Oct. 12, 1926. 1,602,684

J. M. LANCASTER

BED CLAMP

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Fig. 1.

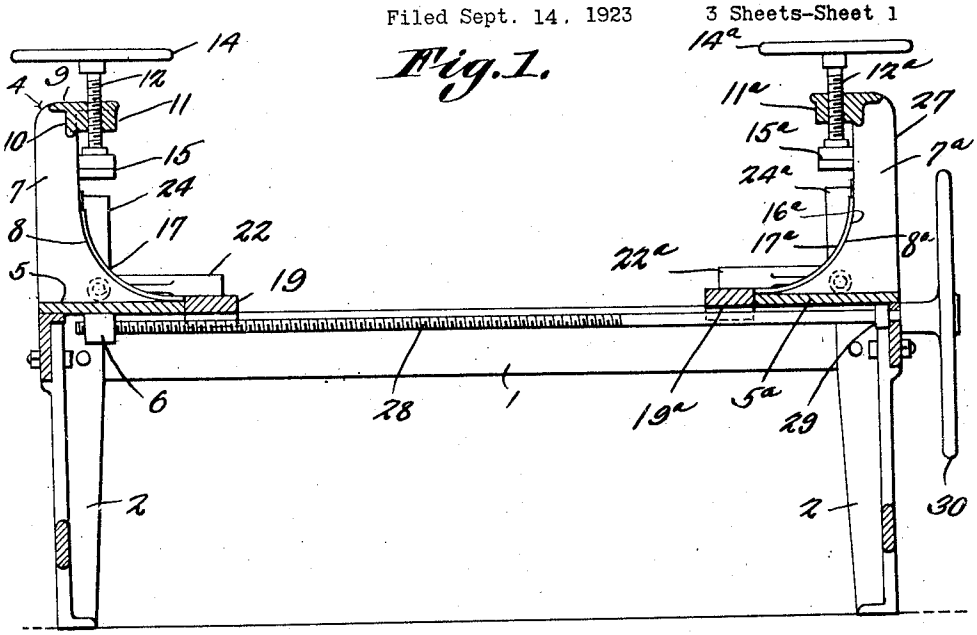
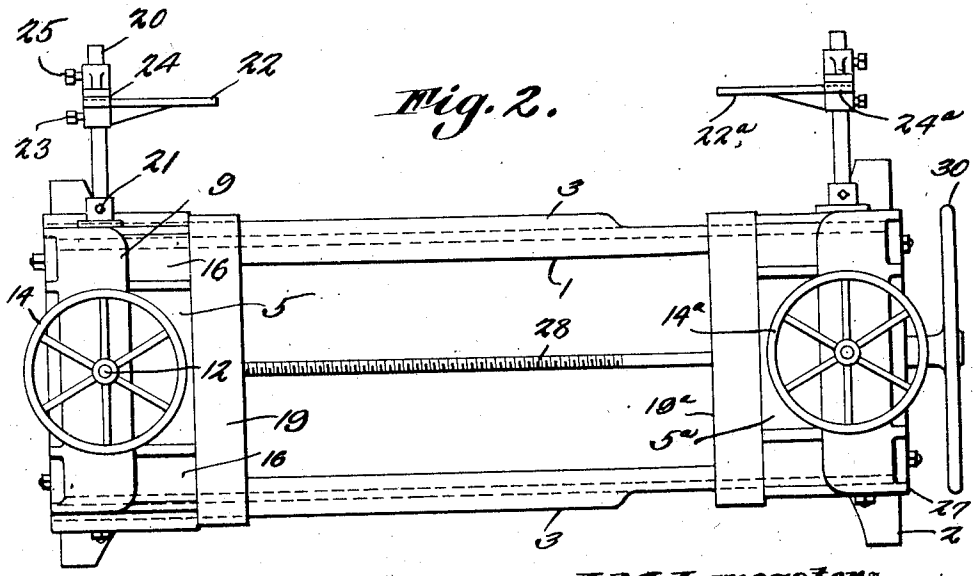


Fig. 2.



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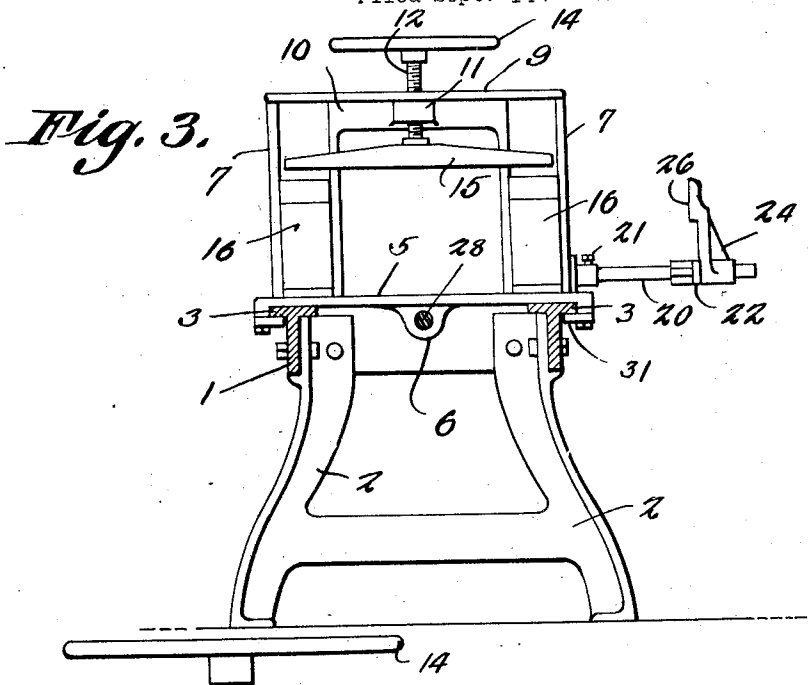
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BED CLAMP

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Fig. 3.



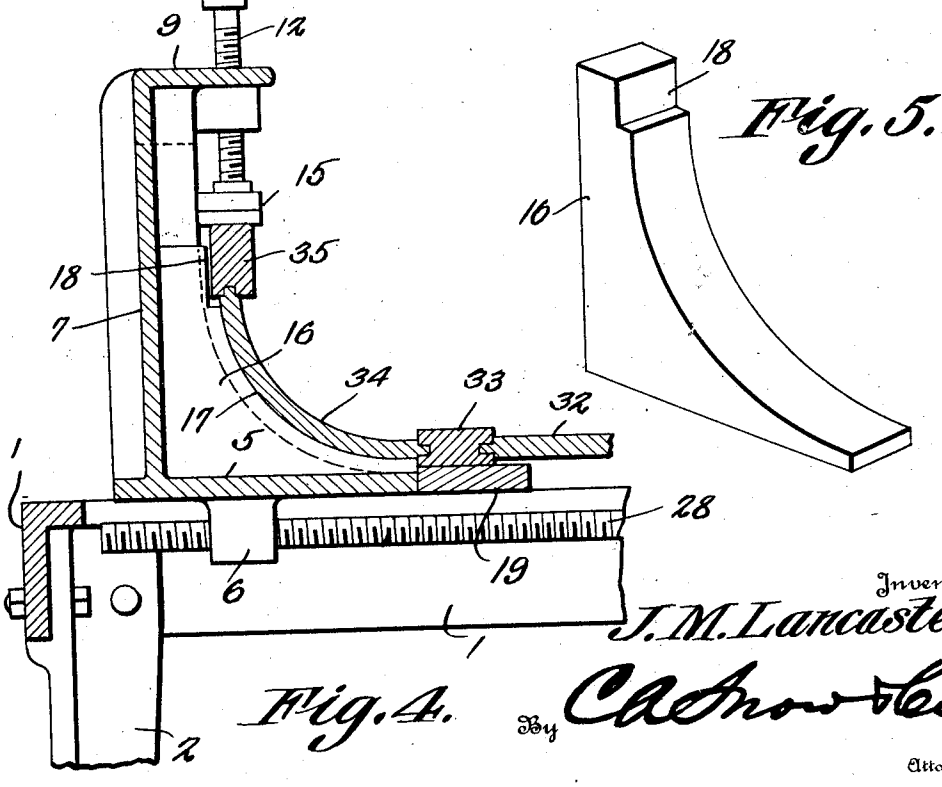


Fig. 4.

Fig. 5.

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Fig. 6.

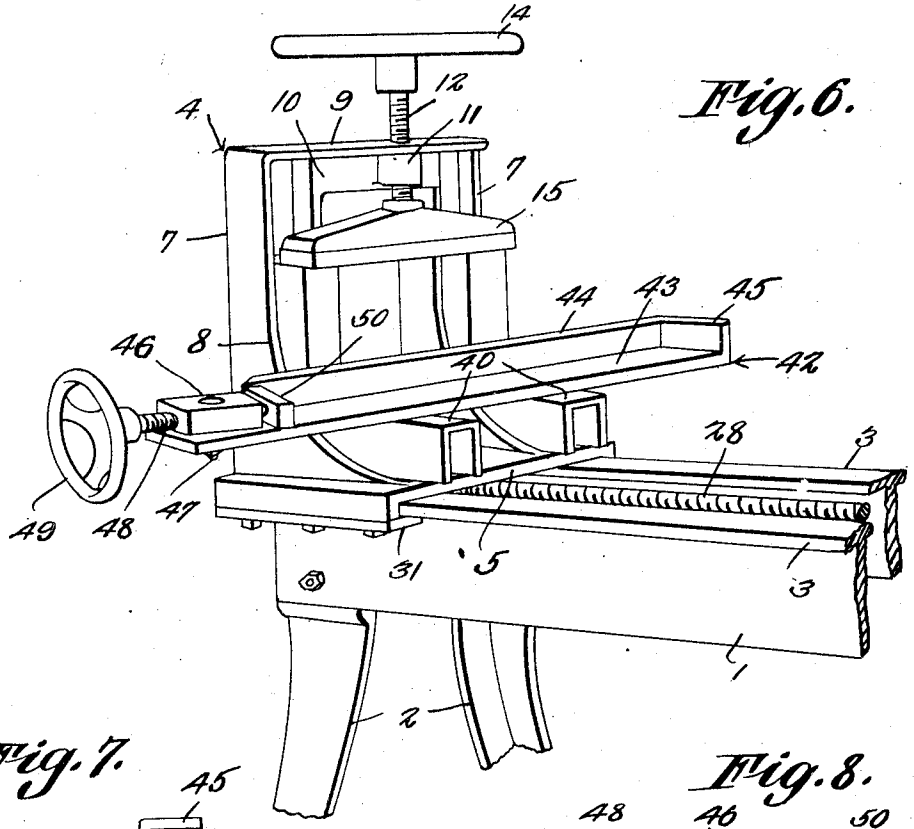


Fig. 7.

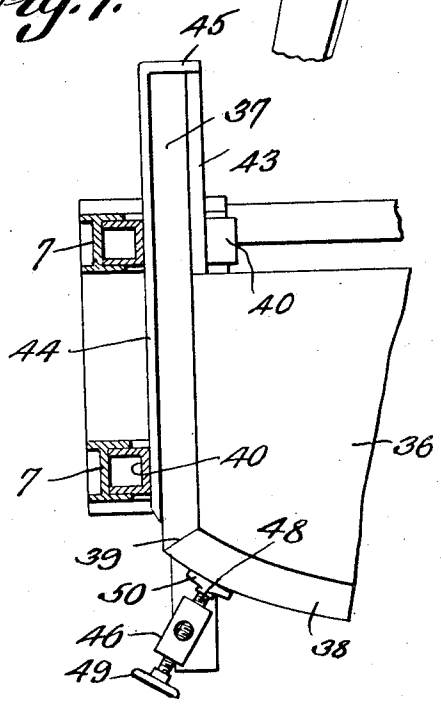


Fig. 8.

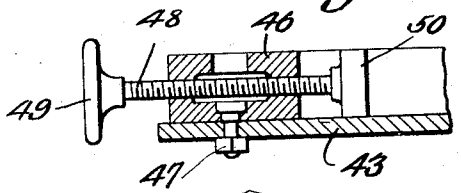
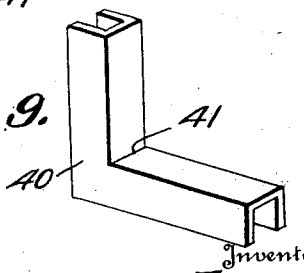


Fig. 9.



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UNITED STATES PATENT OFFICE.

JETER M. LANCASTER, OF BASSETTS, VIRGINIA.

BED CLAMP.

Application filed September 14, 1923. Serial No. 662,730.

This invention aims to provide novel means whereby the head and the foot of a bed be held and pressed whilst the parts of the head and the foot are being glued together, the device being in the nature of a gluing clamp. Especially, the invention aims to provide novel means whereby the parts of a curved or convexed bed foot may be held and compressed under the conditions above mentioned.

It is within the province of the disclosure to improve generally and to enhance the utility of devices of that type to which the invention appertains.

With the above and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that, within the scope of what is claimed, changes in the precise embodiment of the invention shown, can be made, without departing from the spirit of the invention.

In the accompanying drawings:—

Figure 1 shows in longitudinal section, a machine constructed in accordance with the invention; Figure 2 is a top plan; Figure 3 is a cross section; Figure 4 is a fragmental longitudinal section, the curved foot of the bed being in place; Figure 5 is a perspective view showing one of the fillers; Figure 6 is a perspective view showing the machine as it will appear when set up to clamp a straight headpiece for a bed; Figure 7 is a diagrammatic plan showing the operation of clamping a flat bed member; Figure 8 is a section detail showing one of the clamping elements; Figure 9 is a perspective view showing a filler which is used in place of the filler depicted in Figure 5.

In carrying out the invention, there is provided a frame 1, carried by legs 2, the frame being supplied along its edges with guide flanges 3. A carriage is mounted for adjustment along the frame 1 and is designated generally by the numeral 4. The carriage 4 comprises a base plate 5 having a depending lug 6 and carrying standards 7 which, as clearly shown in the drawings, are channel shaped in cross section. The standards 7 have concaved edges 8. The standards are connected by a top piece 9 and by a web 10 having an enlargement 11 whereinto a pressure member, such as a screw 12, is threaded, the screw being provided at its upper end with a hand wheel 14. The screw 12 is held for rotation in a foot 15, but has no longitudinal movement in the foot. Fillers 16 are provided, and one of them is shown in detail in Figure 5. Each filler 16 rests on the base plate 5 of the carriage 4 and is received in one of the channel shaped standards 7, the filler being made of wood if desired, and being provided with a concave surface 17 projecting a little beyond the correspondingly shaped edge 8 of the standard 7. At the upper end of the filler 16 there is a recess 18. A support, which may be a strip of wood 19, is placed on the frame 1 in advance of the base plate 5. An arm 20 is removably held, as at 21, on one side of the carriage 4 and projects horizontally therefrom. A horizontally extended gage 22 is adjustably held by a set screw 23 or otherwise on the arm 20. A vertical gage 24 is held by a set screw 25 on the arm 20 and is offset as shown at 26 in Figure 3, to the end that the working surfaces of the gages 24 and 22 may be in the same vertical plane parallel to the length of the machine.

An abutment 27 is fixed to that end of the frame 1 which is remote from the carriage 4. The abutment 27 is constructed like the carriage 4, and, therefore, parts which have been described in connection with the carriage, are designated, in the abutment, by numerals previously used with the suffix "a." A feed screw 28 is held at 29 (Figure 1) against longitudinal movement, but for rotation, in one end of the frame 1 and is operated by a hand wheel 30, or in any other suitable way, the feed screw being threaded into the lug 6 on the carriage 4, the carriage having flanges 31, which, engaging beneath the flanges 3 of the frame 1, hold the carriage on the frame for sliding movement, responsive to the action of the feed screw 28.

Passing to Figure 4, suppose that it is desired to clamp a bed foot including a central panel 32, an inner post 33, a curved corner piece 34 and an outer post 35. Then, the inner posts 33 rest on the supports 19 and 19ª, the panel 32 extending between the posts 33—33. The curved corner pieces 34 cooperate with the curved surfaces 17 and 17ª of the fillers 16 and 16ª, the posts 33 abutting at their ends against the horizontal gages 22 and 22ª, the posts 35 abutting the vertical gages 24 and 24ª, and the posts 35 being en-

gaged by the feet 15 and 15ª of the pressure screws 12 and 12ª. It will be obvious that when the screws 12 and 12ª are moved downwardly and when the carriage 4 is moved to the right in Figures 4, 1 and 2, by the action of the feed screw 28, the parts of the bed foot 32—33—34—35 will be held securely together, as and for the purpose hereinbefore set forth. The device as thus far described provides a simple but efficient means whereby a curved bed foot of the sort shown in Figure 4 may be held.

Passing to Figure 7, suppose that it is desired to clamp a bed member, perhaps a head piece, including a panel 36, posts 37, and an arched crown 38, extended between the posts 37 and assembled with the panel 36, the posts 37 and the crown 38 meeting at a bevel as shown at 39. Then, the fillers 16 of Figure 5 are removed and their place is taken by angular fillers 40, one of which is shown in detail in Figure 9, the fillers 40 being received in the standards 7 of the carriage 4 and in the corresponding standards 7ª of the abutment 27, and resting upon the base plates 5 and 5ª, as clearly indicated in connection with the carriage 4 in Figure 6 of the drawings. In the angles 41 of the fillers 40 is seated a removable table 42 including a base 43, a back flange 44 and an end flange or stop 45. A carrier 46 may be pivoted at 47 to the base 43 of the table 42 a feed screw 48 being threaded into the carrier, the screw being operated, for instance, by a hand wheel 49, the screw being held for rotation in a foot 50 mounted to slide along the base 43. The abutment 27 is fitted with fillers 40 and a table 42, as shown in connection with the carriage 4 in Figure 6.

Dealing only with that end of the bed member which is shown in Figure 7, it will be understood that the post 37 rests on the base 43 of the table 42, in end abutment with the stop 45 and in side abutment with the back flange 44. The foot 50 is advanced by the feed screw 48 until the foot bears against the arched portion 38 of the bed member, and, since the carrier 46 which supports the screw is pivoted at 47, the foot 50 will always have a proper bearing on the element 38 of the bed regardless of the curve of the part 38. Movement of the carriage 4 to the right in Figure 6 under the action of the feed screw 28, as hereinbefore explained, will result in a clamping together of the parts 36, 38 and 37 of the bed member delineated in Figure 7.

Having thus described the invention, what I claim is:—

In a machine of the class described, a frame, an abutment on the frame, a carriage movable on the frame, means for moving the carriage toward and away from the abutment, pressure devices movable on the carriage and on the abutment in a direction at an angle to the line of movement of the carriage, an arm on the carriage and an arm on the abutment, the arms projecting laterally in the same direction, a substantially horizontal gage on each arm, a substantially vertical gage on each arm, the gages being adjustable on the respective arms, means for holding the gages in adjusted positions, and angular fillers on the carriage and on the abutment, the pressure devices and the gages cooperating with the fillers.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature.

JETER M. LANCASTER.