A. A. Hoffman,

Scroll Sawing Machine,

No. 46,106, Patented Jan. 31, 1865.

Fig 4.

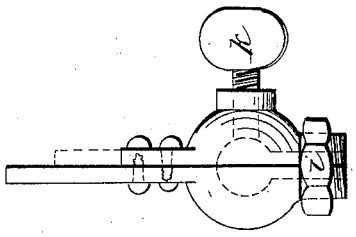


Fig 3.

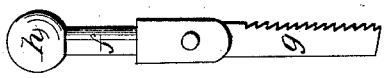


Fig 1.

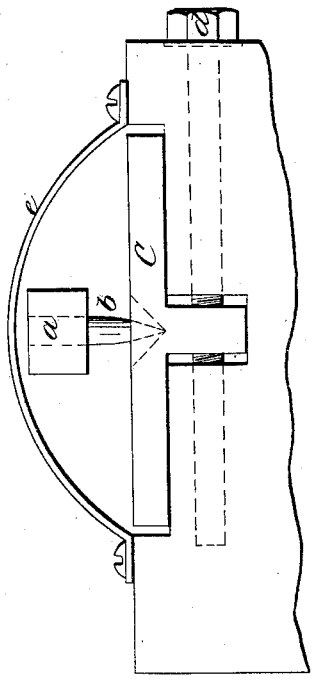
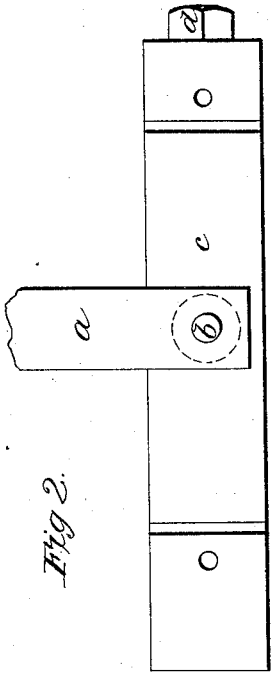


Fig 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

ANTOINE AUGUST HOFFMAN, OF NEW YORK, N. Y.

IMPROVEMENT IN SCROLL-SAWING MACHINES.

Specification forming part of Letters Patent No. **46,106**, dated January 31, 1865.

To all whom it may concern:

Be it known that I, ANTOINE AUGUST HOFFMAN, of the city of New York, in the county and State of New York, have invented certain new and useful Improvements in Adjustments for Scroll-Saws; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, and to the letters of reference marked thereon.

My invention relates to scroll-saws, which are usually hung on a frame without special means of adjustment, and are secured in a fixed position to flexible strips of metal passing over arcs at the ends of vibrating beams; and it has for its object the regulation of the action of the saw by means which enable it to be turned in any direction, and adjusted at the centers of vibration in any manner required.

It consists in hanging the beams on steel pins that work on their points in adjustable sockets with sufficient room to permit the motion required, and in which they are retained by guards that prevent their displacement, and do not interfere with their operation; and my invention also consists in hanging the saw with socket-joints at each end, that admit of its being turned and secured in any direction desired.

To enable others skilled in the arts to which it appertains to make and use my invention, I will proceed to describe its construction and operation with reference to the drawings.

Figure 1 is a side view of one of the pins and its socket upon which the beam carrying the saw vibrates, and Fig. 2 is a plan of the same with the guard removed. The upper vibrating beam of the saw-frame is carried by the cross bar or beam *a*, which is supported at each end by the pin *b*, resting in a conically-excavated socket in the plate *c*, which may be shifted to and fro in the mortise cut in the frame of the machine for its reception, and held in its proper position by the screw-bolt *d*. The guard *e* extends over the mortise and clear of the center bar *a*, so as not to interfere with its motion, and yet close enough to prevent the pins *b* leaving their sockets.

Fig. 3 represents a cylindrical pin, *f*, to which the saw *g* is secured, and which is formed with a spherical knob or head, *h*; and Fig. 4 is a socket for the reception of the same in which it may be turned. This socket may be secured to the saw-frame in the ordinary manner. It is made in halves to inclose the cylinder and bulb or head to which the saw is pinned, and the two halves are clamped together over the saw pin *f* by the nut *i*, and the saw is further held by the set-screw *k*. On slackening the set-screw and the nut the saw may be turned in any direction, and it may be held in any position by screwing up the nut and the set-screw. Both ends of the saw are similarly secured in sockets, and require to be set in the same manner.

I claim as my invention and desire to secure by Letters Patent—

1. The application to scroll saw frames of the adjustable centers of motion constructed with pins or points and conical sockets and retaining guards, combined substantially in the manner described.

2. The application of the device by which the saw may be turned, consisting of a cylindrical pin with a spherical head, combined with a socket made in halves and held by a jam-nut and set-screw, substantially as described, for the purpose specified.

A. A. HOFFMAN.

Witnesses:

WM. B. CARPENTER,

W. K. HALL.