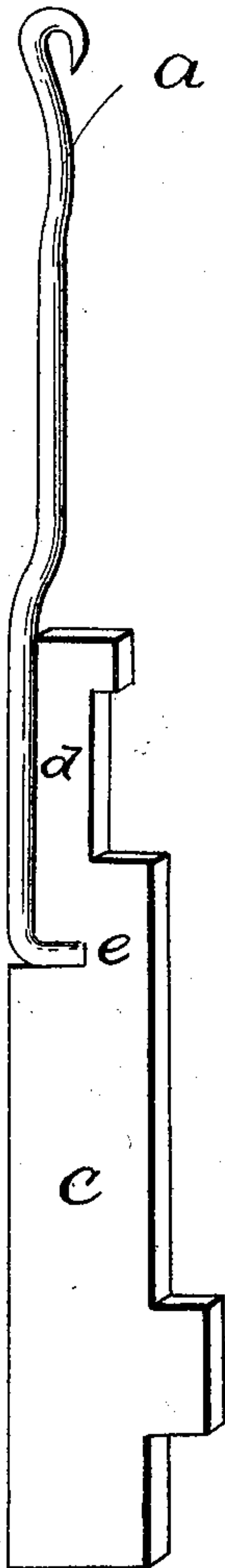


H. J. WICKHAM.  
JACK FOR KNITTING NEEDLES.

No. 81,235.

Patented Aug. 18, 1868.



Witnesses:

A. O. Wilder.  
Jenny M. Bliss

Inventor:

Horace J. Wickham

# United States Patent Office.

HORACE J. WICKHAM, OF MANCHESTER, CONNECTICUT, ASSIGNOR TO HIMSELF AND MILTON KEENEY, OF SAME PLACE.

*Letters Patent No. 81,235, dated August 18, 1868.*

## IMPROVEMENT IN JACK FOR KNITTING-NEEDLE.

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, HORACE J. WICKHAM, of Manchester, county of Hartford, and State of Connecticut, have invented a certain new and useful Improvement in the Construction of Knitting-Jacks, which are employed to support and carry a single needle; and, to enable others skilled in the art to make and use the same, I will proceed to describe it.

In that class of knitting-machines in which each needle is secured to a rising and falling jack, they are usually soldered or riveted firmly to the jacks, and have no movement whatever independent of the jack. The consequence of this mode of attachment is that when any undue strain comes upon the needle, it is either broken or more or less unsoldered so as to be inoperative, and thus occasions much delay, and some trouble and expense to repair or replace it.

The object of my invention is to secure the needle as firmly as may be required to the jack, and yet to dispense altogether with soldering or riveting, or with plugs or wedges, or any other means of positively uniting them into one, at the same time securing to the needle every movement needed, but giving it in addition a slight latitude of play in the direction of the usual strain upon it, without any liability or risk of dislodging it from its true position.

My construction also allows of an almost instantaneous removal of a broken or bent needle, and the substitution of another in its place.

In the accompanying drawings, a jack is shown, constructed in accordance with my invention, and with a needle adapted thereto, inserted in its proper position, *a* representing the needle, and *c* the jack.

The manner of arranging and operating these jacks in a knitting-machine need not be described further than to say that a moving-plate, having a cam-groove therein is usually employed, to raise and lower in succession each jack with its needle; and the jacks are ordinarily made of about the form shown in the drawings, with the exception of the parts *d* and *e*, in which consists my invention.

My improved jacks differ from those now in common use, in this respect, that instead of having a slit in the upper end, the metal is cut away from the back of the jack, as shown at *d*, enough to admit the shank of the needle, and a notch, *e*, is cut transversely to receive the bent end of the needle. The outer or upper end of the rebate *d* is made slightly diverging from the line of the back of the jack, the object of which is to allow play of the needle between the notch *e* and the end of the jack, thus affording greater elasticity to the needle and less liability of breaking it. The lower end of this needle, *a*, is bent into a right-angled shape, or nearly so, as shown in the drawings. Said needle is bent forward just above the upper end of the jack, more or less, so as to bring the body of the needle into its proper relative position with the other mechanism of the machine. With my construction, the needle is more elastic, less liable to break, and more easily connected and disconnected to or from the jack.

I believe I have thus shown the nature, construction, and advantage of this improvement, so as to enable others skilled in the art to make and use the same therefrom.

I am aware that knitting-needles have been made with a right-angled bend at their butts, and that such butts have been held in holes drilled in a stationary frame, and that such butts have been inserted in slots in the top of the needle-plate, and then held in place by means of a spring, and tightened by a wedge, which is forced down into such slot; and that in such case the removal of such spring and wedge is necessary before the needle can be removed. These I do not claim; but

What I do claim, and desire to secure by Letters Patent, is—

A knitting-needle jack, constructed with an inclined rebate, *d*, and slot *e*, as and for the purposes set forth.

HORACE J. WICKHAM.

Witnesses:

N. C. WILDER,

JEREMY W. BLISS.