

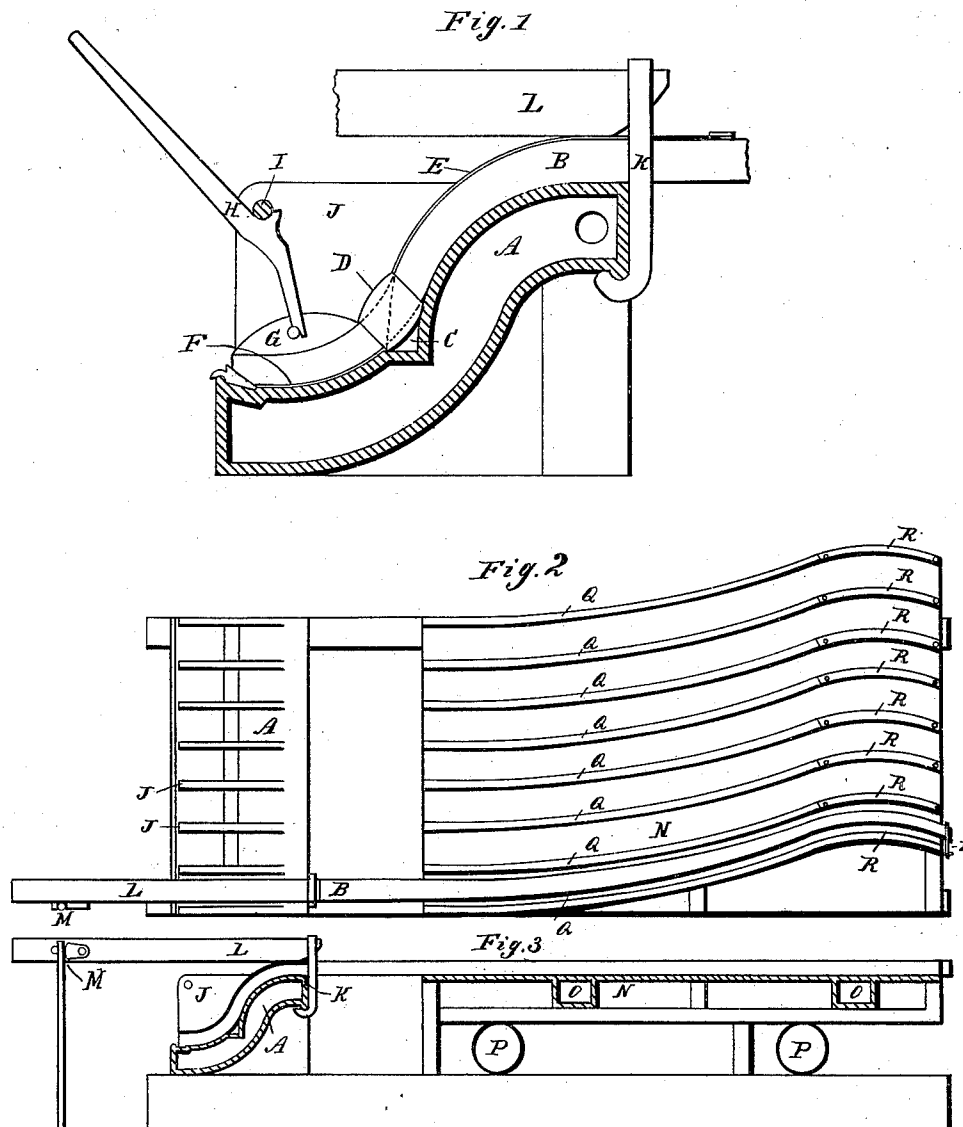
(No Model.)

W. D. PARKER.

DEVICE FOR BENDING AND DRYING CARRIAGE POLES AND THILLS.

No. 358,692.

Patented Mar. 1, 1887.



Attest:  
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# UNITED STATES PATENT OFFICE

WILLIS D. PARKER, OF DELPHI, INDIANA.

DEVICE FOR BENDING AND DRYING CARRIAGE POLES AND THILLS.

SPECIFICATION forming part of Letters Patent No. 358,692, dated March 1, 1887.

Application filed July 29, 1886. Serial No. 209,396. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIS D. PARKER, of Delphi, in the county of Carroll and State of Indiana, have invented new and useful Improvements in Devices for Bending and Drying Carriage Poles and Thills; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to new and useful improvements in devices for bending and drying carriage-poles and buggy-thills.

The object of my invention is to improve the manufacture of carriage-poles and buggy-thills by the use of the means hereinafter described, whereby all the bends can be made, secured, and set at one steaming of the timber, whereas by the means at present known and used the bends have to be made at different times and by detached appliances, resulting in defective work, as the timber thus treated cannot be prevented from twisting more or less out of shape.

To this end my invention consists in the construction, arrangement, and combination of different parts, all as hereinafter described, and specifically pointed out in the claims.

In the drawings which accompany this specification, Figure 1 is a detached transverse section of the form for bending the butt-ends. Fig. 2 is a plan view of the whole device, and Fig. 3 is a longitudinal section thereof.

A is a form for bending the butt-ends of thills and poles. It is made of iron or other suitable material, and provided with an inclosed chamber for heating it by steam for the purpose of drying the timber after bending. The form has several compartments divided by partitions J J, there being seven shown in the drawings; but the number may be greater or less.

B represents a thill forced into position in one of the compartments. It shows a double bend, as commonly applied to thills and poles. When a single bend is required, the end of the timber is secured at the offset C, provided therefor.

D is a sleeve of iron or other suitable material slipped onto the butt of the timber for holding the ends of the metal straps E F, the

function of which is to bind the timber and prevent its fracture at the points subjected to great tensile strain.

When a double bend of the butt is required, the first bend is produced by forcing the block G into the position shown in Fig. 1 by means of the lever H, which has for its fulcrum a rod, I, running through all the partitions J J. This rod is omitted in Fig. 2. When a single bend is required, or the second bend for a "double-bent" piece, the timber is held in position by means of a shackle, K, lever L, and grip M.

The side bends of the thills are produced in the form N, made of cast-iron or other suitable material, and heated at the places where the greatest amount of bend is required by the admission of steam into the passages O, which extend beneath across the whole breadth of the form.

The form N has the same number of compartments as the form A, and the frame which sustains it rests on rollers P P, so that it can be adjusted for varying lengths of timber. The partitions Q, dividing the compartments, are about two inches high, and the portions R thereof are made movable by being hinged or wedged fast. This is done for the greater convenience of holding and releasing the timber and for varying the degree of side bend of the points of the thills. The latter are held in position in the form by being shackled fast to the parts R in any suitable manner.

Preparatory to bending, the timber is steamed in the ordinary way until it is soft enough to avoid fracture, and then put into the forms and bent successively at the points desired, beginning at the butt-end. The timber being properly secured in the forms, it is submitted to the influence of heat, imparted by the steam admitted into the forms, for a sufficient length of time until it has become dried and set to the desired shape.

Any suitable means may be provided for holding the timber in the form N. I have shown a hook or link, r, which passes over the end of the timber and engages a staple, as seen in Fig. 2.

What I claim as my invention is—

1. The hollow steam-form A, formed with the offset C substantially in the center of its

length and projecting into the steam-space of the form, combined with holding means upon each side of said offset, whereby either a single or double bend may be formed, as desired.

5 2. In a device for the purpose described, the hollow steam-form A, formed with an offset, C, projecting into the steam-space of the form, substantially in the center of its length, and having a horizontal portion to support the end  
10 of the timber, and provided with reverse bends, one upon each side of said offset, to receive and shape the timber, substantially as and for the purposes specified.

15 3. In a device for bending carriage-poles and buggy-thills, the form A, provided with compartments for bending the butt-ends, in com-

bination with the independent longitudinally-adjustable form N, provided with corresponding compartments for making the side bends, substantially as described.

20 4. In a device for bending carriage-poles and buggy-thills, the combination of the form A, having a series of compartments, each provided with the bends F E and offset C, and the form N, having corresponding compartments pro-  
25 vided with the side bends, Q R, substantially as described.

WILLIS D. PARKER.

Witnesses:

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