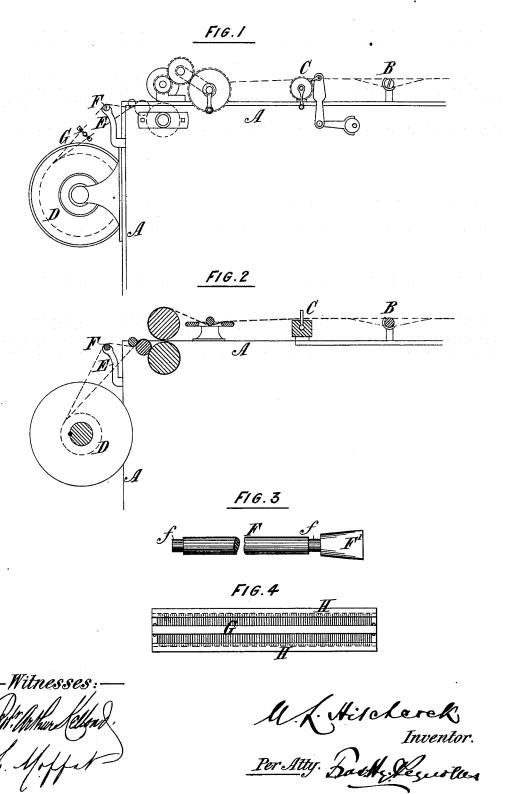
M. L. HITCHCOCK. Slasher.

No. 201,014.

Patented March 5, 1878.



UNITED STATES PATENT OFFICE.

MOSES LORENZO HITCHCOCK, OF CORNWALL, ONTARIO, CANADA, ASSIGNOR OF ONE-HALF HIS RIGHT TO JOHN BERGIN, OF SAME PLACE.

IMPROVEMENT IN SLASHERS.

Specification forming part of Letters Patent No. 201,014, dated March 5, 1878; application filed January 4, 1878.

To all whom it may concern:

Be it known that I, Moses Lorenzo Hitch-cock, of the town of Cornwall, in the county of Stormont and Province of Ontario, Canada, have invented certain new and useful Improvements in Apparatus for the Manufacture of Cotton Warp; and I do hereby declare that the following is a full, clear, and

exact description of the same.

My invention, which has for its object to produce a more even and perfect "lease" than is done at present, and to lessen the chances of the warp breaking, so as to give a more even cloth, and at the same time economize time in weaving, has reference to new attachments to the "slashers," or apparatus for sizing the yarn, and may be briefly described as consisting of the combination, with the slasher, of a dividing-roll, &c., and also in an improved lease-comb; but for fuller comprehension of the same, reference must be had to the annexed drawings, in which—

annexed drawings, in which—
Figure 1 is a part side view of a slasher embodying my invention, and Fig. 2 is a part sectional elevation or diagram of the same. Fig. 3 is a detail of the dividing-roll. Fig. 4

is a detail of the combs.

*Similar letters of reference indicate like parts. A is the frame of the slasher, B being either of the middle splitting-rods, C the "raddle," and D the warp-beam, on which the warp is wound, all these being of any approved construction, similar to those usually forming these parts of slashers, and any number and combination of rollers being used to give the warp the proper tension; but as these, with the parts just mentioned and the motive parts, form no portion of my invention, I will make no further specific allusion to them.

To the frame A are bolted, at any convenient points, brackets E, to suit size of slasher, at the ends of which are formed bearings for the journals f of the dividing-roller F, these journals being preferably arranged one at one end of the roller, and the other immediately be-

hind the wedge-shaped end F'.

G is the comb, in this instance with teeth

on both sides, H H being grooved cases fitting on these teeth.

I will now proceed to describe the operation of my invention. By bringing the middle splitting rod B down to the raddle C, an open space will be left in front of this last, between the two shades. Into this space should be inserted a double cord or a string of the required length, which is pulled forward till it reaches the ends of the brackets, when the wedge-shaped end F' of the roll F is inserted in the string and passed through till the rod rests in the brackets E. The warp is thus divided up into two parts, (one going direct to the warp-beam, and the other previously passing over the dividing-roll,) and caused to wind on the warp-beam in two equal separate shades.

When the warp-beam is full and ready to be removed from the machine, preparatory to going in harness, I insert the comb G in the V-shaped space between the two shades of warp under the roll, so that each shade of warp is held between the comb-teeth in uniform order. The cases H H, covering the teeth of the comb, keep the warp secure and even, thereby insuring a perfect and straight lease.

This invention is applicable to every kind of slashers, and will be found useful in the manufacture of all kinds of cotton warps, whether of two or more colors.

What I claim is as follows:

1. The combination, substantially as specified, with a slasher, of a dividing-roll located in front of the tension-rolls, whereby the thread is delivered in two equal shades to the warpbeam.

2. The combination, substantially as specified, with a slasher, of a double comb, G, and cases H H, to hold the shades of warp in uniform order, and thereby insuring a perfect lease on removal of the warp from the slasher.

MOSES LORENZO HITCHCOCK.

Witnesses:

ALFRED HIGLEY, JOSEPH A. MOSES.