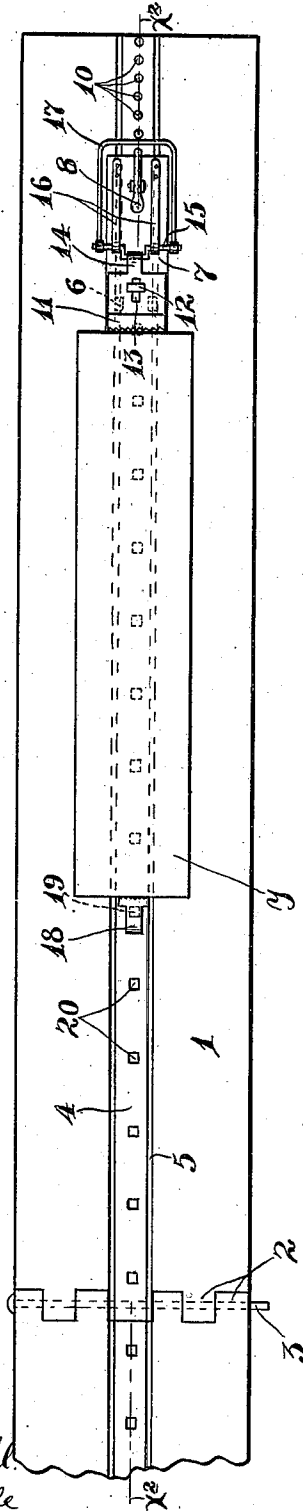


977,695.

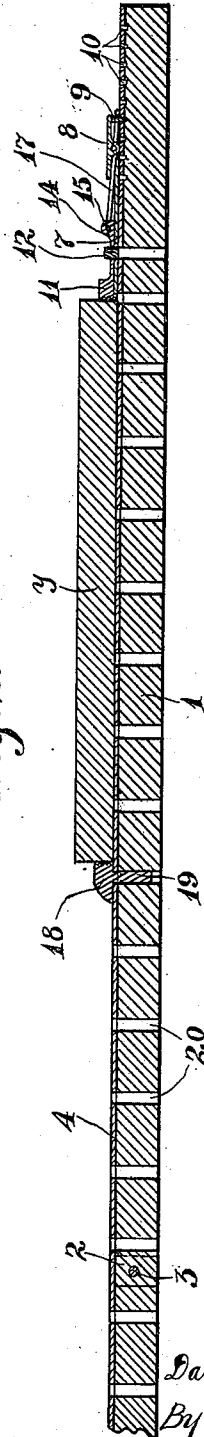
2 SHEETS—SHEET 1.

Fig. 1.



Witnesses.
Harry Opsahl.
E. C. Skinkle

Fig. 2.



Inventor:
Daniel A. Anderson
By his Attorneys
William M. Merchant

977,695.

Patented Dec. 6, 1910.

2 SHEETS—SHEET 2.

Fig. 3.

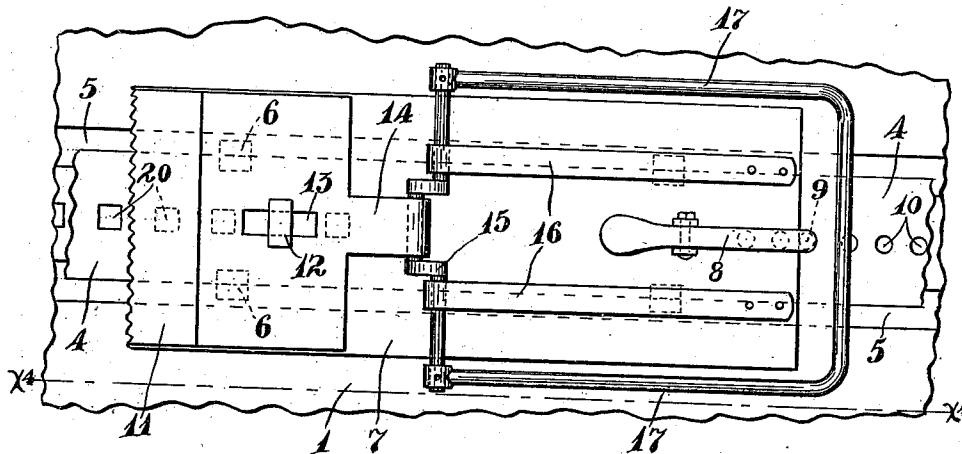


Fig. 4.

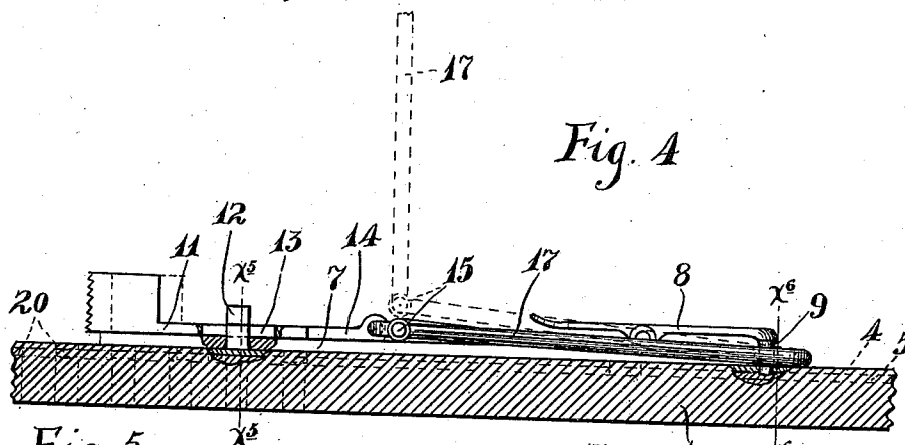


Fig. 5.

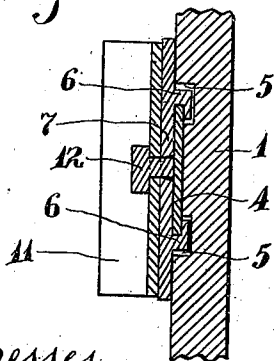
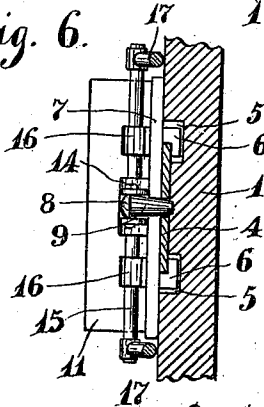


Fig. 6.



Witnesses.
Harry Opsahl.
E. C. Skinkle

Inventor.
Daniel A. Anderson.
By his Attorneys,
William M. Michael

UNITED STATES PATENT OFFICE.

DANIEL A. ANDERSON, OF DEER CREEK, MINNESOTA.

BENCH-CLAMP.

977,695.

Specification of Letters Patent.

Patented Dec. 6, 1910.

Application filed May 19, 1910. Serial No. 562,171.

To all whom it may concern:

Be it known that I, DANIEL A. ANDERSON, a citizen of the United States, residing at Deer Creek, in the county of Otter Tail and State of Minnesota, have invented certain new and useful Improvements in Bench-Clamps; 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 has for its object to provide a simple and efficient portable bench clamp adapted to be carried from place to place and especially adapted for use by carpenters for holding boards or strips of small pieces of lumber while being planed.

To the above end the invention consists of the novel devices and combination of devices hereinafter described and defined in the claims.

In the accompanying drawing which illustrates the invention, like characters indicate like parts throughout the several views.

Referring to the drawing, Figure 1 is a plan view of the improved device; Fig. 2 is a vertical section taken on line $x^2 x^2$ of Fig. 1; Fig. 3 is a plan view showing the crank actuated clamping head and immediate connected parts. Fig. 4 is a section taken on the line $x^4 x^4$ of Fig. 3, some parts being broken away; Fig. 5 is a transverse section taken on line $x^5 x^5$ of Fig. 4 and Fig. 6 is a transverse section taken on line $x^6 x^6$ of Fig. 4.

The body of the device is preferably constructed from long strips of wood 1 made up of sections, the sections being united by overlapping joint 2 and a coupling pin 3. The purpose of making the base board in sections is to adapt the same, when taken apart, to be more easily carried.

A long narrow metallic guide strip 4 is secured to the central portion of the base board 1 with the upper surface of said board and is extended, preferably, from end to end of the said board. This guide strip 4 will be made in sections corresponding to the sections of the board 1. The said board 1 is provided with longitudinally extended clearance grooves 5, which underlap and extend outward beyond the edges of the guide strip 4 so as to leave the edges of said guide strip exposed for engagement with L shaped flanges 6, of a clamp supporting plate 7. This clamp supporting plate 7 is provided

with a pivoted latch 8 having a depending nose 9 and is adapted to be inserted in any one of a row of perforations 10 formed in the right hand end of the guide strip 4, directions being taken in respect to Figs. 1 to 4 inclusive.

Mounted for limited sliding movement on the plate 7 is a clamping head 11, the projecting edge of which is shown, as thickened and serrated, to adapt it to more securely hold the work or board indicated by the character y in Figs. 1 and 2. As shown, the clamp head 11 is connected to the plate 7 by headed stud 12 secured to said plate 7 and working in a slot 13 in said clamping head. The clamping head 11 is, as shown, provided with a short projecting arm 14 in which the crank of a crank shaft 15 is pivotally mounted. The crank shaft 15, which projects on opposite sides of its crank is pivotally mounted on the free ends of a pair of laterally spaced spring bearing bars 16, the right hand ends of which are pivoted or otherwise rigidly secured to the plate 7. The arms of an operating bail 17 are rigidly secured to the ends of the crank shaft 15. To hold the other end of the work or board y , a serrated clamping head or abutment 18 is provided. This clamping head 18 is provided with an angular stem 19 adapted to be inserted into any one of a multiplicity of angular perforations 20 formed in the guide strip 4 and in the base board 1.

As is evident, the clamping head 18 is capable of a wide range of adjustments longitudinally of the base board and by its adjustment the device will be adjusted so that it will quite nearly fit the work or board y . By adjustments of the clamp supporting plate 7, the two clamping heads may be so adjusted in respect to each other that the work will be loosely held between the same, when the clamping head 11 is moved to the right by a movement of the bail 17 from the position shown by full lines in the drawing into an upright position shown by dotted lines in Fig. 4. In such position the plate 7 will be secured by means of latch 8. Then by movement of the bail from the position indicated by dotted lines into position indicated by full lines in Fig. 4, the work will be securely clamped between the two clamping heads 11 and 18.

The utility of a clamp of this character will be readily understood by all carpenters and various other mechanics. It is of small

cost, and furthermore, is generally effective for the purpose had in view.

What I claim is;

1. In a bench clamp, the combination with
5 a base board provided with a longitudinally
extended guide strip, of a clamp supporting
plate slidably mounted on said guide strip
and provided with a latch engageable with
10 perforations in said guide strip to adjust-
ably secure said plate in different positions,
a clamping head having a limited sliding
movement on said supporting plate, a crank
shaft connected to said supporting plate and
15 the said clamping head and provided with a
hand piece for oscillating the same to there-
by move said clamping head and said crank
shaft being movable from one side to the
other of a dead center, and a second clamp-
20 ing head on said base plate, substantially as
described.

2. In a bench clamp the combination with

a base board provided with a longitudinally
extended guide strip, of a clamp supporting
plate slidably mounted on said guide strip,
a pair of laterally spaced yielding bearing 25
bars connected at one end to said supporting
plate, a clamping head having a limited
sliding movement on said supporting plate,
a crank shaft provided with an operating
bail and movably connecting said clamping 30
head to the free ends of said supporting
bars, means for adjustably securing said
supporting plate in different positions on
said guide strip, and a second clamp head on
said base board, substantially as described. 35

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

DANIEL A. ANDERSON.

Witnesses:

R. M. NELSON,
J. R. PALAN.