

UNITED STATES PATENT OFFICE.

EMIL CLAVIEZ, OF CHEMNITZ, GERMANY.

LOOM.

SPECIFICATION forming part of Letters Patent No. 619,248, dated February 7, 1899.

Application filed September 9, 1896. Serial No. 605,302. (No model.)

To all whom it may concern:

Be it known that I, EMIL CLAVIEZ, director, a subject of the King of Saxony, and a resident of 3 Ziegelstrasse, Chemnitz, in the Kingdom of Saxony and Empire of Germany, have invented new and useful Improvements in Looms, of which the following is a specification.

The invention forming the subject-matter of the present application is embodied in the following patents: Austria, No. 44/1,052, dated January 22, 1894; France, No. 325,948, dated January 31, 1894; Great Britain, No. 3,374, dated February 16, 1894; Italy, No. 36,100, dated March 31, 1894; Belgium, No. 108,804, dated March 3, 1894, and Hungary, No. 164, dated March 31, 1894.

My improvement consists in novel features of construction, as hereinafter described and claimed.

In order that my invention may be fully understood, I will proceed to describe it with reference to the accompanying drawing, which is a side elevation of the lathe or batten and its operating mechanism.

A W is the driving-shaft carrying pulleys 32, whereby the loom is driven. The shaft A W also carries a cog-wheel 33, which meshes with a cog-wheel 34, located on one end of the double-crank shaft H W. The double-crank shaft produces the movement of the lay and is provided with an eccentric 67 at its left-hand end, which causes the motion of the pattern-cylinder by means of an eccentric-rod 68. On the crank-shaft H W there are balance-wheels 35.

A part of the shaft H W is bent at right angles to provide cranks c. 99 is a link which works in connection with the upper arm of a bell-crank lever 100, mounted so as to oscillate on a picker-shaft S S W. The lower short arm of this bell-crank lever is connected by means of a rod i with the lathe or batten 23, so that a twofold stroke of the lathe or

batten is obtained for one pick. Further, on the picker-shaft S S W there is fixed a star-wheel s, which sets swinging, by means of the roller v, a lower bell-crank lever x y, pivoted at an axis o. A guide-rod p is fastened to the lower arm y of the lower bell-crank lever and reciprocates in guides l. The connection of the rod with the picker-stick S is effected by means of a leather strap m. If the arm y therefrom moves upward, the picker-stick will be simultaneously set in action—that is to say, the picker-stick S will make a stroke and will throw the shuttle (not shown) into the other shuttle-box. It follows, as in mechanical looms, that the weft is beaten up by the reed to the already-finished fabric, the reed being secured to the batten. The batten strikes twice on the fabric during each throw, for the reason that it is customary to use in the production of carpets a very strong thread or material, and in order to make certain that such weft-threads will be taken uniformly at all parts into the fabric the batten must again during a throw strike twice on the fabric.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

The combination of the picker-shaft having a star-wheel fixed thereto, the bell-crank lever, the roller mounted on the long arm of the bell-crank lever and engaged by and bearing on the star-wheel, the longitudinally-reciprocating guide-rod secured to the short arm of the bell-crank lever, the picker-stick, and connections between the picker-stick and the guide-rod; substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

EMIL CLAVIEZ.

Witnesses:

PAUL SOLMEN,
RICHARD BLOBEL.