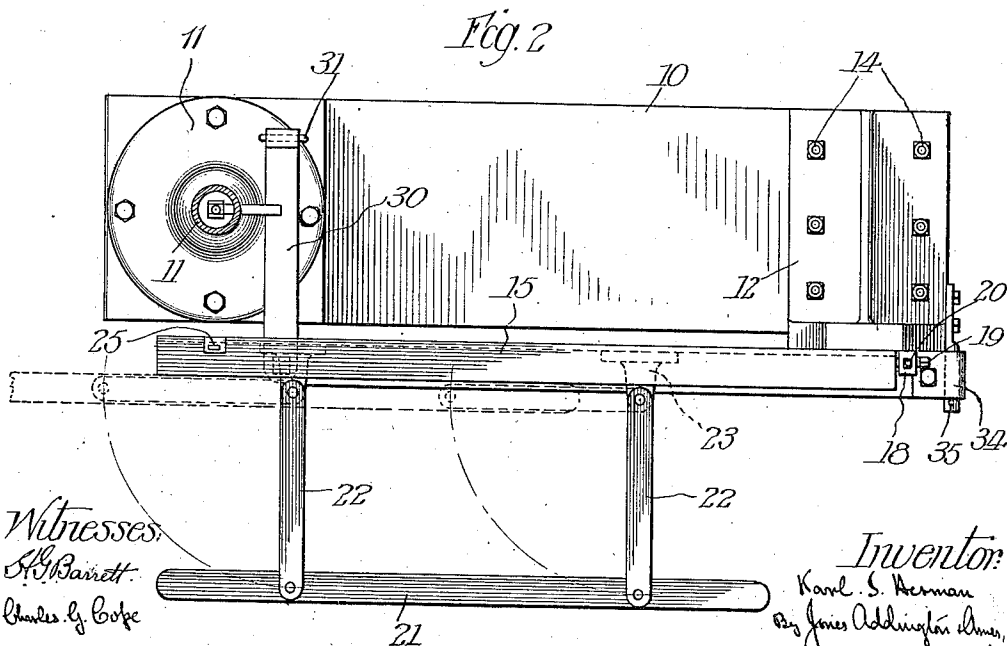
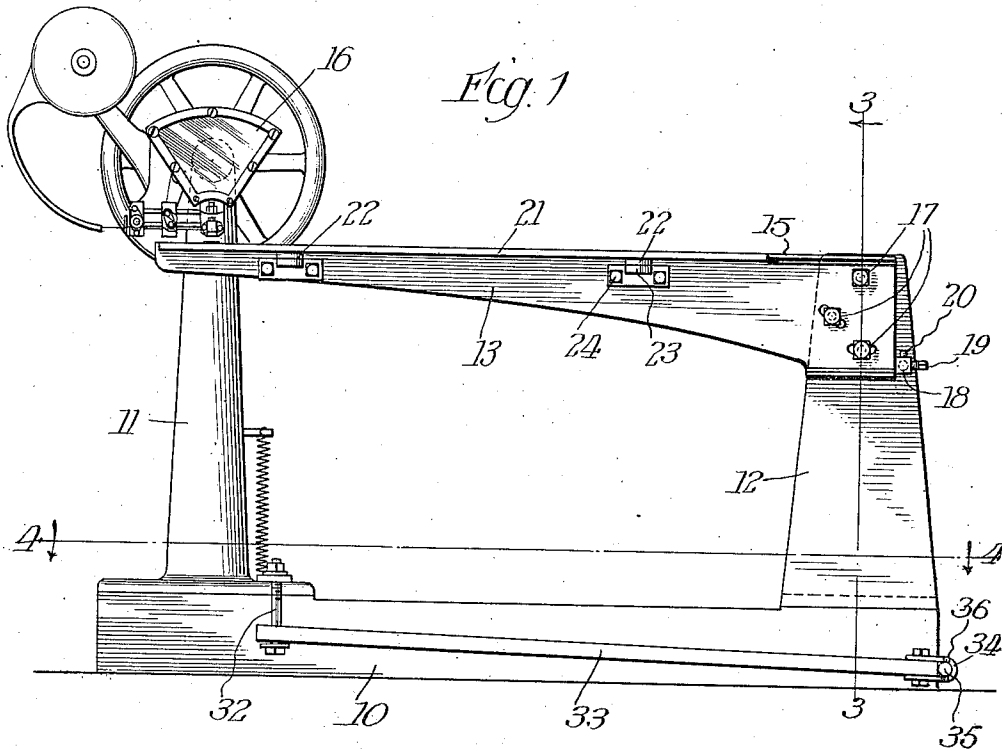


K. I. HERMAN.  
 BLANK SUPPORTING DEVICE FOR STITCHING MACHINES.  
 APPLICATION FILED NOV. 30, 1909.

1,045,403.

Patented Nov. 26, 1912.

2 SHEETS—SHEET 1.

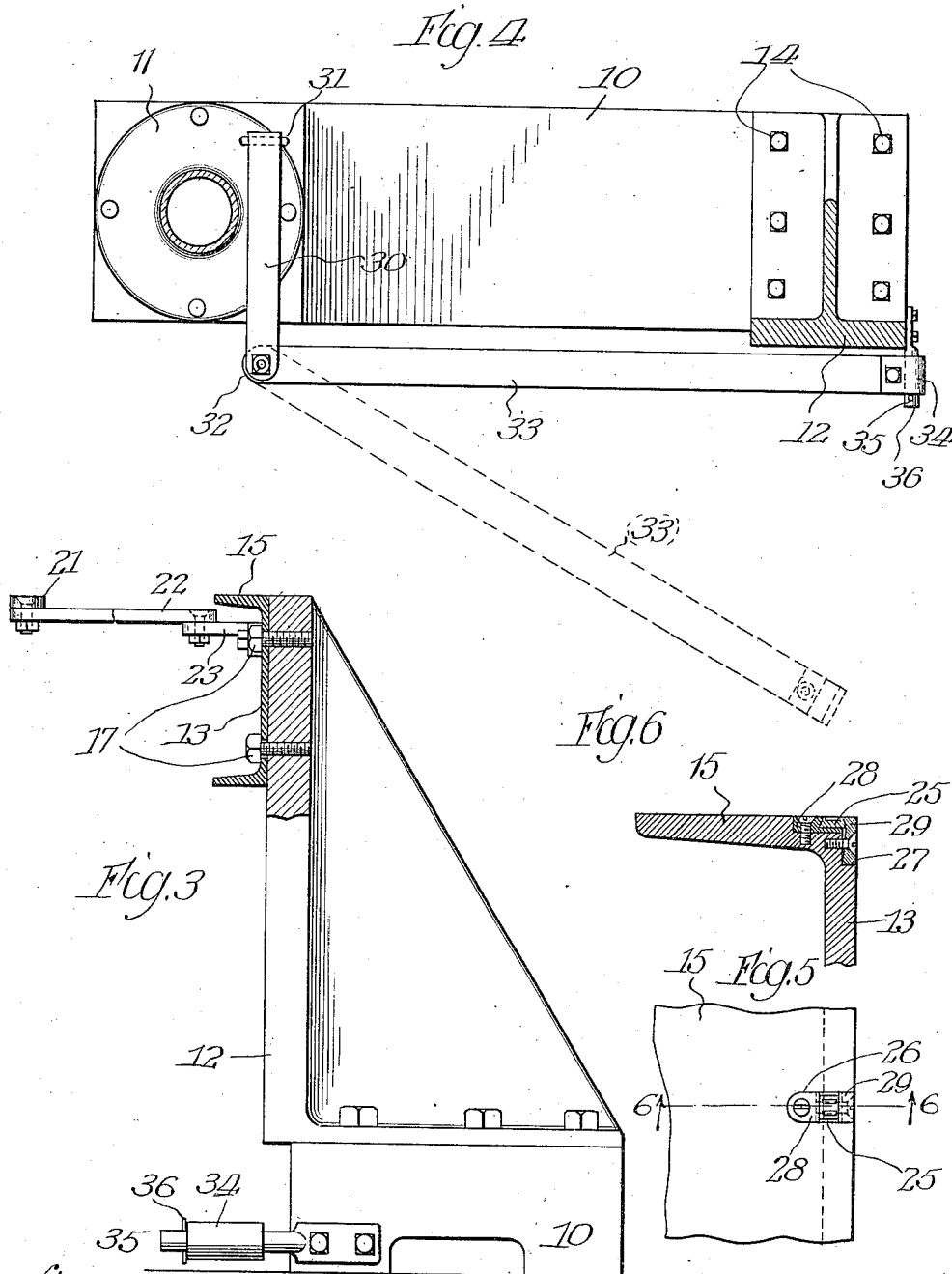


K. I. HERMAN.  
 BLANK SUPPORTING DEVICE FOR STITCHING MACHINES.  
 APPLICATION FILED NOV. 30, 1909.

1,045,403.

Patented Nov. 26, 1912.

2 SHEETS—SHEET 2.



Witnesses:  
 H. C. Barrett  
 Charles G. Cooke

Inventor:  
 Karl J. Herman  
 By Jones, Addington & Ames,  
 Attys

# UNITED STATES PATENT OFFICE.

KARL I. HERMAN, OF CHICAGO, ILLINOIS.

## BLANK-SUPPORTING DEVICE FOR STITCHING-MACHINES.

1,045,403.

Specification of Letters Patent.

Patented Nov. 26, 1912.

Application filed November 30, 1909. Serial No. 530,542.

*To all whom it may concern:*

Be it known that I, KARL I. HERMAN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Blank-Supporting Devices for Stitching-Machines, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawing, forming a part of this specification.

My invention pertains to machines for stitching paper boxes, fiber shipping cases, and the like, and has as its principal object the provision of improved means for supporting the box blanks during the stitching operation.

For an understanding of my invention reference is to be had to the following description and to the accompanying drawings in which a form which my invention may take is illustrated.

In the drawings, Figure 1 is a front elevation of a blank supporting device constructed in accordance with my invention; Fig. 2 is a plan, part of the stitching machine proper having been cut away; Fig. 3 is an end view with the upper portion shown in section, the section being taken on the line 3—3 of Fig 1; Fig. 4 is a sectional plan, the section being taken on the line 4—4 of Fig. 1; Fig. 5 is a detail plan showing the means for securing the clencher block in position; and Fig. 6 is a detail section taken on the line 6—6 of Fig. 5.

In the manner of carrying my invention into effect which I have chosen as best illustrating it, I provide a bed 10 of elongated form adapted to have secured thereon at one end, the base of the stitching machine 11. The stitching machine may be of any convenient type and does not, itself, form a part of my invention. From the other end of the bed 10 rises a standard 12 for supporting the work support 13. The standard 12 may be secured in position by bolts 14 extending through the base 10 and a suitable flange formed at the lower end of the standard.

The work support 13 consists of a vertical web having a horizontal flange 15 extending along its upper edge, upon which flange the blank may be rested during the stitching operation. It is of sufficient length to accommodate the largest size of blank which it is expected that the machine will be required to stitch, the distance between the stitching

machine 11 and the standard 12 being sufficient to allow of the use of a work support of such a length. The work support extends directly beneath the head 16 of the stitching machine and continues slightly beyond it, being provided, at the proper location, with a clencher block for completing the staples. The work support 13 is secured to the standard 12 by means of bolts 17, of which the lower two pass through slotted holes in the work support, the upper bolt hole being not slotted. This enables the work support to be adjusted for various thicknesses of blanks by loosening the bolts and tilting it about the upper bolt. To enable this adjustment to be readily and accurately effected, I provide a boss 18 upon the standard 12 adjacent the lower right-hand corner of the work support. Through this boss passes an adjusting screw 19 arranged to bear at its end against the work support. A locking set screw 20 is provided for locking the set screw 19 after the adjustment has been effected.

In order to support the blanks properly when they are being stitched I provide a support bar 21 which is linked by means of parallel members 22 of equal length to lugs 23 which are suitably secured, as by bolts 24, to the work support, the location of these various parts being preferably such that the bar 21 is supported in the plane of the top of the work support. It will be seen that by rocking the bar 21 and its links 22 to the right or to the left the distance between the bar 21 and the work support may be varied to suit the various widths of blank which it may be necessary to stitch.

As has been stated above, the work support is provided, in the proper position beneath the head 16 of the stitching machine, with a clencher block 25 of the usual conformation. In order to secure the clencher block in position in such a manner as to enable it to be readily removed when desired, I form the work support with a slot 26 extending from one edge outward and with a second slot, 27, opening into the slot 26 and extending downward (Figs. 5 and 6). A plate 28 is secured, by means of a countersunk set screw, in the slot 26 and is formed with an undercut recess for receiving the clencher block 25, which latter is preferably somewhat less in length than the width of the slot 26 so as to allow longitudinal adjustment to be effected. A retaining plate

29 is secured, by means of a set screw, in the slot 27 and engages at its upper edge against the clencher block, thereby retaining the latter in position. When it is desired to adjust the clencher block longitudinally of the work support, it is only necessary to loosen the retaining plate 29 when the desired movement can be effected. A sufficient loosening of the retaining plate permits the clencher block to be withdrawn.

Stitching machines of the class referred to are usually provided with a short starting pedal located upon the base. It will be obvious that, with the support bar 21 extended during the stitching of a wide blank, it would not be possible for the operator to reach the pedal. I therefore provide a lever 30 which lies over the ordinary starting pedal of the stitching machine and is adapted, by being depressed, to operate it. The lever 30 is linked at 31 to the base of the stitching machine and is connected, by a vertical bolt 32, to a foot lever 33 which is pivoted, at its other end, to the bed 10. It will be seen that by pressing with the foot upon the lever 33, the lever 30, and consequently the pedal of the stitching machine, are depressed. The pivotal connection between the foot lever 33 and the bed 10 is effected by providing the foot lever with a loop 34 adapted to engage over a pin 35 which projects laterally from the bed 10. A split pin 36 is provided for retaining the loop 34 in its position upon the pin 35. When the support bar 21 is extended and it would consequently be difficult or impossible to reach the lever 33 with the foot, the split pin 36 is withdrawn and the loop 34 removed from the pin 35. The foot lever 33 is then pulled out so as to extend diagonally away from the bed 10, in which condition it is readily accessible.

Stitching machines, when used for stitching blanks made up into the form of tubes, have been subject to the disadvantage that, when the blank has been stitched and the

tube completed, it has been necessary to swing open the work support, open some latch or the like, or perform some similar act. This disadvantage resulted from the fact that in cases where the work support extended across the front of the machine, it was usually supported at both ends. This swinging open of the work support or the like caused a considerable loss of time and was consequently an annoyance to employers as well as to the operators. I do away with this drawback by providing a long work support supported at one end only and open at the other, so that the blank after being stitched need only be slid forward to become free of the work support.

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

1. The combination with a work support for stitching machines, of a clencher block and means for securing said clencher block to the work support comprising a plate secured to said work support and adapted to form an abutment for said clencher block, and a second plate detachably secured to said work support and arranged to engage said clencher block and retain it in engagement with said first-named plate.

2. The combination with a work support for stitching machines, of a clencher block, and means for securing said clencher block upon said work support comprising a plate secured to said work support and having an undercut recess therein for receiving a part of said clencher block, and a retaining plate detachably connected to said work support and arranged to retain said clencher block in position in said recess.

In witness whereof, I have hereunto subscribed my name in the presence of two witnesses.

KARL I. HERMAN.

Witnesses:

CHARLES G. COPE,  
M. L. FARRAR.