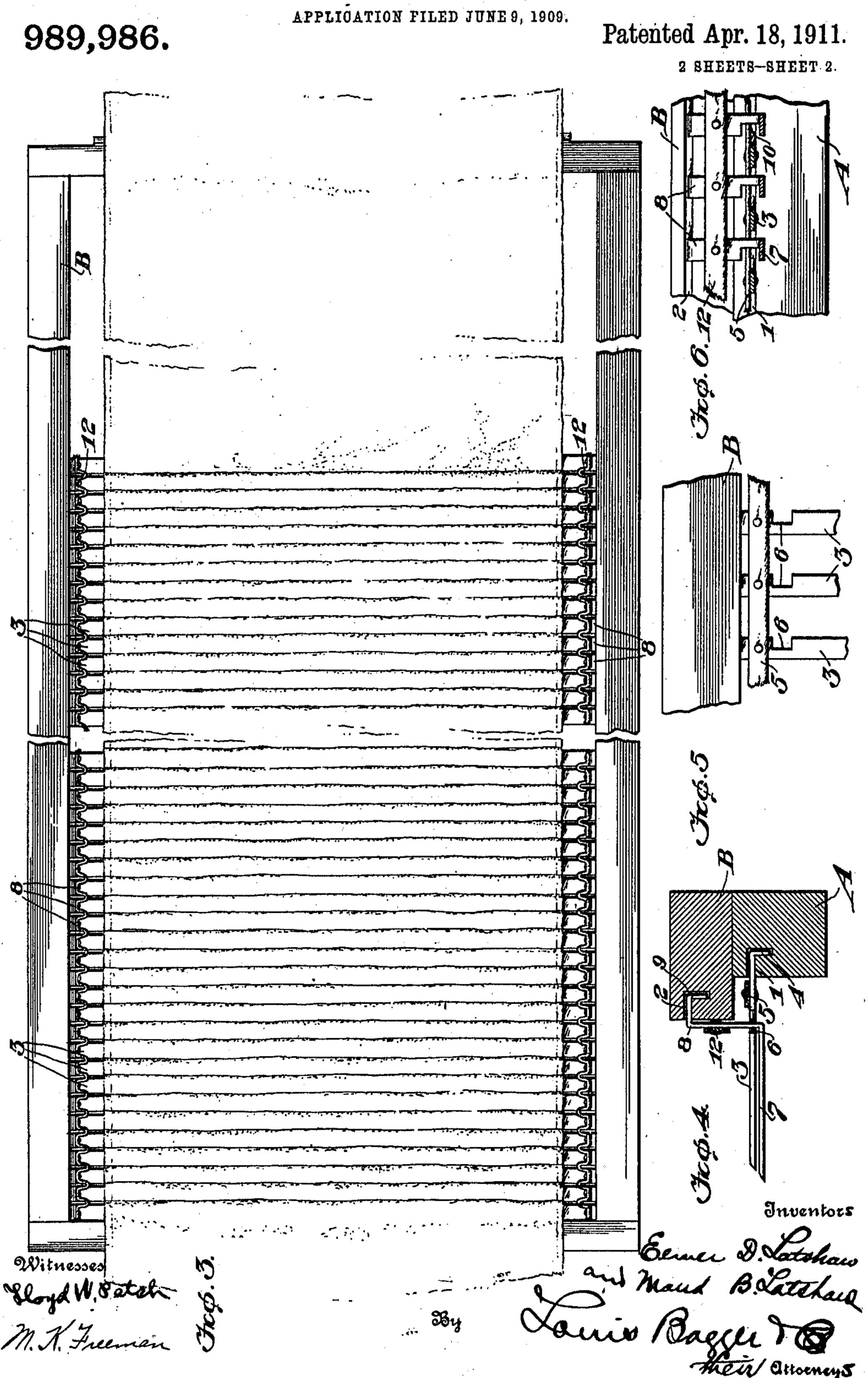
E. D. & M. B. LATSHAW. PLAITING MACHINE.

APPLICATION FILED JUNE 9, 1909. 989,986. Patented Apr. 18, 1911. 2 SHEETS-SHEET 1.

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PLAITING MACHINE.



UNITED STATES PATENT OFFICE.

ELMER D. LATSHAW, AND MAUD BUCKWALTER LATSHAW, OF PHILADELPHIA, PENNSYLVANIA.

PLAITING-MACHINE.

989,986.

Specification of Letters Patent.

Patented Apr. 18, 1911.

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To all whom it may concern:

Be it known that we, Elmer D. Latshaw and Maud Buckwalter Latshaw, citizens of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Plaiting-Machines, of which the following is a specification.

Our invention relates to an improvement in plaiting machines, and the object is to provide means whereby a number of plaits may be formed upon the movement of the

plaiting bars.

The invention consists of certain novel features of construction and combinations of parts which will be hereinafter described

and pointed out in the claims.

In the accompanying drawings—Figure 1 is a top plan view; Fig. 2 is a longitudinal sectional view; Fig. 3 is a top plan with the fabric in place and forced between the plaiting bars, and Figs. 4, 5 and 6 are views of the plaiting bars.

A, represents the lower frame, and B, the upper frame, which is mounted upon the lower frame and hinged thereto at one end. The upper frame extends inwardly a short distance beyond the lower frame. Extending longitudinally of the upper and lower frames and along the inner surfaces of the frames are grooves 1 and 2, which are prac-

tically in the shape of a right angle.

Plaiting bars 3 are provided with hooked 35 ends 4, which are received in the grooves 1 of the lower frame A. These bars are arranged at predetermined intervals and are connected together by a tape 5 at both ends, the tape keeping the plaits in position or the required distance apart. Notches 6, 6 are formed on the bars between the tapes. Bars 7 which are mounted on the upper frame are of less length than the bars of the lower frame, and these bars are provided with upright or vertical arms 8, which are provided with hooked ends 9. The hooked ends are received in the grooves 2 of the upper frame B. Notches 10 are formed in the vertical arms 8 and are adapted to enter 50 the notches 6 of the bars 3 during the plaiting operation. The bars 7 of the upper frame extend below the bars 3 of the lower frame, and the notches of the bars of the upper and lower frames are in alinement, 55 and the upper bars will enter the notches of

the lower bars, and the lower portion of the upper bars will pass beneath the lower bars

in the plaiting operation.

The free ends of the frames are connected together by a clasp 11 for holding the frames 30 together during the plaiting operation. When it is desired to form plaits in a fabric the upper frame is raised and the fabric is spread across the lower bars which are now spaced apart at certain intervals throughout 65 the frame. After the fabric has been placed upon the lower bars the upper frame is lowered and fastened to the lower frame by the clasps 11. The bars of the upper frame are spaced apart similar to the bars of the lower 70 frame, and when the upper frame is connected to the lower frame the bars of the upper frame will force the fabric between the bars of the lower frame. After the two frames have been connected together the 75 bars of both frames are pushed or forced toward one end of the frames forming the plaiting. The tape which connects the bars together being of a flexible material permits of the bars of the two frames being forced 80 together and the bars of the upper frame will pass beneath the bars of the lower frame as the notches of the two frames register, or as the upper bars enter the notches of the lower frame. The upper bars passing 85 beneath the lower bars force the fabric between the two bars forming the plaits, and this is all accomplished by all the bars being forced toward one end of the frame whereby all of the bars are brought together.

More or less slight changes might be made in the form and arrangement of the several parts described without departing from the spirit and scope of our invention, and hence we do not wish to be limited to the exact 95 construction herein set forth, but:—

Having fully described our invention, what we claim as new and desire to secure

by Letters Patent is:

1. In a plaiting machine, the combination with two frames, of bars mounted on said frames, said bars being movable toward one end of the frames for forming the plaits, the bars of one frame having portions extending at substantially right angles to and 105 adapted to interengage with the bars of the other frame, and flexible means connecting the bars of said frames, the bars of one frame being disposed in a plane below those of the other.

2. In a plaiting machine, the combination with upper and lower frames, of bars mounted on the frames and movable in different planes and movable one beneath the other, tapes connecting the bars, and the bars of the upper frame extending below the bars of the lower frame and adapted to be received beneath the bars of the lower frame when the bars are moved to one end of the frames, the bars of the upper frame having vertical portions for coöperation with the horizontal portions of the lower bars for forming the plaits.

3. In a plaiting machine, the combination with an upper and a lower frame, of bars mounted on the frames and having notches formed therein, the bars of the upper frame extending below the bars of the lower frame and having vertical portions in which its notches are formed, and the notches of the bars of the lower frame and of the upper frame in alinement whereby the bars of the

upper frame will pass beneath the bars of the lower frame when the bars are moved for forming the plaits.

4. In a plaiting machine, the combination with upper and lower frames having grooves formed therein, of bars mounted in the grooves of the frames, tapes connecting the bars, and the bars of the upper frame adapted to pass beneath the bars of the lower frame and having vertical portions with notches for coöperation with notches in the bars of the lower frame for forming the plaits upon movement of the bars to one end 35 of the frames.

In testimony whereof we affix our signatures, in the presence of two witnesses.

ELMER D. LATSHAW.
MAUD BUCKWALTER LATSHAW.

Witnesses:
H. L. Shomo,
Eva F. Shomo.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."