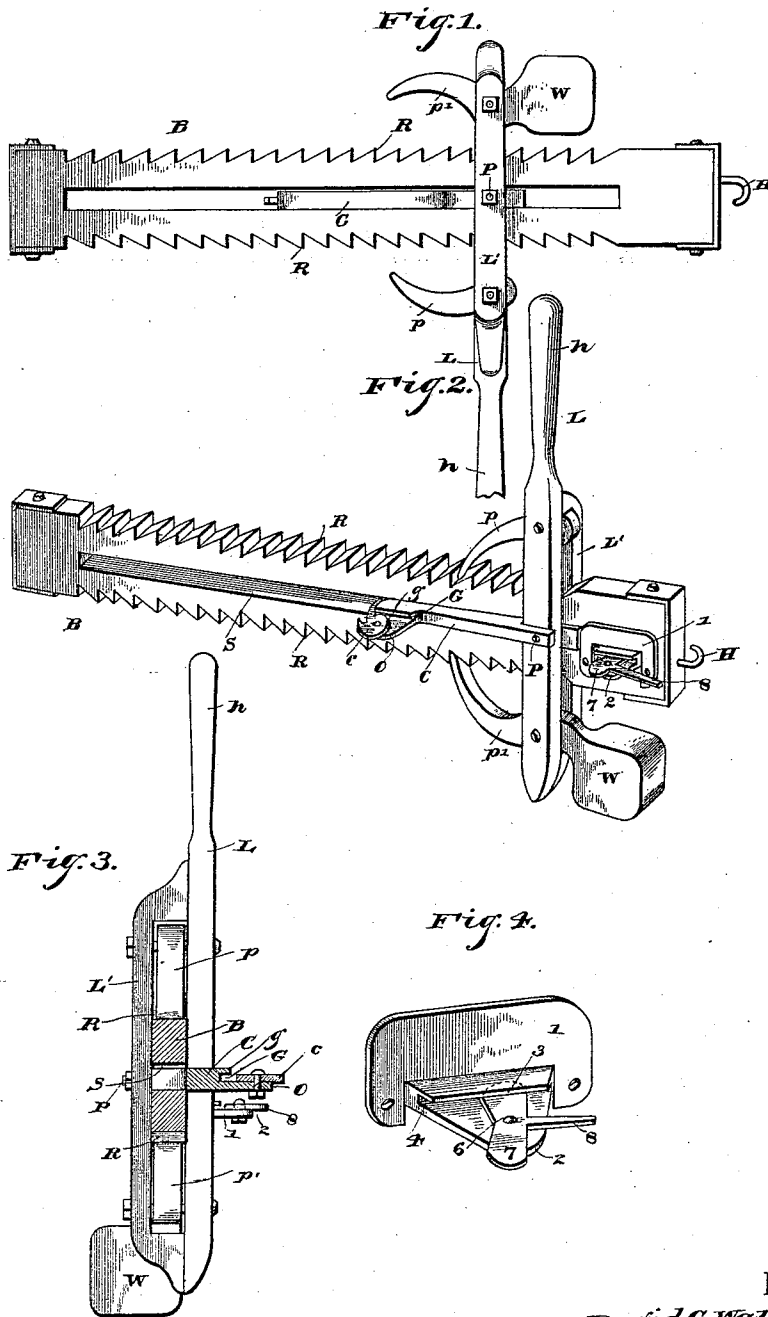


(No Model.)

D. C. WALLACE & T. J. PARKER.
WIRE STRETCHER.

No. 471,260.

Patented Mar. 22, 1892.



Witnesses

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UNITED STATES PATENT OFFICE.

DAVID C. WALLACE AND THOMAS J. PARKER, OF BLUE SPRINGS, MISSOURI.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 471,260, dated March 22, 1892.

Application filed October 30, 1891. Serial No. 410,374. (No model.)

To all whom it may concern:

Be it known that we, DAVID C. WALLACE and THOMAS J. PARKER, citizens of the United States, residing at Blue Springs, in the county of Jackson and State of Missouri, have invented a new and useful Wire-Stretcher, of which the following is a specification.

This invention relates to removable wire-stretchers of that class known as "ratchet-bars;" and the object of the same is to effect certain improvements in devices of this character.

To this end the invention consists in a device embodying the specific construction hereinafter more fully described and claimed, and as illustrated on the accompanying sheet of drawings, wherein—

Figure 1 is an elevation of this device. Fig. 2 is a general perspective view of the device in position for use—that is, with its lever-handle pointing upward. Fig. 3 is a cross-section through the single clamp, looking toward the lever. Fig. 4 is an enlarged perspective detail of the double clamp.

Referring to the said drawings, the letter B designates the body of this improved device, which has a longitudinal slot S at its center closed at its ends and which has ratchet-teeth R on its upper and lower edge facing towards the end where is located a strong hook H.

L is the lever, which is pivotally connected with the body of a clamp C, which body slides in said slot, the pivot-bolt P passing through said lever, through said body, and through a cleat L', which slides against the rear face of the body B, while the lever slides against the front face thereof.

p and *p'* are pawls respectively pivoted between the lever and cleat above and below the body B, the first-mentioned pawl *p* falling by gravity into the upper ratchet-teeth R and the last-mentioned pawl *p'* having a weight W on its rear end, whereby its tip is thrown upward into engagement with the ratchet-teeth R on the lower edge of the body B. The body of said clamp C projects to the left of the pivot P and turns outwardly, as at O, this portion being reduced in thickness, so as to form a groove G, above which is a small projecting lip *g*, and *c* is an eccentric catch whose head is pivoted to said outturned portion O in such position that when the catch is turned

on its pivot its edge will be moved toward said groove G, so as to force a wire thereinto.

The double clamp (best seen in Fig. 4) comprises a plate 1, secured to the face of the body B near its right end and having an outturned portion 2, which is reduced in thickness and provided with a small lip 3, beneath which is a groove 4, and pivoted at 6 to the outturned portion is a catch having oppositely-eccentric wings 7 and a handle 8.

All parts of this stretcher are preferably of iron or other metal suitably proportioned and shaped and of the desired size and weight to give it sufficient strength to withstand the strains incident to its usage.

While we have referred to the right and left or the upper and lower, it will be understood that such description relates to the device as illustrated in Fig. 2 of the drawings.

This improved stretcher is operated as follows: To move the lever to the left, the body B is turned on its longitudinal axis to the position shown in Fig. 1, when the weight of the pawl *p* and of the weight W at the rear end of the pawl *p'* will cause these pawls at their tips to move out of engagement with the ratchet-teeth R, and the lever and single clamp can then be slid bodily to the left. The stretcher may be anchored by connecting a chain with the hook H and securing it around a post or other stationary object. The wire to be tightened or stretched is then passed into the groove G of the single clamp and the catch *c* turned on its pivot to clamp it therein, and by turning the device into the position shown in Fig. 2 and rocking the handle *h* at the upper end of the lever L to and fro the clamp C will be moved to the right in the slot S and the wire will be tightened, as will be clearly understood. If the wire is so slack that one such movement of the clamp C from left to right does not give it the desired tension, the end of the wire is then inserted in the double clamp, wherein it is locked by turning the handle 8 to the right, the catch *c* is loosened, and the clamp C returned to the left for another bite, and this motion can be repeated as often as necessary to give the wire the final tension desired. To use this device for splicing a wire which is broken, the clamp C is run out to the left and one end of the wire is engaged therein, while the other end

is passed into the double clamp and locked therein by moving the handle 8 to the left. The lever is then manipulated, as above described, until the extremities of the broken wire lap each other, when they can be twisted together or otherwise connected.

During either of the uses above described the device can be turned on its longitudinal axis to the position shown in Fig. 1 whenever it is desired to run out the clamp, as the torsional strain on the wires or on the chain will not be very great in thus giving the device a half-revolution.

Other uses will suggest themselves to the owner, and the advantages of this machine are thought to be obvious.

What is claimed as new is—

1. A wire-stretcher comprising a longitudinally-slotted body having on its edges ratchet-teeth facing toward one end, a clamp whose body slides in said slot, extends away from said end, and is outturned and reduced, a catch pivoted to said outturned portion and having an eccentric face engaging a groove in the shoulder thus formed, a lever standing at one side of the body, a cleat at the other side thereof, a pivot-pin through said lever, clamp-

body, and cleat, and pawls pivoted between the lever and cleat above and below the body, the lowermost pawl having a weighted rear end, as and for the purpose set forth.

2. A wire-stretcher comprising a body having on its edges ratchet-teeth facing toward one end, a double clamp at said end, consisting of a plate secured to one side of the body and having an outturned portion, a catch pivoted to said portion and having two wings with oppositely-eccentric faces taking into a groove, and a handle on said catch, a lever astride said body, pawls pivoted to said lever and engaging said ratchet-teeth, the lowermost pawl having a weighted end, and a single catch connected to said lever between its pawls, substantially as and for the purpose hereinbefore set forth.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

DAVID C. WALLACE.
THOMAS J. PARKER.

Witnesses:

WILLIAM H. JONES,
LEWIS E. FLANAGAN.