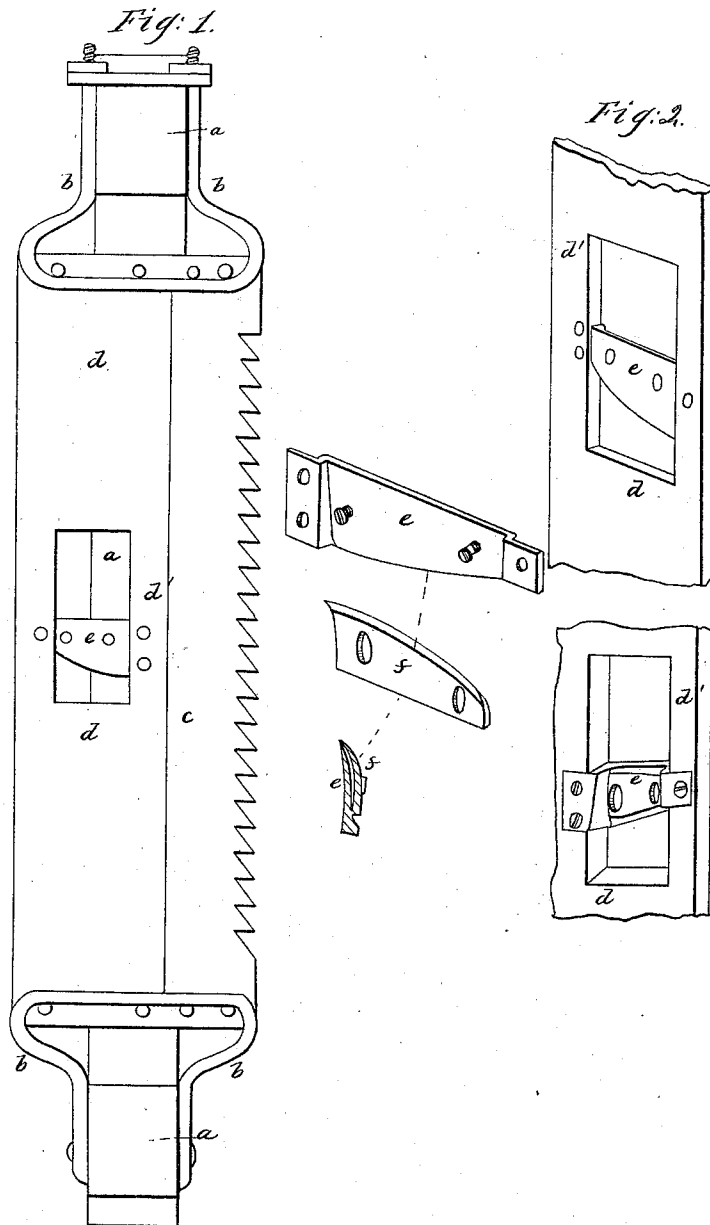


*E. Pratt,
Surr.*

Nº 3,184.

Patented July 20, 1843.



UNITED STATES PATENT OFFICE.

ELIJAH PRATT, OF GRANVILLE, NEW YORK.

SAWING AND PLANING BY COMBINING A PLANE WITH A SAW.

Specification of Letters Patent No. 3,184, dated July 20, 1843.

To all whom it may concern:

Be it known that I, ELIJAH PRATT, of Granville, in the county of Washington and State of New York, have invented a new and useful Machine for Planing Boards while Sawing; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical section through the saw gate showing the saw and plane. Fig. 2 contains detached parts.

The same letters of reference applying to both figures.

The nature of my invention consists in connecting with the saw of a saw mill, a plane in the same frame, both being held by the same stirrups; and also the method of constructing the plane therefor.

To a saw gate of common construction (*a*) are two stirrups (*b*) fastened, also formed in the usual way, but a little stouter, and of about double the width; in the front part of these stirrups a saw (*c*) is strained, and directly behind it is placed a flat plate of metal (*d*) which is also strained into the same stirrups; in this plate there is an oblong mortise (*d'*) in which the plane iron is set; sections of this plate and mortise is perspective are represented in Fig. 2. Across the mortise (*d'*) there is a knife (*e*) horizontally placed, the lower edge of which is slanting at an angle of 20° more or less; one end being made narrower than the other.

The edge of this knife projects a little beyond the plate and on its opposite or beveled side there is an iron like that of the common double iron plane except that it is placed on the reversed side of the cutting iron and its edge is more turned over (see (*f*) Fig. 2), the cutting iron is constructed with flanges at each end set a little back of the fan of the cutter and parallel with it; these flanges are let in flush with the plate, and are fastened to it with screws. To alter the set of the plane pieces of paper or other thin material can be put in the recesses of the plate (*d*) before the plane is put in place. The forward end of the plane is not set quite as rank as the other end, so that a proper thickness is gradually cut from the board, or the set of the plane may be varied to suit the purposes of the operator. The vertical section of the plane iron is a little concave on the face and its horizontal section more or less convex.

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

The combination of the plate (*d*) containing the plane (*e*) constructed and arranged as herein discribed, with the saw of a saw mill in the manner and for the purpose substantially as above specified.

ELIJAH PRATT.

Witnesses:

J. J. GREENOUGH,
T. C. DONN.