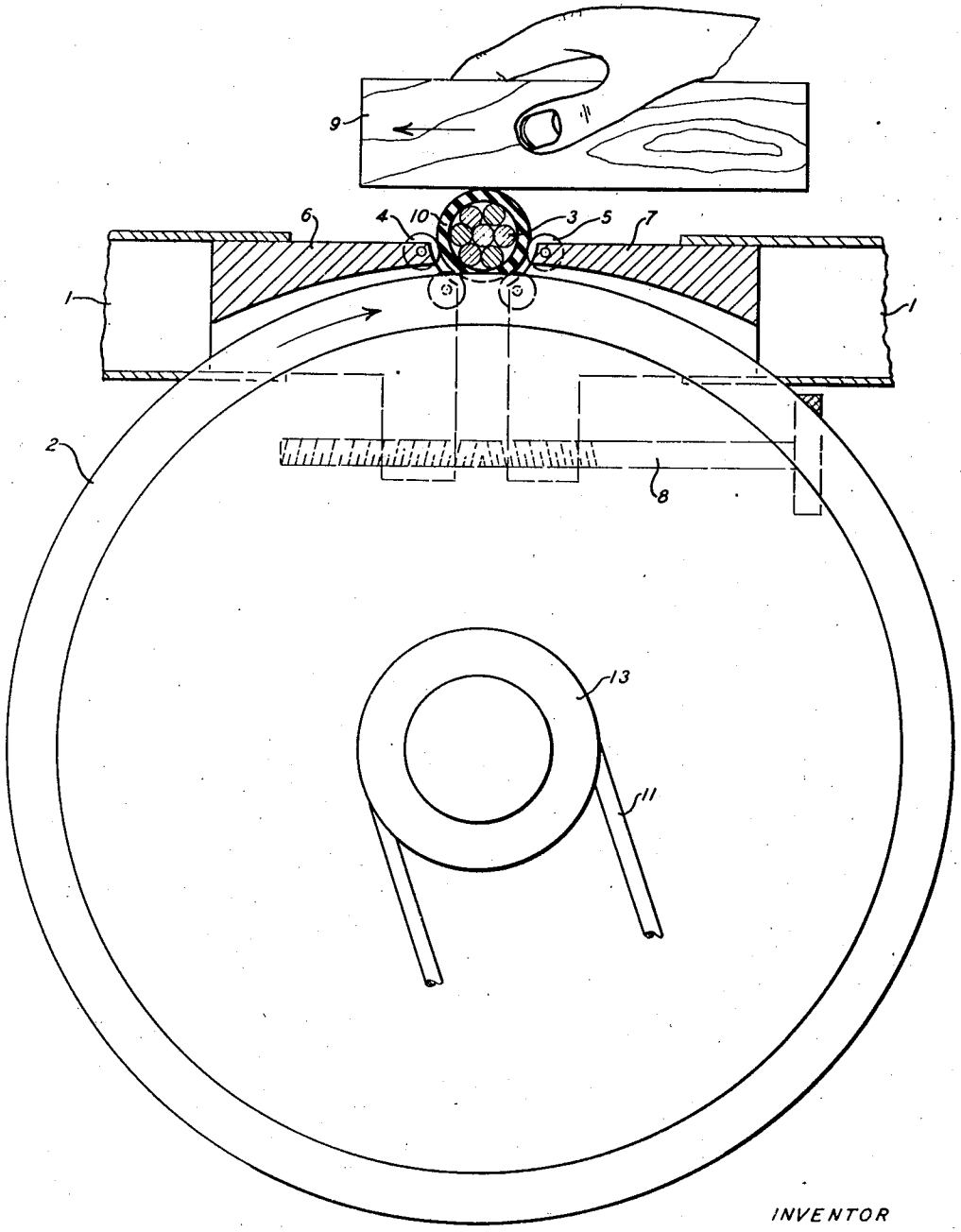
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MACHINE FOR CUTTING ARTICLES

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MACHINE FOR CUTTING ARTICLES

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This invention relates to a machine for cutting articles and more particularly to a machine for cutting insulation on a conductor.

In order to make an electrical connection to an insulated conductor, it is necessary to remove the insulation. In the past this has sometimes been done by cutting or scraping the insulation from the conductor by means of pliers or a knife. This method is slow and has the added disadvantage that often too much insulation is taken off or the conductor itself is damaged.

An object of the present invention is the provision of a machine for expeditiously making a circumferential cut, as through the insulation on a conductor, without cutting the conductor itself.

In accordance with one embodiment of this invention, the insulation is cut by a rotating circular cutter while the conductor is supported in the proper relation to the rotating cutter by means of adjustable rollers, and the conductor is rotated on said rollers by means of a block which is pressed against the conductor and moved in a direction tangential to the revolving circular cutter.

A better understanding of the invention may be had by reference to the following description and the accompanying drawing, in which

The single view of the drawing is a fragmentary elevational view of the machine.

The complete assembly of the apparatus is supported upon a work table or bench 1. Mounted below the surface of this bench and completely covered or guarded during the working operation, is a high-speed rotating circular cutter 2. This cutter is rigidly mounted on a shaft having also secured thereto a pulley 13. Passing over this pulley is a belt 11 which serves to impart high-speed rotation to the cutter from a source of power such as a motor, not shown.

Positioned over the cutter and partially covering the same is a pair of blocks 6 and 7 adapted to be adjusted toward or from each other by means of a left-hand, right-hand (double-threaded) screw 8 operable manually by means of a knurled head. Freely and rotatably journaled in the blocks 6 and 7 are rollers 4 and 5, functioning to serve as a support for a conductor 3, having an insulating or other sheath 10, over and above the cutter, in the proper cutting position.

A manually held and reciprocated block 9 serves to press the sheathed conductor down upon the cutting edge of the rotating disk cutter.

The operation of the device is as follows:

The operator adjusts the distance between the rollers 4 and 5 by means of screw 8. When this distance is properly set, the revolving cutter 2 will cut through the insulation but will not cut the conductor. The conductor 3 is placed on the rollers 4 and 5 with the cutter 2 at the point on the conductor where the circumferential cut is to be made. The block 9 is then pressed lightly down on the conductor and moved to the left as viewed in the drawing. The friction between the block and the conductor will roll the conductor in counterclockwise direction until the entire circumference of the insulation has been cut. It is then a simple matter for the operator to strip the insulation from the end of the conductor to the circumferential cut. The circumferential cut will stop the insulation from tearing beyond the desired point.

As shown in the drawing, the members 6 and 7 act as guards to prevent the operator's hand from coming in contact with the revolving knife. The only exposed portion of the knife is that which is between the rollers and this is below the surface of the work bench.

It may be readily observed that during the entire cutting operation the rotating cutter is completely covered by the adjustable blocks and conductor, thus preventing injury to the operator.

The embodiment of the invention herein disclosed is illustrative only and may be widely modified without departing from the spirit and scope of the invention, and is to be limited solely by the appended claims.

What is claimed is:

1. In a machine for cutting a sheath, a rotary cutter, and means to support the sheath so that the cutter can only cut to a predetermined depth comprising opposed rollers rotatably supporting the sheath.

2. In a machine for cutting insulation on a conductor, a bench, a rotating cutter supported with the periphery of the cutter below the surface of the bench, and conductor supporting means adjacent the periphery of the cutter comprising opposed rollers for rotatably supporting the conductor to receive a circumferential cut.

3. In a machine for making a circumferential cut in the insulation on a conductor, a bench, a rotary cutter supported on the bench with the periphery of the cutter below the surface of the bench, opposed rollers forming a semi-circle for supporting the conductor in position to be cir-

cumferentially cut, and means to rotate the conductor on the rollers.

4. In a machine for cutting a tubular sheath, a revolving cutter, opposed rollers for supporting the conductor in proper position to be cut, and a block for revolving the conductor in a direction opposite to the revolution of the cutter.

5. In a machine for cutting the insulation on a conductor, a revolving cutter, opposed rollers arranged substantially in a semi-circle adjacent the periphery of the cutter for supporting the conductor, and a block for rotating the conductor by pressing it between the said block and the said rollers and moving the block in a straight line.

6. An apparatus for cutting a sheath on a conductor comprising a table, a rotating cutting disc mounted under the surface of said table, said table having a slot above said cutting disc, and rollers adjacent the periphery of said cutting disc for supporting a sheathed conductor in such a position that the sheath will be cut circumferentially.

7. An apparatus for cutting a sheath on a conductor comprising a driven cutting disc of large diameter relative to the diameter of said sheath, and a plurality of rollers adjacent the periphery of said disc for supporting a conductor and limiting its movement toward said disc.

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