

R. ZAHN.
JACQUARD EMBROIDERING MACHINE.
APPLICATION FILED MAR. 21, 1912.

1,048,782.

Patented Dec. 31, 1912.

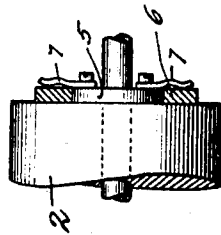


Fig. 2.

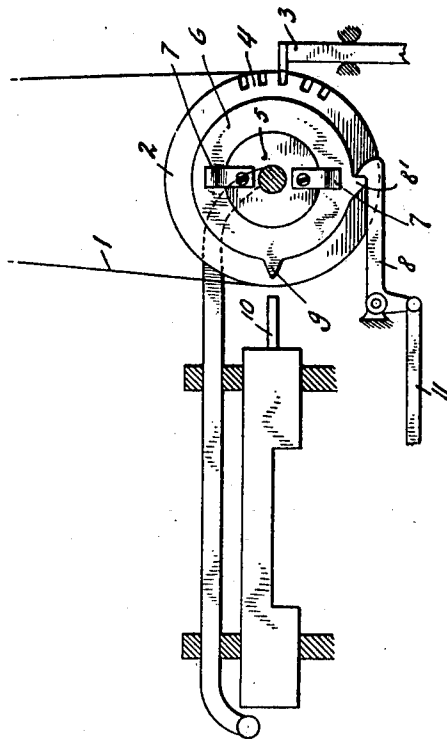


Fig. 1.

Witnesses:
Hans J. Hebig
D. Klein

Robert Zahn Inventor
By his Attorney
Max A. Ordemann

UNITED STATES PATENT OFFICE.

ROBERT ZAHN, OF PLAUEH, GERMANY.

JACQUARD EMBROIDERING-MACHINE.

1,048,782.

Specification of Letters Patent.

Patented Dec. 31, 1912.

Application filed March 21, 1912. Serial No. 685,324.

To all whom it may concern:

Be it known that I, ROBERT ZAHN, a subject of the German Emperor, residing at Plauen, in Vogtland, Germany, have invented certain new and useful Improvements in Jacquard Embroidering-Machines, of which the following is a specification.

When a working jacquard embroidery machine for some reason is suddenly arrested it frequently happens that some parts of the machine continue to move, *e. g.* while when the machine is arrested the heavy main driving parts thereof instantaneously stop, the lighter parts of the jacquard apparatus make one or a few additional movements before they come to a standstill. Owing to this the feeding of the jacquard card is unnecessarily continued and some of its holes ineffectively pass the embroidering needles. In consequence thereof when the machine is again started it is necessary to carefully bring back the card to the position it had when the machine was arrested in order to avoid interruptions in the embroidery design. To this end it has been hitherto customary in a suitable manner to have the card marked at the instant the machine is arrested, which marking consisted in having an impression or an incision made automatically by the jacquard apparatus. But by frequent use of one and the same card the latter became more or less damaged at the marked places whereby its durability was greatly diminished.

The present invention has for its object to provide means whereby marking of the card will be dispensed with and whereby the position of the jacquard card at the time the machine is stopped will be properly indicated.

To make my invention more clear, the same is illustrated in the accompanying drawing which forms a part of this specification and in which similar reference letters denote corresponding parts, the drawing showing only so much of the embroidering machine as is necessary for the understanding of the invention.

Figure 1 is a side view and Fig. 2 a front view of the jacquard apparatus.

The jacquard card 1 is guided around the cylinder or drum 2 and is intermittently fed by the pawl 3 cooperating with the toothed wheel 4, in well known manner, as *e. g.* in the manner described and shown in my application Ser. #659,049, filed November 7,

1911. On the cylindrical reduced end 5 of the jacquard drum 2 the disk 6 is loosely mounted and is frictionally engaged by springs 7 secured to the drum. This disk 60 is provided on its circumference with a tooth 8' which is adapted while the machine is in operation to be engaged by a pawl 8 which locks the disk 6 in a position in which a projection or pointer 9 thereof 65 extends in the direction of the jacquard needles 10.

The pawl 8 is operatively connected to a rod 11 which in a suitable manner may be controlled from the driving means (not shown) of the machine so that when for some reason or other the machine is suddenly arrested the rod 11 will be caused to draw the pawl 8 out of engagement with the tooth 8' of the disk 6. Should the drum 2 75 after the machine is arrested continue to move it will owing to its frictional engagement with the disk, carry the latter along with it so that the pointer 9 will move away from its normal position. When the machine is again started the jacquard card 1 80 can be properly adjusted by returning the drum 2 with disk 6 to its original position in which the pointer 9 extends in alignment with the jacquard needles. 85

It is understood that various modifications may be made in the device shown and described without deviating from the principle of my invention and I, therefore, do not wish to limit myself to the details of 90 construction.

What I claim and desire to secure by Letters Patent is:

1. In an embroidering machine, the combination with the jacquard card feeding means, of a pointer frictionally connected to said means and adapted to normally extend and be locked in a certain direction and to become unlocked at the instant the machine is arrested. 100

2. In an embroidering machine, the combination with the jacquard feeding drum, of a pointer frictionally connected to said drum and adapted to normally extend and be locked in a certain direction and to become unlocked at the instant the machine is arrested. 105

3. In an embroidering machine, the combination with the jacquard card feeding drum, of a pointer adapted to normally extend in a certain direction, means for normally locking said pointer in said direction 110

and means whereby said pointer becomes coupled to said drum at the instant the machine is arrested.

4. In an embroidering machine, the combination with the jacquard card feeding means, of a disk formed with a pointer adapted to normally extend in a certain direction, frictional means coupling said disk to said jacquard card feeding means and means normally locking said disk in the normal position and adapted to unlock the same at the instant the machine is arrested.

5. In an embroidering machine, the combination with the jacquard card feeding drum and jacquard needles, of a disk formed with a pointer and frictionally connected to said drum and means normally locking said disk in a position in which the said pointer extends in the direction of said

embroidering needles and adapted to unlock the same at the instant the machine is arrested.

6. In an embroidering machine, the combination with the jacquard card feeding drum, of a disk formed with a pointer and a tooth, means frictionally connecting said disk to said drum, and means cooperating with said tooth so as to normally lock said disk in a position in which its pointer extends in a certain direction and when the machine is arrested to unlock said disk.

In testimony whereof I affix my signature in presence of two witnesses.

ROBERT ZAHN.

Witnesses:

LOUIS OMAN EDWARDS,
ROBERT HEINRICH NIER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."