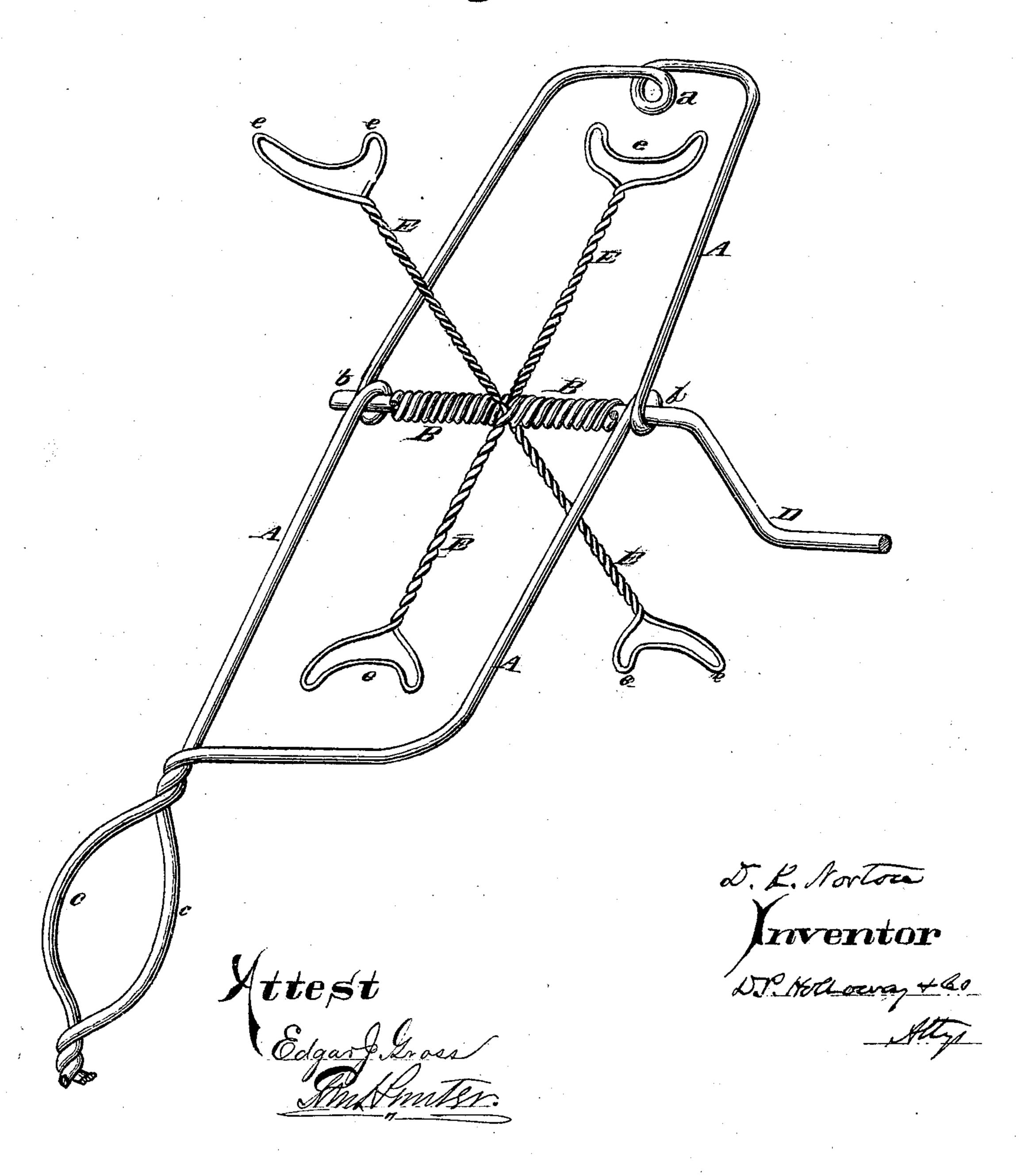
D. K. NORTON.

Reels for Clothes Lines and Kite-Strings.

No.151,612.

Patented June 2, 1874.

Fig.1



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UNITED STATES PATENT OFFICE.

DURENE K. NORTON, OF CINCINNATI, OHIO.

IMPROVEMENT IN REELS FOR CLOTHES-LINES AND KITE-STRINGS.

Specification forming part of Letters Patent No. 151,612, dated June 2, 1874; application filed April 6, 1874.

To all whom it may concern:

Be it known that I, DURENE K. NORTON, of Cincinnati, Hamilton county, State of Ohio, have invented a certain new and useful Reel for Clothes-Lines, Kite-Strings, &c., of which the following is a specification:

My invention consists of a reel and frame composed entirely of wire, as hereinafter described, the object being to cheapen the construction of such article and render the same

light, strong, and durable.

The accompanying drawing is a perspective view of a reel and frame embodying my invention.

The frame A is composed of one piece of wire so bent, as shown, as to form the guidingloop a, the journal-bearings b, and the handle c. The axle B is fitted into the journalbearings b, and is formed with a crank-handle, D, by which the recl is operated. The reel is composed of any number of arms, E, which are formed of twisted wire, so as to compose the notches or forks e for the cord, the inner ends of the arms being forcibly twisted around the axle B, so that they are firmly secured thereto;

and in order that they may be prevented from slipping on the axle the latter may be filed partly away into a square or other form to give the wires of the arms E a tighter gripe.

For convenience in packing, the arms E may be brought together on opposite sides temporarily, so as to be flattened down, as it were, into a small compass, and the arms may be afterward returned, so as to assume the necessary radial position.

I claim--

The herein-described reel, composed of the wire-frame A, bent to form guide-loop a, bearings b b, and handle c, the cranked axle B D, and the reel proper, the arms E of which, made of twisted wire, are provided with forks ee, and are twisted around the shaft to secure them, all substantially as specified.

In testimony of which invention I hereunto set my hand.

DURENE K. NORTON.

Witnesses:

FRANK MILLWARD, R. M. HUNTER.