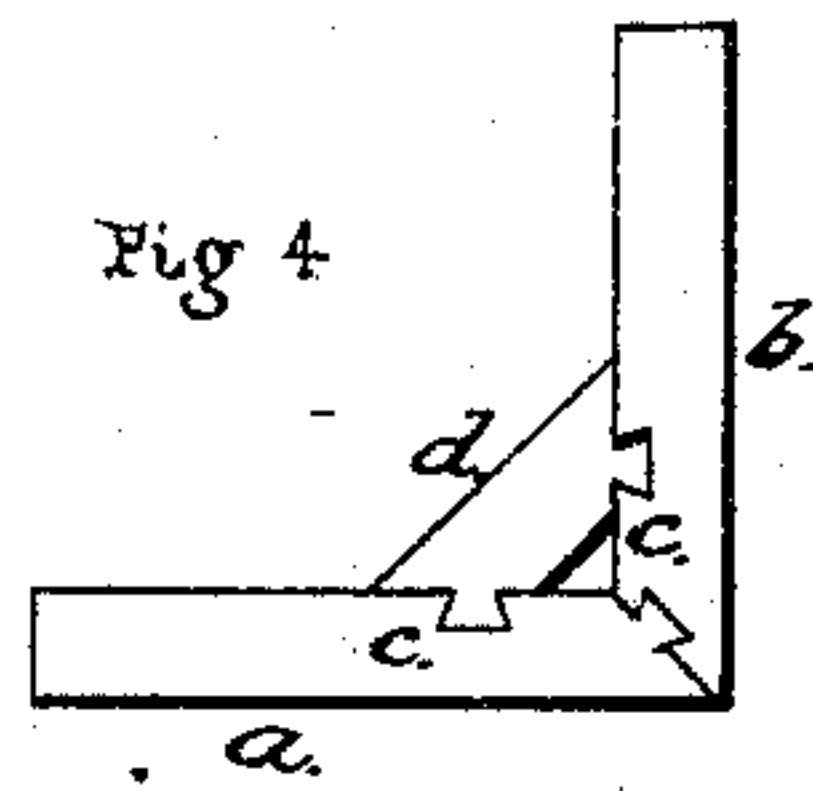
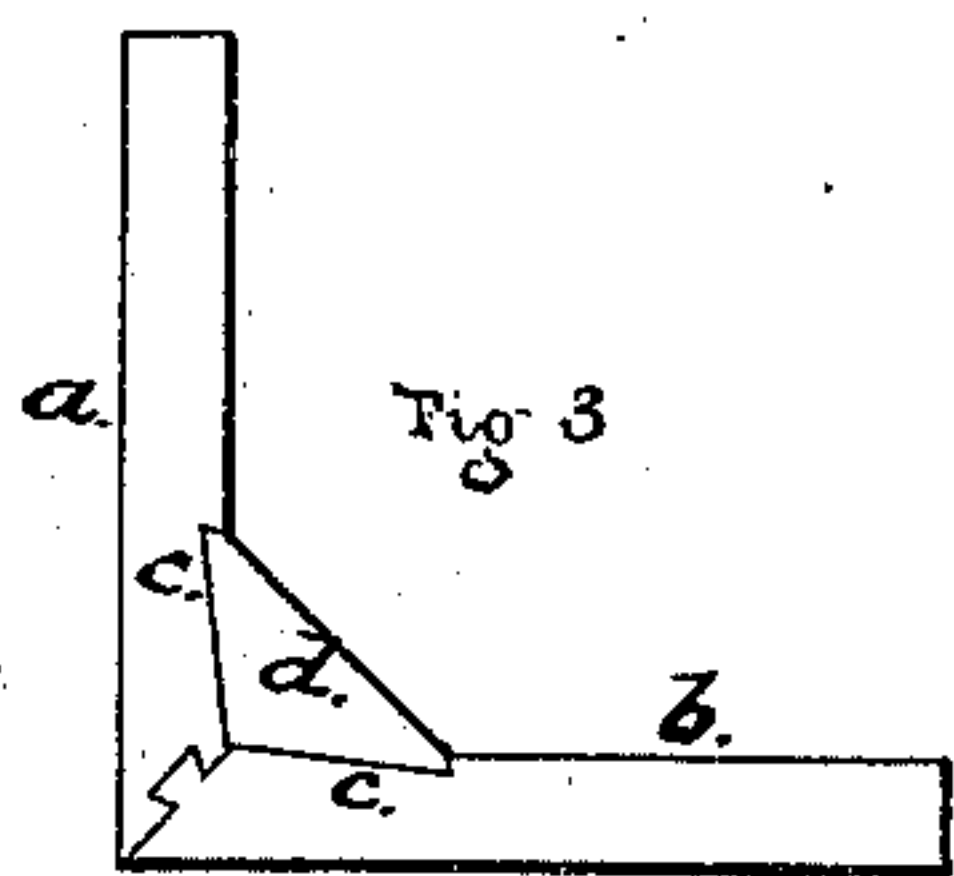
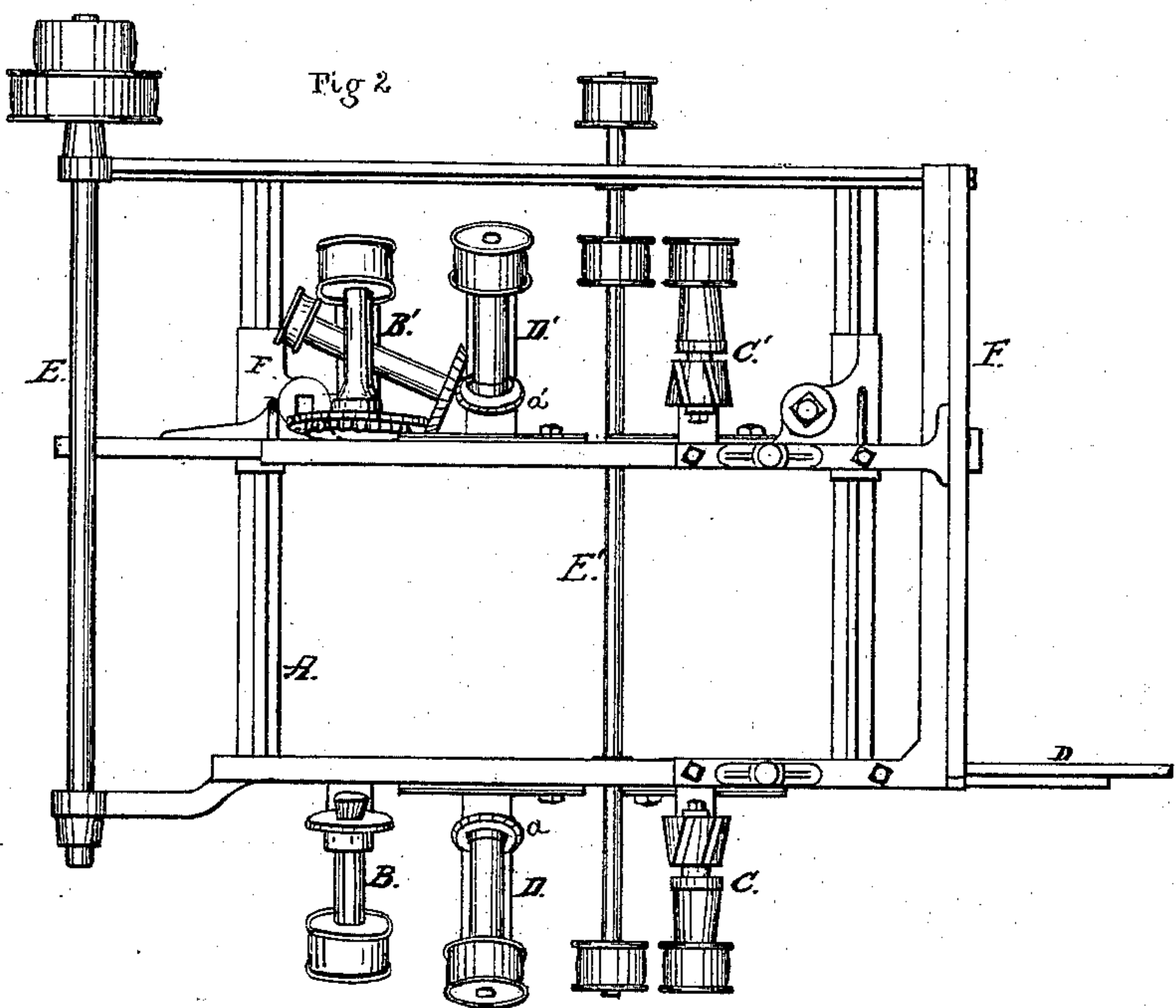
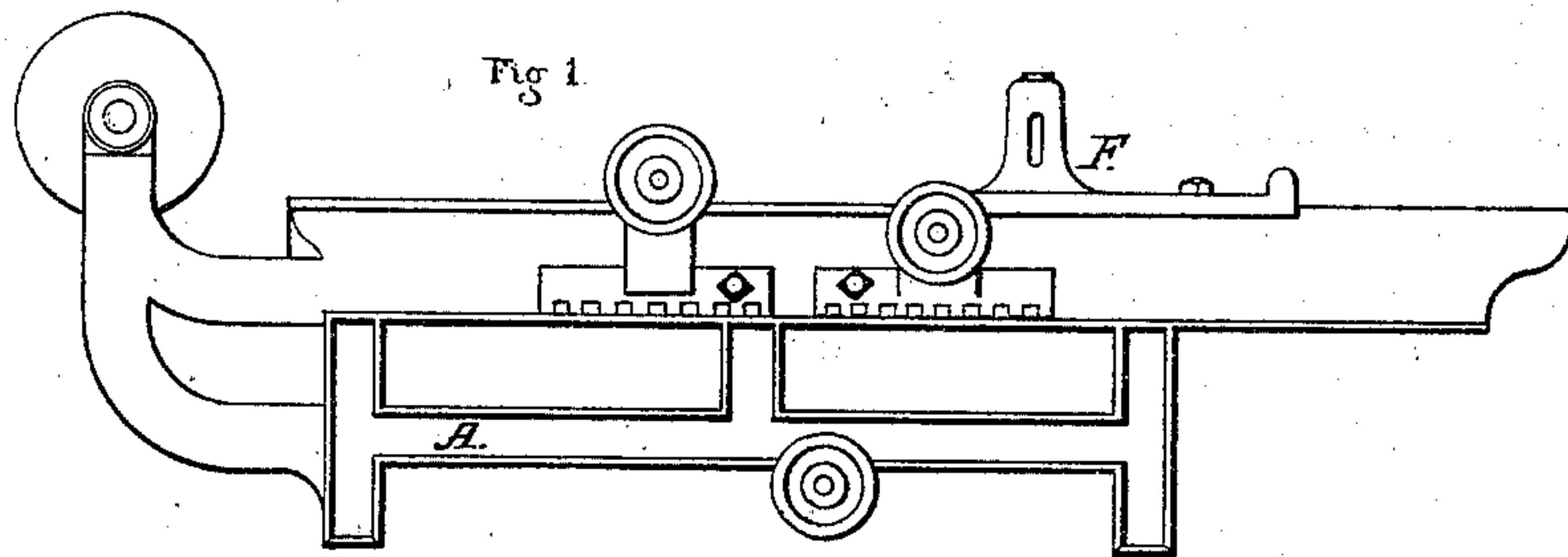


A. DAVIS.
Dovetailing Machines.

No. 151,098.

Patented May 19, 1874.



Witnesses.

Wheelock G. Tilton
James Carmichael

Inventor.

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UNITED STATES PATENT OFFICE.

ASAHEL DAVIS, OF LOWELL, MASSACHUSETTS.

IMPROVEMENT IN DOVETAILING-MACHINES.

Specification forming part of Letters Patent No. 151,098, dated May 19, 1874; application filed May 13, 1874.

To all whom it may concern:

Be it known that I, ASAHEL DAVIS, of the city of Lowell, county of Middlesex and State of Massachusetts, have invented certain Improvements in Dovetailing-Machines, and the joints formed thereby, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings which form part of this specification, and in which similar letters of reference indicate corresponding parts in the different figures.

Figure 1 is a side elevation of the machine embodying my invention. Fig. 2 is a plan of the same. Fig. 3 shows a joint formed by the machine, and Fig. 4 is a modification of the same.

This invention relates to an improvement upon the miter-dovetailing machine for which Letters Patent No. 139,299 were granted to me on the 27th day of May, 1873; the object being to produce a joint having greater strength than that produced by the machine above referred to, or any other dovetailing-machine with which I am acquainted; and the invention consists in adding to an ordinary miter-dovetailing machine the necessary cutters to form additional grooves for the reception of a corner-supporting piece, and in the joint so formed, as will be hereinafter fully set forth, and then pointed out in the claims.

In the drawings, A represents the frame of the machine, which supports the rotary cutters B B', which form the ordinary miter-joint, and also supports one or both sets of cutters, C C' and D D', for the purpose of forming the additional grooves for the reception of the corner-piece, either set of cutters being used, as may be required, to form the desired joint, the whole being operated from the driving-shafts E E'.

The form of joint shown in Fig. 3 is produced by the action of the cutters C C', in con-

nection with the ordinary cutters for making the miter-dovetail; and the modification shown in Fig. 4 is formed by the cutters D D', in the same connection.

F represents a sliding frame, upon which the material to be operated upon is placed, it being retained in position by the hand of the operator, or a suitable clamp, while being passed over the cutters.

Upon an inspection of Figs. 3 and 4 it will be seen that the parts *a b* are united at the corner by the ordinary miter dovetail, but have an additional groove, *c*, upon their inner sides, into which is inserted the corner-piece *d*.

It is obvious that other modifications in the form of the corner-piece may be required to suit different kinds of work, as, for instance, the form shown in Fig. 3, would be best adapted for securing to each other the pieces which form the feet of articles of furniture, the corner-piece being cut lengthwise of instead of across the grain of the wood, while the form shown in Fig. 4 would be better adapted for giving strength to the corners of boxes and similar articles, the form in all cases being modified to suit the strain to which the articles may be exposed.

I am aware that corner-pieces, for adding strength to a joint, have been heretofore used, being held in place by glue, screws, nails, or similar appliances. These I do not claim; but

What I do claim as new, and desire to secure by Letters Patent, is the following:

1. In combination with the cutters which form a miter dovetail, the additional cutters C C' or D D', for the purpose of cutting an additional groove to receive a corner-supporting piece, substantially as specified.

2. The side pieces *a* and *b*, connected by a miter-dovetail joint, and with the corner-piece *d*, as and for the purpose set forth.

Witnesses: ASAHEL DAVIS.

WHEELLOCK G. TILTON,
JAMES CARMICHAEL.