W. H. PALMER, Jr.

Machine for Tentering Cloth.

No. 164,587. Patented June 15, 1875.

Fig. 1.

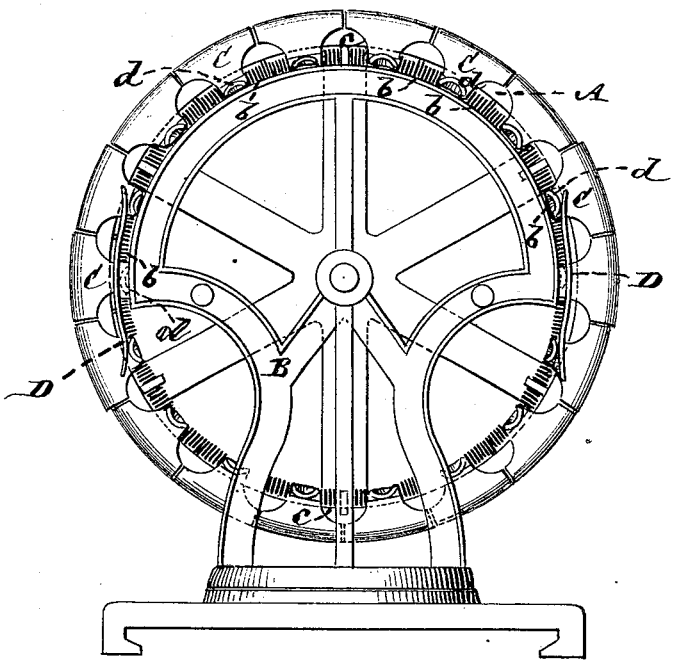


Fig. 2.

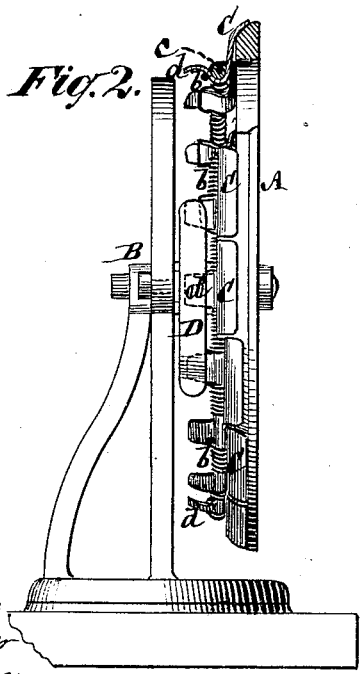
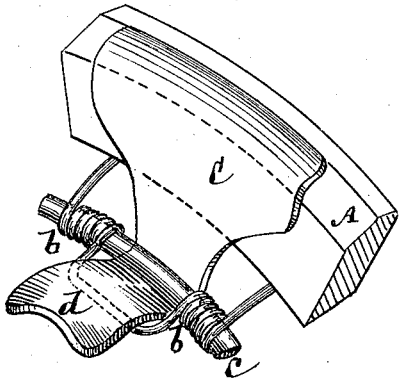


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM H. PALMER, JR., OF MIDDLETOWN, CONNECTICUT, ASSIGNOR TO HERBERT F. PALMER, OF NEW YORK, N. Y.

IMPROVEMENT IN MACHINES FOR TENTERING CLOTH.

Specification forming part of Letters Patent No. **164,587**, dated June 15, 1875; application filed April 3, 1875.

CASE B.

To all whom it may concern:

Be it known that I, WILLIAM H. PALMER, Jr., of Middletown, in the county of Middlesex and State of Connecticut, have invented a new and useful Improvement in Apparatus for Tentering and Straightening Fabrics; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to apparatus for tentering and straightening cloth and other fabrics, in which endless or revolving selvage feeding and carrying devices are used.

The invention consists in a novel arrangement of spring jaws or clips with a selvage-carrying wheel, the axis of which is parallel with the fabric, said jaws or clips being attached to and made to revolve in common with the wheel, and constituting, in concert with the rim of the carrying wheel, a series of clamps, which open and close for reception and hold of the selvage of the fabric, and for liberation of the same after the tentering and straightening has been effected. By this arrangement of the spring-jaws and carrying-wheel the selvage is introduced over the perimeter of the wheel, and between the latter and its spring-jaws, thereby providing for a prolonged travel of the selvages of the fabric between the clamps, and for a more gradual and regular stretching of the same than is attainable by disks the axes of which are perpendicular to the fabric, and which have jaws on their upper faces.

In the drawing, Figure 1 represents a side elevation, as seen from the exterior, of a revolving selvage carrying and feeding device constructed in accordance with the invention; Fig. 2, an edge view of the same; and Fig. 3, a view, in perspective, of one of the spring jaws or clips, as applied to the revolving carrying-wheel, shown only in part.

It may be here stated, in advance of more minutely describing the invention, that, although here only a single selvage carrying and feeding device is shown, the same, in practice, is duplicated for operation on both or opposite sides of the machine, and that, like other endless selvage carriers and feeders, the improved carrier and feeder here shown is made capable of adjustment on its stand or base, for varying the diverging relation of the two selvage carriers and feeders, and their distance apart, as required.

A is the revolving selvage-carrying wheel, and B the upright in which it rotates. The axis of this wheel is horizontal or parallel with the fabric. Applied to the off or outer side of this carrying-wheel, for rotation along with it, are a series of spring jaws or clips, C, arranged to overlap the rim of the carrying-wheel for a portion, at least, of its width, and serving to hold between them and the rim of the carrying-wheel the selvage of the fabric while the latter is being tentered and straightened by its feed or motion, in common with the carriers on opposite sides of the machine. These clamping-jaws C remain closed during the upper portion of their travel, but open at any convenient points on approaching and leaving their upper course of travel to receive the selvage of the fabric in between them and the carrying-wheel, and to liberate said selvage after the tentering and straightening has been effected, the rim of the carrying-wheel forming the one jaw of the clamps. A convenient construction and combination of devices for such purpose, and for securing a proper action to the clamping jaws or clips, is shown in the drawing. Thus the jaws C have a radial relation around the outside of the carrying-wheel A, and are connected by springs *b* with a ring or annular rod, *c*, as a center of motion when opening and closing, and to give said jaws or clips an elastic action. Furthermore, the back or outer ends of the jaws or clips C are constructed with ears *d*, which, as said jaws are rotated in common with the carrying-wheel, pass within or against fixed cams D D on opposite sides of the axis of the carrying-wheel, to automatically operate or open the clamps against the closing action of the springs *b* at the necessary points in the travel of the

clamping jaws or clips C, for reception and liberation of the selvage, as hereinbefore specified.

I claim—

The combination, with a selvage-carrying wheel, having its axis parallel with the fabric, of the series of radially-arranged spring-jaws attached around the rim of the wheel, and each jaw constructed to clamp over the peripheral portion of the wheel, as and for the purpose described.

W. H. PALMER JR.

Witnesses:
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