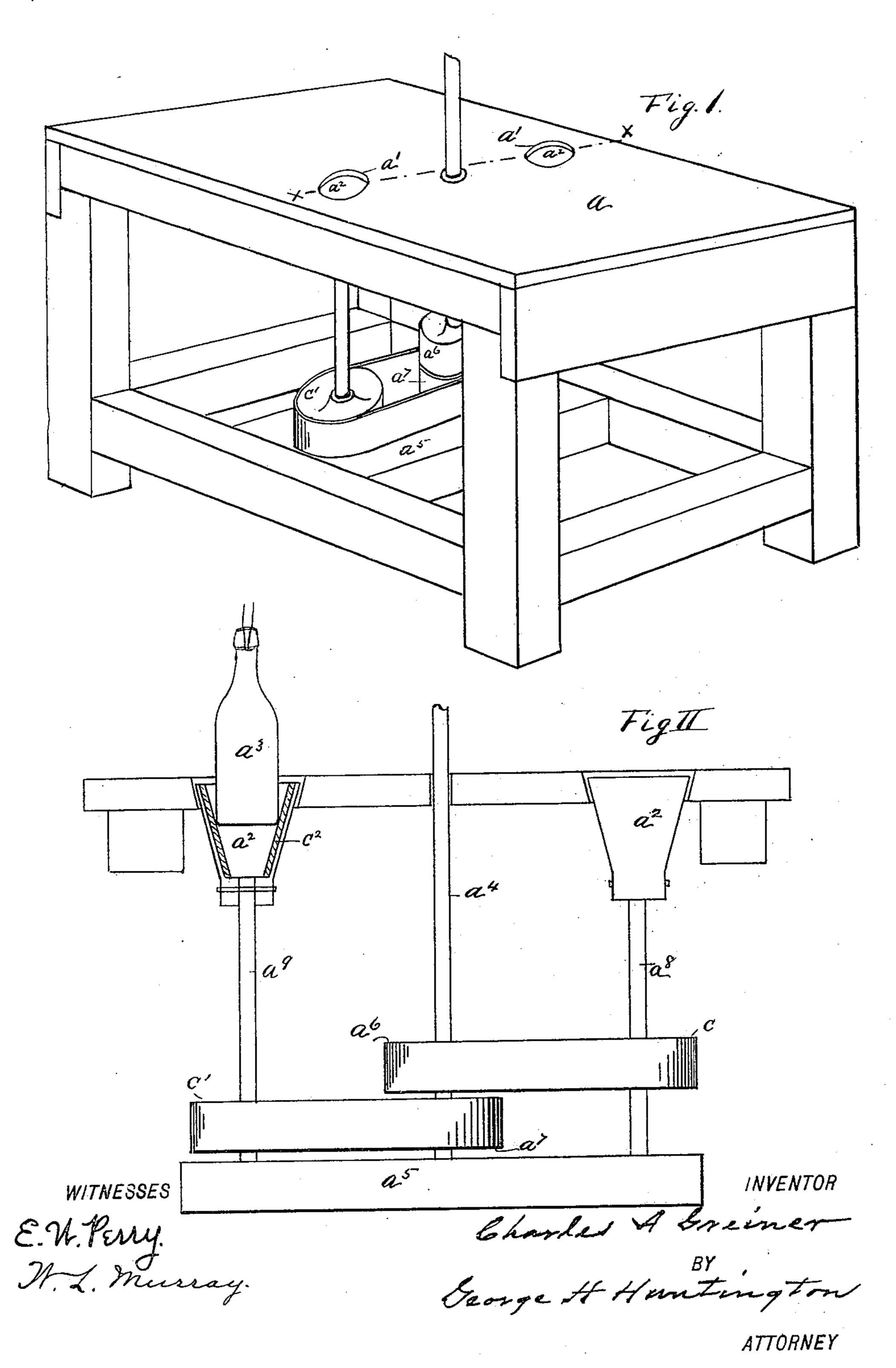
No. 670,228.

C. A. GREINER. BOTTLE ROTATING MACHINE.

(Application filed Apr. 7, 1900.)

(No Model.)



United States Patent Office.

CHARLES A. GREINER, OF MADISON, INDIANA, ASSIGNOR OF ONE-HALF TO ALBERT C. GREINER, OF SAME PLACE.

BOTTLE-ROTATING MACHINE.

SPECIFICATION forming part of Letters Patent No. 670,228, dated March 19, 1901.

Application filed April 7, 1900. Serial No. 11,954. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. GREINER, a citizen of the United States, residing at the city of Madison, in the county of Jefferson and State of Indiana, have invented and produced an Improvement in Bottle-Rotating Machinery, of which the following is a specification.

This invention relates to machines for wiring stoppers on bottles—such as those containing beer, &c.—its object being to create a machine into which the bottom of the bottle may be placed and rotated while the wire is held with a pair of pliers, thus expediting the work and avoiding the necessity of rotating the bottle by hand or twisting the wire around the neck of the bottle with the pliers.

In the accompanying drawings, which form a part of this specification, my invention is fully illustrated, with similar letters of ref-20 erence to indicate corresponding parts, as follows:

Figure 1 represents a perspective view showing the table a, through which holes, as a', are provided, so that the cone-shaped cup a^2 can extend up through the table nearly or quite to the upper surface, as the case may require. Fig. 2 shows a transverse vertical section through the line xx, Fig. 1, illustrating a side elevation of one of the cone-shaped cups a^2 and a transverse vertical section of its neighbor, also showing the bottle a^3 in a position to be operated upon.

As shown in the drawings, a vertical shaft, as a^4 , which is rotated by an overhead shaft or by means from the floor below, passes down through the center of the table and has mounted upon its lower end, above the table-frame a^5 , the fixed pulleys a^6 and a^7 . Trunnioned in the frame a^5 , on either side of the vertical shaft a^4 , are the vertical shafts a^8 and a^9 , carrying the fixed pulleys c and c', the fixed pulley c being in line with the upper

pulley a^6 of the shaft a^4 and the pulley c' being in line with the pulley a^7 on the vertical shaft a^4 . On the upper end of the shafts a^8 45 and a^9 are the cone-shaped metal cups a^2 , secured by a pin, as illustrated, or any desired means, and, as shown in Fig. 2, at c^2 is a cone-shaped non-metallic lining composed of leather, rubber, or any suitable yielding substance into which the bottom of the bottle may be "jammed," so to speak, without the risk of breaking and which acts as a yielding adhesive contact-surface, which keeps the bottle from slipping when the shaft is rotated.

It will be understood from the illustration that one, two, three, or four cup-revolving shafts can be placed in the same table and all operated by the centrally-vertical shaft a^4 , depending entirely upon the facilities and the 60 number of men it is desired to employ at each table.

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

In a bottle-rotating machine the combination of the table a, vertical power-shaft a^4 , vertical cup-carrying shafts a^8 and a^9 , suitable pulleys and belts mounted upon the said shafts, whereby the cup-carrying shafts are 70 operated by the power-shafts as described, suitable cone-shaped metal cups provided with a non-metallic lining mounted upon the ends of the vertical shafts a^8 and a^9 and extending through openings in the table a, all 75 substantially as specified.

In testimony that I claim the foregoing specification I have hereunto set my hand this 2d day of April, 1900.

CHARLES A. GREINER.

In presence of— DANIEL B. HUNTLEY, MATT GREINER.