Jan. 1, 1963 K. KIRSCH ETAL 3,070,946

APPARATUS FOR MAKING BARBED WIRE BARRIERS

Filed May 20, 1960 2 Sheets-Sheet 1

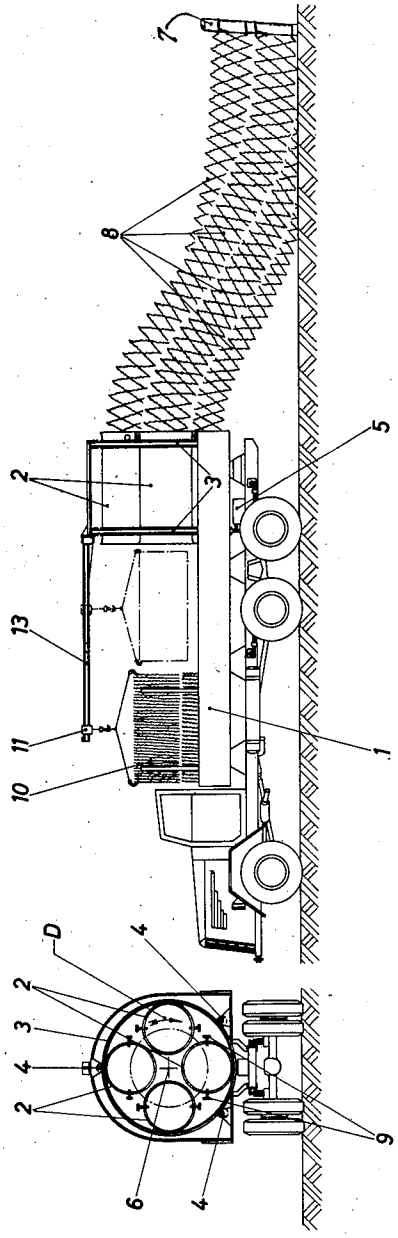

Fig. 1

Fig. 2

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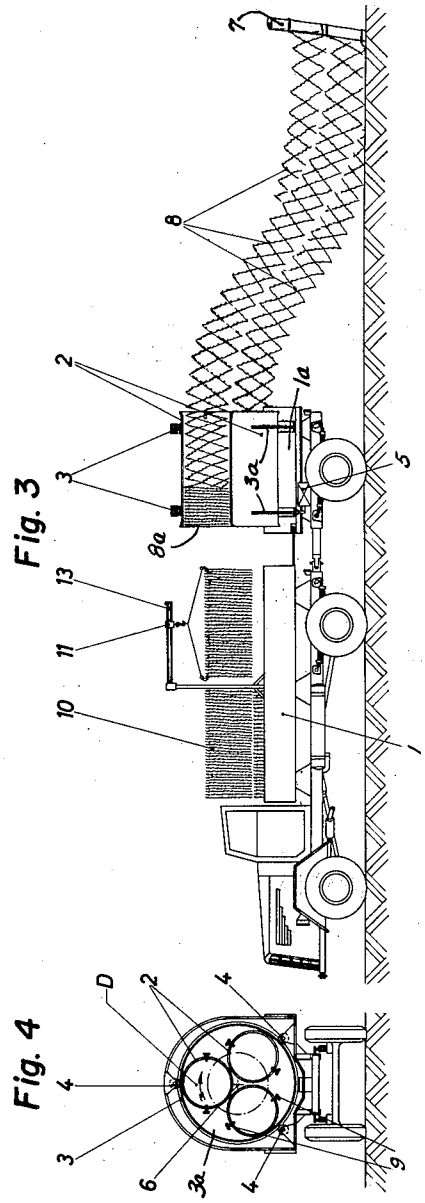

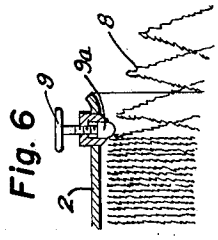

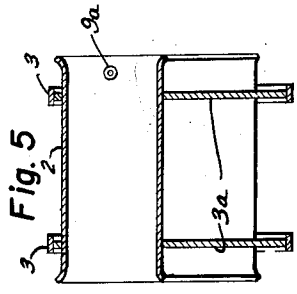

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United States Patent Office

3,070,946

Patented Jan. 1, 1963

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APPARATUS FOR MAKING BARBED WIRE BARRIERS

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Filed May 20, 1960, Ser. No. 30,533
Claims priority, application Germany June 3, 1959
4 Claims. (Cl. 57—1)

The invention concerns a barbed wire barrier, made from barbed wire coils, the individual turns of which are connected at one or several points of the circumference and pulled apart after the manner of a concertina. The novelty consists in that at least three such wire coils are intertwined. A barrier of this kind is higher and wider than one made of a single coil of barbed wire, whilst having the same coil diameter and requiring, in the folded condition, the same transport facilities as the former. The mutual intertwining results in an additional hooked engagement of the individual coils, making their separation more difficult and increasing the barrier effect.

This new barbed wire barrier may be positioned without special difficulties, and very quickly, by using the method of the invention, whereby the three wire coils to be intertwined are rotated in a common revolving frame parallel about its axis of rotation, whilst being moved or, preferably, pulled away from a fixed anchoring point of all three coils in the longitudinal direction of this axis of rotation.

In a preferred embodiment of the arrangement for positioning such barrier according to the invention, open cylinders each adapted to receive a collapsed wire coil, are arranged to form a revolving frame, parallel to an axis of rotation, said frame being located on roller bearings in ring mounts along its periphery on a vehicle, and being rotatably driven preferably by means of a gear wheel and gear rim, so that the wheel axle of the vehicle is perpendicular to the axis of rotation of the revolving frame.

The method of the invention may be carried out particularly well by means of a wire coil, known per se, which is embraced by a flat metal strip, the edges of which have barb recesses, the barbed strips being located radial relative to the axis of the coil, and therefore, with the coil in the collapsed condition, tightly packed close to one another, because these barbed coils may be closely collapsed, whilst they are still capable of being expanded easily and quickly, without the risk of being hooked together, and without requiring special care.

The invention will be further described, by way of example, with reference to the accompanying drawings showing two embodiments thereof, and in which:

FIG. 1 is a longitudinal view during the laying of the barrier from a mechanically propelled vehicle;

FIG. 2 is an end view of the vehicle; and

FIG. 3 is a side elevational view of another form of barrier laying device, and

FIG. 4 is an end view of the device of FIG. 3.

FIG. 5 is a fragmentary longitudinal vertical sectional view taken through the ring mounts of FIG. 4, and more clearly shows the details of the circular plates of the ring mounts for fixedly supporting the cylinders.

FIG. 6 is a fragmentary enlarged longitudinal sectional view taken through one of the cylinders and shows more clearly the details of the coil brake means.

At the rear end of the platform 1 of a motor vehicle, four open cylinders 2 are combined by means of ring mounts including circular plates 3*a* to form a revolving frame 3, which is located and guided on rollers 4 and is rotatably driven in the direction of the arrow D, by motor 5, rotating the revolving frame 3, so that it revolves about the axis 6, while the vehicle is driven away from a fixed anchoring point at 7. Each of the open cylinders 2 holds a collapsed barbed wire coil 8*a*, held together at the open rearward release end by means of braking jaws or other suitable means 9 including simple coil engaging round horns 9*a* (FIG. 6); the expanded front end 8 of which coil is fixed to the anchoring point 7, whereby with the vehicle travelling forward, each wire coil, is when the limit force of the brake jaws is exceeded, pulled off the storage coil and expanded, as at 8 while simultaneously being intertwined with the other wire coils; this action is also advantageously supported by the height of the draw-off above ground level.

Additional coils 10 may be stored on the platform 1, forward of the revolving frame, and may be carried to the open cylinders 2 by means of a travelling crab 11 of a travelling crane 13, provided for this purpose.

In the embodiment of FIGS. 3 and 4, the laying tubes 2 are located on a separate trailer 1*a*; the revolving frame 3 of this embodiment has three such laying tubes 2.

What we claim is:

1. An apparatus for forming a barbed wire barrier from a plurality of coils of barbed wire of the type wherein adjacent convolutions of each coil are joined together at circumferential spaced intervals wherein each coil may be elongated, said apparatus comprising a frame, means mounting said frame for rotation about a horizontal axis, a plurality of tubes having axes parallel to said frame axis and adapted to receive compressed coils of barbed wire, means rigidly mounting said tubes in said frame for rotation therewith, and drive means connected to said frame for rotating said frame about the axis thereof.

2. The apparatus of claim 1 wherein each of said tubes is provided with means for retarding the movement of convolutions of coils of barbed wire thereoutof.

3. The apparatus of claim 2 wherein each tube has a discharge end, and said retarding means of each tube is disposed adjacent the discharge end thereof.

4. The apparatus of claim 1 wherein a platform is disposed forwardly of said frame for the storage of coils of barbed wire, and loading means for elevating coils of barbed wire and feeding the same into said tubes.

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