

W. WEAVER.
Loom for Weaving Terry Fabrics.

No. 211,815.

Patented Jan. 28, 1879.

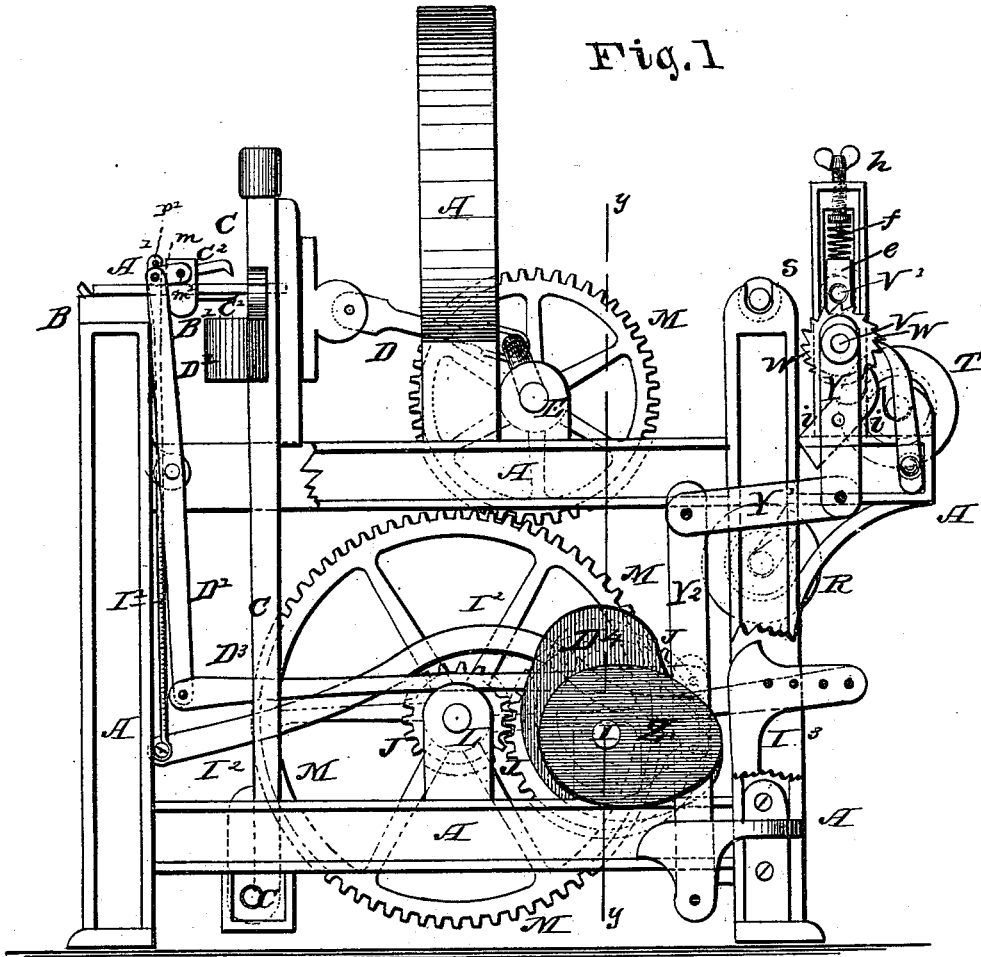


Fig. 1

Fig. 5.

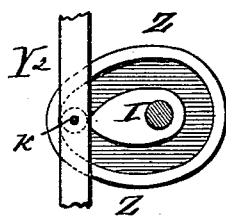


Fig. 6.

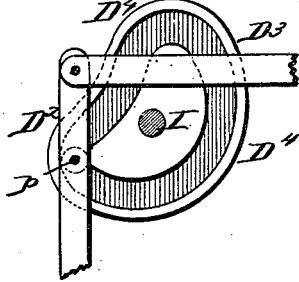
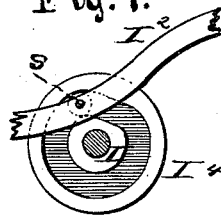


Fig. 7.



Witnesses:

P. C. Dietrich.
Frank H. Duffy.

Inventor:

William Weaver.

Per *C. H. Watson & Co* Attorneys.

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Fig. 2.

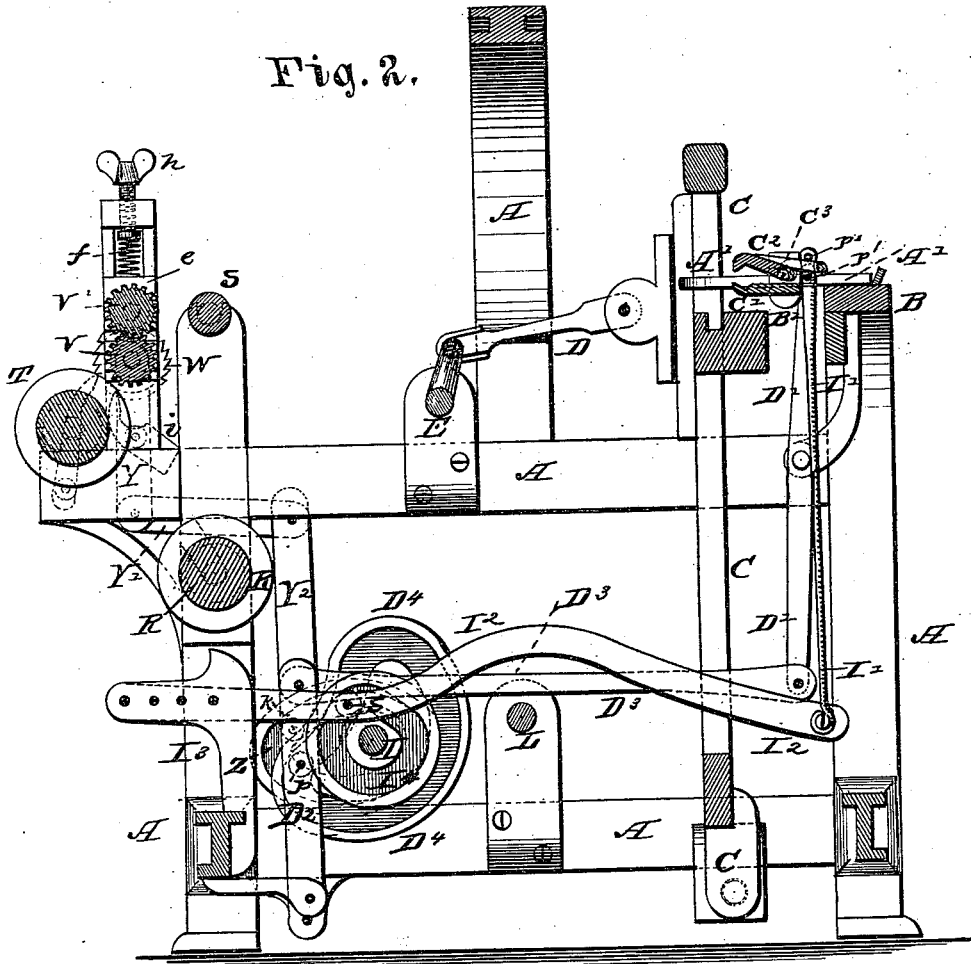
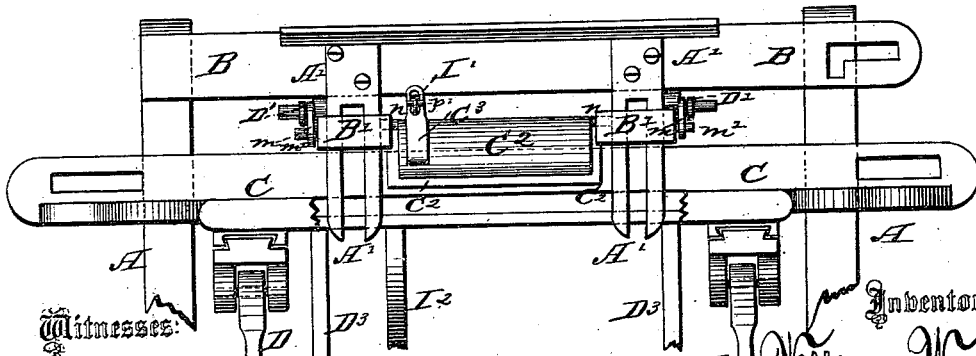


Fig. 3.



Witnesses:
P. C. Dietrich
Frank Duffy

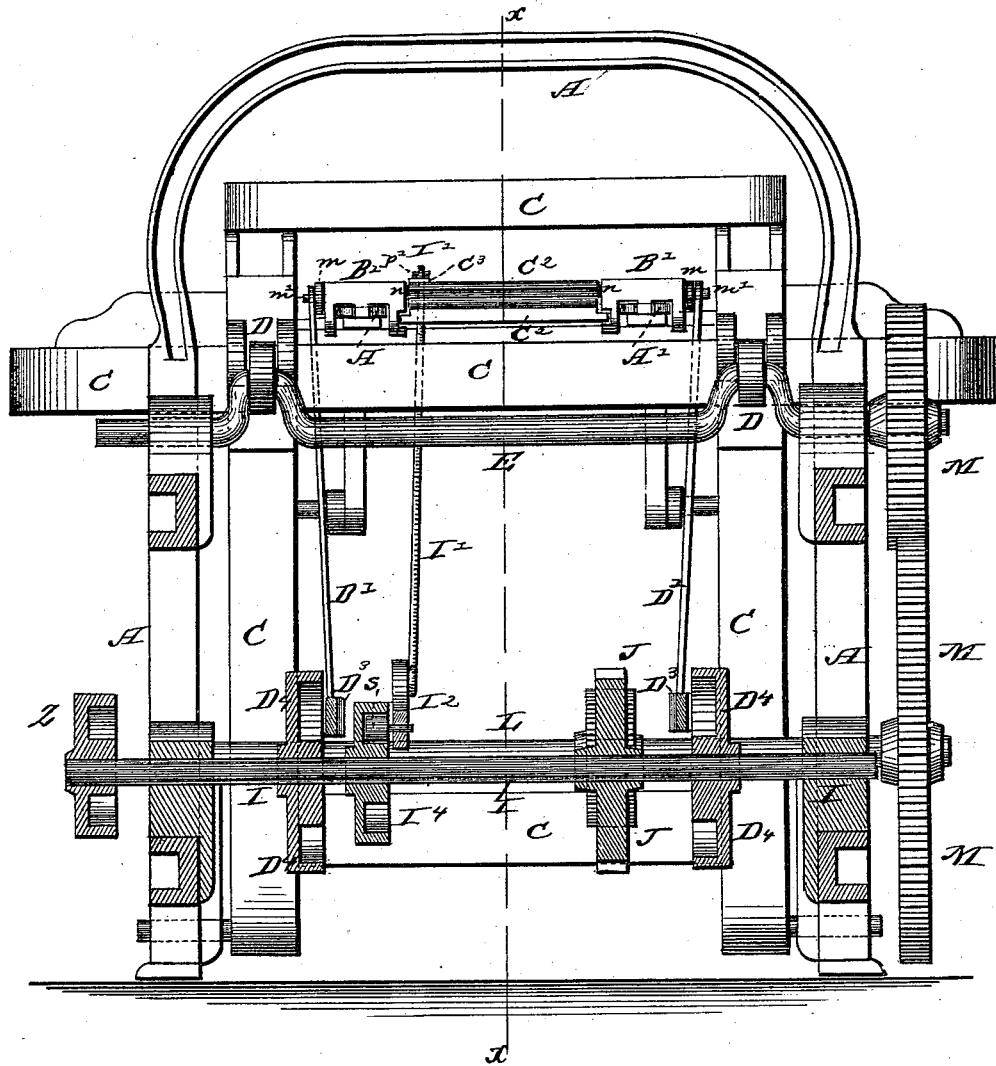
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Fig. 4



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UNITED STATES PATENT OFFICE

WILLIAM WEAVER, OF GREENWICH, NEW YORK, ASSIGNOR TO EDWARD HENRY WEAVER, OF SAME PLACE.

IMPROVEMENT IN LOOMS FOR WEAVING TERRY FABRICS.

Specification forming part of Letters Patent No. 211,815, dated January 28, 1879; application filed April 10, 1878.

To all whom it may concern:

Be it known that I, WILLIAM WEAVER, of Greenwich, in the county of Washington and State of New York, have invented certain new and useful Improvements in Looms for Weaving "Terry" Fabrics; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which they appertain to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to looms for weaving terry fabrics; and it consists in the construction and arrangement of certain devices for weaving looped or piled fabrics with any desired length of loops, as will be hereinafter more fully set forth, and pointed out in the claim.

In the annexed drawings, to which reference is made, and which fully illustrate my invention, Figure 1 is a side elevation of part of a loom showing my invention. Fig. 2 is a central vertical section of the same through the line *x x*, Fig. 4. Fig. 3 is a plan view of the breast-beam and lathe. Fig. 4 is a transverse vertical section through the line *y y*, Fig. 1. Figs. 5, 6, and 7 are views showing the cams employed in the loom.

A represents the frame-work of the loom, with breast-beam B. C is the lathe, pivoted at its lower end in the usual manner to the frame, and operated by pitmen D D from the crank-shaft E. This shaft receives its motion through gears M M from the driving-shaft L; and this latter shaft also, by gears J J, communicates motion to a counter-shaft, I, upon which the cams, hereinafter described, are secured.

R is the roller on which the body-warp is placed, said body-warp passing upward over a roller, S, and then forward in the usual manner.

T is the roll for the terry warp, which is passed between two rollers, V V'. W is a ratchet-wheel on the journal of the lower roll, V, said ratchet-wheel being operated by a pawl, *i*, on the arm Y. The arm Y is operated by means of a rod or bar, Y¹, lever Y², and cam Z, which mechanism is so timed that the pawl

will only operate on the ratchet-wheel at the time when the devices hereinafter described take hold of and draw forward the terry warp to form the loops.

On the breast-beam B are secured two slotted arms, A' A', on which are placed two sliding blocks, B' B', which are connected by having the lower jaw, C¹, of a clamp secured to their inner ends. The upper jaw, C², of this clamp has its journals *n* passing into the slides B'. A link, *m*, is secured on the end of a pin, *m'*, in the outer side or end of each slide.

Each link *m* is pivoted to the upper end of a lever, D¹, which lever is pivoted to a hanger under the breast-beam, and the lower end of the said lever is, by a rod, D³, connected to a second lever, D², pivoted at its lower end at the rear end of the loom.

The lever D² is provided with a stud and roller, *p*, working in a groove on a cam, D⁴, secured on the shaft I. This arrangement of parts is for the purpose of moving the clamp backward and forward at the proper time.

The length of the movement of the slides and the clamp between them may be regulated by adjusting the connection between the levers D¹ D², and the extent of such movement regulates the length of the loop.

The upper jaw, C², of the clamp has a slotted arm, C³, through which passes a rod, I¹, having pins *p'* *p'* through it above and below the arm.

The lower end of the rod I¹ is attached to a lever, I², which extends rearward, and is pivoted in a stand, I³, at the back part of the loom. This lever I² has a stud and roller, *s*, which works in a groove on a cam, I⁴, also secured on the shaft I, and causes the opening and closing of the clamp.

The warps pass between the jaws of the clamp, and the latter being opened is moved inward toward the lathe at the proper time, and then closed upon the warp; and when it is moved outward toward the breast-beam, it draws with it the portion of the warp which is to form the loops, it having been let off by the positive motion of the let-off rolls, which are operated at the same time by the devices above described, the ground-warps being prevented from moving, so that the clamp and terry

warps slide upon them and form the loops, and after the loops are secured the clamp is again opened.

By this device loops of any desired length may be made in the fabric.

In this case I have only described the devices for forming the terry surfaces and how the same are manipulated, it being understood that the shedding and take-up devices, though not shown, are to be substantially the same as ordinarily used in looms.

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

The combination of the arms A' A', secured upon the breast-beam B, the sliding blocks B' B', with the clamp C¹ C² between them, and with links *m m* on their outer sides, the lever D¹, rod D³, lever D², with roller *p*, and the cam D⁴, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WM. WEAVER.

Witnesses:

WM. B. UPPERMAN,
P. C. DIETERICH.