W. H. KILBURN.

NEEDLE-GIBS FOR KNITTING-MACHINES.

No. 185,330. Patented Dec. 12, 1876.

Fig. 1.

Fig. 2.

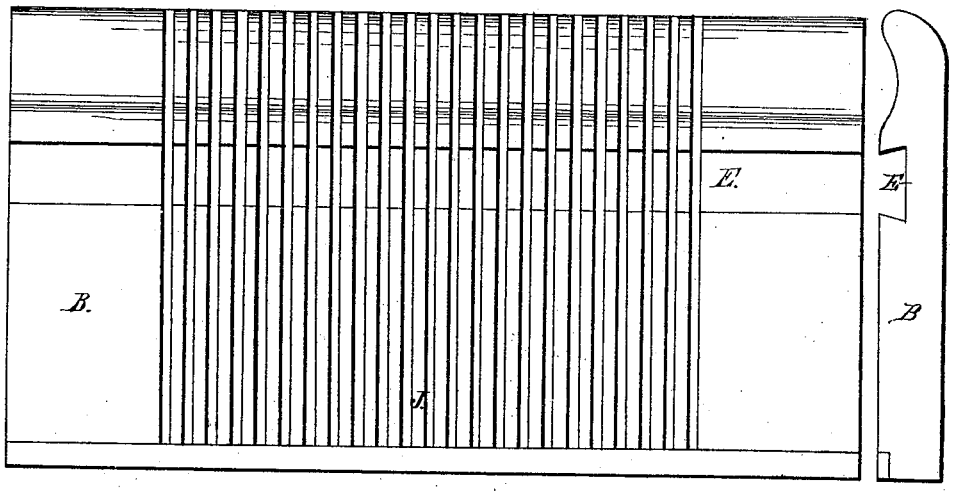

Fig. 3.

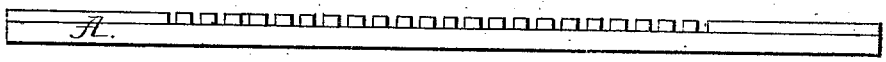

Fig. 4

Attest:

E. Cannon

N. Pardee.

Inventor:

Washington H. Kilburn

UNITED STATES PATENT OFFICE.

WASHINGTON H. KILBURN, OF CORRY, PENNSYLVANIA.

IMPROVEMENT IN NEEDLE-GIBS FOR KNITTING-MACHINES.

Specification forming part of Letters Patent No. **185,330**, dated December 12, 1876; application filed July 13, 1876

To all whom it may concern:

Be it known that I, WASHINGTON H. KILBURN, of Corry, in the county of Erie and State of Pennsylvania, have invented a new and Improved Needle Gib or Slide for Knitting-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

My invention is designed to allow of the needles being inserted in, locked in place in, or withdrawn from, the machine by very simple mechanism, and with as small a loss of time as is possible.

Heretofore it has been necessary, when for any reason a change in needles or a displacement of the same is desired, to expend from ten to fifteen minutes, or thereabout, in the manipulation of the parts securing and releasing the needle.

My aim is to so construct the usual gib or slide that by a movement of the same to either right or left a short distance the needle-engaging parts may be in a position suitable for at once removing the needle and substituting another in its stead.

By such a construction of parts as follows in description a broken needle can be replaced within a few seconds of time by adjusting its engaging-slide on the needle-bed a distance equal to the diameter of the needle. The disadvantage of being obliged to remove the carriage or other top engaging mechanism is also thus obviated, and a corresponding economy of labor is thereby effected.

My invention consists in a gib or slide provided with transverse grooves or channels upon its face, and so applied to the bed as that the said grooves shall be toward the bed, and by sliding the said gib its grooves may be adjusted to register with the grooves in the bed, or "break joint" with them, these grooves being of a width corresponding to the grooves of the bed, and constructed so that upon the registering of the grooves in the gib and in the bed an opening is afforded for readily introducing or removing the needles, and, upon passage of the slide over the bed the distance of the cross-section of one of these grooves, the needles are securely locked and held in operative condition.

Referring to the drawings, Figure 1 represents my improved gib or slide; Fig. 2, a bed or frame for holding the needles in position for use; Fig. 3, a side elevation, and Fig. 4 an edge view of the gib.

A is the needle gib or slide, of any desired dimension or construction, and provided with the grooves *i*, running parallel with the needles, as arranged for action. B is the ordinary bed plate or frame for holding the needles, provided with grooves corresponding to those of the gib, the intervening ribs or grooved projections of which are lettered J. A dovetailed groove, E, longitudinal with the bed-piece B, is formed in the upper face of the same, which groove admits the gib, the latter being constructed with a dovetailed tongue corresponding to the groove, and by this means the gib and the bed are engaged with each other.

The gib is so applied to the bed that its grooves shall be toward those of the bed, and may register or break joint with them. Upon the introduction of the gib into the slot E it can be easily adjusted therein longitudinally in either direction, and when the transverse grooves of the two plates A and B register, or come into direct line one above the other, an opening is left sufficient to remove or reinstate a needle without any other change or movement of the gib or slide.

To fasten and firmly secure the needles in place, it is only necessary to adjust the gib until its transverse grooves stand directly over the projections J of the bed, which movement places the said grooves *i* between the needles.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a knitting-machine, the combination, with a needle-bed, of an adjustable gib, the latter provided with grooves counterpart to those of the bed, whereby the needles may be inserted, locked, or withdrawn at will, substantially as described.

The above specification of my invention signed by me this 8th day of July, 1876.

W. H. KILBURN.

Witnesses:
C. G. HARMON,
M. PARDEE.