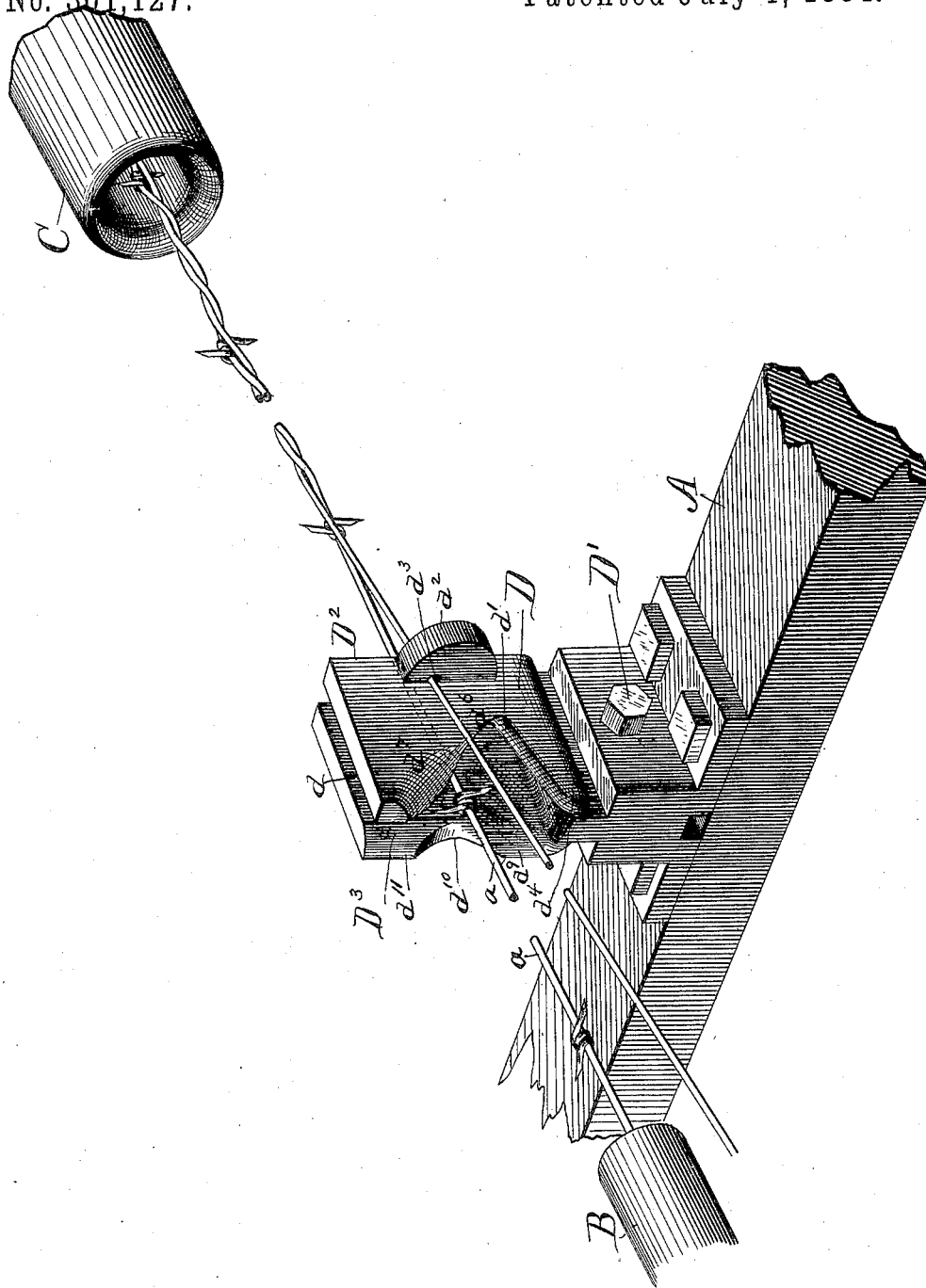


(Model.)

S. M. KANE.
BARB WIRE MACHINE.

No. 301,127.

Patented July 1, 1884.



Witnesses:
Chas. C. Gaylord.
Taylor E. Brown

Inventor:
Sandy M. Kane
By Munday, Evans & Adcock
his Atty's.

UNITED STATES PATENT OFFICE.

SANDY M. KANE, OF DES MOINES, IOWA, ASSIGNOR TO WILLIAM L. CARPENTER, OF SAME PLACE.

BARB-WIRE MACHINE.

SPECIFICATION forming part of Letters Patent No. 301,127, dated July 1, 1884.

Application filed March 24, 1884. (Model.)

To all whom it may concern:

Be it known that I, SANDY M. KANE, a citizen of the United States, residing in Des Moines, in the county of Polk and State of Iowa, have invented a new and useful Improvement in Barb-Wire Machines, of which the following is a specification.

The object of this invention is to provide a device for turning or arranging the barbs as the two strands of the cable are twisted together, so that the prong side of the barb will always lie between the strands, and the prongs thus project centrally from the cable. When the barbs are thus arranged, the other strand of the cable effectually prevents their rotating or turning on the strand upon which they are placed, and the barbs being arranged uniformly, a better, more uniform, and more efficient barb-wire is produced.

The invention consists in a device having an oblong vertical slot, through which the barb-wire passes, and an eye-hole for the plain wire. The walls of this oblong vertical slot are beveled, and the one adjacent to the plain wire is provided with a deep V-shaped notch facing the barbing-machine, the edges of which notch are beveled off, so as to turn the barb into a vertical position as it passes through the slot. The opposite wall or edge of the slot is provided with a shallow curved notch, the edges of which are also beveled off, so as to aid in turning and arranging the barbs. This device is located between the barbing mechanism and the twister, and in such relation to the twister that the twist of the cable will grasp the barbs at the proper distance from the device to cause the points of the barb to project from between the cables. The peculiar form of the two walls of the slot, together with their bevel edges, operate as a screw in twisting or turning the barb into the right position to be laid between the cable-wires.

In the accompanying drawing, which forms a part of this specification, I have shown a device embodying my invention as applied to a barb-wire machine.

In said drawing, A represents a portion of the frame of the machine, located between the coiling-head B and the mouth of the twister

C, to which portion of the frame my barb turning and arranging device D is adjustably secured by means of the set-screw D', so that it may be adjusted to or from the twister, as may be desired, to cause the barbs to be properly laid between the strands of the cable. The device D is provided with an oblong slot, *d*, which should be somewhat longer than the barbs and a little wider than the transverse thickness of the barbs. The face of the wall or slide D² of this slot is provided with a deep V-shaped notch, *d'*, and also with a projection, *d''*, having a hole, *d'''*, for the plain wire to pass through. The apex of this V-shaped notch *d'* should project considerably below the eye *d'''* for the plain wire. The lower edge, *d⁴*, of this V-shaped notch is rounded off both outwardly and inwardly, so that there may be no point for the barb to catch against. The upper edge of this V-shaped notch is beveled off inwardly at its lower portion, *d⁵*, and outwardly at its upper portion, *d⁶*, so as to present a screw-shaped edge. The opposite wall or side, D³, is provided with a bevel edge, *d⁷*, facing the coiling mechanism, and also with a V-shape or curved notch, *d⁸*, the edges of which notch are also beveled inwardly. The edge of the top part, *d¹¹*, facing the coiler, should also be beveled inwardly. The notch *d⁸* is made much shallower than the notch *d'*, and its apex is above the former and about on the line with the wires as they pass through the device. As the barb-strand *a* passes through the slotted device one of the prongs of the barb will first strike against the inwardly-beveled edge *d⁷* of the side D³, and is thereby turned upward and onward by said bevel edge *d⁷*. This prong of the barb will ordinarily first strike against the lower portion of the inwardly-beveled notch *d⁸*, which constitutes the middle portion of the edge *d⁷*, so that the barb will be gently turned upward as the strand *a* is drawn through the slot. The opposite prong of the barb will then, as it is carried forward, strike against the inwardly-beveled lower portion, *d⁵*, of the side D³, and the barb is then further turned by the screw edge of the side D² until it is brought to a vertical position, when it passes through the slot and issues therefrom in a vertical position.

The device is so located in relation to the coiler that the barbs, as they issue from the coiler, will so strike the bevel edges of the device as to be turned thereby to bring the prong side of the barb adjacent to the plain wire a' . The twist of the cable should extend back near enough to the device, so that the barbs issuing therefrom in a vertical position will be caught by the twist and laid with their points projecting between the two strands of the cable.

I have described the device as being placed in a vertical position; but it, of course, may be set in other positions on the machine.

I claim—

1. The barb-arranging device D, provided with an oblong slot for the barb-wire and an eye for the plain wire, the walls of said slot having notched bevel edges facing the barb-coiling device, substantially as specified.

2. The barb arranging and guiding device having an oblong slot for the barb-wire, and a wall or side adjacent to the plain wire, pro-

vided with a beveled-edge notch for turning the barbs, substantially as specified.

3. The device D, having slots for the barb-wire, eye a^3 for the plain wire, side D^2 , having deep V-shaped notch d' , provided with bevel edges, and the side D^3 , provided with shallow beveled-edge notch d^9 , substantially as specified.

4. The barb-arranging guide or device D, provided with slot d , and bevel-edged walls D^2 D^3 , said wall D^2 having an eye, d^8 , for the plain wire and V-shape notch d' , having lower rounded edge, d^2 , and upper edge beveled inwardly at its lower portion and outwardly at its upper portion, and said wall D^3 having a bevel-edged notch, d^{10} , the apex of which is located above the apex of the notch d' , on the opposite edge, substantially as specified.

SANDY M. KANE.

Witnesses:

JOSE HARRIS,

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