of plaiting apparatus designed

10 for use in plaiting or fluting cloth.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings, in which—

Figure 1 is a perspective view of my improved plaiter. Fig. 2 is a sectional view on the line X X of Fig. 1. Fig. 3 is a detail per-20 spective view of the clamping members detached. Fig. 4 is a detail plan view illustrating the preferred shape of the clamping-plate for use with gored materials.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same

reference characters.

My improved plaiter comprises two spacing and clamping members, designated 1 and 30 designed to be secured at proper distances upon a board, table, or other support 2. Each of the clamps 1 comprises two superposed members 3 and 4, the lower one of which is provided along its upper surface 35 with a series of parallel grooves or recesses 5 and near each end with an aperture 6. The upper member 3 of each clamp is constituted by a plate which is designed to extend over the upper surface of the lower 40 member 4 and is provided with downwardlybent ends 7, extending beyond the ends of the lower member 4 and accommodating binding-screws 8, as shown, designed to secure the clamp to the board or other support 2. 45 The upper member 3 of each clamp is further provided with two or more set-screws 9, which work therethrough into engagement with the apertures 6 in the lower member 4,

so as to bind the two members together with 5° more or less tension. Extending between the two clamps 1, with their ends received in the recesses 5 of the lower members 4, is a plurality of plaitingneedles 10, around which the cloth 11 is de-55 signed to be folded, so that it will be held | thereby in the proper folds for the subsequent action of the pressing-iron.

In the practical operation of my improved plaiting apparatus the two clamps are secured on the board or other support 2 at the 60 proper distance apart, according to the approximate width of the cloth to be plaited, the two members of each clamp being loosely held together for the reception between them of the needles. To plait the cloth 11, the op- 65 erator should first place one of the needles $\bar{1}0$ over the cloth and lay it in the second recess or groove 5 of each clamp. A second needle is then placed under the cloth and is brought over to the first recess or groove of each clamp 70 which was before omitted. This operation is continued until the goods are fastened about half-way of the plaiter, and the thumbscrews or set-screws 9 are then tightened, so that the needles are prevented from moving 75 out of their places. The degree to which the screws 9 are to be tightened manifestly depends upon the thickness of the goods. After the plaiter has been folded a damp cloth is placed over the same and a hot iron is used 80 until the cloth becomes dry and the suitable plaits or creases are formed, whereupon the needles are taken out, with the exception of the last two, which are left in the last plait, and both of them, still with the cloth folded 85 about them, are then brought to the front part of the plaiter, and the operation is continued in the same way with the remaining portion of the cloth. In the same manner gored material may be plaited by properly 90 spacing the needles and by the proper folding of the cloth around the same.

It will be seen that my improved plaiter comprises two clamp members each of which consists of a lower recessed plate for the re- 95 ception of the needles and a superposed plate having its ends extending beyond the lower plate and bent downwardly for engagement with the table or other support and two sets of screws, one set being located in the said 10c downwardly-bent ends of the upper plate, so as to secure said plate firmly to the table or support in the proper location, and the other set of which works through the upper plate into the lower plate, so that the two plates 105 may be pressed together and suitably adjusted upon the needles according to the thickness of the cloth that is being operated upon.

The parts of the device may be easily man- 110

ufactured and readily assembled, and the clamps may be readily secured to the support at the proper distances apart for the accommodation of material of different widths.

It is to be understood that I use needles of different lengths, according to the width of the material to be operated upon; but it is manifest that the same length needles may be conveniently employed for use with ma-10 terials of different widths by merely positioning the clamping members at the proper distance apart and allowing the needles, if necessary, to project outwardly beyond either or both of the clamping devices. By pro-15 viding three lengths of needles a wide range of work is possible.

As indicated in Fig. 4, my invention contemplates the employment of curved clamping members for use with gored material, the 20 needles being arranged in somewhat radial

positions, as shown.

Having thus described the invention, what is claimed as new is-

A plaiting apparatus comprising a pair of plaiting-clamps, each clamp consisting of a 25 lower grooved plate provided with apertures and an upper plate resting thereon and provided with downwardly-extending ends projecting beyond the lower plate, bindingscrews in the projected ends of the upper 3° plate and designed to secure said plate to a support, binding-screws working through said upper plate and into the apertures in the lower plate, and a plurality of needles adapted to be held at their ends between said 35 plates in the grooves of the lower plate.

In testimony whereof I affix my signature

in presence of two witnesses.

DORA S. KOLBECK. [L. s.]

Witnesses: DON BOEHM, J. H. Mullin.