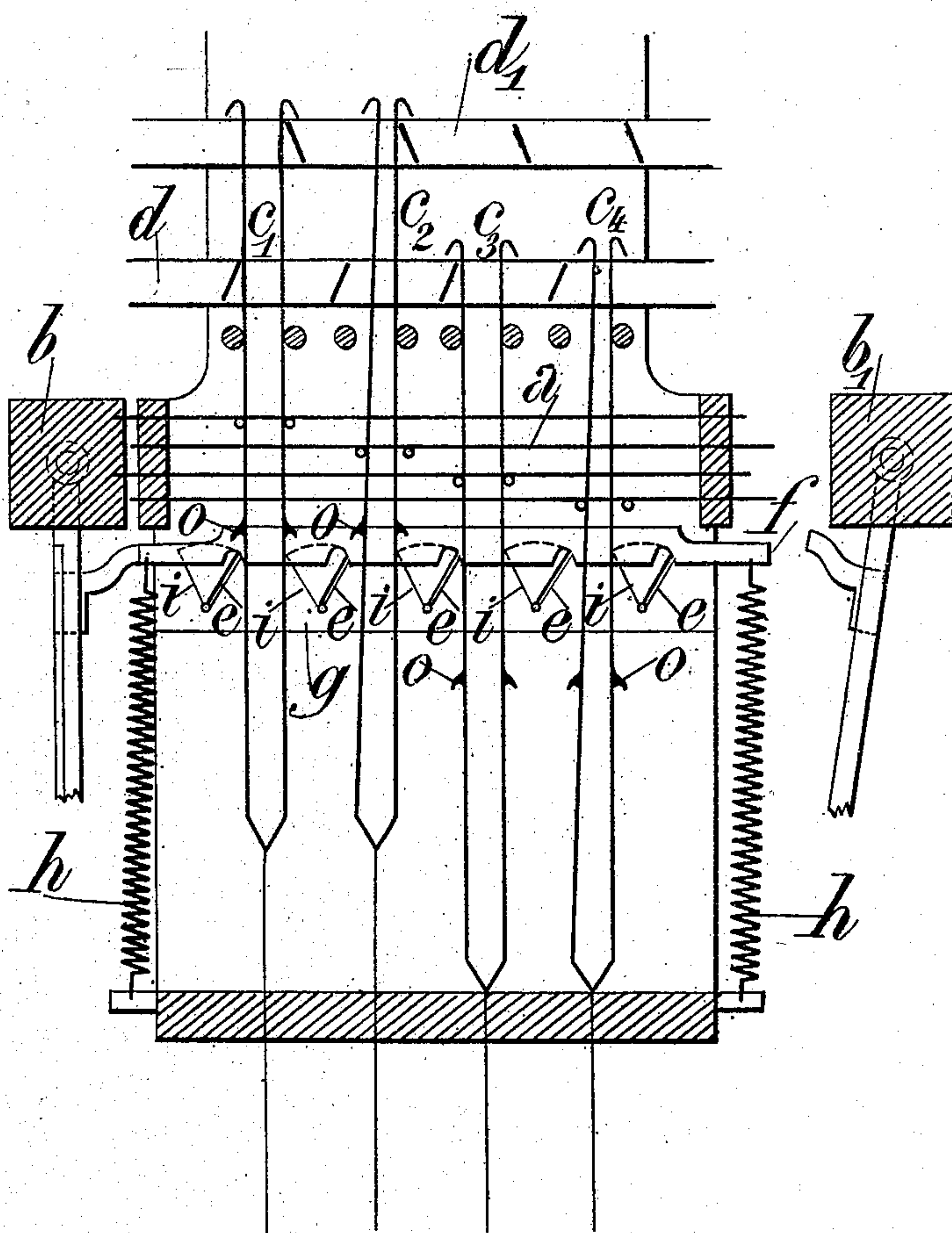


M. A. PERRIN.
JACQUARD MECHANISM.
APPLICATION FILED NOV. 20, 1907.

900,948.

Patented Oct. 13, 1908.



WITNESSES

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MARIE ANTOINETTE PERRIN, OF VILLEURBANNE, FRANCE.

JACQUARD MECHANISM.

No. 900,948.

Specification of Letters Patent.

Patented Oct. 13, 1908.

Application filed November 20, 1907. Serial No. 403,033.

To all whom it may concern:

Be it known that I, MARIE ANTOINETTE PERRIN, a citizeness of the French Republic, residing at Villeurbanne, Rhône, in France, have invented certain new and useful Improvements in Jacquard Mechanism, of which the following is a specification.

In low speed jacquard machines with two cylinders and two lifting bars, the lifting wires which are to be lifted several times in succession descend, after each stroke, with the descending bar to the middle of its course and there meet the ascending bar, by which they are returned to their upper position. The passage from one bar to the other is very sudden, since the bars are traveling in opposite directions and are moving at their highest speed when the transfer takes place. For this reason the machines must be run at a lower speed than would otherwise be practicable, and the sudden change of movement involves risk of damaging the warp.

The present invention obviates these disadvantages by providing that the wires to be used during successive strokes do not descend between these strokes.

A construction embodying the invention is shown in the annexed drawing.

The cylinders b b_1 carry the two sets of cards which alternately act on the needles a . The latter act on the bifurcated wires c_1 , c_2 , c_3 , c_4 adapted to be lifted by the bars d d_1 . Below the needles a there is a fixed bar g to which are pivoted plates e located between or adjacent the wires and adapted to be inclined towards the right or left. The purpose of these plates is to support the respective wires in positions somewhat below their highest positions, and the wires are for this purpose provided with lateral projections o adapted to engage the said rods.

The plates e are adapted to be oscillated in V-shaped recesses i by means of a notched bar f connected to springs h . The bar f moves alternately towards the right and left together with the cylinders b b_1 , and is for this purpose actuated by the lay or whatever other part of the loom actuates the cylinders. In the drawing the left hand cylinder b is shown moved towards the needles, and the rods e are therefore inclined towards the left

hand members of the bifurcated wires, that is to say towards those members which have been acted on by the needles displaced and which will be lifted by the bar d while the bar d_1 is descending.

It will be seen that the left hand member of the wires which were previously lifted and are to remain lifted, such as the wire c_1 in the drawing will during this operation be engaged by the corresponding rod e , so that the said wires will remain suspended a short distance below their highest positions and will not be engaged by the ascending bar d until the speed of the latter has been reduced near the point of the reversal of its movement. There will, therefore, be no shock.

No obstacle is offered to the descent of the wires, such as c_2 , which were previously lifted and are to descend, the left hand members of these wires having been thrust aside so that the projections o thereof clear the rods e . The wires, such as c_3 , which were not lifted during the previous stroke but are to be lifted by the bar d , are slightly thrust aside, during their ascent, by the abutment of their projections o against the adjacent plates e . The wire c_4 , which has been acted on by a needle, is not lifted. The action is analogous when the cylinder b_1 has caused needles to act on right hand members of the wires.

What I claim as my invention and desire to secure by Letters Patent of the United States is:—

Jacquard mechanism comprising in combination bifurcated lifting wires, two bars for lifting same, two jacquard card carriers, means for operating said carriers and lifting bars alternately and means comprising a series of oscillatory rods and a ratchet bar engaging said rods, coöperative with the said carriers for engaging those raised wires which have been positioned to be engaged by the lifting bar on the next stroke.

In witness whereof I have signed this specification in the presence of two witnesses.

MARIE ANTOINETTE PERRIN.

Witnesses:

THOS. N. BROWNE,
GASTON JEANNIAUX.