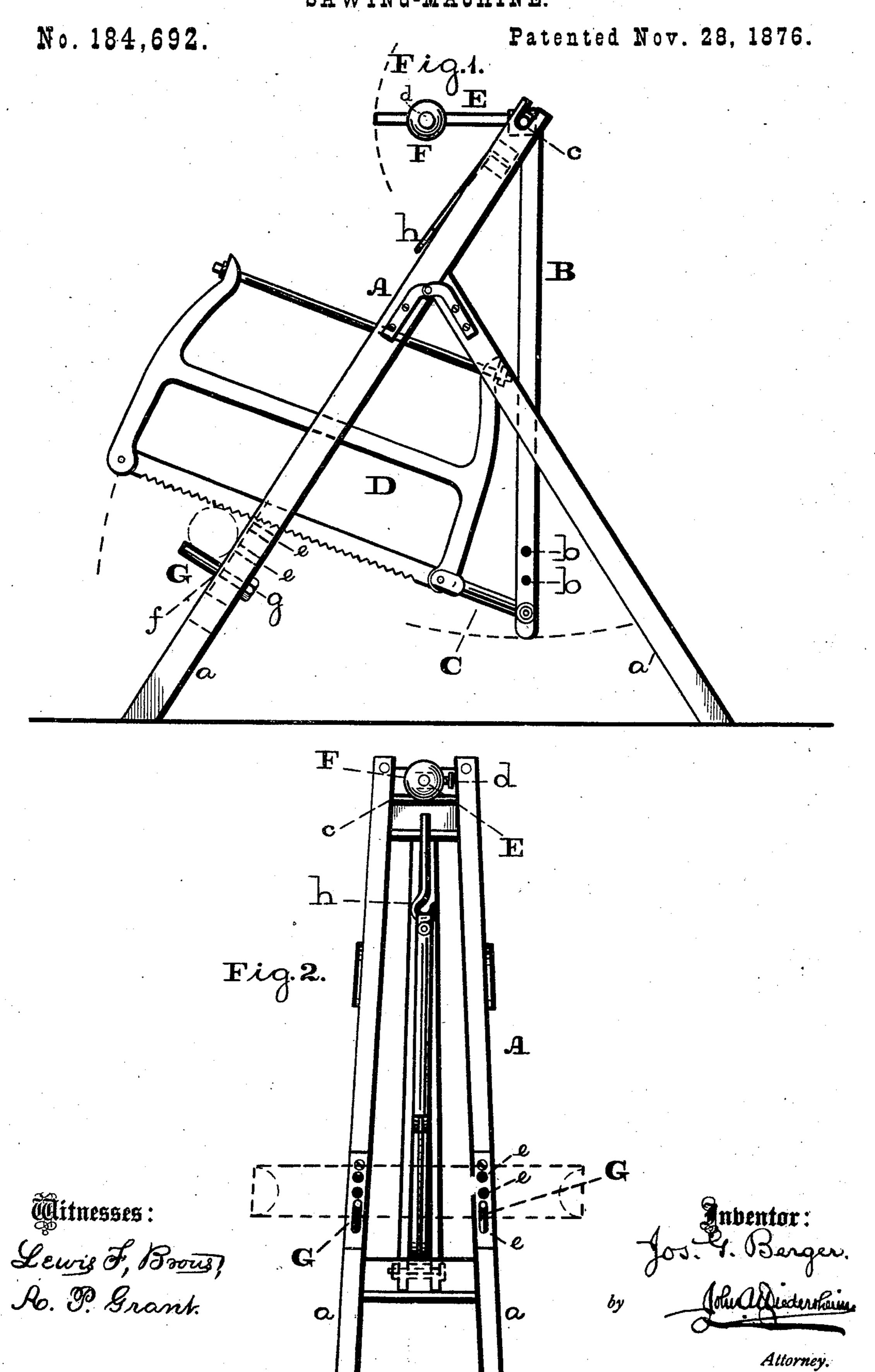
J. G. BERGER.
SAWING-MACHINE.



## UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN SAWING-MACHINES.

Specification forming part of Letters Patent No. 184,692, dated November 28, 1876; application filed April 1, 1876.

To all whom it may concern:

Be it known that I, Joseph G. Berger, of the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Sawing-Machines; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a side view of the machine embodying my invention. Fig. 2 is a front view thereof.

Similar letters of reference indicate corresponding parts in the two figures.

My invention consists of a saw connected to a swinging arm or frame, which is mounted on a frame or buck, and carries an adjustable counterpoise fitted on a rod projecting from the cross-head of the swinging arm, whereby the sawing may be easily accomplished, and the saw is adapted to pieces of wood of different thicknesses.

Referring to the drawings, A represents a frame or buck, which consists of two pieces or legs, a a', hinged together, so that they may be folded, and also spread, so as to form a broad stand for the parts of the machine. To the upper end of the frame A there is mounted a swinging or rocking arm or frame, B, to whose lower end is pivoted, by a clevis, C, the saw D, the arm B having a series of holes, b, whereby the clevis C may be connected to the arm at various points.

To the axis or cross-head c of the arm B there is rigidly secured a rod, E, on which is fitted a sliding counterpoise, F, provided with a set-screw, d, for holding the counterpoise in adjusted positions on the rod.

In the pieces or legs a, near the lower ends thereof, there are formed a series of holes, e, arranged one above the other, and extending in the longitudinal direction of the frame A.

G represents pins, which are adapted to enter the holes e, and they provide supports for the piece of wood to be sawed. The pins are formed with shoulders f, and they carry nuts g at their outer ends, for providing firm connections with the pieces or legs a.

The operation is as follows: The piece of wood to be sawed is placed on the pins G, and the saw operated, so that the blade will cut the wood. In the movements the counterpoise F will assist the manual efforts, and thus the work will be easily and quickly accomplished.

Greater or less power, relatively to the weight of the work, will be obtained from the counterpoise by sliding it out or in on the rod E, after which it will be secured in its adjusted position by means of the set-screw d.

In the event of sawing wood of greater or less thickness, the supporting-pins G and saw D require relative adjustments thereto, so that the blade will present a proper angle to the wood. For this purpose the pins G will be inserted in one of the openings e, and the bolt of the clevis C fitted in one of the openings b, the selection of the openings being determined by the work to be performed.

It will be seen that I provide simple, convenient, and serviceable means for sawing wood of various kinds.

When the saw is not in service, it may be hung on a hook, h, connected to the frame A.

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

The frame A and swinging arm B, in combination with the rod E, projecting from the cross-head c, and carrying the counterpoise F, with screw d, substantially as and for the purpose set forth.

JOSEPH G. BERGER.

Witnesses:

John A. Wiedersheim, H. E. Hindmarsh.