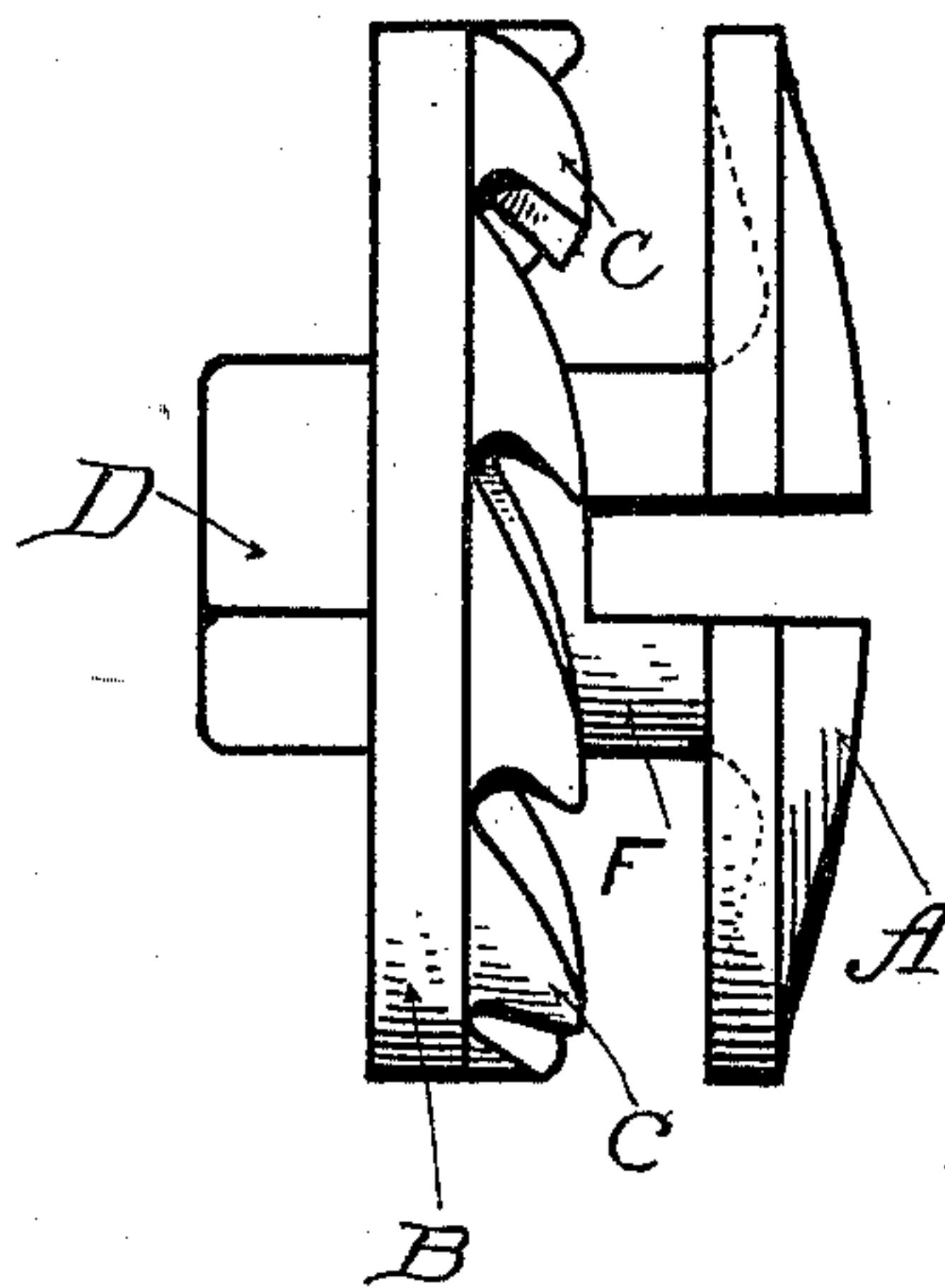


(No Model.)

W. WARD & J. HARVEY.
WIRE STRAINER.

No. 537,949.

Patented Apr. 23, 1895.



Witnesses

Alexander Stephen Paterson

John Edward Lee

William Henry Tucker

Frank Dinning Clayton

Inventors

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John Harvey

UNITED STATES PATENT OFFICE.

WILLIAM WARD AND JOHN HARVEY, OF DUNEDIN, NEW ZEALAND.

WIRE-STRAINER.

SPECIFICATION forming part of Letters Patent No. 537,949, dated April 23, 1895.

Application filed October 6, 1894. Serial No. 525,154. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM WARD, miner, and JOHN HARVEY, farmer, subjects of the Queen of Great Britain, residing at the city of Dunedin, in the Colony of New Zealand, have invented new and useful Improvements in Wire-Strainers, of which the following is a specification.

Our invention relates to improvements in wire-strainers and the object of our improvements is to produce a wire-strainer which will be economical, easily worked and self-locking. We attain this object by use of the wire-strainer illustrated in the accompanying drawing which shows an elevation of our strainer, and in which—

A, B and F form a reel of which F is the spindle and A and B are the shields or disks.

A is a slotted shield with the slot cut through its diameter well into F to allow of the wire passing on to the spindle clear of the shield A.

D is a square projection or bearing being a continuation of F to which is applied a handle bar or crank to revolve the strainer.

C, C is a set of grip teeth on the inner side of B to hold the wire as it is wound on the reel.

Our strainer is put into operation by applying the slot in A to the wire and pressing it home. We then wind the strainer with a handle bar, spanner or crank of any preferred shape applied to D. This handle bar may be straight or it may be a crank-handle and it may be of any length which will give sufficient leverage to effect the required strain.

As the strainer revolves the teeth C, C are pressed against the wire by the hand. As C, C lie over in the fashion of sharks' teeth they act as ratchet teeth and they lock the strainer firmly when winding ceases. The handle bar or crank is then removed and is used for other strainers.

The shield or disk A is shown in the drawing as convex on the outer side and concave on the inner side. We make it so for convenience of handling and because the concave inner side gives more space for wire as it

winds round F but it is obvious that this shape is not essential to the working of our wire-strainer and that the shield A may be of any preferred shape.

The grip teeth C, C are sunk toward F and rise toward the circumference of B to give space for the wire and to allow the wire to be caught and locked.

The coupling or junction of wires may be effected with our strainer by placing the wires alongside each other in the slot and then winding as usual. Our strainer may be made in any proportion and of any weight or size and to suit any gage of wire.

Our strainer is applied at any point on the wire requiring no support but the wire itself.

We cast our strainer in iron and turn it out in one piece. The handle bar or crank handle is made in any desired shape and may be wrought or cast or stamped. One handle serves any number of strainers.

We are aware that reels are used as the basis of other wire-strainers. We therefore do not claim the use of a strainer which is simply a reel, but

What we do claim as our invention, and desire to secure by Letters Patent, is—

A wire reel comprising the slotted shield and the toothed shield substantially equal in diameter with the spindle connecting them, the said slotted shield being concaved in its inner side, substantially as described.

WILLIAM WARD.
JOHN HARVEY.

Witnesses to the signature of William Ward:

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JOHN E. RÉE,
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