

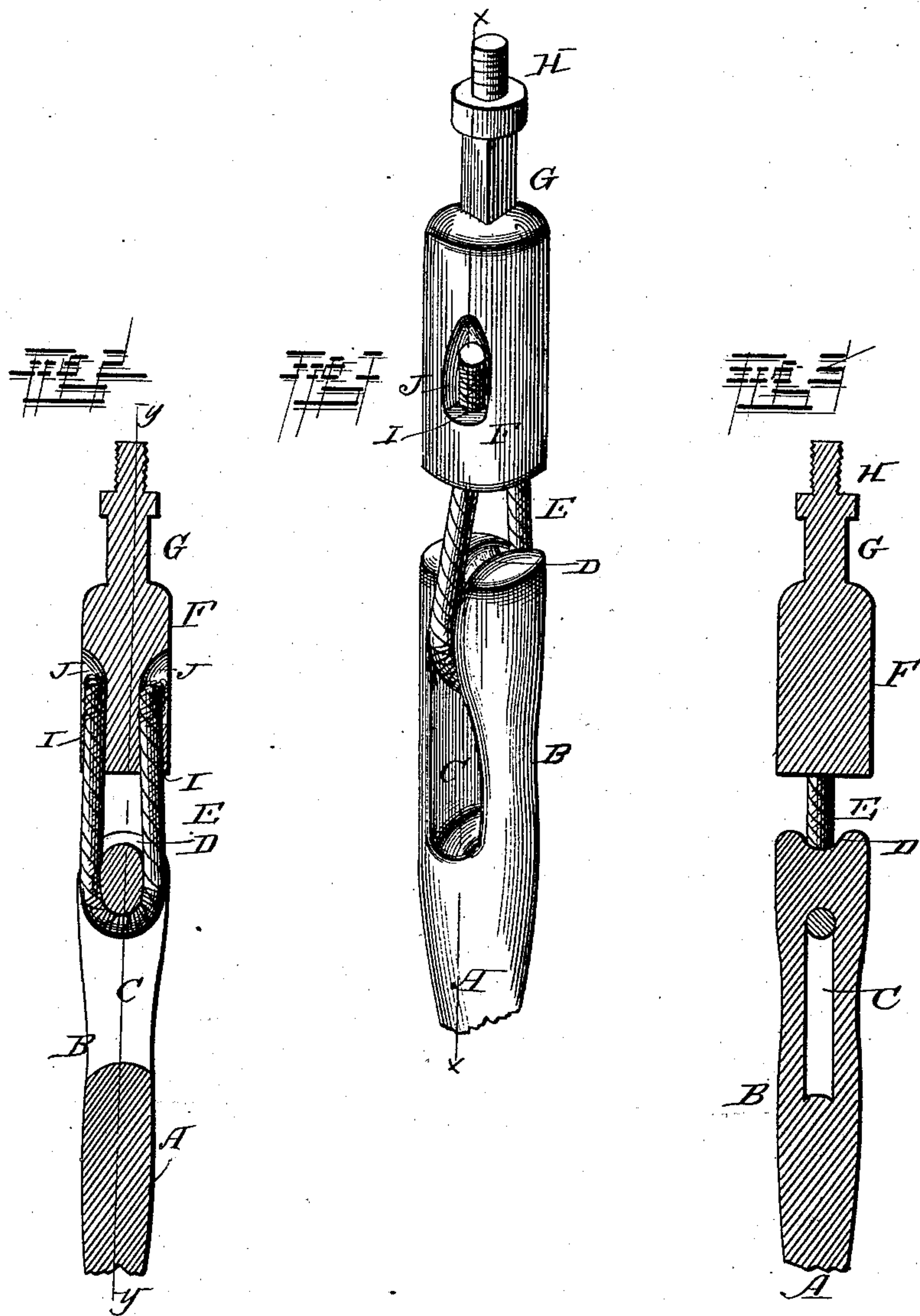
(No Model.)

L. WHEELER.

ROPE DRILL JAR.

No. 311,157.

Patented Jan. 20, 1885.



WITNESSES:

*Ad. S. Dieterich*  
*Wm. Bagger*

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INVENTOR,  
by *Louis Bagger & Co.*  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

LAMBERT WHEELER, OF ALLENTOWN, NEW YORK, ASSIGNOR TO LIZZIE WHEELER, OF SAME PLACE.

## ROPE DRILL-JAR.

SPECIFICATION forming part of Letters Patent No. 311,157, dated January 20, 1885.

Application filed September 2, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, LAMBERT WHEELER, a citizen of the United States, and a resident of Allentown, in the county of Allegany and State of New York, have invented certain new and useful Improvements in Rope Drill-Jars; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view. Fig. 2 is a vertical sectional view taken on the line  $x x$  in Fig. 1, and Fig. 3 is a vertical sectional view taken on the line  $y y$  in Fig. 2.

The same letters refer to the same parts in all the figures.

This invention relates to jars for drilling machinery; and it has for its object to produce a device of this class which shall possess superior advantages in point of simplicity, durability, and general efficiency, and in which the upper end of the drill-stem shall be connected with the box or weight by means of a rope-bight, which when worn out may be easily and quickly replaced without any necessity for resorting to skilled labor.

With these ends in view the invention consists in the improved construction and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, A designates the upper end of the drill-stem, to which is securely welded a handle, B, having a vertical slot, C, above which a groove, D, is formed in the said handle, of sufficient depth to accommodate a rope, E, large and strong enough to form the connection between the drill and the box or weight. The bottom of the said groove, as well as the upper end of the slot C, are nicely rounded in order to protect the rope from wear as much as possible.

The box or weight, which is designated by letter F, is provided at its upper end with a stem, G, screw-threaded at H for connection with the sinker-rod. The lower end of the said box is provided with two perforations, I, extending diagonally from its lower end to its sides, and terminating in enlargements J.

The ends of the rope E, the bight of which is passed through the slot C, are passed from the lower end of the box through the perforations I, and their upper ends are knotted and seated in the enlarged ends of the said perforations, thus forming a secure connection between the drill and the jar-box. The bight of the rope at the point at which it passes through the slot C is wound tightly with a smaller cord or other suitable material in order to protect it at this point, where it is most exposed to wear.

From the foregoing description, taken in connection with the drawings hereto annexed, the operation and advantages of my invention will be readily understood.

The construction is simple and inexpensive, and when the rope, which is the only part exposed to much wear, becomes disabled it may be easily replaced with a new one without loss of time.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In jars for drilling machinery, the combination of the drill-stem provided at its upper end with a handle having a vertical slot, from the upper end of which grooves extend to the upper end of the handle, with the jar or box having a screw-threaded stem, and provided with inclined perforations extending from its lower end upward to its sides, substantially as and for the purpose set forth.

2. In jars for drilling machinery, the combination of the drill-stem handle having a vertical slot rounded at its upper end, and grooves extending from the same to the top of the handle, the jar-box having inclined perforations extending from its lower end to its sides, and terminating in enlargements, and the rope-bight extending through the slot in the handle, and having its ends passed through the perforations in the box and made fast by knotting, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

LAMBERT WHEELER.

Witnesses:

WILLIAM L. NORTON,  
AARON D. NORTON.