

Dec. 17, 1940.

H. AIBEL ET AL

2,225,290

YARN

Filed Feb. 10, 1939

FIG 1

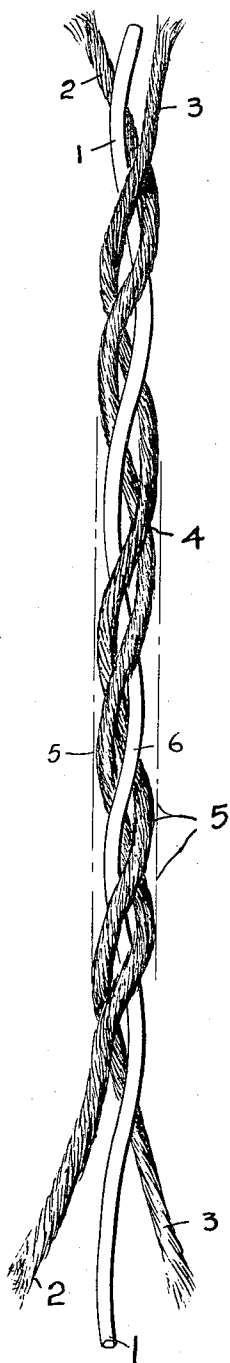


FIG 2

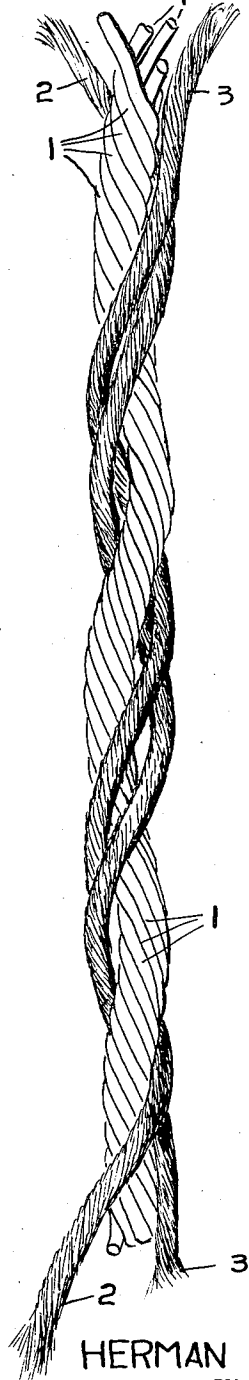
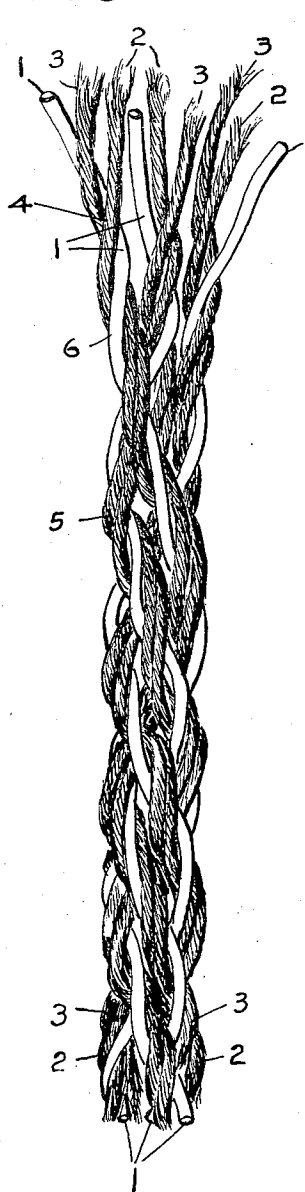


FIG 3



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2,225,290

YARN

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Application February 10, 1939, Serial No. 255,651

5 Claims. (Cl. 57—139)

Our invention relates to the construction of yarn and particularly to yarn in which horse hair or artificial horse hair is used as a component part and has among its purposes and objects:

A crinkly and relatively stiff yarn.

A yarn with a body.

A yarn having a two tone effect which is shiny and chalky.

A stiff yarn which may be stitched.

We accomplish these and other objects by the construction herein described and shown in the accompanying drawing forming a part hereof in which:

Fig. 1 is a view of a three thread yarn having a single horse hair thread.

Fig. 2 is a modification of a three thread yarn having a plurality of horse hairs forming one thread.

Fig. 3 is a modification showing several plies of the yarn shown in Fig. 1.

Similar reference characters refer to similar parts throughout the several views of the drawing and in the specification to follow.

We are aware that horse hair has been used for stiffening and has also been used with other threads in making yarn but such yarn is made without twisting the horse hair which is used straight and bound or covered with the other threads.

In our yarn threads of cotton, rayon, or other material are first twisted in one direction and then are twisted in the opposite direction with the horse hair to thus form the yarn. While this is our preferred construction it may be modified in numerous ways some of which are herein-after described.

The term horse hair as used in this description of our yarn is the general term applied commercially and includes not only horse hair but also artificial horse hair and similar stiff material which has the principal characteristics of horse hair or hair of considerable length from the tails and mains of horses and from other animals having similar long stiff hair.

Referring to the drawing and particularly to Figure 1 the horse hair 1 is shown as a single thread or end of about 360 deniers twisted about 6 turns per inch and combined with two ends 2 and 3 of dull rayon about 450 deniers each singly twisted about eleven and one half turns per inch.

The twisting of the horse hair gives the yarn an uneven or crinkly appearance and also causes the horse hair to be seen and to appear shiny between the more conspicuous ends of dull rayon

which because of their greater flexibility are noticed in the assembled yarn to have a more pronounced twist 4 and to lie relatively closer to the surface 5 of the yarn than the horse hair which due to its stiffness tends to lie closer to the center 6 of the yarn.

A plurality of ends or predominance of horse hair twisted to form a thread as shown in Figure 2 of the drawing tends to make the horse hair more conspicuous on the surface of yarn and thus causes the yarn to appear more shiny. The relative number of horse hairs may be varied to change the appearance of our yarn as desired and the character and size of the material of the other threads used with the horse hair may also be varied to produce numerous modifications of our yarn.

In Figure 3 we have shown several plies of the yarn above described and shown in Figure 1 of the drawing and the several plies may be further modified by using the construction shown in Figure 2 or other combinations may be used in the plies to give the desired size and appearance. The number of twists per inch of the horse hair and of the other threads of the yarn also give varying effects of stiffness and make the yarn more or less crinkly or shiny.

We do not wish to be limited to the details herein described as it will appear to those skilled in the art to which our invention pertains that numerous modifications may be made without departing from the principles underlying our invention. We may wish to depart from the details of construction herein disclosed to illustrate our invention within the scope of the appended claims.

We claim:

1. In a yarn, a plurality of ends or threads of fibrous material and twisted horse hair twisted and assembled with said threads of fibrous material to form said yarn, said twisted horse hair causing said yarn to have a crinkly appearance.

2. In a yarn, a plurality of ends or threads of fibrous material and twisted horse hair twisted and assembled with said threads of fibrous material to form said yarn, said twisted horse hair causing said yarn to have a crinkly appearance and changing in appearance as the relative proportions of said fibrous material and said horse-hair are changed.

3. In a yarn, a plurality of ends or threads of fibrous material and twisted horse hair twisted and assembled with said threads of fibrous material to form said yarn, said twisted horse hair causing said yarn to have a crinkly appearance

and changing the crinkly appearance of said yarn by changing the number of twists per inch of said horsehair.

5 4. In a yarn, horse hair twisted and combined with threads of fibrous material said horsehair lying nearer the center of said yarn in relation to the other ends or threads of said yarn.

5. In a yarn, horse hair twisted and combined

with threads of fibrous material whereby a crinkly effect is produced by the twisting of said horse hair, said threads of fibrous material having a dull surface and said horse hair having a shiny appearance whereby a varied effect is 5 produced.

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