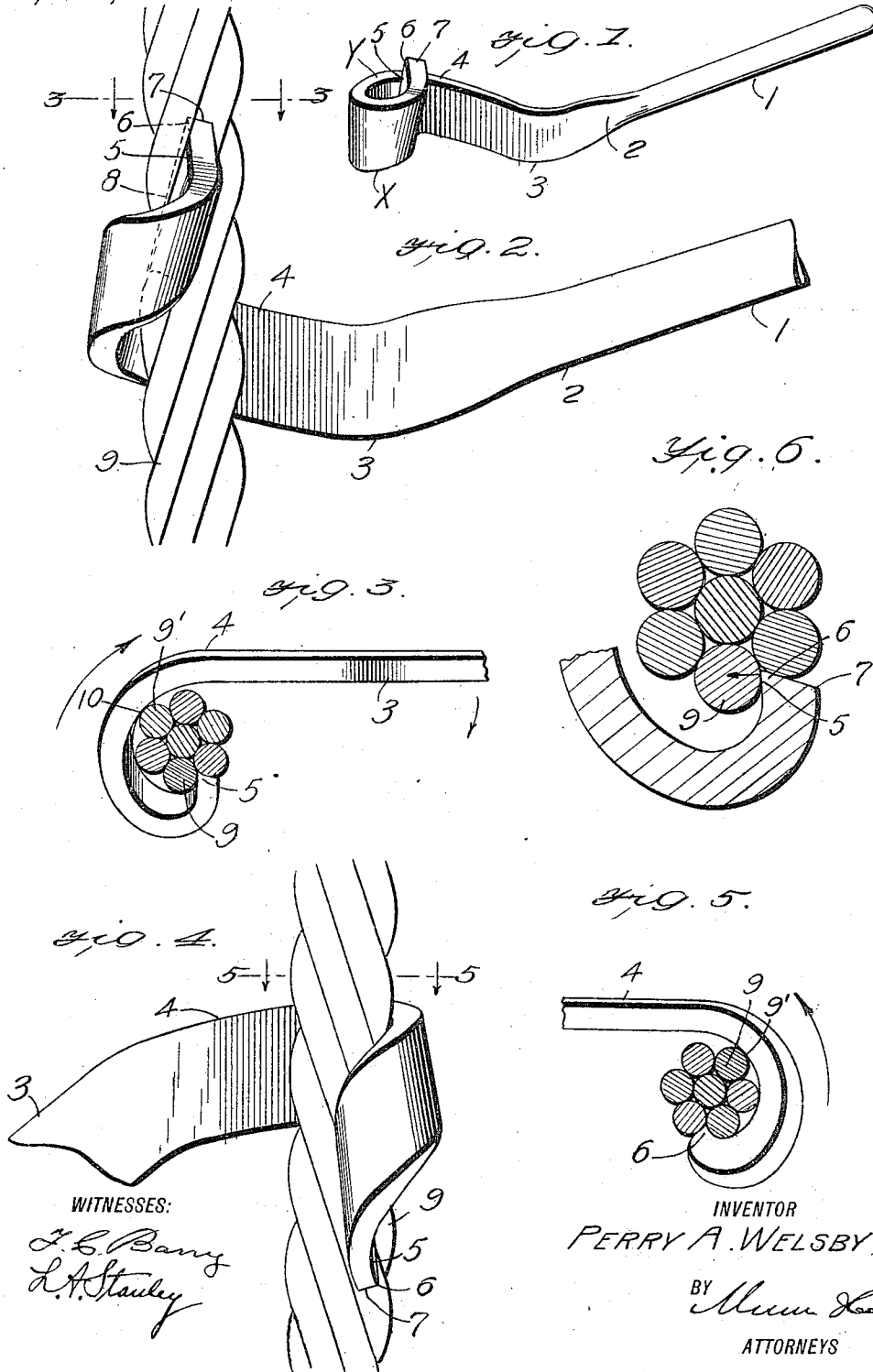


P. A. WELSBY.
CABLE TWISTING DEVICE.
APPLICATION FILED APR. 21, 1916.

1,211,020.

Patented Jan. 2, 1917.



UNITED STATES PATENT OFFICE.

PERRY A. WELSBY, OF SAPULPA, OKLAHOMA.

CABLE-TWISTING DEVICE.

1,211,020.

Specification of Letters Patent.

Patented Jan. 2, 1917.

Application filed April 21, 1916. Serial No. 92,670.

To all whom it may concern:

Be it known that I, PERRY A. WELSBY, a citizen of the United States, and a resident of Sapulpa, in the county of Creek and State of Oklahoma, have invented a certain new and useful Improvement in Cable-Twisting Devices, of which the following is a specification.

My invention relates to improvements in cable twisting devices, and it consists in the combinations, constructions, and arrangements herein described and claimed.

An object of my invention is to provide a simple tool to be used primarily in twisting the cable used in connection with well drilling, such as oil wells and the like, which will not injure the cable.

A further object of my invention is to provide a tool which may be applied very quickly and which may be removed quickly.

A further object of my invention is to provide a simple tool made in one piece and therefore which is not liable to get out of order, as are more complex devices.

A further object of my invention is to provide a tool of the type described which, when applied to the cable, will grip the cable tightly, and will not work itself up or down the cable.

Other objects and advantages will appear in the following specification, and the novel features of the invention will be particularly pointed out in the appended claims.

My invention is illustrated in the accompanying drawings forming part of this application in which:

Figure 1 is a perspective view of the device. Fig. 2 is a view showing the tool as applied to a cable whose strands are twisted in one direction. Fig. 3 is a section along the line 3—3 of Fig. 2. Fig. 4 is a view similar to Fig. 2 but showing a cable whose strands are twisted in the opposite direction. Fig. 5 is a section along the line 5—5 of Fig. 4. Fig. 6 is an enlarged section showing the manner in which the tool engages the strands of the cable.

In carrying out my invention I provide a tool which is made of a single piece of iron, steel, or other suitable material. This tool has a handle portion 1 which is preferably of cylindrical shape, as shown in Fig. 1. At substantially a point 2 the handle is flattened out, and at a point 3 this flattened portion is bent upwardly. At sub-

stantially a point 4, see Figs. 1 and 2, the tool is bent so as to form a curve having a constantly shorter radius

the arrow in Fig. 6. Since the cable is held between the side 5 and the point of contact 10, the cable will be twisted. It will be seen that the cable is not gripped by teeth, as with other gripping devices with which I am familiar. There is, therefore, no tendency to injure the strands of the cable. This I consider one of the most important features of the invention.

10 In disengaging the tool from the cable, it is only necessary to move the handle in the opposite direction, and as will clearly be seen from Fig. 3, this will take the cable out from engagement with the tool, thereby
15 freeing the latter and permitting its instant removal.

In twisting a cable which is wound in the opposite direction as shown in Fig. 4, the tool is merely turned over, so that instead of being in the position shown in Fig. 3, it is in that position shown in Fig. 5. It will be observed that Fig. 5 is a perspective view of the tool, although it shows the cable in section. As a matter of fact, the tool
20 grips the cable in precisely the same manner as explained in connection with Fig. 6; that is to say, the flat portion 5 enters the sinus between two strands, and the edge 8 follows the contour of the strand, so that
25 when the tool is turned in the opposite direction to that shown in Fig. 3, the flat side will bear against the strand and tend to twist the whole cable.

Owing to the peculiar construction of the tool in which the tool is bent into substantially spiral shape and at the same time having a helical form with one end of the coil narrower than the other, there is no tendency of the tool to creep on the cable during
30 the twisting of the latter. The tool is applied and instantly grips the cable but does not injure it when the latter is being twisted.

Owing to the fact that the tool is made in one piece, there are no complex parts to get out of order. As a matter of fact, the tool may be used with one hand, since there are no adjusting devices to operate, such as the adjusting screws on wrenches or other
35 devices having more than one part.

I claim:—

1. A cable twisting tool comprising a handle and having a spirally bent portion

provided with an edge conforming to the contour of the strands of the cable, said edge being arranged to enter the space between adjacent strands on the cable, said tool having a fulcrum on another strand of the cable. 55

2. A tool for twisting cables comprising a handle portion and a spirally curved gripping portion, said gripping portion being provided with a flat surface arranged to engage a strand of the cable and having an edge adjacent to said flat portion, said edge being arranged to follow the contour of the strands of the cable, and said tool having a bearing portion for engaging the cable at another point. 60

3. A tool for twisting cables comprising a handle and a gripping portion, said gripping portion being curved in spiral shape and being bent in helical shape with respect to the axis of the spiral, the end of the tool having an edge arranged to follow the contour of a strand of the cable. 65 75

4. A tool for twisting cables comprising a handle and a gripping portion, said gripping portion being curved in spiral shape and being bent in helical shape with respect to the