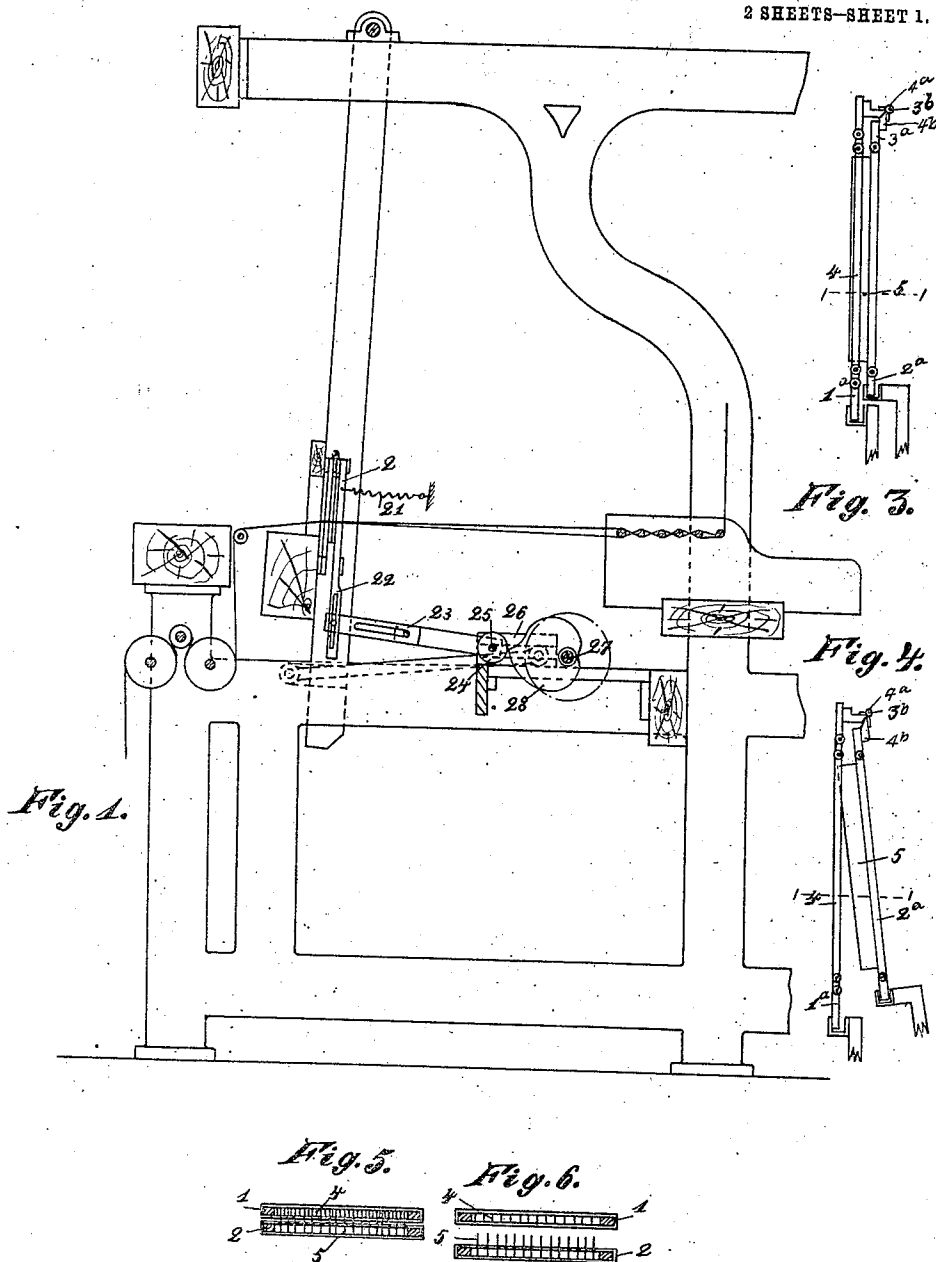


1,055,543.

R. KÖNIG.
 REED FOR LOOMS FOR WEAVING.
 APPLICATION FILED APR. 10, 1912.

Patented Mar. 11, 1913.

2 SHEETS—SHEET 1.



Witnesses:

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2 SHEETS—SHEET 2.

Fig. 2.

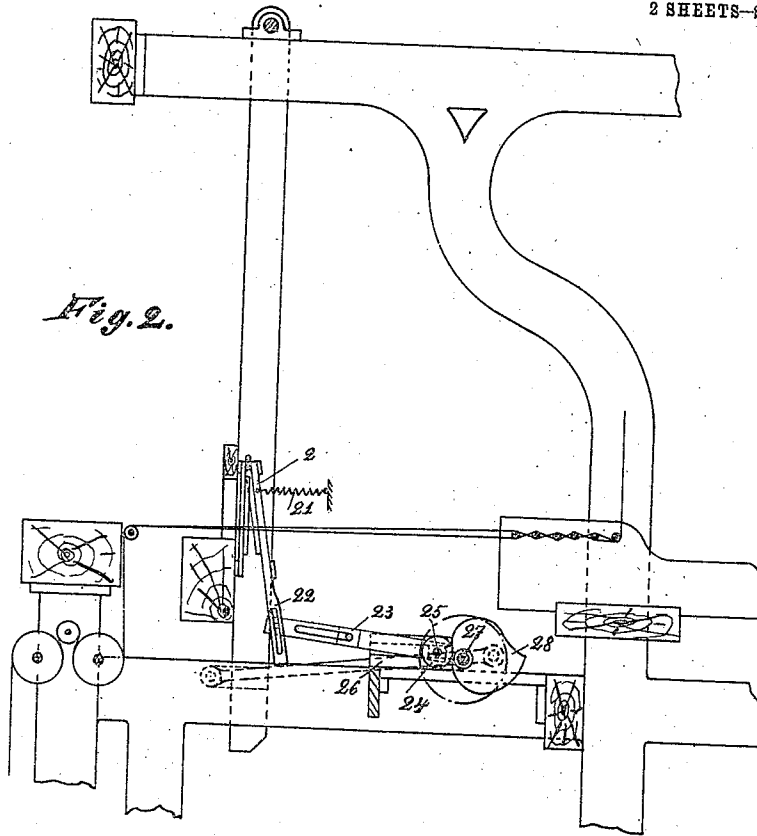


Fig. 7.

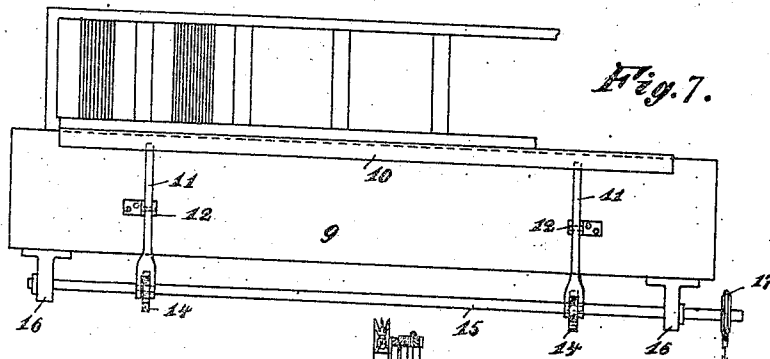
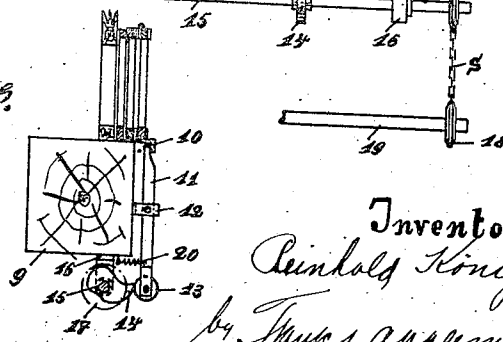


Fig. 8.



Witnesses:

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UNITED STATES PATENT OFFICE.

REINHOLD KÖNIG, OF LÜTTRINGHAUSEN, GERMANY.

REED FOR LOOMS FOR WEAVING.

1,055,543.

Specification of Letters Patent.

Patented Mar. 11, 1913.

Application filed April 10, 1912. Serial No. 689,934

To all whom it may concern:

Be it known that I, REINHOLD KÖNIG, manufacturer, residing at Lüttringhausen, Rhenish Prussia, Germany, a subject of the Emperor of Germany, have invented new and useful Improvements in Reeds for Looms for Weaving, of which the following is a specification.

My invention has for its object an improved reed for looms for weaving by which the warp threads which are raised and lowered are combed and cleaned so that all material for such threads may be employed.

According to this purpose my improved reed consists of two members which are linked together and of which one is stationary and the other movable, the operation being in such a manner that at each beat of the slay both members are united to bear on the weft but in the contrary movement of the slay are separated and during this part of motion the threads are combed and cleaned.

The invention is fully illustrated on the accompanying drawing on which:

Figure 1 illustrates a side elevation of a loom with my invention applied thereto. Fig. 2 illustrates a fragmental view of a loom showing the operating mechanism for the reeds. Fig. 3 discloses a side elevation of the reeds in working position. Fig. 4 discloses a similar view showing the reed members separated. Fig. 5 is a horizontal section along line 1—1 of Fig. 3. Fig. 6 is a horizontal view along line 1—1 of Fig. 4. Fig. 7 is a top plan fragmental view of a loom, to which my invention is to be applied, and Fig. 8 is a cross section of the slay mounted with the improved reed and showing means for operating the movable members.

Like letters of reference indicate like parts in the drawing.

Referring to the drawing, in which the standard 1^a supports the body of the loom 2^a, comprising the arm 3^a, having bearings 3^b in which is journaled the shaft 4^a forming a bearing for the rocking arm 4^b. The rocking arm 4^b carries at one end thereof reed members through which the warp threads of the loom are guided. According to my invention the improved reed comprises two frames 1 and 2 which are linked at its top or bottom portion. In the present example they are connected at its top by a shaft or pivot 3. Each frame is provided in the

usual manner with blades 4, 5 which in the working position, that is when the slay beats against the weft are forming one reed and the blades 5 of the member 2 are then introduced between the blades 4 of the member 1. In the return motion of the slay the frame 2 is moved away from frame 1, and the blades 5 removed from the blades 4 which are united again in the moment just when the slay is beating and it is clear that by such a motion of the movable member 2 the warp threads are treated as if a comb is operating on the same and they are cleaned in this manner so that any textile material may be employed which hitherto could not be used and a good fabric is obtained. In order that the blades may be always in engagement at its top the blades 5 are made much broader as shown in Fig. 2.

The Figs. 4 and 5 show the means by which the movable reed is operated. 9 is the slay body which may be of any suitable construction on which is mounted in a holder or in any other convenient manner the stationary frame 1 in combination with the movable frame 2. From the latter extends a horizontal rail 10 on which acts a double armed lever 11 having its fulcrum at 12 and carrying a roller 13. On said roller acts a cam 14 situated on a shaft 15 which is carried in bearings 16 that are fastened to the slay 9 as shown. The shaft 15 is driven by chains and sprocket wheels 17 and 18 from a shaft 19 which is revolved in any way by the main shaft of the loom. The cams in revolving turn the levers 11 causing them to project the movable blades within the stationary blades just at the moment the slay is beating up. Springs 20 serve to separate both sorts of blades simultaneously. It is clear that I can arrange the cams in such a manner or position and shape them that the engagement of the movable blades can take place after each beat of the slay or after the second, third weft or the like.

In Fig. 6 is shown a modified construction of the operating mechanism. The movable reed frame 2 is again moved away from frame 1, by a spring or springs 21, it is extended to a slotted rod 22 which is seized by a slotted rod 23, fitted with a roller 24, the bolt 25 of which is horizontally guided in a piece 26. 27 is a shaft which is rotated in any manner by a suitable gear of the loom and which carries a cam 27 that operates the roller 24 and is shaped to bear

the frame 2 against frame 1 for the purpose described before.

I do not confine myself to the construction of the mechanism operating the movable
5 reed.

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

1. A reed for looms, comprising a stationary frame having spaced blades extending vertically therein, a second frame piv-
10 otally connected to the upper edge of the first mentioned frame, said second frame also having vertical spaced blades mounted therein said blades being adapted to pass
15 between the blades of the first mentioned frame, and means to force the lower edge of said second frame outwardly, whereby,

the blades of the respective frames are separated from each other.

2. A reed for looms comprising a station- 20
ary frame having spaced blades extending vertically therein, a second frame, blades on said second mentioned frame, adapted to pass between the blades of the first men- 25
tioned frame, means for mounting the second mentioned frame on the first mentioned frame to allow a rocking movement of the second mentioned frame, and means secured to one extremity of the second mentioned frame for operating the same.

REINHOLD KÖNIG. [L. S.]

Witnesses:

HELEN NUFER,
ALBERT NUFER.