

No. 708,196.

Patented Sept. 2, 1902.

S. W. BRADBURY.  
WIRE TIGHTENER.

(Application filed Feb. 19, 1902.)

(No Model.)

Fig. 1.

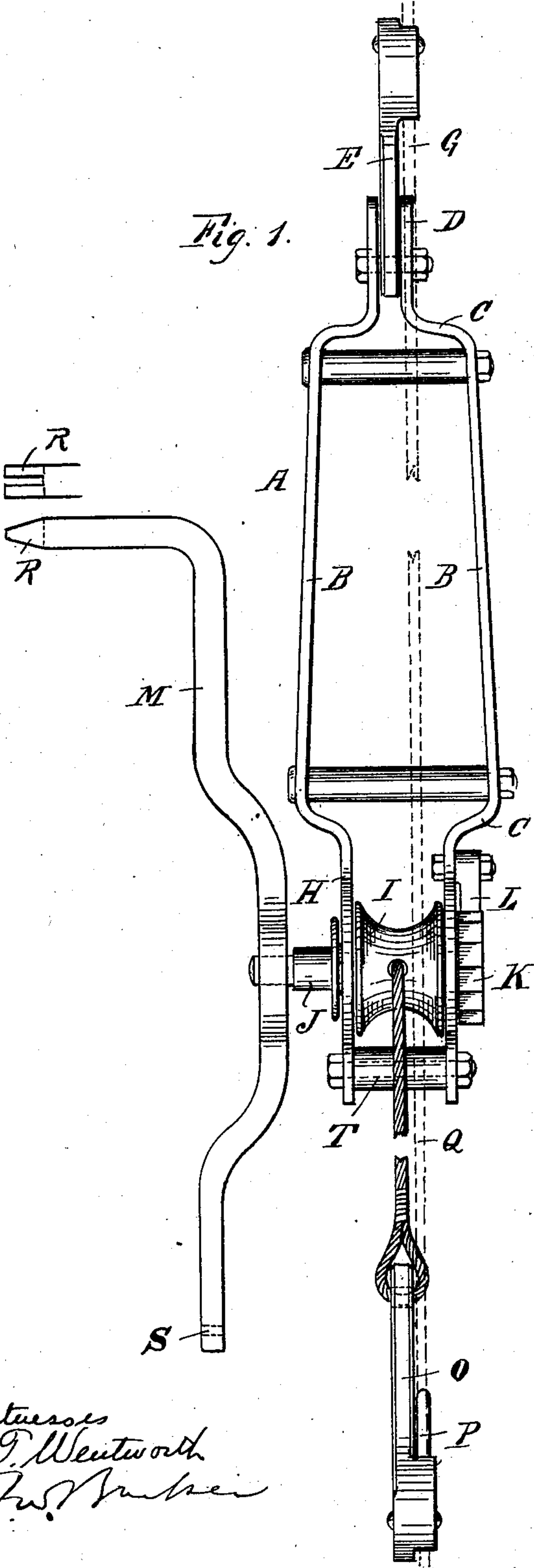
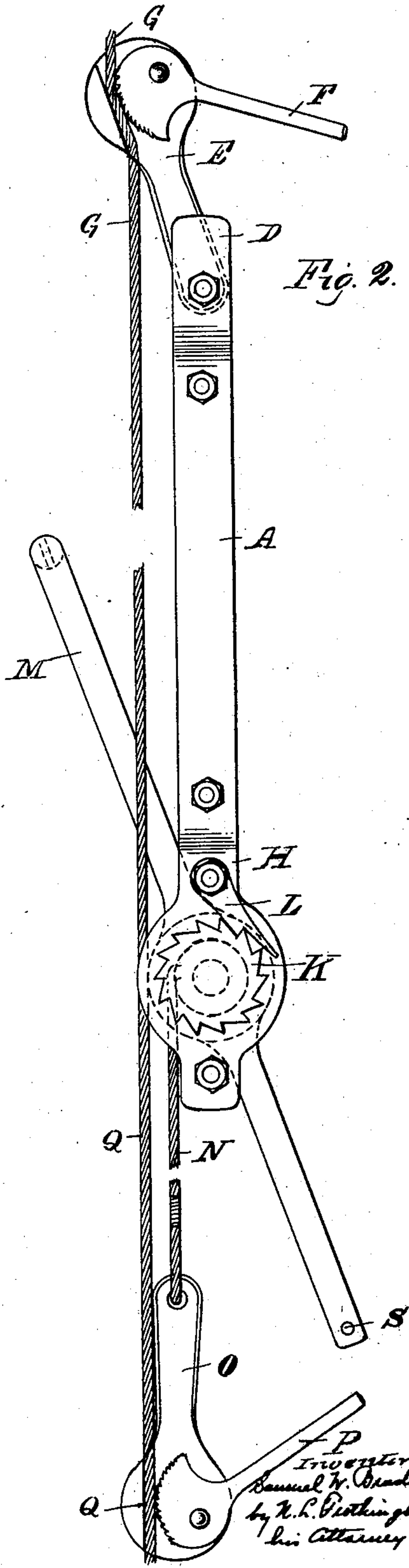


Fig. 2.



Witnesses  
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# UNITED STATES PATENT OFFICE.

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## WIRE-TIGHTENER.

SPECIFICATION forming part of Letters Patent No. 708,196, dated September 2, 1902.

Application filed February 19, 1902. Serial No. 94,733. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL WILLIAM BRADBURY, engineer, a subject of the King of Great Britain and Ireland, of Findlay & Company, engineers, Church Square, Cape Town, Cape Colony, have invented a certain new and useful Apparatus for Tightening, Straining, and Repairing Wires, Ropes, Cords, and the Like, of which the following is a specification.

This invention relates to improvements in apparatus for tightening, straining, and repairing wires, ropes, cords, cables, chains, and the like, the object of the invention being to provide a means whereby the cord, rope, or the like can be strained, joined, or repaired without losing the strain upon the said cord or the like.

The improved apparatus consists of a frame one end of which is provided with a clamp and the other end with a pulley or sheave having a ratchet, the pulley and ratchet being actuated by a lever-handle. Fixed onto the rim of the pulley is a short length of cord or wire, having at the other end a clamp similar to that fixed at the opposite end of the frame, the motion of the pulley and short length of rope being toward the frame. By revolving the pulley by means of the handle and ratchet the rope, cord, or the like, which is held tightly by the clamp attached to the short length of cord aforesaid, is drawn toward the frame and nearer to the clamp at the opposite end of the frame, and therefore nearer to that portion or end of the rope, cord, or the like which is held by said clamp.

Referring to the drawings, which form a part of this specification, Figure 1 represents a sectional elevation of the apparatus, and Fig. 2 a plan of the same.

In the views, A is the frame, consisting of sides B B and ends C C, one end of the frame terminating in a double eye D, which holds the end of the clamp E. This clamp is provided with a claw cam and lever F, which grips the wire, rope, or cord G. The other end of the frame terminates in a smaller frame H, in which the sheave I revolves on the spindle J.

K is the ratchet, controlled by the pawl L.

M is the handle-lever, which is fitted onto the square part of the spindle J, the lever providing a fulcrum for winding the flexible rope, cord, or chain N onto the pulley-sheave I. This flexible rope or chain N has attached to its other end the clamp O, which is similar in detail to the clamp E and has a claw cam and lever P, which grips the rope, cord, or the like at Q. When the flexible rope or chain N is wound onto the pulley-sheave I, it pulls the clamp O toward the frame, and with it the gripped cord Q, the end of which may be situated in the space within the sides and ends of the frame A, and if the end of the wire, rope, or cord G is brought to an adjacent position the ends of the rope can be joined or treated in whatever way may be required.

The handle of the fulcrum-lever M is provided at its end with a slot, forming the end into a fork R, the other end of the lever having a hole S, these provisions being for the purpose of twisting the binding wire or cord when making a joint in the wire, rope, or cord.

T is a roller revolving on a pin in the frame for allowing the flexible rope or chain N to slide without friction.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In an apparatus of the character described, the combination of two sides similar in configuration spaced apart to form an elongated central space and terminating in a double eye and a secondary frame, a clamp E pivoted in said double eye, a winch-and-ratchet mechanism mounted in said secondary frame, a clamp O, a flexible connection between said clamp O and said winch, an antifriction-roller carried by said secondary frame between said winch and said clamp and a detachable double lever-handle M whereby said winch may be actuated, substantially as described.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

S. W. BRADBURY.

Witnesses:

C. R. JAMBLIN,  
HARRY LAMBERT.