

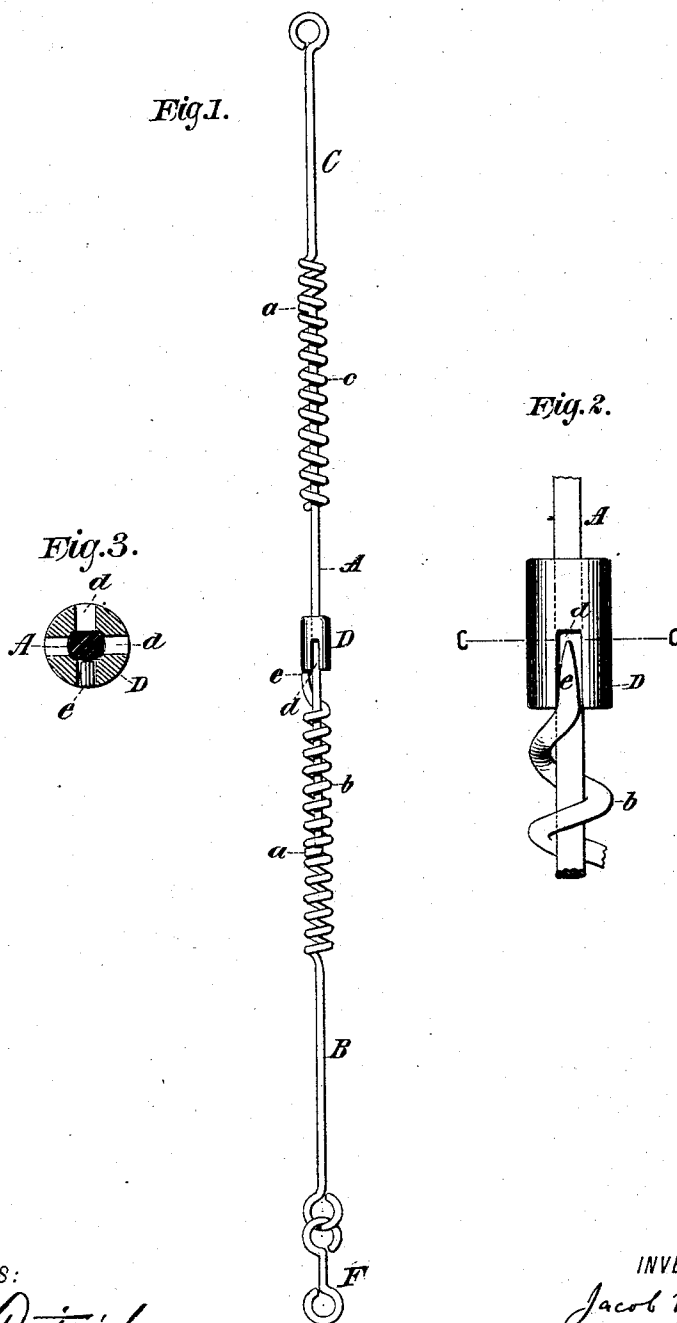
(No Model.)

J. WALDER.

ADJUSTABLE HOLDER FOR HEDDLE FRAMES OF LOOMS.

No. 371,007.

Patented Oct. 4, 1887.



WITNESSES:
Gustave Dretsch
J. F. Bourne.

INVENTOR
Jacob Walder
BY *Brisson & Steele*
ATTORNEY S.

UNITED STATES PATENT OFFICE.

JACOB WALDER, OF PATERSON, NEW JERSEY.

ADJUSTABLE HOLDER FOR HEDDLE-FRAMES OF LOOMS.

SPECIFICATION forming part of Letters Patent No. 371,007, dated October 4, 1887.

Application filed February 4, 1887. Serial No. 226,524. (No model.)

To all whom it may concern:

Be it known that I, JACOB WALDER, of Paterson, in the county of Passaic and State of New Jersey, have invented an Improved Adjustable Holder for Heddle-Frames of Looms, of which the following is a full, clear, and exact description.

Heretofore to adjust the height of heddle-frames it has been necessary to unfasten the heddle-frame holder, adjust the length of the holder, and then refasten the same, thus causing loss of time and annoyance.

The object of my invention is to overcome this difficulty; and it consists in making the holder sectional, as hereinafter described, so that it need not be detached to make the desired adjustment of the heddle-frame. The holder is composed of a central flat or prismatic rod having projecting lugs on each end, which work in spirals on the end of two separate rods, and a sleeve around the central rod, which sleeve serves to turn the rod and also to lock one of the spirals to the same.

Reference is to be had to the accompanying drawings, forming part of this specification, in which Figure 1 is a side view of one of my improved heddle-frame holders. Fig. 2 is an enlarged view of part of the same, showing the central rod locked to one of the spirals by the sleeve. Fig. 3 is a cross-sectional view on the line *c c*, Fig. 2.

A in the accompanying drawings is a rod, preferably prismatic in cross section, upon the ends of which rod A are formed projections or lugs *a*. This rod may be made of any desired metal, preferably of wire. The rod A passes into, and the lugs *a* engage, the oppositely-arranged spirals *b c* on two other rods, B C. Surrounding the rod A is the sleeve D. The internal configuration of the sleeve D conforms to the shape of the rod A, and is made to slide on said rod longitudinally and to turn with same. The sleeve D has one or more longitudinal recesses or grooves, *d*, near one end, to receive the end *e* of the rod B, for locking the rod A to the rod B.

The rod B may have the link F, for attachment to the heddle-frame, or any other suitable attaching means may be employed, and

the rod C may be attached to the jack, harness-lever, or similar device on the upper part of the loom in any suitable manner.

To adjust the heddle-frame to any desired height, sleeve D is released from engagement with the end *e* of rod B, when the rod A can be turned in either direction on its longitudinal axis, so that the lugs *a*, engaging the spirals *b c*, will draw the spirals nearer together or separate them farther apart, thus raising or lowering the heddle the desired extent without turning either rod B or C. Then by slipping the sleeve D over the end *e* of the rod B the heddle will be locked in the desired position.

It is evident that only one spiral need be used, the other end of the rod A being swiveled in any suitable manner, and also that the rod A may have a longitudinal groove to receive a pin from the sleeve D, when the operation will be the same.

Having now fully described my invention, what I claim is—

1. In a heddle-frame holder, the central rod, A, having the end projections, *a* and *a*, in combination with the end rods, B C, made spiral and engaged with the projections on said rod A, and with means for locking said central rod to one of the rods B C, leaving it swiveled in the other, all arranged so that when the rods B C are unlocked from the rod A the entire holder can be lengthened or shortened without turning its ends, as specified.

2. In a heddle-frame holder, the prismatic rod A, having end projections, *a*, and grooved sleeve D, in combination with rod B, having spiral *b* and projecting end *e*, substantially as described and for the purposes specified.

3. In a heddle-frame holder, the prismatic rod A, having end projections, *a*, and sleeve D, having longitudinal groove *d*, in combination with the rods B and C, having spirals *b* and *c*, the rod B having also the projection *e*, for locking said rods A and B together, substantially as described.

J. WALDER.

Witnesses:

HARRY M. TURK,

CHARLES G. M. THOMAS.