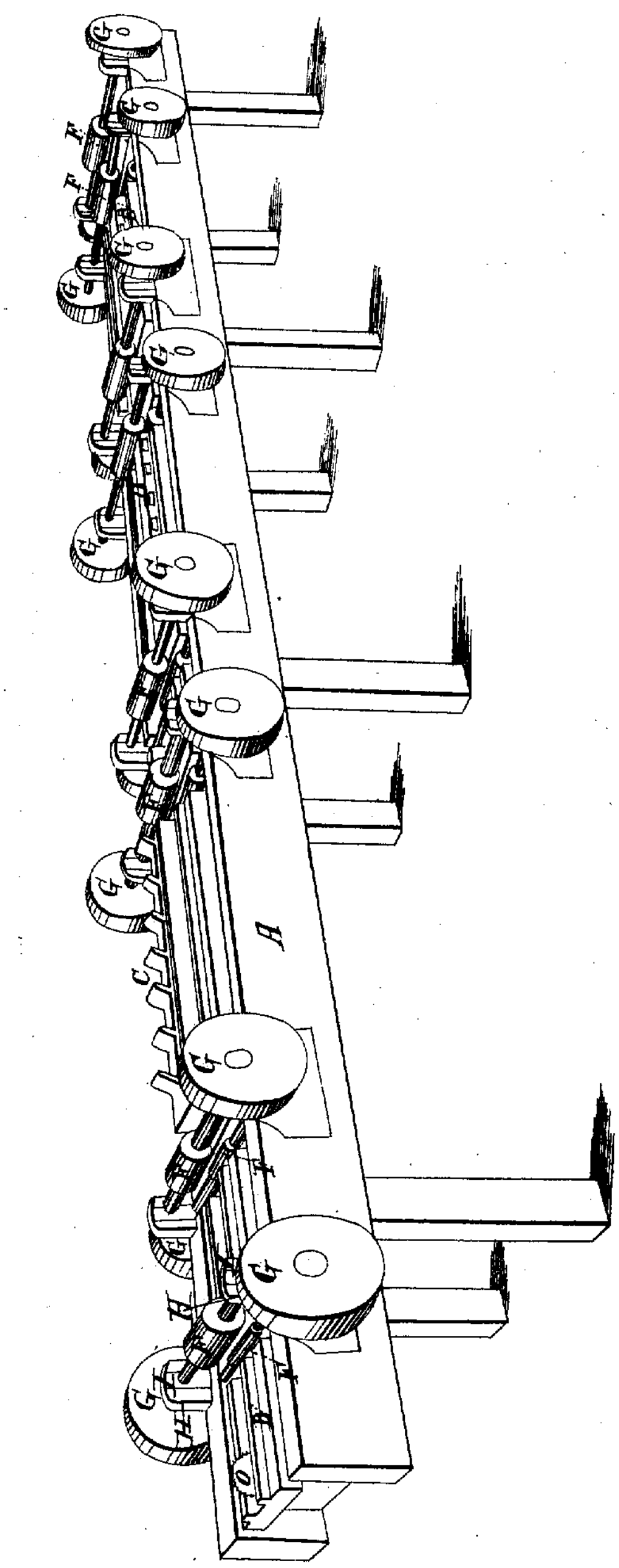
6609X

J. Tees,

Wood Planing Machine.

Patented June 13, 1831.



AM. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS.)

June 13, 1831

563.

6609X Uncert Tees.

Letters Patent.

The Schedule, referred to in these Letters Patent and making part of the same, containing a description in the words of the said Uncert Tees himself, of his improvement in the machine for planing edging and grooving boards.

The bench upon which the planes are to be placed should be long enough to admit of three planes being placed upon it, longitudinally succeeding each other with sufficient space at each end and between each plane or set of planes for friction rollers with drums. It is required to be as much wider than the board to be planed, as will admit of securing the battens and plane No. 1, and the planes No. 2 & 3, and the pedestals and boxes for the journals of the friction rollers. Upon the end of the bench where the planing is to be commenced and extending thence the distance of the position of the two first sets of friction rollers. the length of the plane No. 1, and the distance of the position of the two second sets of friction rollers and ending at the fore ends of the planes No. 2, place parallel to each other and the distance apart of the width of the board to be planed two battens or guides for the board to be planed. Plane No. 1, may be made in the ordinary way as regards its box, that is to say, that it may be made entirely of wood or its face may be shod or faced with iron or other metals. It should be long enough to admit of a number of gauge mortises of plane irons being placed, in succession in it. The plane iron must be as wide as the board to be planed. This plane is laid nearly horizontally, with its edges respectively resting upon the battens its fore part nearest to the end of the bench where the work is to be commenced, and raised, or made higher than the after end, as the thickness of the shaving required to be taken from the board.

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It is prevented from rising too much by weights or springs and from moving longitudinally or laterally by stops. The boxes of the planes No. 2. (which are two in number) may be made in like manner; they must be furnished, respectively, with a number, (say seven or more) of plane irons placed in succession; but these plane irons need be of no greater width than the edges of the board to be planed. These two planes are to be laid upon the bench upon their sides nearly parallel to each other. Their fore ends are much more distant from each other than the after ends as the thickness of the shaving required to be taken off the edges of the board. The fore end of these planes must be such a distance from the after end of the plane No 1, as will leave a space for two sets of friction rollers, the faces of these planes forming respectively lines with the batten or guides and they (said planes No 2) being of course as wide apart as the board required to be planed. The boxes of planes No. 3) which are also two in number) may be made in like manner, they must be furnished respectively with a number (say seven or more) of plane irons placed in succession; but as the plane irons of one of these planes must be plough, and as the plane irons of the other of these planes must be groove irons. They must be of a width sufficient to plough and groove a board of the thickness required to be planed and ploughed and grooved. At each end of the bench and also between the after end of plane No 1. and the fore end of planes No 2, and likewise between the after end of planes No 2, and the fore end of planes No. 3. place respectively two pairs of friction rollers with drums. The friction rollers are placed across the bench and the drums revolve outside of the bench. The journals of the friction rollers should turn in boxes placed in pedestals, let into and secured to the bench. The rollers may be kept in their places, and may be furnished with sufficient power to give and move the board to be

to be planed, by weights or springs. The planes and irons remain stationary the moving power is applied to the drums and from through them to the rollers, which rollers gripe the board in reception and pass it under plane No 1, and between planes No 2, and planes No 3, successively. Upon the end of the bench where the work is commenced on a line with one of the battens may be placed a revolving circular saw to revolve in the same direction as the rollers and driving its power from the drums. Instead of both battens and both planes of each set being stationary upon the bench, one batten and one of each set of planes, on the same side, may be moveable and may be furnished with registers so that the distance of the battens and planes of a set respectively may be increased or diminished so as to admit boards of different sizes.

Witnesses

Peter A. Browne Jacob Tees

John Binns.

Operation.

The board to be planed is presented horizontally, and forward and with the side intended to be planed uppermost, to the end of the bench where the planing is to be commenced. The end of the board is shoved by hand between the battens or guides until it arrives at the first set of friction rollers which immediately gripe the board and draw it forward; the second set of friction rollers as soon as the end of the board arrives at them gripe it and assist in the horizontal forward moving operation. The board then passes under plane No 1, and has its upper surface planed smooth by the successive operations of the plane irons of plane No 1; should the board be too wide the circular saw cuts it to the width required. Having passed plane No 1, the board passes between the two sets of rollers which are situate between the after end of plane No 1, and the fore end of plane No 2, and by the operation of the plane irons

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plane irons of planes No 2, has its edge planed straight, having passed planes No 2, the board passes in like manner between the rollers that are situate between the after end of plane No 2, and the fore end of plane No 3, and between planes No 3, by which last operation the board is ploughed on one edge, and grooved on the other. It then passes through the remaining sets of rollers which draw the board out and deliver it planed, straightened on the edges and ploughed and grooved.

What the said Jacob Tees claims as his invention are,

First, The affixing a number of stationary plane irons in one box or plane. Second the operation of planing with stationary plane irons and stationary planes, to smooth, straighten, and plough and groove a board. Third, The affixing of the circular saw to move with the same power as the planes turning the board to the proper size to pass between the bottom and planes No 2, and No 3. Fourth, The combination of smoothing, edging and ploughing and grooving the board by one operation by means of stationary planes and plane irons.

Jacob Tees

Witnesses
Peter F. Browne
John Binns

(1332 Words)