

UNITED STATES PATENT OFFICE.

SENECA G. LEWIS, OF GREENSBURG, PENNSYLVANIA.

RUBBER-COATED CORD.

1,279,718.

Specification of Letters Patent. Patented Sept. 24, 1918.

No Drawing.

Application filed November 3, 1916. Serial No. 129,405.

To all whom it may concern:

Be it known that I, SENECA G. LEWIS, residing at Greensburg, in the county of Westmoreland and State of Pennsylvania, a citizen of the United States, have invented or discovered certain new and useful Improvements in Rubber-Coated Cords, of which improvements the following is a specification.

10 My invention consists in a new article of manufacture, rubber-sized catgut.

Certain articles of which catgut is a component part, rackets for example, used in tennis and other games, are fragile and not very durable because the catgut drawn taut upon the frame (which itself manifests irregularities in strain) is subject to rapid deterioration under the atmospheric conditions to which it is subjected both in service and when stored.

20 I have found that catgut sized or coated with india-rubber is not impaired for service as stringing for rackets and is, as compared with ordinary catgut, far more durable in such service.

25 Catgut of commerce such as is used in the stringing of rackets is formed of a number of strands (say a dozen or thereabout) of animal fiber twisted together, and the whole shaped by suitable instrumentalities. The rubber sizing or coating which characterizes my invention may be applied either to the otherwise finished twisted cord, or it may be applied to the component strands of animal fiber before twisting occurs. The rubber may be applied in the form of thin sheets wrapped upon the cord or strand of animal tissue, or it may and preferably will

be applied by causing the cord or strand of animal tissue to pass through a liquid solution of rubber, in which case the sizing or coating will adhere to and more or less fill the pores and openings of the fibrous tissue. The solvent for the rubber in case a rubber solution is employed may be such as is desired—bisulfite of carbon, chloroform, ether, naphtha or another solvent of rubber; and the strength of the solution and its fluidity or viscosity will be adapted to afford the desired amount of sizing or coating. The material passing from such a bath may be wiped or the adhering sizing or coating may be otherwise spread and the adhering quantity determined with any suitable appliances. If the component strands of animal tissue be passed through the rubber solution before being twisted together to form the cord, the instrumentalities which shape the cord will also distribute and equalize the quantity of sizing or coating. If the rubber be applied to the component strands, then in the finished article the sizing or coating will be intercalated between component strands. The otherwise finished article is supported and disposed in such position and arrangement and under such conditions as to allow the rubber to become air-cured.

I claim as my invention:

As a new article of manufacture racket-stringing consisting of rubber-coated catgut.

In testimony whereof I have hereunto set my hand.

SENECA G. LEWIS.

Witnesses:

FRANCIS J. TOMASSON,
FRIEDA E. WOLFF.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."