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YARN REEL FOR REELING MACHINES AND WINDING MACHINES.
APPLICATION FILED MAR. 17, 1909.

944,987.

Patented Dec. 28, 1909.

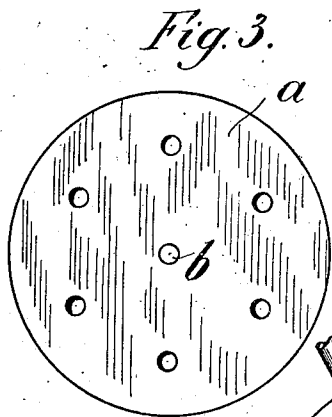
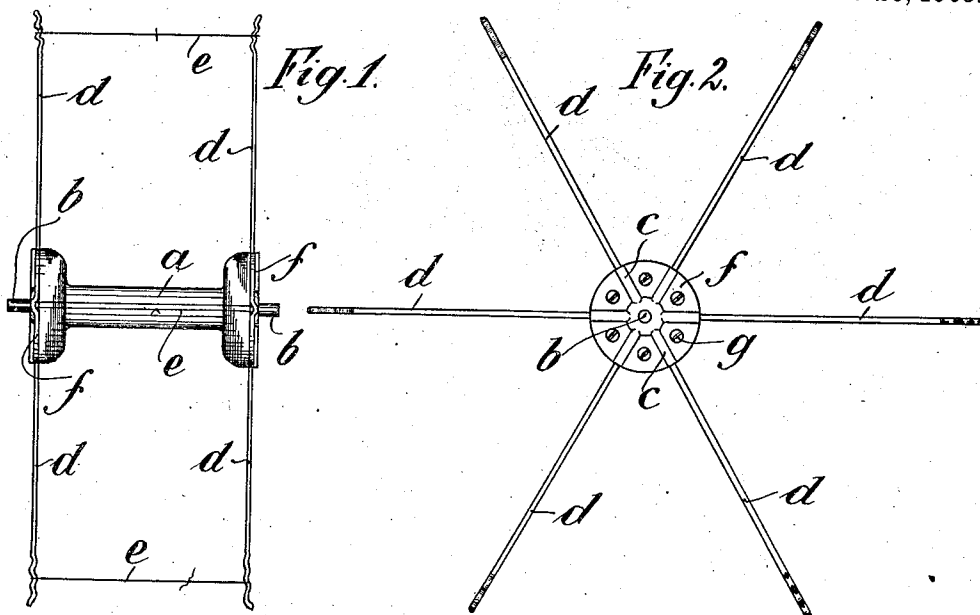


Fig. 4.

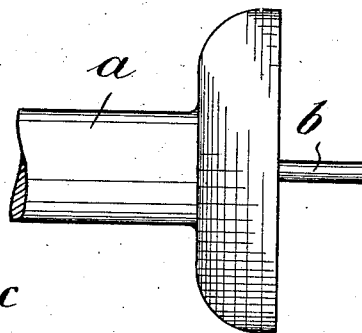
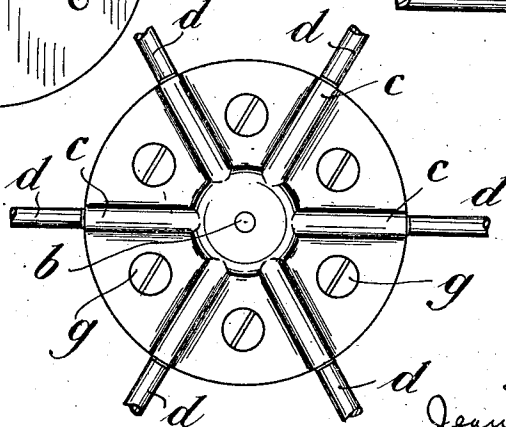


Fig. 5.



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JEAN SCHWEITER, OF HORGEN, NEAR ZURICH, SWITZERLAND.

YARN-REEL FOR REELING-MACHINES AND WINDING-MACHINES.

944,987.

Specification of Letters Patent.

Patented Dec. 28, 1909.

Application filed March 17, 1909. Serial No. 483,951.

To all whom it may concern:

Be it known that I, JEAN SCHWEITER, a citizen of the Swiss Republic, and resident of Horgen, near Zurich, Switzerland, have invented certain new and useful Improvements in Yarn - Reels for Reeling - Machines and Winding-Machines, of which the following is a specification.

Yarn-reels for reeling-machines and similar apparatus are usually made of wood. But the reels thus far known have the drawback that, on the one hand, they are too bulky, so that the surface for the material is too small, and, on the other, they are so heavy that, when winding fine material, such as silk, there is too great a strain for the strength of the same. A further drawback consists therein that the reels are too little elastic for winding the yarn on and off and consequently render the winding-up very difficult, and when the yarn which is being wound off gets entangled, they are not sufficiently yielding, so that the thread frequently breaks.

The present invention does away with these drawbacks. The same consists in the main in fastening to the front sides of the hub of the reel radially grooved clamping-disks by which the reel-flights are secured. The reel-flights are flattened on the side facing the hub of the reel, in order that the same cannot be turned.

The accompanying drawing illustrates a sample form of construction of such a reel.

Figure 1 is a front view and Fig. 2 a side view, whereas Figs. 3-5 are details on an enlarged scale.

Similar letters refer to similar parts throughout the several views.

a is the hub of the reel which is preferably made of wood and is provided at both ends with pivots *b*. Upon the front sides of the hub of the reel are screwed, as will be seen from Figs. 3 and 5, clamping-disks *f* of metal provided with several grooves or channels *c*. Into these grooves are placed the metal reel-flights *d*. The latter are provided at their upper end with several undulations, in order to retain the cords *e* on which the yarn rests. At the lower end they are flattened a little on the side facing the hub of the reel, so that the same cannot turn. In order to prevent the single flights from falling out and to keep them in the right position, the wooden screws *g* or the like are firmly tightened. By this arrangement the

surface on the reel on which the yarn rests is made much broader, because the flights extend beyond the hub, which was not the case with the reels thus far known. As, moreover, the reel-flights are formed of thin metal bars the whole reel becomes very elastic and the yarn can be easily placed on it and be wound off without any trouble, even if slightly entangled, without straining the yarn very much or breaking it. Reels of this kind are, consequently, especially suited for reeling silk and fine cotton threads, but also for coarse materials they are of a decided advantage.

Another advantage consists therein that such reels are very light, that they can be easily taken to pieces and are by inserting other reel-flights, adapted to be transformed at once into reels for larger or smaller skeins.

A further advantage is that such yarn-reels are very cheap to manufacture.

What I claim as my invention and desire to secure by United States Letters Patent is:—

1. A yarn-reel for reeling and winding machines comprising a hub member having flat surfaces at the ends thereof, plates overlying said end surfaces and provided with a plurality of radially disposed grooves, said grooves forming with said end surfaces spoke sockets having each a flat side, spokes within said sockets and having each a flat side complementary to the flat sides of said sockets and lying in intimate contact therewith, and means for holding said grooved plates to said hub ends.

2. A resilient yarn-reel for reeling and winding machines comprising a hub member having flat end surfaces, plates overlying said end surfaces and having radially disposed grooves formed therein providing spoke sockets, resilient wires within said sockets constituting spokes, said wires having their outer ends crimped whereby cords may be tied thereon against slipping and to connect the spokes in parallel pairs and provide means for winding the yarn on the reel, and means for holding said grooved plates to said hub ends.

The foregoing specification signed at Zurich, Switzerland this 2d day of March, 1909.

JEAN SCHWEITER.

In presence of—

WM. BAUMGARTNER,
J. SURBER.