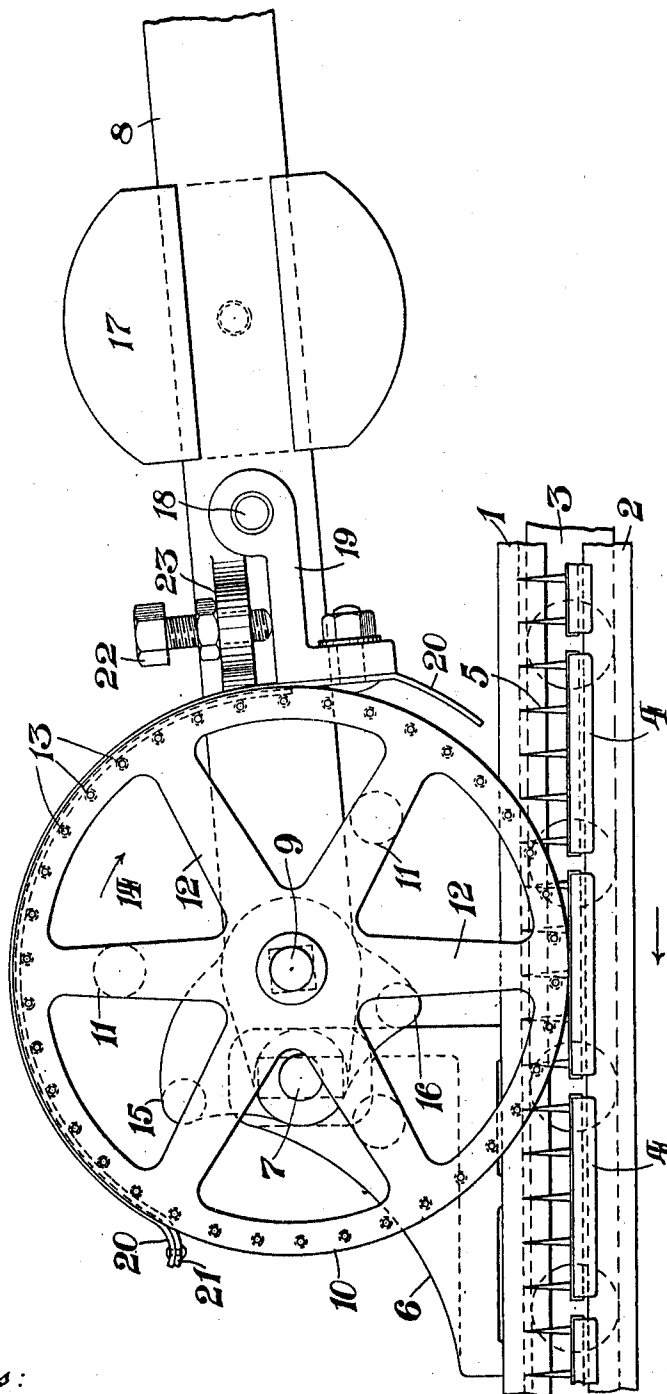


M. DAY & A. F. NOTT.
 TENTERING MACHINE FOR DRYING AND STRETCHING WOVEN FABRICS.
 APPLICATION FILED APR. 20, 1911.

1,003,712.

Patented Sept. 19, 1911.



Witnesses:

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UNITED STATES PATENT OFFICE.

MARK DAY AND ARTHUR FRANCIS NOTT, OF DEWSBURY, ENGLAND.

TENTERING-MACHINE FOR DRYING AND STRETCHING WOVEN FABRICS.

1,003,712.

Specification of Letters Patent. Patented Sept. 19, 1911.

Application filed April 20, 1911. Serial No. 622,367.

To all whom it may concern:

Be it known that we, MARK DAY and ARTHUR FRANCIS NOTT, residing at Dewsbury, in the county of York, England, have invented certain new and useful Improvements in Tentering-Machines for Drying and Stretching Woven Fabrics; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to tentering machines for drying and stretching woven fabrics, of the type in which pin chains are employed, and the selvage of the cloth is pressed on to the pins of the chain by pegs, or rollers or sleeves on pegs, carried by a double rotary disk or wheel, the rotation of the disk being effected by the pull of the traveling chain, and each pin piercing the cloth at a point between two portions of the cloth which are at the moment engaged by pegs. It is found in practice that the double disk, owing to its own weight and that of the circle of pegs it carries, accumulates impetus, or in other words acts like a flywheel. The result of this is that where the pitch of the pins is irregular, as may occur for instance between the last pin of one gill or section of the chain and the first pin of the next gill, the pegs on the disk strike the said pins, which are liable to be bent or broken thereby. Such breakage is also liable to occur every time the chain stops unless the disk be first lifted clear. It has been proposed to mount the pegs in slotted bearings and to provide springs to hold the said pegs to their work, with a view of obviating the above difficulty; but such arrangements we consider cumbersome and ineffective.

The object of the present invention is to provide means for checking the tendency of the wheel to overrun the pins, and to render the rotary movement of the disk dependent upon the positive drive which it receives from the chain.

Referring to the drawing, the figure shows a portion of a tentering machine illustrating, in elevation, a form of my invention.

In the accompanying drawing, the reference numeral 1 indicates a portion of the side frame of the machine, 2 the fixed track upon which the pin chain runs, 3 the chain proper, which usually travels around

sprocket wheels at each end of the machine, 4 lugs projecting from the links of the chain, on each of which lugs is secured one gill or section of pins 5. All the parts are duplicated at the other side of the machine, and each selvage of the cloth entering the machine is placed upon and drawn forward by such pins 5.

On the framework 1 and near the feeding end of the machine is a bracket 6, to which is pivoted at 7 a lever arm 8 terminating in a handle (not shown). On a stud 9 projecting from the lever 8 two disks are mounted in such manner as to rotate freely on the said stud. The disk nearer to the center line of the machine is here numbered 10, the other disk being similar. The two disks are connected or braced together by suitable crossbars or stays indicated in dotted lines at 11, and the said disks may either be entire or have approximately triangular pieces cut out as shown, leaving radial spokes 12. All around the disks are a number of pegs 13, which may be journaled in the disks so as to rotate freely, but are preferably fixed, and covered by small tubes or sleeves which rotate freely on the said pegs. As the cloth is drawn in by the moving chain, the pins 5 engaging the pegs 13 cause the disks to rotate in the direction of the arrow 14, and at the same time such pegs roll lower down the pins 5 and thereby press the cloth down on to the pins, thus giving the pins a secure hold upon the cloth. By lifting the lever 8 the disks and pegs can be lifted clear of the cloth and chain; stops 15 and 16 engaging the bracket 6 limit the extent of movement of this lever. A weight 17 holds the pegs 13 down to their work.

The parts just described are all well known.

According to our invention, we provide on the lever arm 8 a stud 18 on which is pivoted a bracket 19, to which is attached a curved or bent plate or band of metal 20, which may if desired be of spring metal, but is not essentially so. This plate on its lower or concave surface is provided with a tread, lining or strip 21 of leather or other durable and slightly resilient material. The plate and lining may either be of such width and in such a position as to engage one or both disks, or may enter between the disks and engage the pegs 13, or the sleeves on the said pegs. Its pressure

can be adjusted by means of a set screw 22
working through a lug 23 formed on the
lever 8. By this means any tendency to
independent rotation on the part of the
5 disks can be checked, and the aforesaid ob-
ject of our invention accomplished.

We claim as our invention:—

10 In a tentering machine for drying and
stretching woven fabrics, having a travel-
ing pin chain, and a disk adapted to be ro-
tated by the said pin chain, the combination

with such disk of a curved checking plate,
and means for adjusting the pressure of
such checking plate, for purposes described.

In testimony whereof we affix our signa- 15
tures, in presence of two witnesses.

MARK DAY.

ARTHUR FRANCIS NOTT.

Witnesses:

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