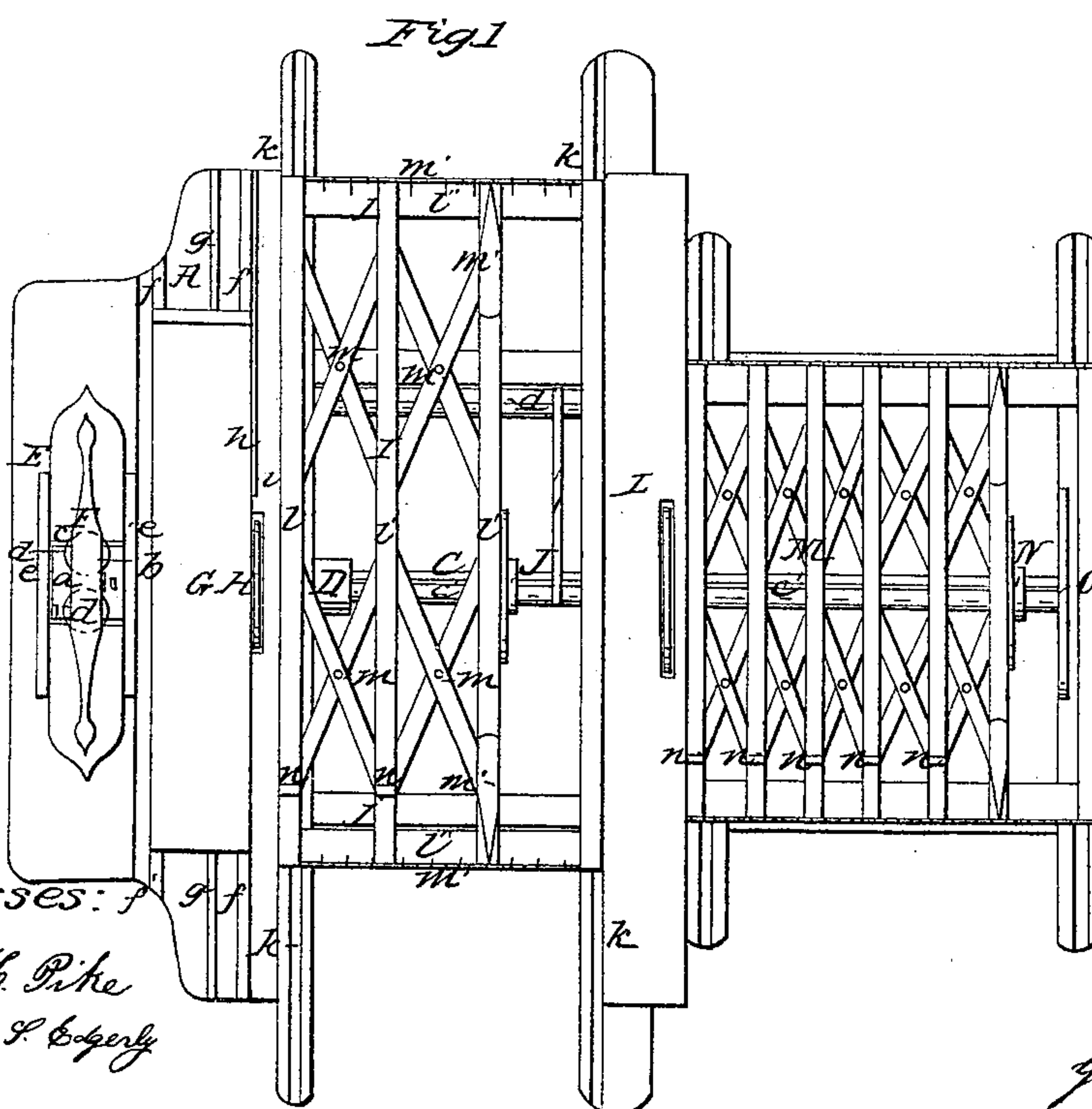
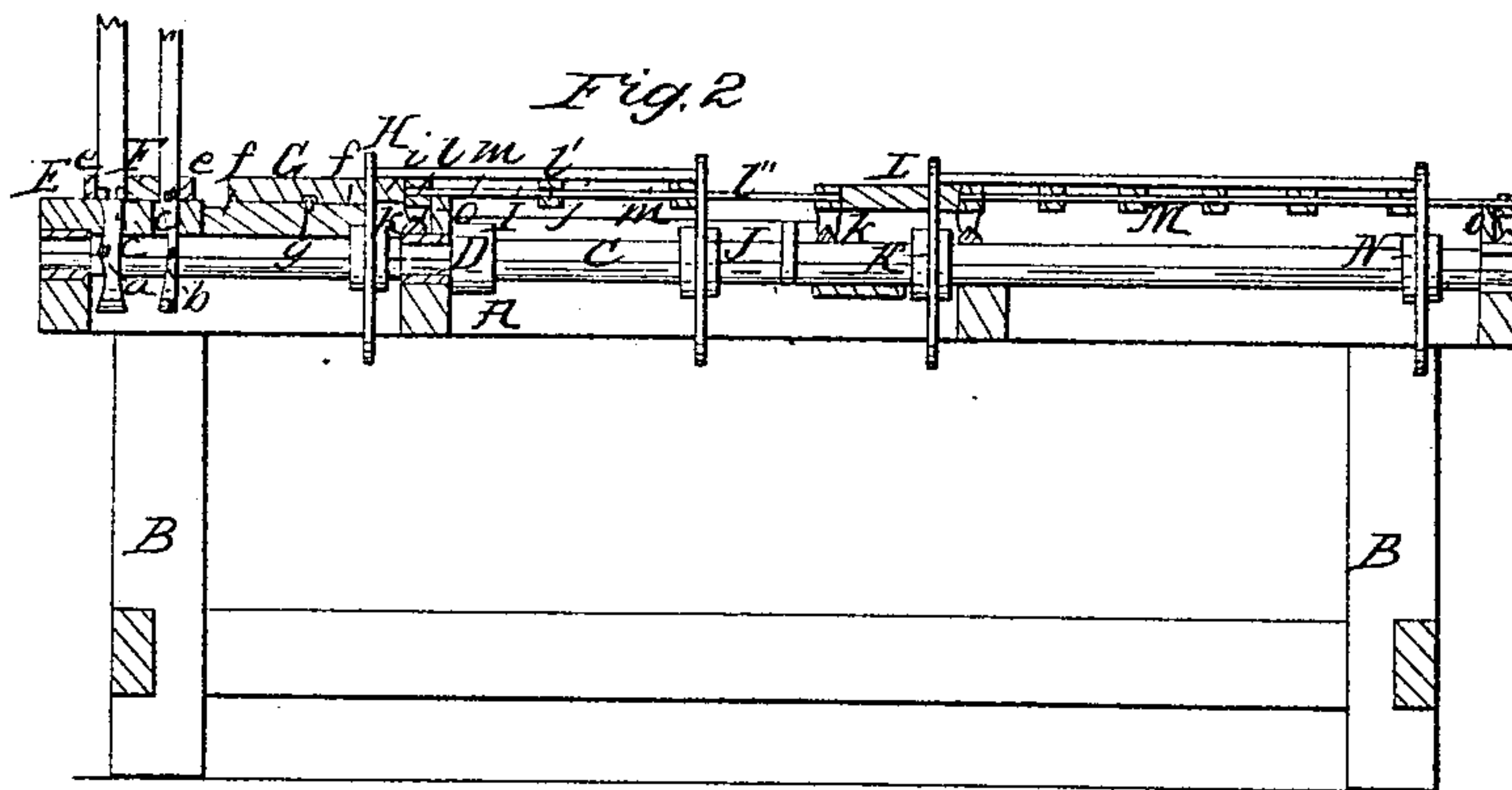


G. F. Palmer,
Making Wooden Boxes,
No 26,119. *Patented Nov. 15, 1859.*



Witnesses:
Jacob H. Pike
Winfield S. Egerly

Inventor.

G. F. Palmer

UNITED STATES PATENT OFFICE.

GEORGE F. PALMER, OF FARMINGTON, NEW HAMPSHIRE.

MACHINE FOR MAKING WOODEN BOXES.

Specification of Letters Patent No. 26,119, dated November 15, 1859.

To all whom it may concern:

Be it known that I, G. F. PALMER, of Farmington, in the county of Strafford and State of New Hampshire, have invented a new and Improved Machine for Making Boxes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 represents a plan or top view of my invention; Fig. 2 is a longitudinal vertical section of ditto.

Similar letters of reference indicate corresponding parts in both views.

This invention consists, first, in arranging on a rotary shaft two cutters for grooving and tonguing together with two stationary and two movable saws, for the purpose of preparing the boards for jointing and to cut them off to the proper width and length; and it also consists in the employment of two expanding sliding platforms, one to determine the width, and the other the length of the boards for a box of any given size.

To enable those skilled in the art to make and use my invention I will proceed to describe it.

A represents a frame constructed of wood and supported by legs, B. The cross timbers of this frame form the bearings for a shaft, C. This shaft is rotated by means of a pulley, D, and secured to one of its ends are two cutters, *a b*, the cutter, *a*, for tonguing, and the cutter, *b*, for grooving the boards. These cutters extend through a slot, *c*, in the stationary platform, E, and between said cutters and on the top of the platform is a little frame, F, containing two friction rollers, *d*, which in combination with two gages, *e*, serve to guide the boards as the same are passed edgewise over the cutters.

After the boards have been united, and in order to prepare them for jointing they are placed on the sliding platform, G, that has a longitudinal motion on ways, *f*, being guided by an iron track, *g*. The jointing saw, H, is rigidly secured to the shaft, C, in close proximity to the edge of the platform, G, and immediately back of the saw is an iron fence, *h*, that serves to keep the timber being jointed in a direct line. This

fence is attached to a stationary table, *i*, that serves to receive the edgings. The boards are now cut to the required width by placing them on the expanding sliding platform, I, which is constructed of a frame, *j*, that slides on an iron track, *k*, crosswise to the direction of the shaft, C. United to one of the side members, *l*, of the frame, *j*, by means of lazy tongs, *m*, are two or more timbers, *l'*, which have a sliding motion to and from the stationary side timber, *l*, of the frame, being guided by the end timbers *l''*. Secured to the end timbers, *l''*, are notched bars, *m'*, and a scale is marked on the upper side of each of said end timbers which serves to adjust the expanding platform, I, to any given width. Two spring catches, *m''*, retain the platform in the required position. A saw, J, that has a longitudinal sliding motion on the shaft, C, is adjusted according to the width of the platform and in order to be able to more readily adjust these saws, the shaft is furnished with a groove, *c'*, extending in a longitudinal direction from one end to the other. A roller, *d*, placed under the platform, I, and having a motion in a direction opposite to the shaft, C, serves to carry off the edgings that may fall through the platform. Further on on the shaft, C, and firmly secured to the same there is a saw, K, which extends through a stationary platform, L, that serves to support the boards and an expanding platform, M, with an adjustable saw, N, similar in every respect to the platform, I, and saw, J, serves to cut the boards to the required length.

In order to be able to saw the boards perfectly square, rests, *n*, are attached to each of the platforms, I and M, which run parallel with the shaft, C, and stops, *o*, that are rigidly attached to the frame, A, prevent the platform coming in contact with the saws.

It is obvious that by the use of my machine a great amount of labor is saved, a workman of ordinary skill being enabled to prepare a large quantity of boards ready to be jointed to make boxes of any desired size, and the work done by the machine will compare quite favorably with the best work turned out by hand even if the latter is done by the most skilful workman.

Having thus fully described my invention

what I claim as new, and desire to secure by Letters Patent, is:—

1. The arrangement of the cutters, *a b*, in combination with the stationary saws, H and K, and with the adjustable saws, J and N, substantially as and for the purpose specified.
2. The employment of the expanding slid-

ing platforms, I and M, arranged in combination with the saws, H, K, J and N, substantially as and for the purpose specified. 10

GEO. F. PALMER.

Witnesses:

JACOB H. PIKE,
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