

M. LINDNER.
Pattern Chain for Looms.

No. 224,550.

Patented Feb. 17, 1880.

Fig: 1

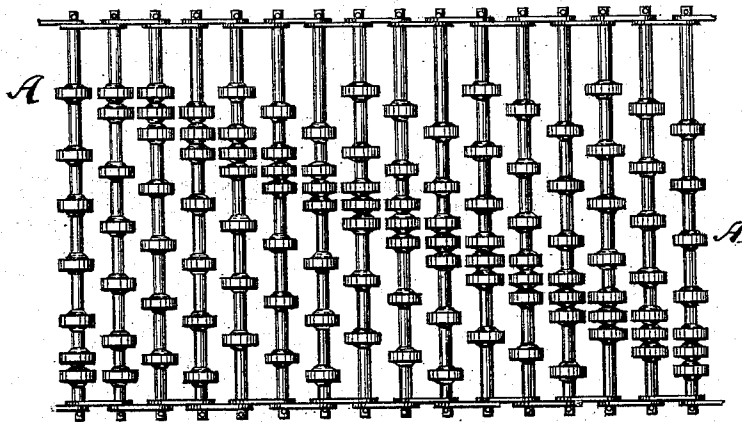


Fig: 2

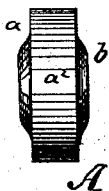


Fig: 3

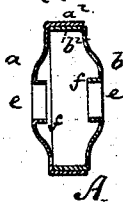


Fig: 4

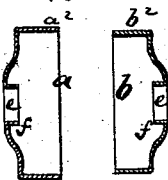
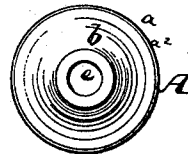


Fig: 5



Witnesses:

John C. Dunbridge
William H. C. Smith.

Inventor:

Monty Lindner
by his attorney
and Ziesen

UNITED STATES PATENT OFFICE.

MORITZ LINDNER, OF CHEMNITZ, SAXONY, GERMANY.

PATTERN-CHAIN FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 224,550, dated February 17, 1880.

Application filed October 31, 1879. Patented in Germany, January 9, 1879.

To all whom it may concern:

Be it known that I, MORITZ LINDNER, of Chemnitz, Kingdom of Saxony, have invented an Improvement in Pattern-Chains for Looms, of which the following is a specification.

Figure 1 is a face view of a pattern-chain containing my improvement. Fig. 2 is an edge view of one of the tappets thereon; Fig. 3, a central section thereof; Fig. 4, a central section of the parts thereof separated; Fig. 5, a face view of said tappet.

This invention, for which I received a German patent of fifteen years, dated January 9, 1879, No. 6,692, relates to a new construction of the little tappets or disks used on the pattern-chains of looms. Such pattern-chains (of which one is represented in Fig. 1) require large numbers of small tappets or disks A A, which, being adjusted at the requisite distances apart, furnish projections for moving the threads in the loom in the desired order.

Heretofore these disks or tappets were made of cast-iron, adding materially to the weight of the chain and interfering with its proper easy motion, besides unduly wearing the parts with which they are brought in contact and the supporting-journals of the chain.

My invention seeks to avoid this undue weight and the disadvantages resulting therefrom; and it consists in constructing each of the disks or tappets A of two pieces of stamped metal of peculiar form—that is to say, I make

each roller A of two saucer-shaped halves, *a* and *b*. The rim *a*² of the half *a* is somewhat larger in diameter than the rim *b*² of the part *b*, so that when the two parts are put together, by placing the rim *b*² into the rim *a*², as in Fig. 3, they will be and remain firmly united by frictional contact without requiring further fastening. They are likewise properly centered by this connection.

In the center of each saucer-shaped piece *a* *b* is a circular opening, *e*, and around the same an inwardly-projecting annular ring, *f*, as shown. These two rings *f f* constitute a bearing-surface for supporting the tappet at the requisite right angle upon the rod-shaped link of the chain. They also prevent the tappet from tilting on the chain.

I claim—

A pattern-chain composed of bars hinged together, as described, each bar being provided with tappet-rolls A, that consist each of two saucer-shaped parts, *a b*, of different diameters, firmly united by their rims *a*² *b*², each part having a central aperture, *e*, and inwardly-projecting ring *f*, substantially as herein shown and described.

The foregoing specification of my invention signed by me this 30th day of June, 1879.

MORITZ LINDNER.

Witnesses:

R. SCHUBERT,
L. MÜLLER.