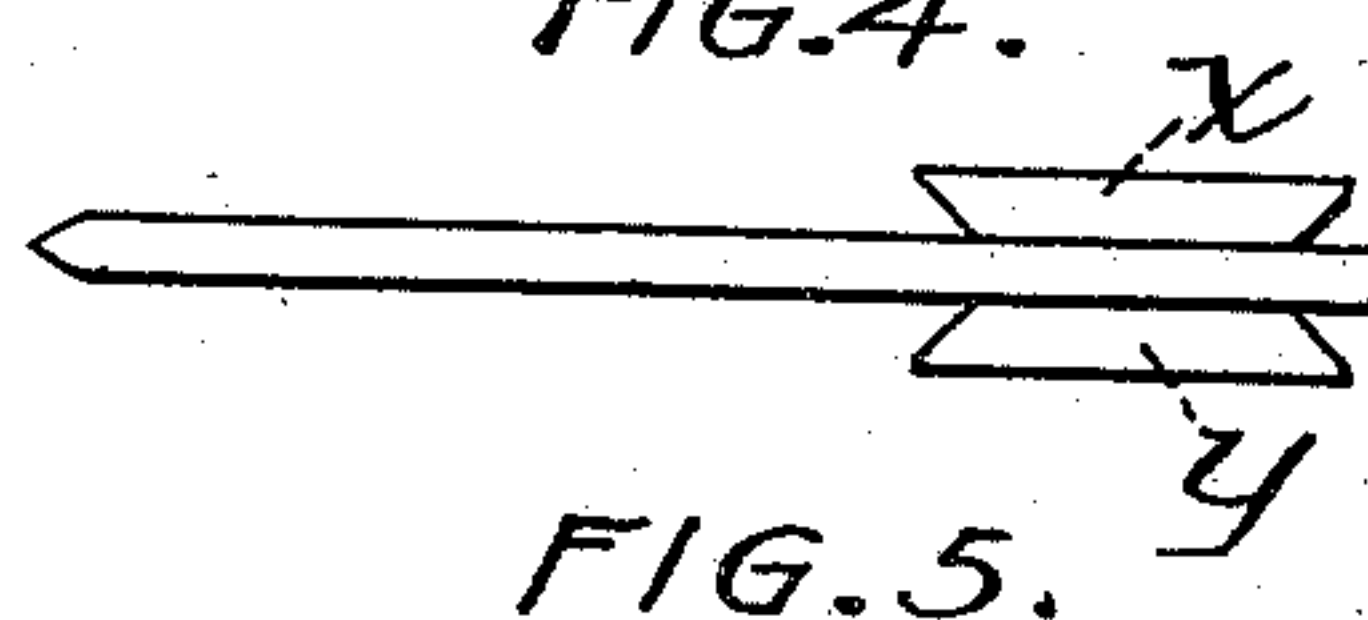
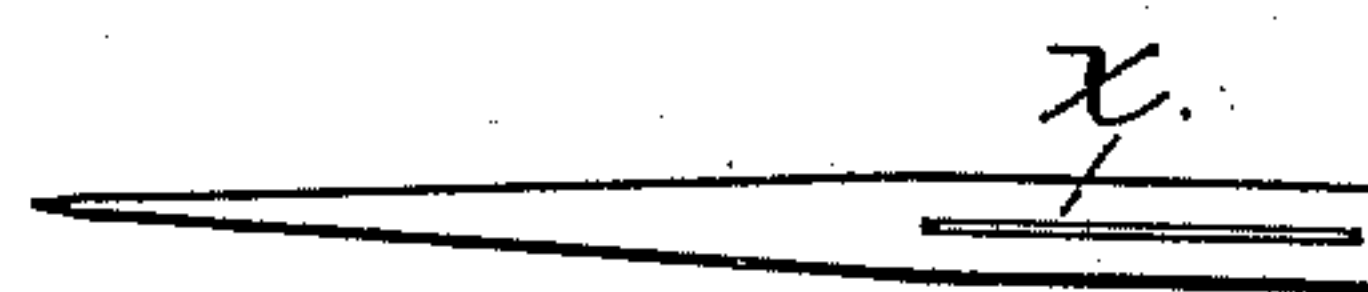
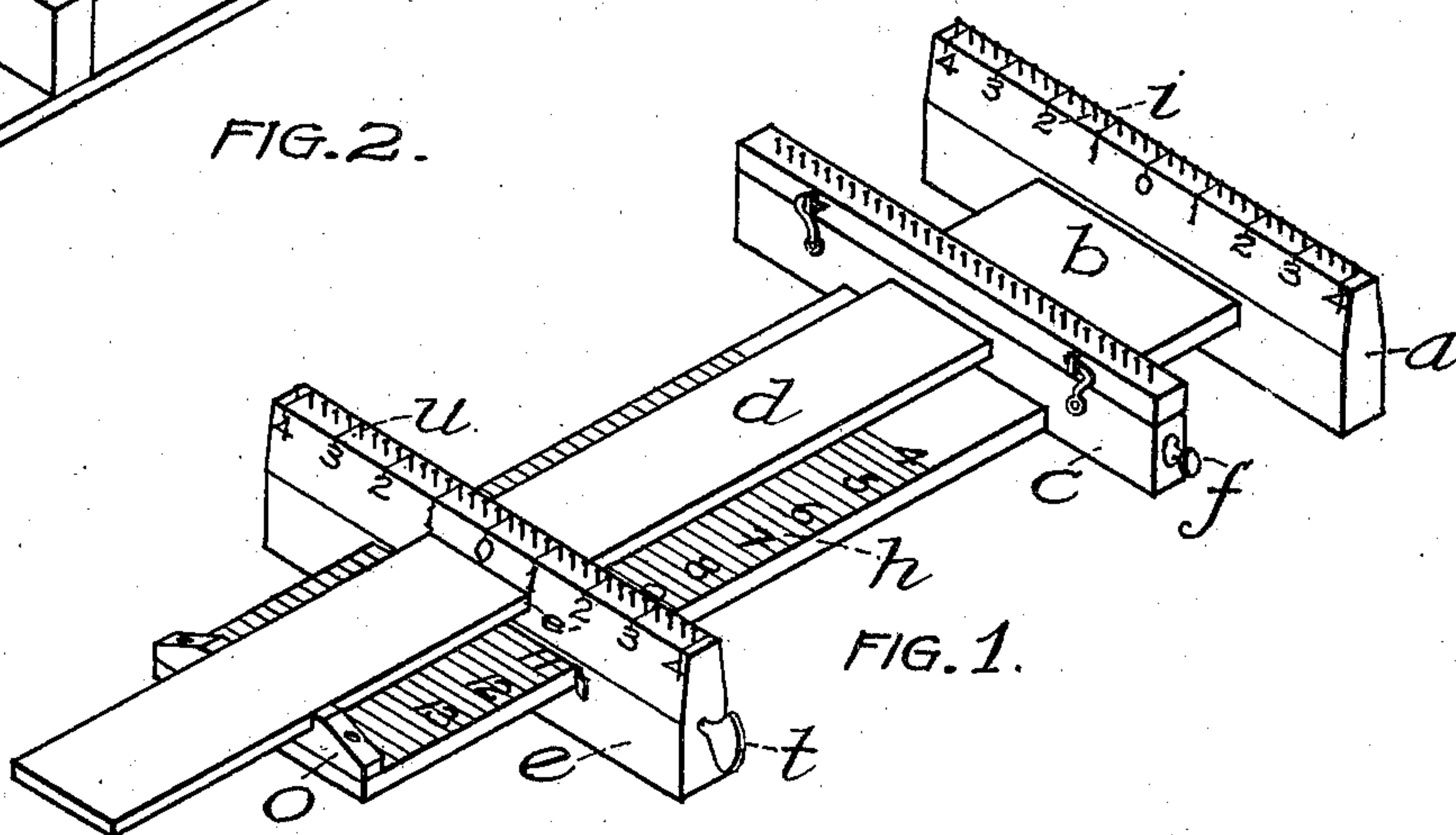
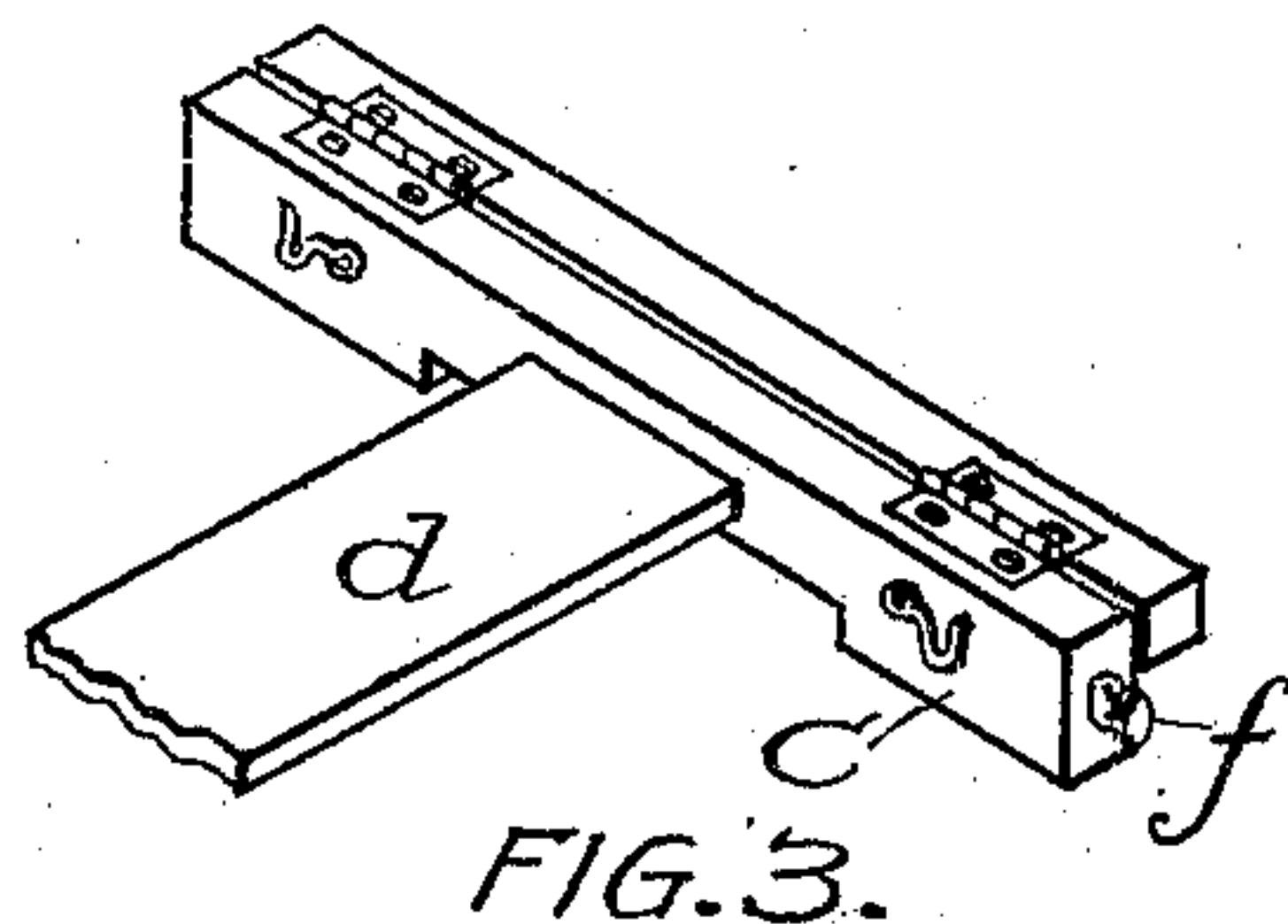
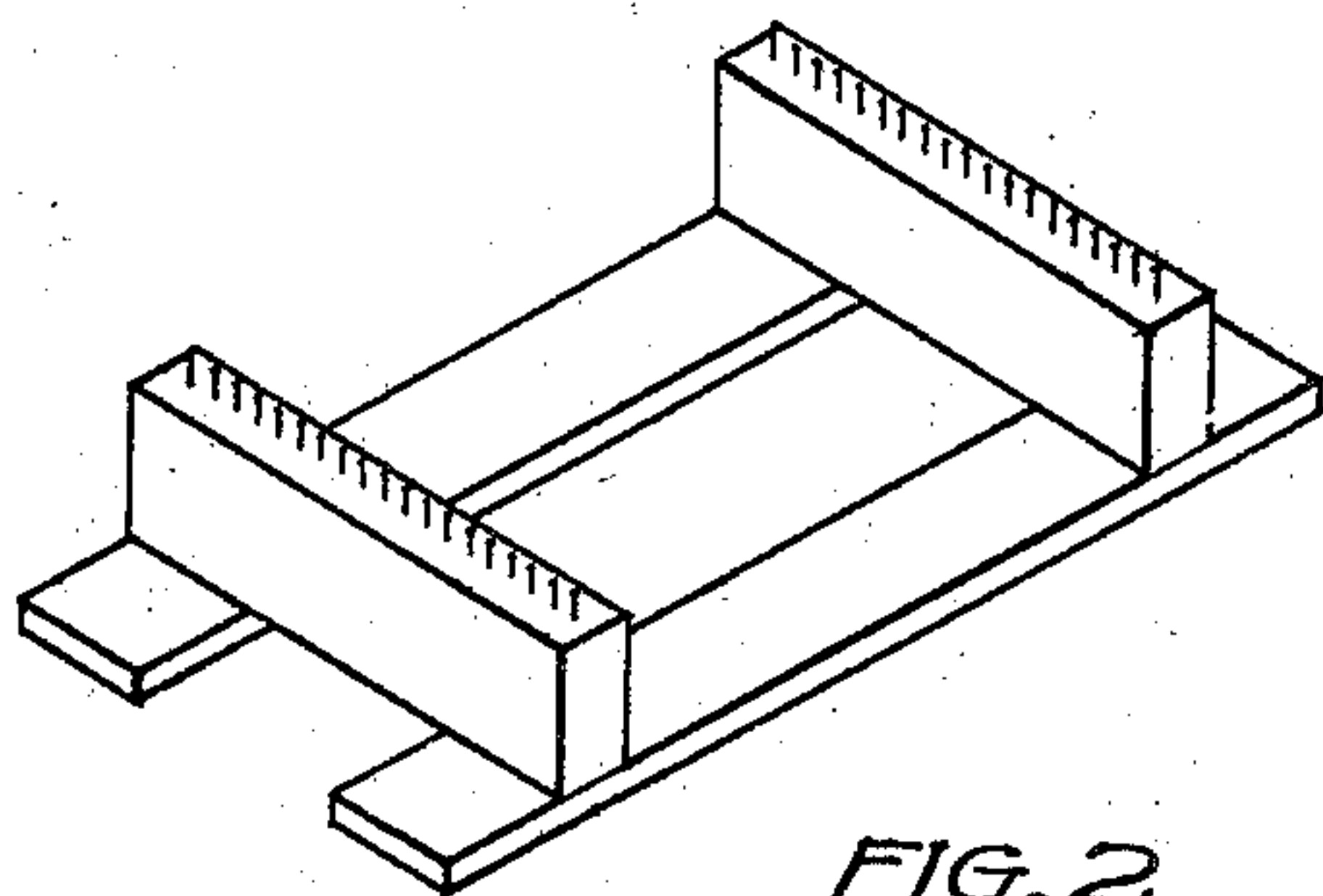


No. 709,535.

Patented Sept. 23, 1902.

L. M. COMSTOCK.
KINDERGARTEN LOOM.
(Application filed Feb. 16, 1901.)

(No Model.)



WITNESSES:

WITNESSES:
J. Howard Bowell
Mrs. B. Bowell

Levi M. Burnstock INVENTOR.

UNITED STATES PATENT OFFICE.

LEVI M. COMSTOCK, OF HIGHLAND PARK, ILLINOIS.

KINDERGARTEN-LOOM.

SPECIFICATION forming part of Letters Patent No. 709,535, dated September 23, 1902.

Application filed February 16, 1901. Serial No. 47,642. (No model.)

To all whom it may concern:

Be it known that I, LEVI M. COMSTOCK, a citizen of the United States, residing at Highland Park, in the county of Lake and State of Illinois, have invented a new and useful Kindergarten-Loom, of which the following is a specification.

The object of my invention is to provide a portable loom which may be readily adapted for use in kindergarten-work or for fancy-work, it being primarily my purpose to provide a loom which is not merely portable, but which will be suitable for use in the operator's lap or upon a table or under other like conditions.

A further object of my invention is to provide such a loom which is of simple and inexpensive construction and which, while it may be readily used by the unskilled, and especially by children in kindergarten-work, shall yet be capable of producing artistic and accurate weaving.

These and such other objects as may hereinafter appear are accomplished by the devices illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the preferred form of my loom. Fig. 2 is a perspective view of one of the simplest forms of loom, which is old in this art. Fig. 3 shows the lathe in perspective in its closed position. Fig. 4 is a plan view of my shuttle, and Fig. 5 is a side elevation thereof.

Like letters of reference indicate the same parts in the several figures of the drawings.

Referring by letter to the accompanying drawings, *b* is a base-board, upon which are mounted oppositely-disposed pin-blocks *a* *e*. These pin-blocks project above the plane of the base-board *b* and are provided at their upper edges with pins for receiving the warp-threads, which are wound back and forth from one pin-block to the other and around said pins, the warp-threads when so wound extending in a plane above the plane of the base-board, so as to leave a working space between the base-board and the warp.

In the preferred form of my device, as shown in Fig. 1, the pin-blocks are adjustable with relation to each other, the simplest means for obtaining such adjustment consisting in securing the pin-block *a* rigidly to

the base-board *b* and providing the pin-block *e* with a slot for receiving the base-board *b*, whereby the block *e* may slide longitudinally of the base-board *b* and may be locked at any desired point along the base-board by means of the set-screw *t*.

c is a lay adapted to be reciprocated between the pin-blocks *a* *e* and provided with a stem *d*, which passes freely through a guide-slot *e'* in the block *e* and through a corresponding guide-notch in the end block *o*.

For convenience in threading the loom, as well as for convenience in weaving in the weft-threads immediately adjacent to the pin-block *a*, the lay *c* is formed in two sections, the upper one of which is hinged to the lower or base section in the manner shown in Fig. 3. Upon the upper edge of the upper section of the lay are mounted a plurality of pins arranged to extend upwardly between the warp-threads and to engage the weft-threads as the lay is reciprocated along the base-board *b*. When the lay is being thus used, the upper section thereof is turned up, as shown in Fig. 1, and is secured in such position by any suitable means, such as the hooks and eyes shown in Fig. 1.

For convenience in reciprocating the lay it may be provided with knobs or handles *f*, if desired.

In using my loom a convenient and simple form of shuttle is that shown in Figs. 4 and 5, consisting of a strip of hard wood tapered toward one end and provided with oppositely-projecting wedges *x* *y*, about which the supply of material to form the filling or weft of the fabric may be wound.

In using my improved loom the loom is threaded as before indicated. The filling or weft threads are then woven backward and forward across the warp by means of the shuttle shown in Figs. 4 and 5 or any other convenient means, and each time the weft thread is woven across the loom it is beaten up by reciprocating the lay *c* until the pins mounted thereon engage the weft-thread and beat it up in the usual manner. The lay is then reciprocated away from the woven portion of the fabric. The weft-thread is again woven in and beat up, as before, until the fabric is nearly completed and the portion thereof being woven approaches one of the

pin-blocks. Obviously the lay will then interfere with the completion of the fabric, and the space allowed for the passage of the shuttle will be too narrow for the use of a shuttle.

- 5 With my device the upper section of the lay *c* is now unlocked from its lower section and is turned out of the way, as shown in Fig. 3, thereby leaving a clear space for the completion of the fabric, which may now be finished
10 by using a needle to weave the weft-thread back and forth to the end of the fabric.

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

- 15 1. In a loom, the combination with a support, of oppositely-disposed blocks mounted thereon, means upon said blocks for engaging the warp-threads, a lay arranged to be reciprocated between said blocks and provided
20 with means for beating up the weft-threads of a fabric being woven upon said loom, and means whereby said thread-engaging means upon said lay may, at will, be brought into the plane of said weft-threads or dropped be-
25 low said plane, substantially as described.

2. In a portable hand-loom, the combination with a base-board, of pin-blocks adjustably mounted on said base-board with relation to each other, a lay mounted upon said base-board and adapted to be reciprocated between said pin-blocks, a stem upon said lay, and a guide for said stem, substantially as described. 30

3. In a loom, the combination with a base-board, of a pin-block rigidly mounted thereon, a second pin-block slidably mounted upon said base-board, means for locking said second pin-block to said base-board, a lay slidably mounted upon said base-board and between said pin-blocks, a stem upon said lay, and a guide for said stem, substantially as described. 35 40

In testimony whereof I have signed my name to this specification in presence of two subscribing witnesses.

LEVI M. COMSTOCK.

Witnesses:

J. HOWARD BOSWELL,
Mrs. B. BOSWELL.