Dec. 12, 1933. J. E. DUREPO 1,939,002

WIRE FABRIC

Filed May 24, 1932

Fig. 1.

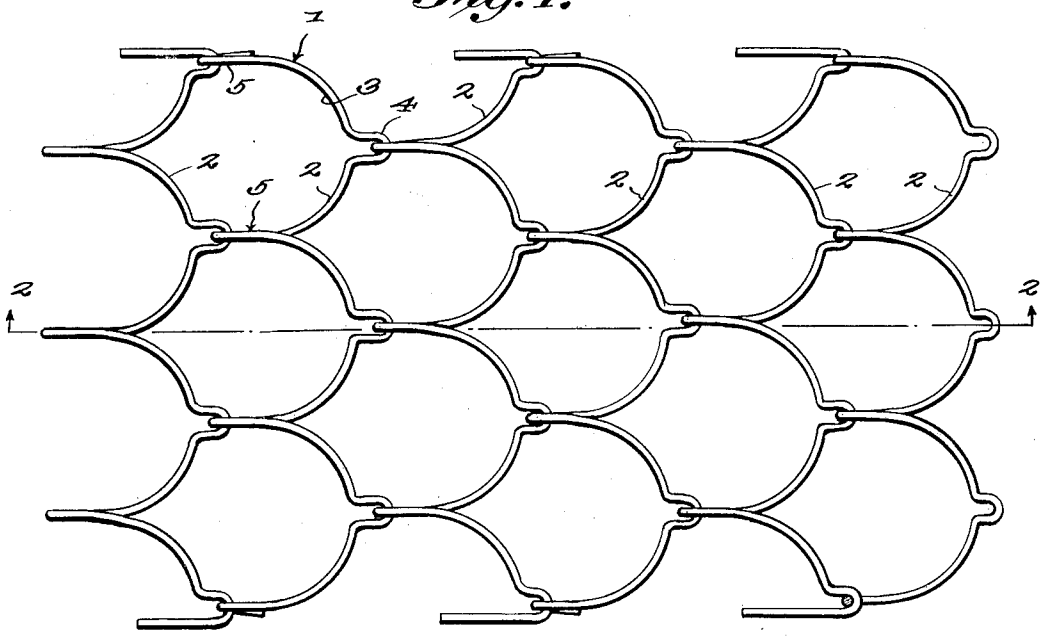


Fig. 2.

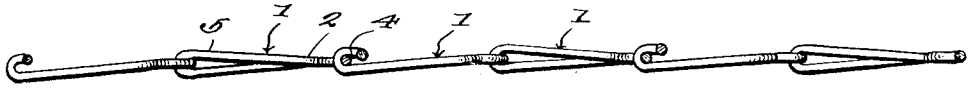
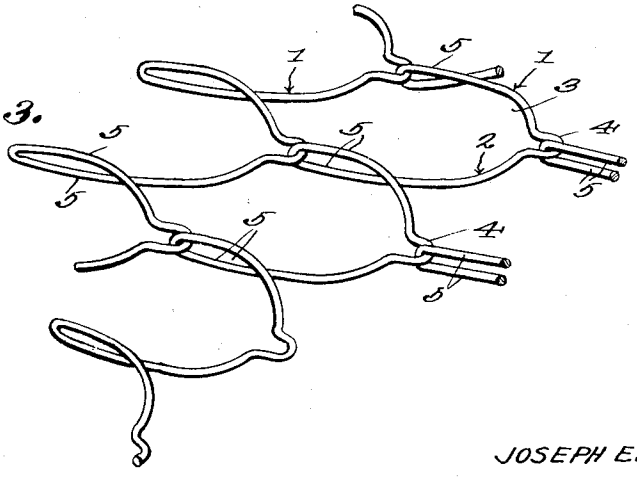


Fig. 3.



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WIRE FABRIC

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1 Claim. (Cl. 245—6)

This invention relates to belts, particularly adapted for use in connection with potato and vegetable or fruit assorting machines, and has for its object the production of a simple and efficient belt consisting of a plurality of link sections, these link sections being made up of a plurality of loops arranged side by side, extending transversely of the width of the belt, the sections being interlocked or looped together to form a continuous flexible body.

Another object of this invention is the production of a simple and efficient wire belt, or wire mesh fencing, which may be either used as a conveyor belt upon a vegetable or fruit assorting machine, or the same structure used as a wire fence, without departing from the spirit of the invention.

A still further object of this invention is the production of a specially constructed wire fence or belting, wherein the wire fence or belting is made up of a series of linked sections, each link section comprising a plurality of loops arranged side by side and formed to produce a flexible body, the loop of each section being formed of a continuous strand of wire and the various loops of the various sections being looped together.

The present invention embodies an especially constructed wire mesh fencing or belt such as might be used in connection with my co-pending application relating to a potato sorter.

With these and other objects in view, this invention consists in certain novel constructions, arrangements and combinations of parts as will be hereinafter fully described and claimed.

In the drawing:

Figure 1 is a top plan view of a portion of the strip of belting or fence;

Figure 2 is a section taken on line 2—2 of Figure 1; and

Figure 3 is a perspective view of a portion of the wire belting or fence showing a series of loops connected together to provide the link sections of the chain or fence.

By referring to the drawing, it will be seen that 1 designates the wire mesh or strand fabric which may be used either as a flexible belt or a wire fence, without departing from the spirit of the invention. The important element of the present invention, however, is the particular arrangement of the links having the specially designed loops illustrated and described. The body 1 of the material is made up of a series of link sections 2, and each link section comprises a plurality of loops 3 which are arranged side by side and formed from a continuous strand of wire. Each loop 3 is provided with a forwardly bent eye 4 at its apex and each loop 3 is also provided with a pair of substantially parallel side members 5, which side members are looped or threaded through the eyes 4 of the loops 3 of the adjoining link sections 2, as shown clearly in the drawing. These substantially parallel side members 5 are arranged so as to have one side member 5 of each loop extend over the eye 4 of the adjoining link section of one of the loops, and the other side member 5 is arranged to extend under the next adjoining eye 4 of the registering loop 3 of the adjoining link section, as shown clearly in the drawing. In other words, the side members 5 are adapted to extend alternately above and below the adjoining eyes 4 of the adjoining link sections. In forming the wire mesh body 1, the strand is started and passed through one eye 4 of one of the loops of an adjoining link section, and is then brought over this eye and extended forwardly and bent to form a substantially elliptical loop, such as is indicated by the numeral 3 in Figure 1. The apex of the loop is then formed to produce the eye 4 and the strand is then continued to provide the opposite side of the substantially elliptical loop 3 and is passed down under and through the eye 4 of an adjoining loop 3 of the adjoining link section 2 and is then brought over this last mentioned eye and extended forwardly so as to have the overhanging side portion 5 of the adjoining loop 3 extend over the side portion 5 of the next adjoining loop, or extend substantially parallel in overlapping position such as is shown in Figure 3. By means of this structure a very simple and efficient link wire mesh body is provided which may be conveniently used as a flexible belt on a potato sorter, other vegetable and fruit assorting machine, and the same structure may be conveniently and properly used as a wire fence, if desired. It should also be noted that since the loops 3 of each section 2 are all provided with eyes 4 at the centers of their bowed portions and the arms of the loops are engaged through these eyes, the sections 2 will be positively held against shifting transversely of the body out of their proper positions and will be retained in evenly distributed staggered relation to each other. This will cause pull to be evenly distributed and if the fabric is used as fencing, sagging between posts due to slippage of the sections will be prevented.

As shown in Figures 1 and 2 of the drawing, it will be seen that each loop through the medium of the eyes 4 and the parallel side portions 5, will provide a forwardly extending eye in the nature of the eye 4, and a rearwardly extending eye, at the

rear end of each loop, the rearwardly extending eyes extending in a plane at right angles to the forwardly extending eye 4.

It should be noted that the body 1 constitutes a flexible structure formed of link sections 2, which extend transversely of the body, one after another. Each link section 2 consists of a wire strand bent to form a series of substantially U-shaped loops 3, which loops are disposed in side-by-side relation to each other, transversely of the body, the arms or parallel portions 5 of the loops extending longitudinally of the body and their bowed portion extending transversely of the body. The bowed portion of each loop is crimped or bent to form a U-shaped eye 4 of reduced width extending longitudinally of the body and being open at its inner end as shown in Figures 1 and 2. By noting the drawing, it will be seen that the arms of the adjoining loops 3 of each section are integrally united in superimposed relation to each other and pass through the eyes 4 of the adjoining section.

It should be understood that certain detail changes in the mechanical structure may be employed without departing from the spirit of the invention so long as these changes fall within the scope of the appended claims.

Having described the invention, what is claimed as new is:

A device of the character described comprising a flexible body formed of link sections extending transversely of the body one after another, each section consisting of a wire strand bent to form a series of substantially U-shaped loops disposed in side-by-side relation to each other transversely of the body with their arms extending longitudinally of the body and their bowed portions extending transversely of the body, the bowed portion of each loop being crimped to form a U-shaped eye of reduced width extending longitudinally of the body and open at its inner end, and the arms of adjoining loops of each section being integrally united in superimposed relation to each other and engaged through the eyes of an adjoining section.

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