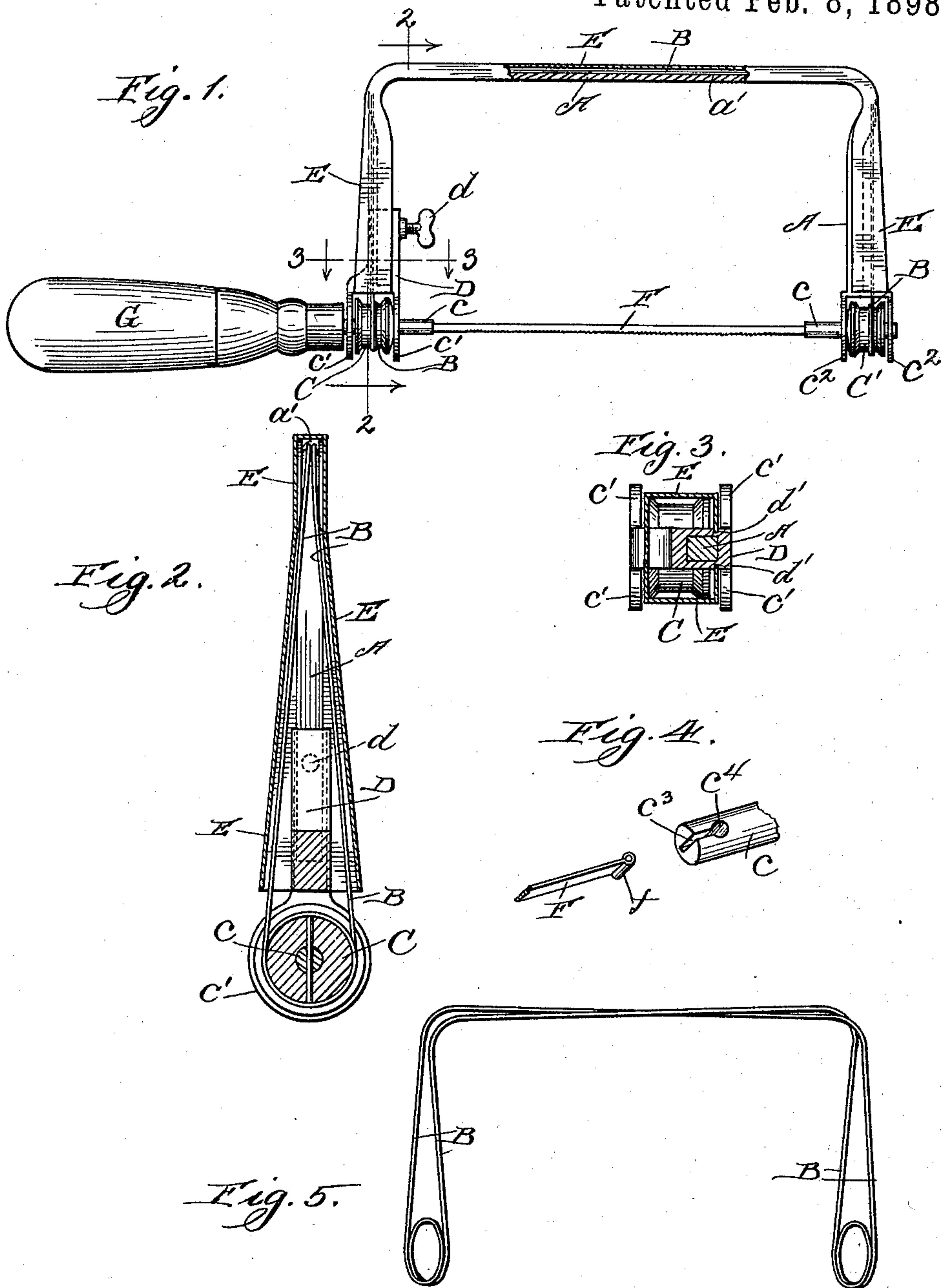


(No Model.)

A. JONES.  
SCROLL SAW.

No. 598,729.

Patented Feb. 8, 1898.



Witnesses:  
R. J. Jacker.  
E. A. Duggan.

Inventor:  
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By Chas. C. Tillman Atty.



# UNITED STATES PATENT OFFICE.

ARTHUR JONES, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO JOHN P. DOMMERSNAS, OF SAME PLACE.

## SCROLL-SAW.

SPECIFICATION forming part of Letters Patent No. 598,729, dated February 8, 1898.

Application filed October 21, 1897. Serial No. 655,893. (No model.)

*To all whom it may concern:*

Be it known that I, ARTHUR JONES, a subject of the Queen of Great Britain, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Scroll-Saws, of which the following is a specification.

This invention relates to improvements in that class of saws used for cutting out intricate patterns in boards or planks for ornaments, coping, and the like or for doing other curved or irregular work; and it consists in certain peculiarities of the construction, novel arrangement, and operation of the various parts thereof, as will be hereinafter more fully set forth and specifically claimed.

The objects of my invention are, first, to provide a scroll-saw which shall be simple and inexpensive in construction, strong, durable, and effective in operation; second, such a saw which by reason of the peculiar construction and arrangement of its parts will be capable of being turned in its bearings to any desired angle, and, third, a saw in which the frame or support for the blade will be protected by a removable covering.

In order to enable others skilled in the art to which my invention pertains to make and use the same, I will now proceed to describe it, referring to the accompanying drawings, in which—

Figure 1 is a view in side elevation, partly in section, of a saw embodying my invention. Fig. 2 is an enlarged sectional view, taken on line 2 2 of Fig. 1, showing the frame and its casing and the endless cable or cord for operating or changing the position of the saw. Fig. 3 is an enlarged cross-sectional view, taken on line 3 3 of Fig. 1, looking in the direction indicated by the arrows. Fig. 4 is a perspective view of a portion of the saw-blade and a part of one of the stub-shafts therefor, and Fig. 5 is a similar view of the endless cable detached.

Similar letters refer to like parts throughout the different views of the drawings.

A represents the frame, which may be made of any suitable size, form, and material, but preferably bent to form three sides of a rectangular figure. The outer surface of this frame is formed with a groove  $a'$  to receive

the endless cable B, which passes once and a half around the pulleys C and C', the former of which is mounted on a stub-shaft  $c$ , journaled in the forks  $c'$  of the piece D, which piece is formed with a vertical socket to receive one end of the frame A and is provided with a set-screw  $d$ , employed to secure the frame in the proper position. The piece D is provided on each side with grooves  $d'$  to receive the edges of the covering E, which is of similar form to the frame A, or substantially of such form. The pulley C' is mounted on a stub-shaft  $c$ , journaled in the forks  $c^2$  on the opposite end of the frame A from that to which the socket-piece D is secured. As shown in Fig. 3 of the drawings, the covering E for the frame is substantially rectangular in shape and has its free edges bent inwardly, so that said covering will encompass the frame. While I have shown the frame and covering therefor rectangular in cross-section, yet I may employ a frame and covering of any desired shape. The stub-shafts  $c$  are each provided in their free and inner ends with slots  $c^3$ , which terminate in enlargements  $c^4$ , to receive the blade F and enlargements  $f$  on the ends thereof. The cable B, as shown in Figs. 2 and 5 of the drawings, is passed once and a half around each of the rollers or pulleys C and then passes up and over the frame A and has its strands crossed, as shown in Fig. 5 of the drawings, on the upper portion of the frame. Secured to one of the stub-shafts  $c$ , and usually that one located in the socket-piece D, is a handle G, which is used for forcing the saw back and forth through the material to be sawed and is also employed for turning the blade to the desired position. The covering E may sometimes be omitted, and in the event of the cable becoming slack that end of the frame A extending into the socket-piece D may be moved outwardly until the cable is made taut and there held by means of the set-screw  $d$ , which is employed for this purpose.

The operation of my saw is simple and as follows: The enlargements  $f$  on the ends of the blade F may be inserted into the enlarged openings  $c^4$ , near the ends of the stub-shafts  $c$ , in which position the said blade will be held by reason of the tendency of the ends



of the frame to spring outwardly. After the blade shall have been thus fixed in the stub-shafts it may be turned to any desired position by turning the handle G, which will cause the  
5 pulleys C and C' to rotate by reason of the cable or cord B, which connects them.

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

- 10 1. The combination of the frame having one of its ends forked, with a forked piece having a socket to receive the other end of the frame and a set-screw to secure said end, a pulley journaled in the forked end of the  
15 frame and another pulley journaled in the forked piece, a saw-blade secured to the pulley-shafts, a handle secured to one of the pulley-shafts, and a cable connecting and en-

circling the pulleys and being supported by the frame, substantially as described. 20

2. The combination with the frame A, having the grooves *d'*, and one of its ends forked, of the piece D, having a socket in its upper portion and provided with a set-screw *d*, the pulley C', journaled in the fork of the frame, 25 the pulley C, journaled in the fork of the piece D, the covering E, encompassing the frame, a handle G, secured to one of the pulley-shafts, and the cable B, connecting the pulleys and located between the frame A, and covering E, 30 therefor, substantially as described.

ARTHUR JONES.

Witnesses:

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