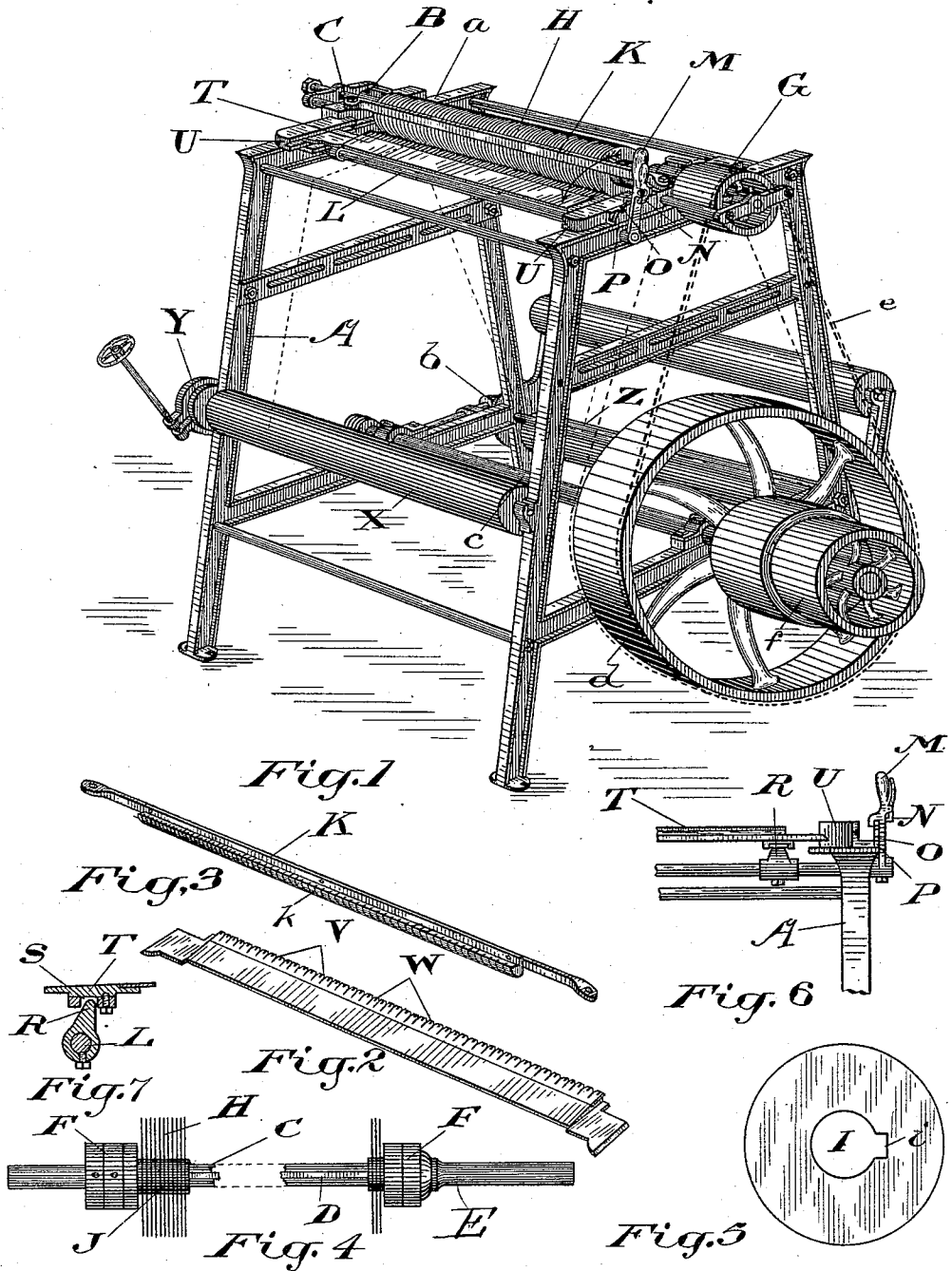


(No Model.)

W. TALBOT.
MACHINE FOR CUTTING CHENILLE CLOTH.

No. 538,217.

Patented Apr. 23, 1895.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM TALBOT, OF TORONTO, CANADA.

MACHINE FOR CUTTING CHENILLE CLOTH.

SPECIFICATION forming part of Letters Patent No. 533,217, dated April 23, 1895.

Application filed October 3, 1894. Serial No. 524,844. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM TALBOT, of the city of Toronto, in the county of York and Province of Ontario, Canada, have invented
5 certain new and useful Improvements in Machines for Cutting Chenille Cloth; and I hereby declare that the following is a full, clear, and exact description of the same.

In the manufacture of chenille goods the
10 chenille is first woven into what is technically known as chenille cloth with the warp threads equi-distant from each other and at regular intervals and parallel to the sides of the cloth. It has always been impossible heretofore to get
15 a machine which would evenly cut the weft threads or filling between the warp threads into the chenille strips all uniform and even throughout their length; and the object of this invention is to produce a machine which
20 will evenly cut the weft threads or filling of the chenille intermediate and parallel to the warp threads with rapidity and precision, and to so arrange the machine that in the event of any irregularity the cloth can be thrown
25 away from the cutters without the necessity of stopping the machine; and the invention consists essentially of a machine having a bed plate provided with a series of grooves arranged equi-distant from and parallel to each
30 other, corresponding in number and location with the number and location of the warp threads, a series of slots intermediate the said grooves, a series of cutter knives loosely journaled on and revolving with a shaft engaging
35 with the slots formed in the said bed plate intermediate the grooves for the warp threads, and means for moving the bed plate to and from the cutter knives; the whole device being hereinafter more fully set forth and more
40 particularly pointed out in the claims.

In the drawings, Figure 1 is a perspective view of the machine. Fig. 2 is an enlarged view of the bed plate. Fig. 3 is a perspective view of the upper guide. Fig. 4 is a plan view of a section of the shaft for the cutter
45 knives, showing several of the knives mounted on the said shaft. Fig. 5 is a side elevation of one of the cutter knives. Fig. 6 is a section of one end of the bed plate showing the guides, rock shaft and lever. Fig. 7 is an end view of a section of the rock shaft and bed
50 plate.

Like letters of reference refer to like parts throughout the specification and drawings.

The machine consists of a stand or frame 55
A. Formed in the middle of the top *a* of the frame A are bearing boxes B, in which are journaled the ends of the shaft C. The shaft C is provided with a longitudinal spline D. Mounted on the shaft C contiguous to the in- 60
ner ends of each of the journals E are collars or washers F. The spline D extends from the collars or washers contiguous to one of the journals E to the collars or washers F contiguous to the other journal E. Mounted on 65
one end of the shaft C is a fast pulley G. Mounted and longitudinally movable on the shaft C is a series of cutting disks H. Each of the cutting disks H is provided with a bore I through which passes the shaft C, and each 70
of the disks H is provided with a recess or enlargement *i* in continuation of the bore I into which fits the spline D to cause the cutting disks to revolve with the shaft C.

The cutting disks H are held separated from 75
each other by a series of washers J mounted on the shaft C between the said cutting disks. The cutting disks and washers are free to move longitudinally on the shaft, in order that they may have sufficient play to overcome 80
the vibration of the machine, so that at all times they may cut the chenille cloth evenly between the warp threads.

Bolted to the top of the frame A on the front side of and contiguous to the cutting disks H 85
is a guide bar K provided with a series of slots *k* arranged equi-distant from each other, and at regular intervals, and corresponding in number and location with the number and location of the cutting disks H. 90

Mounted in the top of the framework A below and in front of the cutting disks H is a rock shaft L, to one end of which is connected a lever M having a spring dog N engaging with the notches O of a segment P 95
secured to the top of the frame, adjacent to said lever M. Rigidly connected to each end of the rock shaft L is an arm R which works in a recess S in the under side of the bed plate T. The ends of the bed plate T work 100
in guides U formed on the top *a* of the frame and in front of the cutting disks H. That side of the bed plate T contiguous to the cutting disks H is provided with a series of lat-

eral grooves V extending to the cutting edge to receive the warp threads of the chenille cloth, and is provided also with a series of slots W intermediate the grooves V, in each of which works one of the cutting disks H. The number and location of the slots W correspond with the number and location of the cutting disks and the cutting disks working in the slots W of the bed plate T and the slots k of the guide bar K are held in their proper relation to the chenille cloth while it is passing over the bed plate and being cut into chenille strips. The warp threads of the chenille cloth are held in the grooves V which are located intermediate the slots W, and the tension of the chenille cloth while it is passing over the bed plate is sufficient to permit the grooves V to firmly hold the warp threads therein.

Journalled in the front of the frame A midway between the top and base is the unwinding roll X, one end of which is journalled in a friction brake Y to permit of the requisite tension being placed on the chenille cloth. Journalled at the rear of the frame A is a winding roll Z suitably driven preferably by a gearing b operated from the main driving shaft c. The main driving shaft c is journalled in the frame A vertically below the shaft C, and mounted on the main driving shaft c is a fast pulley d. Passing around the pulleys d and G is a drive belt e by means of which motion is transmitted from the main driving shaft c to the shaft C for the cutting disks. Mounted on the end of the main driving shaft c on the outer side of the fast pulley d is a set of pulleys f, by means of which motion is transmitted from the shafting to the machine.

In the operation of the machine the chenille cloth is placed on the unwinding roll X and passed over the bed plate T. The warp threads of the chenille cloth are placed in their respective grooves V, and connected with the winding roll Z. The bed plate is then moved to the cutting disks H by means of the rock shaft L and arm R operated by the lever N. The machine is then set in motion, and the revolution of the cutting disks cuts the chenille cloth evenly into chenille strips, and the revolution of the winding roll Z draws the chenille cloth across the bed plate T. The bed plate T holds the chenille cloth against the cutting disks H. In the event of any of the warp threads being displaced from their respective grooves V the lever M can be moved in the direction indicated by the arrow, and the

chenille cloth moved away from the cutting disks. The bed plate T being supported upon the ends of the arms R, follows the arc of movement described by said arms when turned and thus the tension on the bed plate T of the chenille cloth will always be the same whether the bed plate is close to the cutting disks or away from the same.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A machine for cutting chenille cloth consisting of a frame, a shaft journalled in the said frame, a series of cutting disks mounted and longitudinally movable on the said shaft and revolving therewith, means for transmitting motion to the said shaft, a bed plate having a series of lateral grooves arranged equidistant from and parallel to each other a series of slots located intermediate the said grooves corresponding in number and location with the cutting disks and means for moving the bed plate to and from the cutting disks, substantially as specified.

2. A machine for cutting chenille cloth consisting of a frame, a shaft journalled in the said frame, a series of cutting disks mounted and longitudinally movable on the said shaft and revolving therewith, means for transmitting motion to the said shaft, a bed plate having a series of lateral grooves arranged equidistant from and parallel to each other, a series of slots located intermediate the said grooves corresponding in number and location with the cutting disks and means for moving the bed plate to and from the cutting disks, and a guide bar bolted to the frame on the same side as and above the bed plate having a series of slots one for each of said cutting disks, substantially as specified.

3. In a machine for cutting chenille cloth the combination of the frame, a shaft having a spline journalled in the frame, a series of cutting disks mounted and longitudinally movable on the shaft, means for transmitting motion to the shaft, a bed plate sliding on the frame in front of the cutting disks, a rock shaft journalled in the frame, arms connected to the rock shaft engaging with and moving the bed plate, and a lever connected to the rock shaft, substantially as specified.

Toronto, August 22, 1894.

WILLIAM TALBOT.

In presence of—

C. H. RICHES,
M. WESTWOOD.