

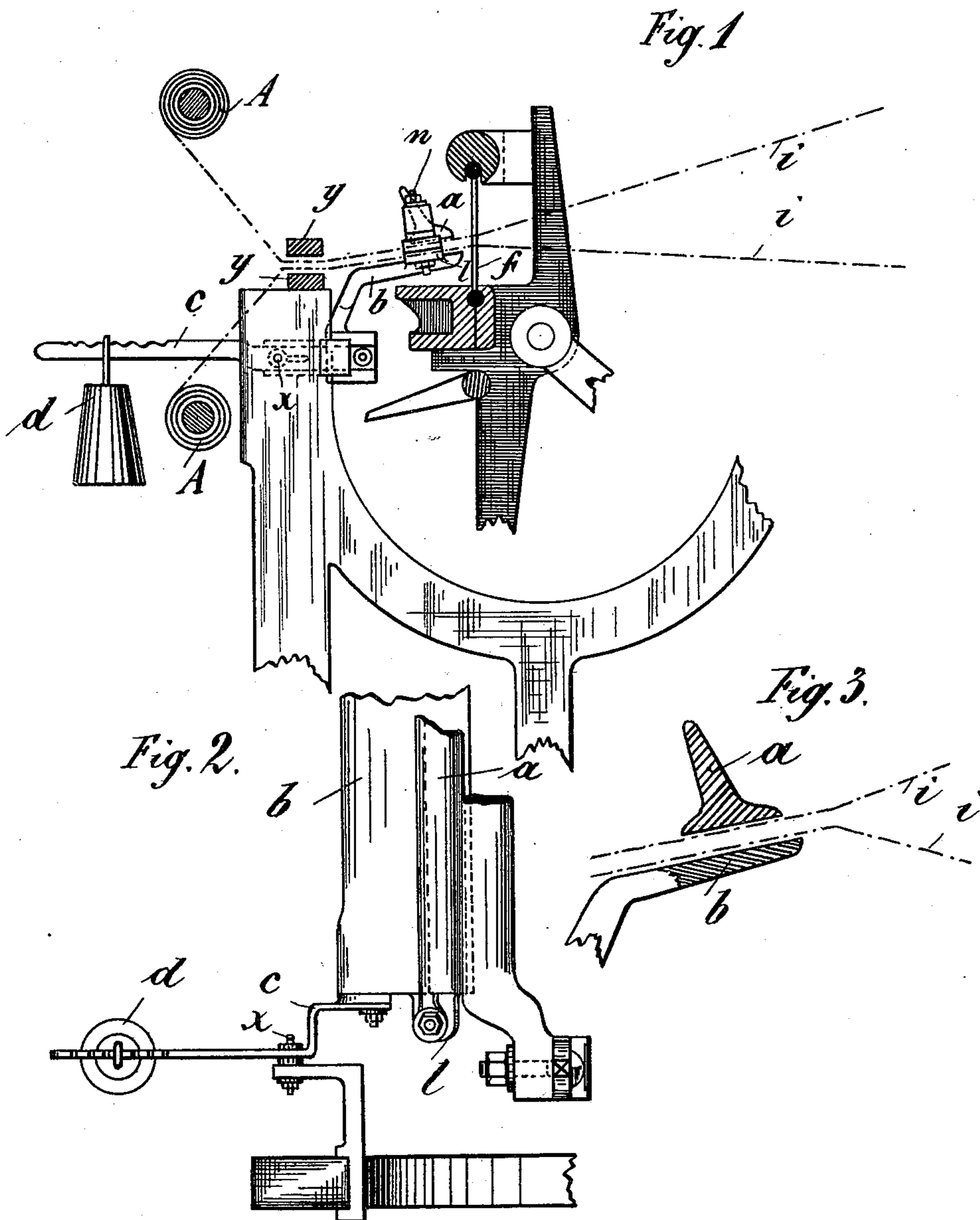
No. 631,561.

Patented Aug. 22, 1899.

A. CLAVIEZ.  
MOVABLE PILE GUIDE FOR PLUSH LOOMS.

(Application filed July 5, 1898.)

(No Model.)



WITNESSES:  
*W. H. Wurtzel*  
*O. G. Gask*

INVENTOR  
*Alfred Claviez*  
BY *Joseph H. Baegauer*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

ALFRED CLAVIEZ, OF LEIPSIC, GERMANY, ASSIGNOR TO THE KUNSTWEBEREI CLAVIEZ & COMPANY, GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, OF SAME PLACE.

## MOVABLE PILE-GUIDE FOR PLUSH-LOOMS.

SPECIFICATION forming part of Letters Patent No. 631,561, dated August 22, 1899.

Application filed July 5, 1898. Serial No. 685,153. (No model.)

*To all whom it may concern:*

Be it known that I, ALFRED CLAVIEZ, a citizen of the Empire of Germany, residing at Leipsic, in the Kingdom of Saxony, Empire  
5 of Germany, have invented certain new and useful Improvements in Movable Pile-Guides for Plush-Looms, of which the following is a specification.

This invention relates to an improved device which is intended to produce a uniform height of pile in all parts of a double-pile fabric or plush fabric during the operation of the loom when weaving the same. It is well known that the height of pile depends, on the  
15 one hand, on the tension of the ground-warp and, on the other hand, on the drag carried on the individual pile-threads. In plush-loom it was therefore necessary to produce the separate adjustment of the tension of the  
20 warp and of the drag or retarding action on the pile-threads for producing an even and uniform height of pile for the reason that various irregularities in the work of the loom had to be provided for.

The invention consists of two movable pile-guide rails arranged between the reed and the breast-beam and adapted to produce a uniform height of pile, a lever pivoted to the frame of the loom and having a free end extending beyond the pivot, said guide-rails being supported by the other end of the lever, and a weight adapted to be supported in different positions on said extended end of the lever, whereby the rails are permitted to follow every motion of the fabric during each crossing of the warps.

In the accompanying drawings, Figures 1 to 3 represent, respectively, a side elevation, a plan view, and a vertical transverse section, of my improved pile-guide rails drawn on a larger scale.

Similar letters of reference indicate corresponding parts.

On obtaining the proper height of pile in weaving plush in double-pile-fabric looms the upper guide-rail *a* is set to a certain distance from the lower guide-rail *b*. The warp *i* is so beamed and is set at such a tension that the longest possible pile can be produced. By  
45 this arrangement of the two guide-rails *a b* it

is rendered certain that the pile is not only formed between the two rails, but that a change in the height of the pile is made impossible.

In regard to the construction of the improved movable pile-rails the same appears readily from the following: Immediately in front of the reed *f* is arranged an angular rail *b*, which is bolted to a correspondingly bent and pivoted lever *c*, having two arms. This  
55 two-arm lever is pivotally applied to the bolt *x*, which is attached in a suitable manner to one of the side walls of the loom. The angular rail *b* carries, besides, two flanged brackets *l*, which serve for supporting an adjusting-bolt. Over the rail *b* and the flange-like brackets *l* is placed a second rail *a* of T-shaped cross-section, which is held in position at *l* by the screw-bolt *n*. According to the adjustment of this bolt *n* the two pile-  
60 rails *a* and *b* may be set closer to or farther from each other. As during the working of the loom the finished fabric takes part of an oscillating motion, it is further necessary to arrange the two pile-rails *a* and *b*, also movable, in such a manner that in each direction of movement of the shafts, respectively, of the harness parts the rails *a* and *b* follow these motions. For producing this effect in a more reliable and better manner the lever *c* is provided with a weight *d*, which counterbalances the pile-rails in such a manner that they follow every movement of the webs or fabrics during the formation of the pile. According to the character of the plush to be woven and  
85 according to the drag or brake action on the warps the weight *d* can be so adjusted that at each formation of the pile, whatever kind of plush is to be woven, a uniform motion of the rails is produced.

The two pile-rails *a* and *b* are shown in Fig. 3 on a larger scale, so as to permit the course of the two webs to be more clearly seen. It will be further readily perceived that, as before mentioned, the formation of the pile is uniform all through, as the upper and lower rails *a* and *b* form, respectively, the required contacts or abutments for the webs.

In addition to the foregoing it may be mentioned that the double-pile fabric after pass-  
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ing the pile-rails is passed over the cutters *y*  
*y*, by which the pile is cut and the two webs  
conducted, respectively, to the beams A A by  
usual regulating mechanisms.

5 Having thus described my invention, what  
I claim is—

10 In looms for making double-pile fabrics,  
the combination of two movable guide-rails  
arranged between the reed and the breast-  
beam, and adapted to produce a uniform  
height of pile, a lever pivoted to the frame of  
the loom, and having a free end extending  
beyond the pivot, said guide-rails being sup-

ported by the other end of the lever and a  
weight adapted to be supported in different 15  
positions on said extended end of the lever,  
whereby the rails are permitted to follow  
every motion of the fabric during each cross-  
ing of the warps, substantially as set forth.

In testimony that I claim the foregoing as 20  
my invention I have signed my name in pres-  
ence of two subscribing witnesses.

ALFRED CLAVIEZ.

Witnesses:

E. BRITTE,  
RUDOLPH FRICKE.