April 17, 1934. B. F. JENKINS 1,954,817

INSULATION STRIPPER

Filed April 25, 1932

Fig. 1

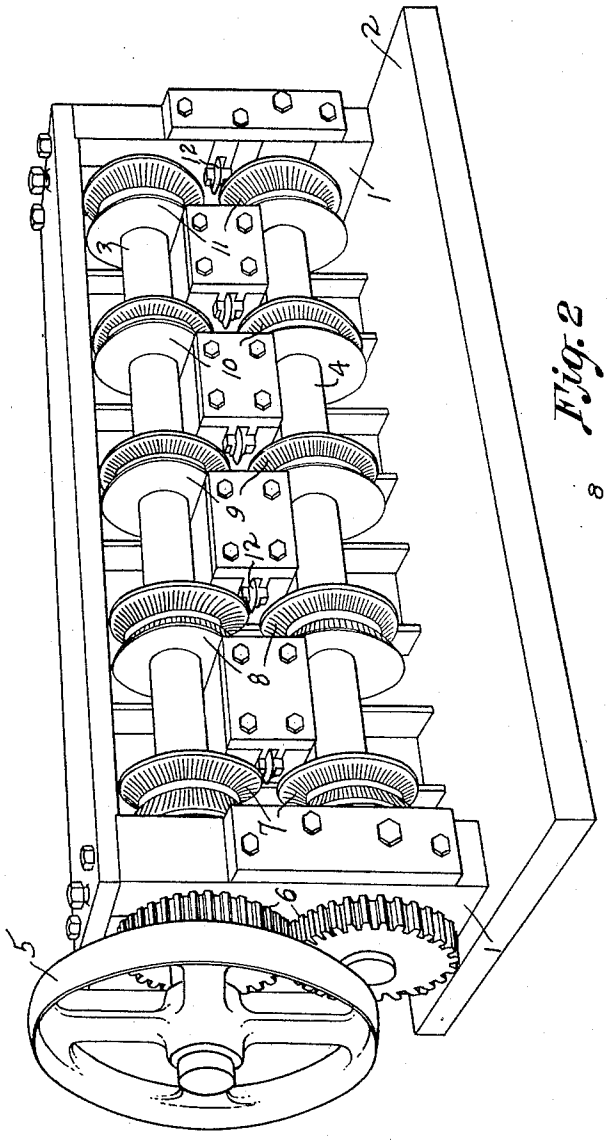
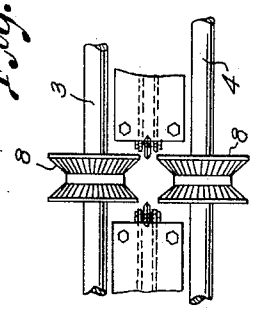


Fig. 2



INVENTOR
B. F. JENKINS.

BY

Robert A. Lavender
ATTORNEY

Patented Apr. 17, 1934 1,954,817

UNITED STATES PATENT OFFICE

1,954,817

INSULATION STRIPPER

Bernard F. Jenkins, United States Navy

Application April 25, 1932, Serial No. 607,481

6 Claims. (Cl. 164—61)

(Granted under the act of March 3, 1883, as amended April 30, 1928; 370 O. G. 757)

This invention relates to a machine for stripping the insulation from cables and has for its object to provide a device that will rapidly remove the insulation from cables, particularly armored cables, for the purpose of salvaging the rubber, metal, etc., included in the construction thereof.

With the above and other objects in view, this invention consists in the construction, combination and arrangement of parts as will be described more fully hereinafter.

Fig. 1 of the drawing is a perspective view of one embodiment of my invention; Fig. 2 is a front elevational view of the mechanism of one pass of the device shown in Fig. 1, which is typical of all the passes thereof.

Various means have heretofore been employed to remove the insulation and armor from cables, such as hack saws, torches, etc., but they have not proved satisfactory. My invention effects this operation at speeds up to two hundred feet per minute of heavy armored cable.

The standards 1 are mounted on a suitable base 2, the parallel shafts 3 and 4 being journaled in the standards. Shaft 3 is driven by direct connection or by a belt and pulley 5, as in the drawing, and shaft 4 is driven therefrom at the same speed through gears 6. Pairs of opposed rollers 7, 8, 9, 10 and 11 are carried by shafts 3 and 4, one roller of each pair being on each shaft. The rollers are peripherally grooved and the faces of the grooves are corrugated to feed the cable through between the rollers. The grooves in the rollers of the several pairs are of different sizes to accommodate cables of different diameters.

Rolling cutters 12 are mounted in pairs to split the insulation along each side of the cable as it passes between the rollers. The depth of cut of the cutters 12 may be regulated by setting the cutters of a pair toward or away from each other, the incision being made deep enough to insure that the insulation will be completely cut through. The deformation of the insulation by the pressure of the rollers will tend to free it from the cable and its removal from the cable can be easily and expeditiously accomplished. Further, the insulation on the sides of the cable where acted upon by the cutters will be put under tension by the pressure of the rollers at right angles to the cutters and will facilitate the cutting.

It will be understood that the above description and accompanying drawing comprehend only the general and preferred embodiment of my invention, and that various changes in the construction, proportion and arrangement of parts may be made within the scope of the appended claims without sacrificing any of the advantages of this invention.

The invention described herein may be manufactured and used by or for the Government of the United States of America for governmental purposes without the payment of any royalty thereon.

I claim:

1. In a device of the class described, a supporting structure, a pair of parallel shafts journaled in said structure, means to drive said shafts at the same speed, a plurality of rollers on each said shaft, said rollers being peripherally grooved and the faces of the grooves being corrugated, each roller on one shaft being disposed opposite to and in cooperating relation with a roller on the other shaft having a groove of the same size, and a rolling cutter disposed at each side of the space between each pair of rollers to project into said space.

2. In a device of the class described, a supporting structure, a pair of parallel shafts journaled in said structure, means to drive said shafts at the same speed, a pair of rollers disposed in opposed relation one on each of said shafts, said rollers being peripherally grooved and the faces of the grooves being corrugated, and a rolling cutter disposed at each side of the space between said rollers to project into said space.

3. In a device of the class described, a supporting structure, a pair of parallel shafts journaled in said structure, means to drive said shafts at the same speed, a plurality of rollers on each said shaft, said rollers being peripherally grooved and the faces of the grooves being corrugated, each roller on one shaft being disposed opposite to and in cooperating relation with a roller on the other shaft having a groove of the same size, and cutting means disposed at each side of the space between said rollers to cut a body passing through said rollers.

4. In a device of the class described, a supporting structure, a pair of parallel shafts journaled in said structure, means to drive said shafts at the same speed, a pair of rollers disposed in opposed relation one on each of said shafts, said rollers being peripherally grooved and the faces of the grooves being corrugated, and cutting means disposed at each side of the space between said rollers to cut a body passing through said rollers.

5. In a device of the class described, a supporting structure, a pair of parallel shafts jour-

naled in said structure, means to drive said shafts at the same speed, a pair of rollers disposed in opposed relation one on each of said shafts, said rollers being peripherally grooved and the faces of the grooves being corrugated, and cutting means disposed to cut a body passing through said rollers said body being held under compression by said rollers at the point of cutting.

6. In a device of the class described, spaced-apart opposed cutting means and coacting rotating means having friction surfaces to cause a body to pass between said cutting means and hold said body under compression at the point of cutting while being cut.

BERNARD F. JENKINS.