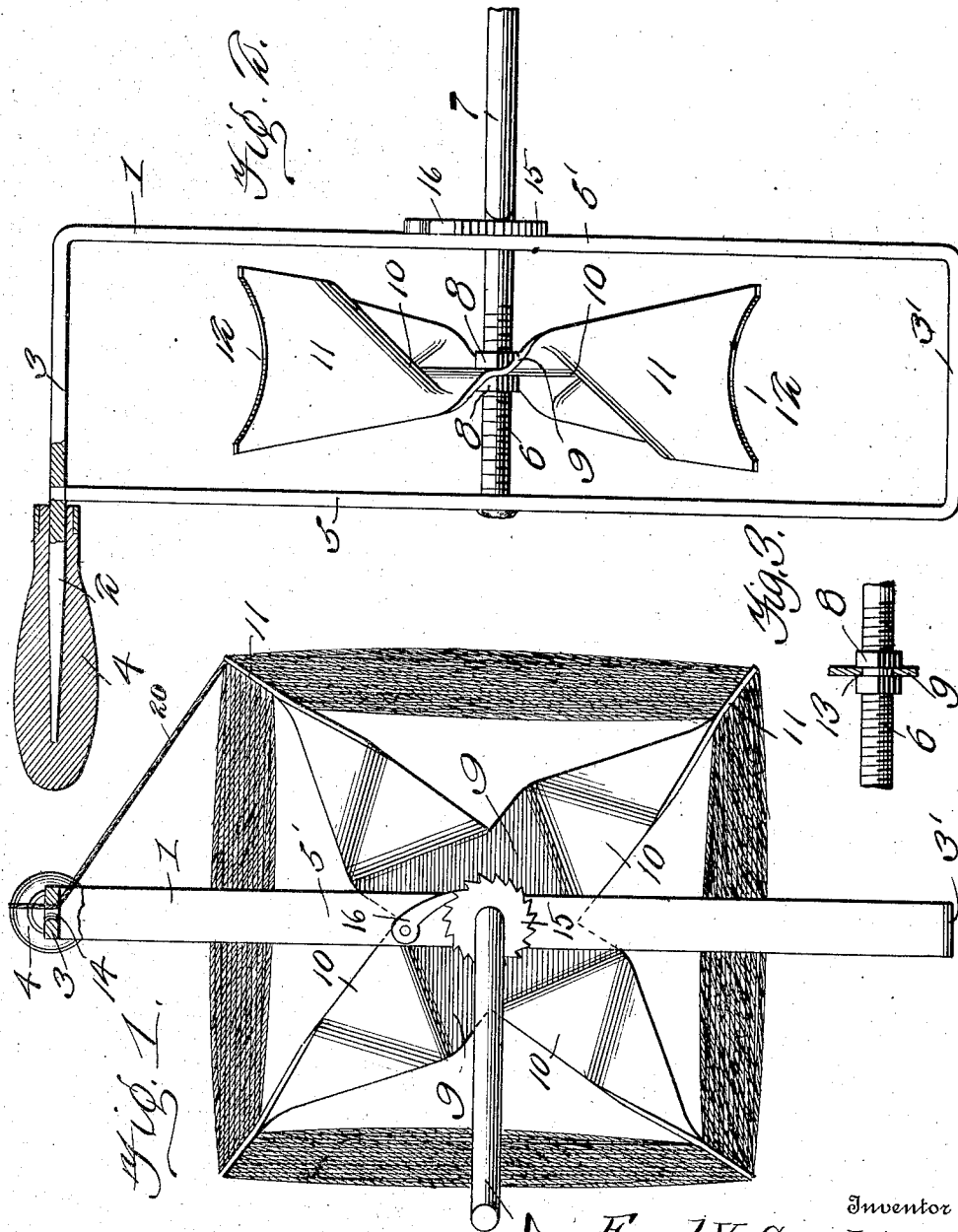


E. V. SANDERS.
REEL.

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996,527.

Patented June 27, 1911.



Witnesses

Hugh H. H. H.
Wm. Bagger.

Inventor

Earl V. Sanders

By Victor J. Evans

Attorney

UNITED STATES PATENT OFFICE.

EARL V. SANDERS, OF PAWNEE, ILLINOIS.

REEL.

996,527.

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To all whom it may concern:

Be it known that I, EARL V. SANDERS, a citizen of the United States of America, residing at Pawnee, in the county of Sangamon and State of Illinois, have invented new and useful Improvements in Reels, of which the following is a specification.

This invention relates to reels, and it has for its object to provide a simple and efficient reel mounted for rotation in a suitable frame whereby it may be conveniently utilized for winding and unwinding a string of a kite and for other purposes.

The invention consists in the improved construction and novel arrangement and combination of parts which will be hereinafter fully described and particularly pointed out in the claims.

In the accompanying drawing has been illustrated a simple and preferred form of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that changes, alterations and modifications within the scope of the invention may be resorted to when desired.

In the drawing,—Figure 1 is a side view. Fig. 2 is a top plan view. Fig. 3 is a detail view in elevation of a portion of the shaft showing a portion of the reel body in section.

Corresponding parts in the several figures are denoted by like characters of reference.

35 A rectangular frame 1, which may be formed by properly bending a strip of iron or steel of suitable dimensions, is provided at one corner with an extension 2 of one of the end members 3 of said frame, said extension 40 serving to support a handle 4. The side member 5, which terminally abuts upon the end member 3 adjacent to the extension 2, may be connected with said end member by soldering, brazing or in any other convenient manner whereby sufficient strength will be secured. The side members 5, 5' of the 45 frame are apertured to form bearings for a shaft 6 which is provided with a crank 7 at one end whereby it may be conveniently rotated. The shaft 6 is screw threaded for a portion of its length for the reception of 50 connecting pieces 8, 8 between which the reel

body 9 is clamped. Said reel body is formed of a cruciform plate of sheet metal, the arms 10 of which are quarter-twisted so as to 55 place the outer ends 11 of said arms in planes substantially at right angles to the inner ends of the arms and to the body of the plate. The outer ends of the arms are provided at their outer edges with notches 60 or recesses 12 for the reception of the string that is to be wound. The body of the reel plate is centrally apertured at 13 for the passage of the shaft 6, and the end member 3 of the frame having the extension 2 is provided with an aperture 14 through which 65 the string wound upon the reel is guided.

In operation, the device is grasped by the handle 4, and the end member 3' of the frame may be supported against the breast 70 of the operator, while the crank 7 is manipulated by the other hand for the purpose of controlling the winding or unwinding of the string, the latter being indicated at 20 in Fig. 1 of the drawings. It will be readily 75 seen that this device is so constructed that the operator will be in complete control of the reel; the construction being simple and thoroughly efficient.

The shaft 6 may if desired be equipped 80 with a ratchet wheel 15 adapted to be engaged by a pawl 16 which is suitably pivoted upon the frame and whereby the said shaft may be held against rotation when desired. 85

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

1. In a device of the character described, a reel consisting of a cruciform plate, the central portion of which is perpendicular to the axis of rotation having relatively broad 90 quarter-twisted arms presenting elongated outer edges substantially parallel to the axis of rotation, said outer edges being provided with string-receiving notches, a partly 95 threaded shaft supporting said reel, clamp nuts on said shaft engaging opposite sides of the plate constituting the reel body, and a frame wherein said shaft is supported for rotation, said frame being provided at one 100 corner with a laterally extending handle member.

2. In a device of the character described, a reel consisting of a cruciform plate, the

central portion of which is perpendicular to the axis of rotation, having relatively broad quarter-twisted arms presenting outer edges substantially parallel to the axis of rotation
5 and provided with string-receiving notches in said outer edges, a shaft supporting said reel, a frame wherein said shaft is supported for rotation, a ratchet wheel upon the shaft,

and a pawl pivoted upon the frame and engaging said ratchet wheel.

In testimony whereof I affix my signature
10 in presence of two witnesses.

EARL V. SANDERS.

Witnesses:

C. W. KESSLER,
J. M. DUMAN.