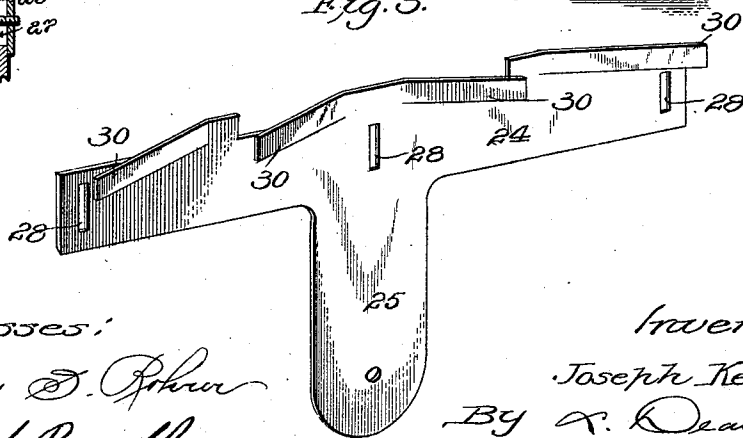
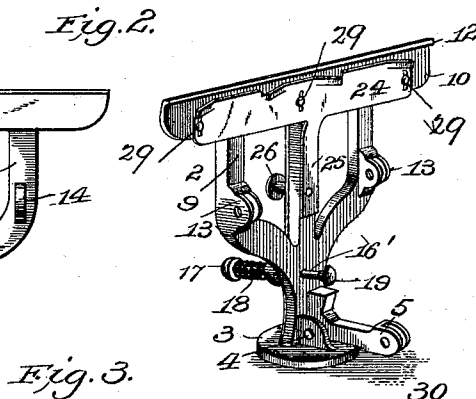
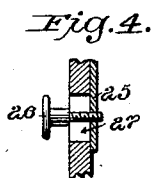
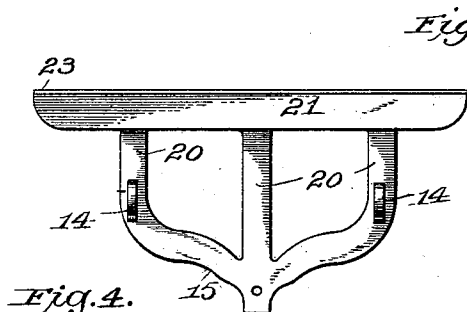
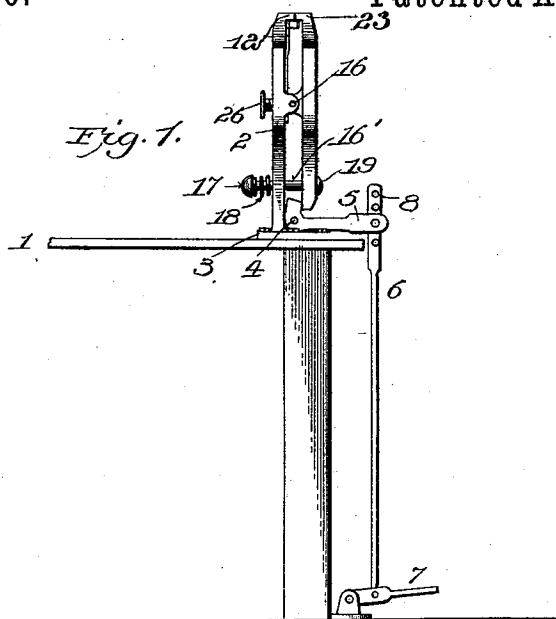


(No Model.)

J. KEEHN.
LEAF CREASING CLAMP.

No. 538,520.

Patented Apr. 30, 1895.



Witnesses:

Henry D. Pohn
Herbert Bradley.

Inventor:

Joseph Keehn.

By A. Deane.

His Atty.

UNITED STATES PATENT OFFICE.

JOSEPH KEEHN, OF BURLINGTON, IOWA.

LEAF-CREASING CLAMP.

SPECIFICATION forming part of Letters Patent No. 538,520, dated April 30, 1895.

Application filed July 23, 1894. Serial No. 518,389. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH KEEHN, a citizen of the United States, residing at Burlington, in the county of Des Moines and State of Iowa, have invented certain new and useful Improvements in Apparatus for Creasing the Leaves of Books Preparatory to Binding; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in apparatus for creasing the leaves of books, preparatory to their being bound up into book form.

In large books, especially those used for keeping public records, in order to allow the book to be opened out flat it is necessary that the leaves, before binding, be creased a short distance from the inner edges. This will permit the leaves to turn upon the crease, as a hinge or pivot, instead of turning upon the place of binding, and by this means the book will lie flat in an open condition. The method generally employed for creasing the leaf is to mark with a rule and then fold the leaf over by hand. This is a slow and laborious proceeding and the object of my invention is to provide an improved machine, whereby a number of leaves may be clamped and held at the proper point, so that they can be folded to produce the crease in a rapid and efficient manner.

The invention consists in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a machine constructed in accordance with my invention. Fig. 2 is a perspective view showing the stationary and movable clamps disconnected from each other. Fig. 3 is a perspective view of the gage detached. Fig. 4 is a longitudinal sectional view, on an enlarged scale, of a portion of the stationary clamp, showing the slot therein and the set-screw for holding the gage in place.

In the said drawings the reference numeral 1, designates a table, of any suitable construction upon which the clamps are mounted.

The numeral 2, designates the stationary

clamp having a base 3, which may be bolted or otherwise secured to the clamp. Formed with this base and the lower end of the clamp are lugs 4, in which is pivoted an elbow lever 5, one arm of which is connected with a rod 6, which in turn is connected with a treadle 7, pivoted to the floor or other place or object upon which the table is supported. The upper end of rod 6, is provided with a series of holes 8, to accommodate it to different heights of tables. This clamp is formed with three upwardly extending arms 9, and with horizontal arm 10, having its upper edge turned inwardly forming a clamping flange 12. The outer arms 9, are formed with lugs 13, with which engage corresponding lugs 14, on the movable clamp 15, said lugs being pivoted together by pivots 16, thereby forming a hinge connection between the two clamps. Near its lower end the clamp 2, is provided with a rod 16', having an adjustable head 17, and a coiled spring 18, the inner end of which fits within a recess in said clamp while its other end abuts against said head. By adjusting the head the tension of the spring can be regulated. The opposite end of the rod 17, passes through the lower end of the movable clamp and is provided with a head 19. The movable clamp is formed with vertical arms 20, and a horizontal arm 21, and a clamping flange 23, similar to the flange 12, of the stationary clamp.

The numeral 24, designates an adjustable gage for determining the distance from the edge at which the leaves are to be creased. It consists of a sheet metal plate, provided with a downwardly extending arm 25, provided with a set screw 26, the shank of which passes through a slot 27, in the stationary clamp. By loosening this screw the gage may be moved up and down. This gage lies against the inner side of said clamp and near its upper edge is provided with a series of slots 28, through which pass guide pins 29, secured to said clamp. The upper edge of the said gage is formed with a series of intersecting horizontal and vertical slits, forming tongues 30, which are bent inwardly and serve to support the edges of the bundle of leaves to be creased.

In normal condition, the clamps are open, that is to say, the coiled spring 18, pressing

against the nut 17, forces the rod 16', to the left, and the head 19, on the opposite end of the rod, bearing against the lower end of the movable clamp causes its upper end to be
5 forced away from the upper end of the stationary clamp. The gage is now adjusted according to the distance from the edges the leaves are to be creased and a sufficient number of leaves are then placed between the
10 clamps with their lower edges resting upon the tongues of the gage. The clamps are then brought together by depressing the treadle which through the medium of rod 6, will throw the vertical arm of lever 5, out-
15 ward which engaging with the lower end of the movable clamp, will force the upper end of the latter toward the stationary clamp. The leaves are now securely held and can be folded by a ruler or otherwise. The leaves
20 being creased the treadle is released and the rod 17, and its coiled spring will open the clamps.

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

25 1. The combination with the stationary clamp, having a flange at its upper end, the

elbow lever pivoted to said clamp, and the vertically adjustable gage, of the movable clamp hinged to said stationary clamp with its lower end abutting against one of the arms
30 of said lever, the movable rod passing through apertures in said clamps, having a head at one end and an adjustable nut at the other, and the coiled spring interposed between the said nut and the stationary clamp, substan-
35 tially as described.

2. The combination with the stationary and movable clamps hinged or pivoted to each other, of the vertically adjustable gage consisting of a plate having a set screw working
40 in a slot in one of said clamps the guide pins passing through slots near the upper end of said plate, and the tongues formed by slitting the upper edge of said plate and turning the metal thereof inwardly, substantially as de-
45 scribed.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH KEEHN.

Witnesses:

F. O. GRANDSTAFF,
JNO. J. SEERLEY.