

A. E. PALMER.

CLAMP.

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1,005,292.

Patented Oct. 10, 1911.

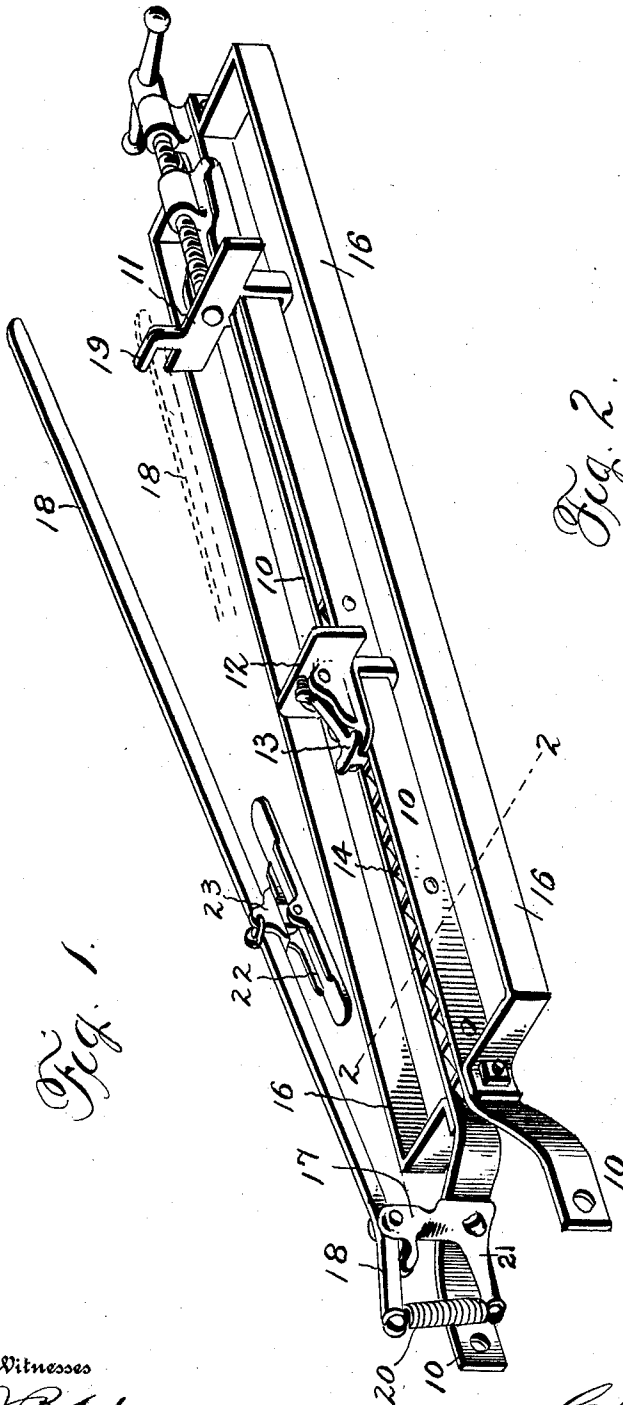


Fig. 1.

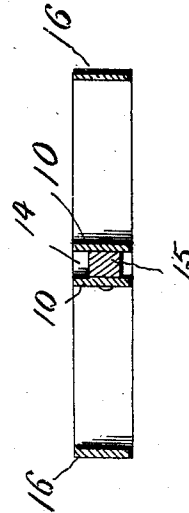


Fig. 2.

Witnesses

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CLAMP.

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To all whom it may concern:

Be it known that I, ALBERT E. PALMER, a citizen of the United States, residing at Owosso, in the county of Shiawassee and State of Michigan, have invented certain new and useful Improvements in Clamps, and do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

My invention relates to clamps by which, for example, strips of wood to be glued together may be clamped, and in embodying my invention I have adapted it more particularly for use in the clamping machine which forms the subject of my Patent No. 918,192, April 13, 1909, and to the end of providing a clamp having certain desirable characteristics of structure and use, more particularly set forth hereinafter, my invention consists in the clamp having the features of construction substantially as hereinafter specified and claimed.

In the drawings, Figure 1 is a perspective view of a clamp embodying my invention; and Fig. 2 a cross section on the line 2—2 of Fig. 1.

In the machine which forms the subject of my above referred to patent, I employ a series of radially extending spoke-like arms mounted for rotation about a horizontal axis, on which arms the strips of wood or things to be clamped are placed, and each arm having clamping means comprising a pair of jaws, and in my present invention I employ a radially extending or spoke-like arm that consists of a pair of bars 10 that are straight for a greater portion of their length, and at their inner ends are bent outwardly to provide means for substantially supporting the arm in the machine, and mounted on said arm near the outer end thereof is the screw-actuated jaw 11, and slidably mounted on the bar so as to be adjustable to different positions to suit the width of the things to be clamped is the companion jaw 12. The jaw 12 has a pawl or dog 13 adapted to engage any one of a series of ratchet teeth 14 formed on the edge of a bar 15 placed between the bars 10 and riveted thereto. This makes a simple construction, and one of strength by reason of

the position of the bar carrying the ratchet teeth.

In handling short stuff which may not be long enough to reach from one radial arm or bar to another, it is awkward or inconvenient to hold it in position on the single arm or bar until it is clamped. To remedy this condition, I attach to the arm on each side thereof a light bar 16 that extends parallel with the arm, and which at each end is bent to form a lateral arm or extension by which it is attached to the arm and supported with its upper edge in the plane of the upper edge of the arm. Thus an extended bearing or support is formed by which short pieces of stuff may conveniently be held while being clamped between the two jaws.

Bolted to the bent inner end of one of the arm-forming bars 10, is a bracket 17 to which is pivoted a rod 18 that thence extends forward and has a length substantially that of the arm, and at its forward end is adapted to engage with a hook 19 formed on the screw-operated jaw 11, and thereby be held in a position parallel or substantially parallel with the plane of the upper edge of the arm against the pull of a spring 20 which is fixed to the rear end of said rod beyond its point of pivotal connection with the bracket 17, and to an arm or extension 21 of said bracket, the spring thus normally tending to swing the outer end of the rod upward. Pivotaly connected to said rod 18 is a clamping foot 22 that is adapted when the rod is swung downward, to bear upon the work, and hold it on the arm so as to prevent any tendency to buckle. Said clamping foot is pivoted to a block 23 that is slidably mounted upon the rod 18, so that it may be shifted or adjusted to such position as it may be desired it shall engage the work. By the action of the spring 20, when the rod 18 is freed from the hook 19, the rod will be swung and held away from the jaw-carrying arm so as not to interfere with the convenient application or placing of work thereon.

Having thus described my invention, what I claim is—

A clamp consisting of a jaw-supporting arm, having a pair of co-acting jaws, said arm being composed of a pair of parallel bars having outwardly and oppositely bent ends, a bracket attached to one of

said laterally bent ends of said arm beyond the jaws, a foot-carrying rod pivoted at one end to said bracket, a spring acting on said rod to yieldingly hold it in a raised
5 position, a holding device adapted to engage the free end of said rod, comprising a hook carried by one of the jaws of said arm and bars upon opposite sides of said arm spaced therefrom having inward extensions that are
10 attached to said arm, the point of attachment

at one end being contiguous to the point where the bars forming the arm are bent laterally.

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

ALBERT E. PALMER.

Witnesses:

FLORENCE LINDSEY,
WALTER M. BUSH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
