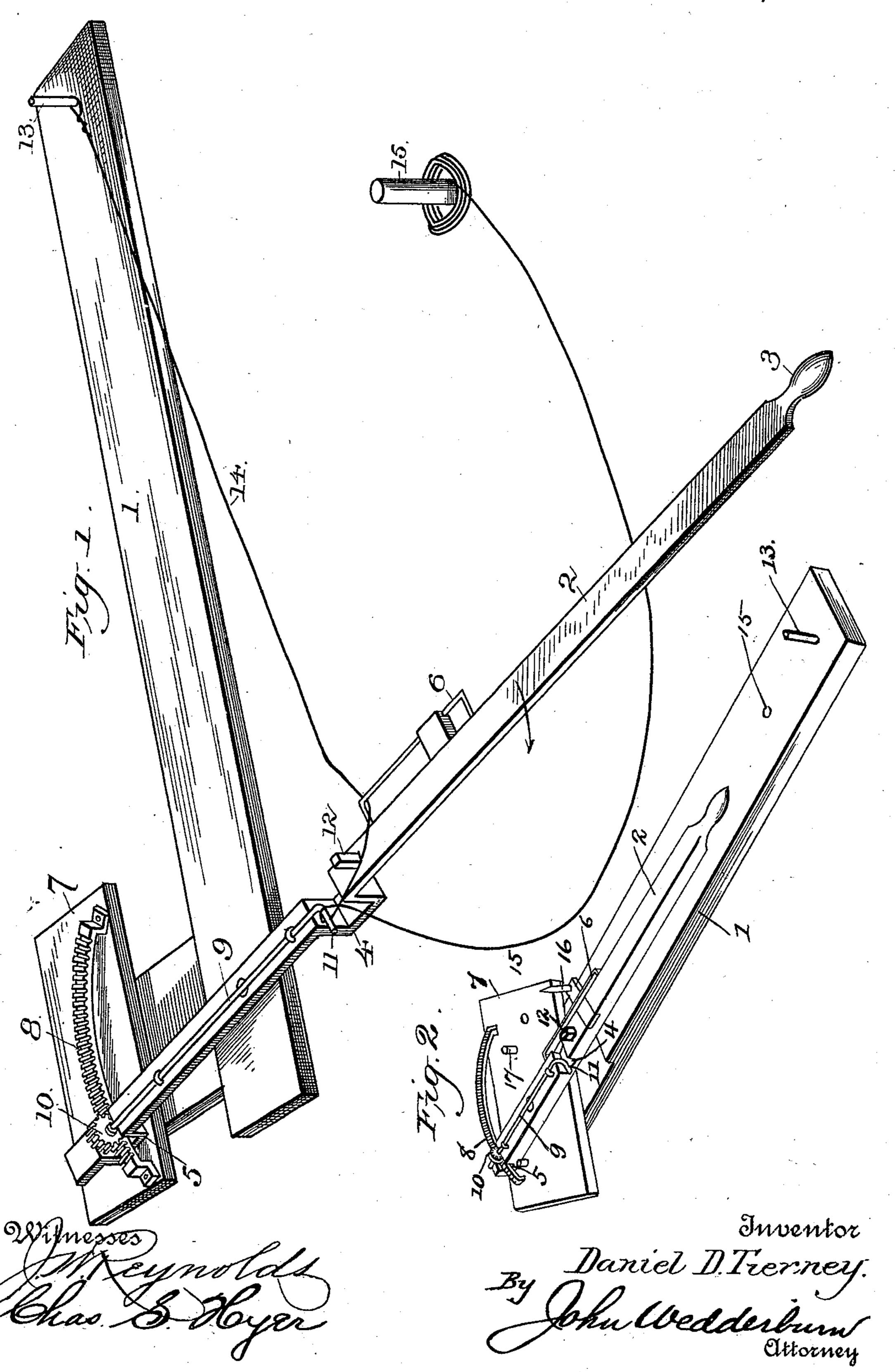
## D. D. TIERNEY. BALE TIE TWISTER AND STRETCHER.

No. 516,712.

Patented Mar. 20, 1894.



## United States Patent Office.

DANIEL D. TIERNEY, OF IONE, CALIFORNIA.

## BALE-TIE TWISTER AND STRETCHER.

SPECIFICATION forming part of Letters Patent No. 516,712, dated March 20, 1894.

Application filed November 16, 1893. Serial No. 491,129. (No model.)

To all whom it may concern:

Be it known that I, DANIEL D. TIERNEY, a citizen of the United States, residing at Ione, in the county of Amador and State of California, 5 haveinvented certain new and useful Improvements in Bale-Tie Twisters and Stretchers; 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.

This invention relates to bale tie twisters and stretchers for making bale wires, and has for its object to provide simple and effective means for the purpose stated whereby a loop may be formed in one end of the wire simultaneously with the stretching of the same, and the wire be severed and made ready for use.

With these and other objects in view, the invention consists of the construction and arrangement of the parts which will be more fully hereinafter described and claimed.

In the drawings: Figure 1 is a perspective view of a stretcher embodying the invention. Fig. 2 is a similar view of a modification.

Similar numerals of reference are employed to indicate corresponding parts in both the views.

Referring to the drawings, the numeral 1 designates the platform having a lever 2, pivotally connected thereto. The said lever is provided with a handle 3, and loops or bends 4 and 5 on opposite sides of its pivotal point 35 to permit the play of the parts of the mechanism employed in connection with the device. The said lever 2, is also provided with a guard 6, over which the wire passes, and, secured to the platform 1, is a support 7, hav-40 ing a segmental rack 8, secured thereon and extending through the loop or bend 5 of the lever 2. On the lever 2 adjacent to the point where it is pivotally attached, is mounted a twisting rod 9, having a pinion 10 keyed there-45 on and which meshes with the rack 8. The opposite end of the said rod 9 is formed with a hook 11, which plays in the loop or bend 4, and beyond the said hook 11, the said lever is supplied with a post 12 around which the

50 wire is guided in forming a twist loop. At

the opposite end of the platform 1 is a post or pin 13, to which the end of the wire 14 is made fast, and then passed around the stud or post 12, and looped over the hook 11 of the rod 9. The coil of wire is placed on a stake 55 15, adjacently situated and fed therefrom as found desirable. After the wire has been looped over the hook 11, the lever 2 is moved in the direction of the arrow, and stretches the wire 14, and at the same time the twisting 60 rod 9 is rotated and the hook 11 turns in such manner as to secure the loop in the end of the wire. The wire is then cut off near the formation of said loop, and a new length arranged on the platform, and this operation 65 becomes successive in accordance with the number of bale wires desired.

In Fig. 2 the construction is similar in all respects, except that in Fig. 1 the platform can be turned straight with the support 7 and 70 in Fig. 2 said support is rotatable and the platform stationary. In Fig. 2 openings 15 are formed in the support and platform through which are passed spikes or other devices to hold the stretcher on bales. An upright cut-75 ter 16 is also used in this instance. Stop pins 17 are also employed in Fig. 2 to limit the movement of the lever 2.

Having thus described the invention, what is claimed as new is—

In a device of the character set forth, the combination of a platform, a lever pivotally mounted thereon having loops or bends on opposite sides of its pivotal point, and a stud or post rising therefrom adjacent to one of 85 said loops or bends, a segmental rack under which the other loop or bent portion of the lever passes, a twisting rod mounted on said lever and having a pinion keyed thereon engaging said segmental rack and having a hook 90 at one end, and a pin rising from one part of the said platform, all arranged substantially as and for the purposes specified.

In testimony whereof I have signed this specification in the presence of two subscrib- 95 ing witnesses.

DANIEL D. TIERNEY. Witnesses:

W. E. KENT, SILAS PENRY.