H. Snow,

Wood Planing Machine.

No. 11,984. Patented Nov. 21, 1854.

Fig. 1.

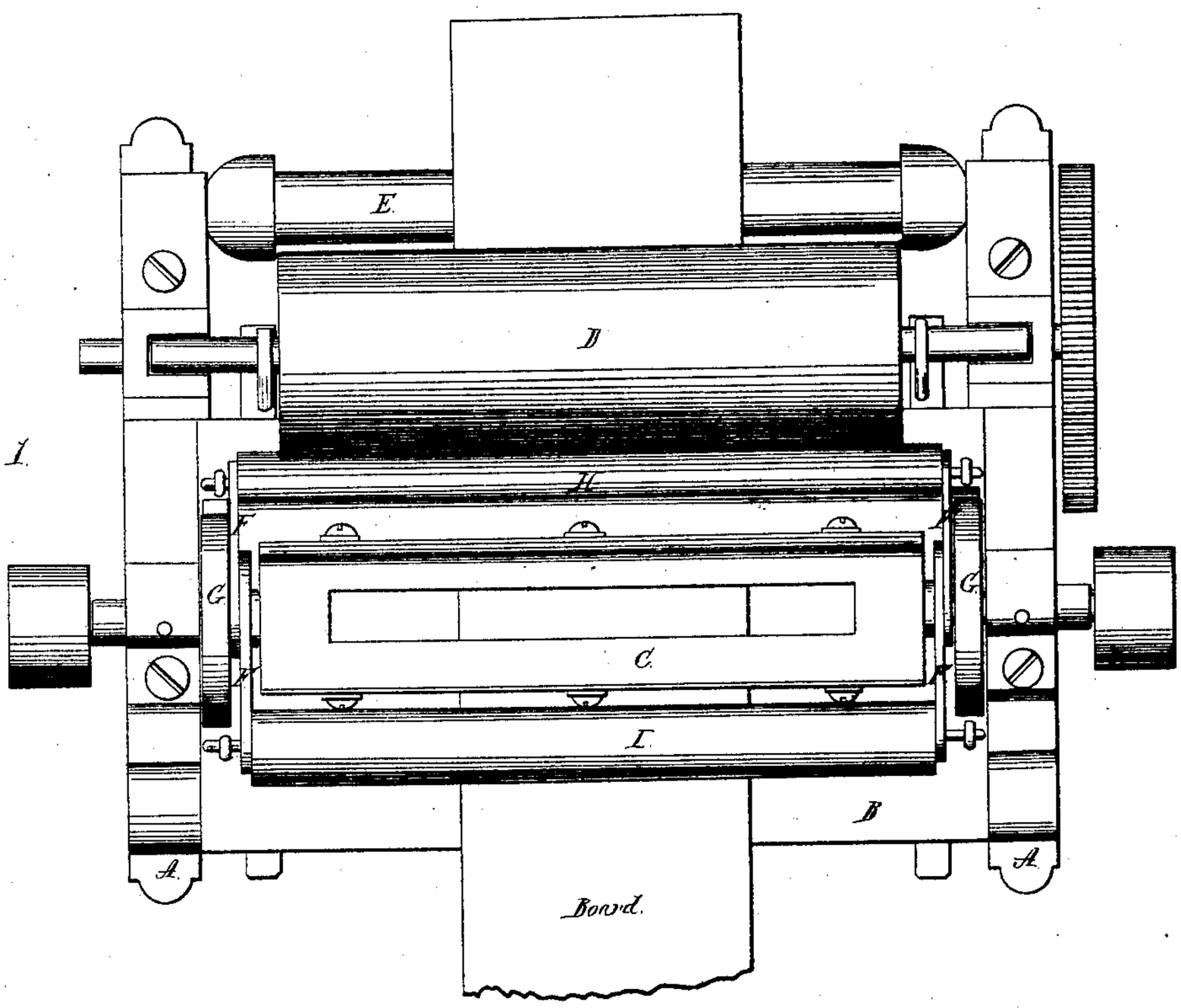

Fig. 2.

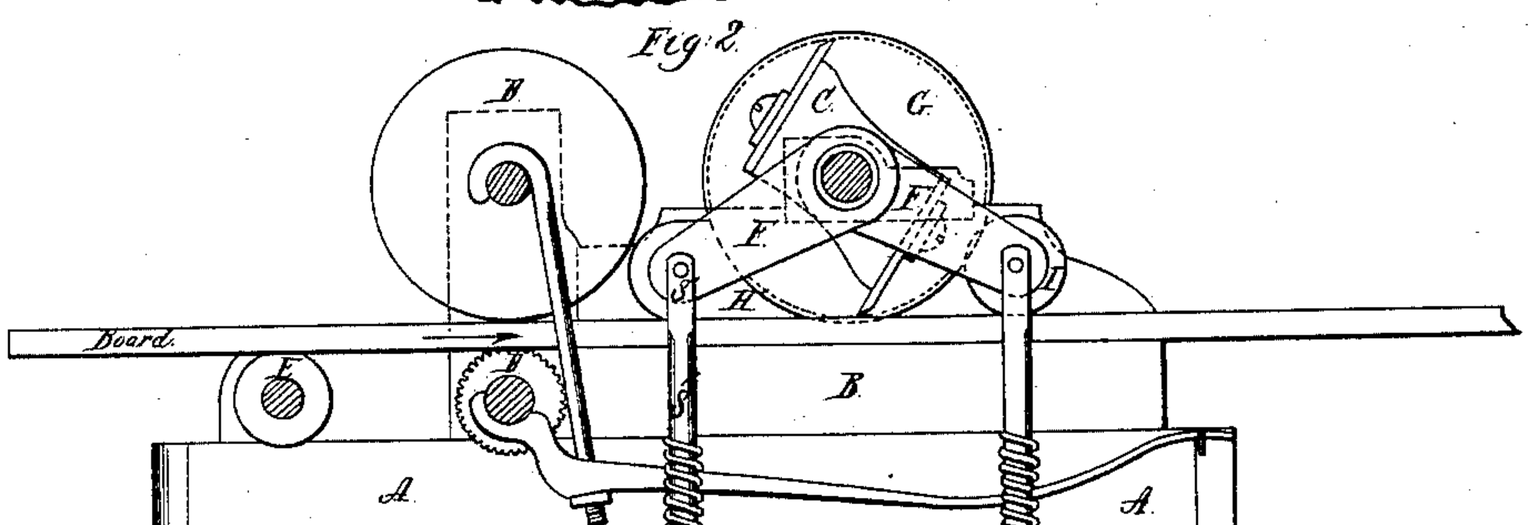

Fig. 3.

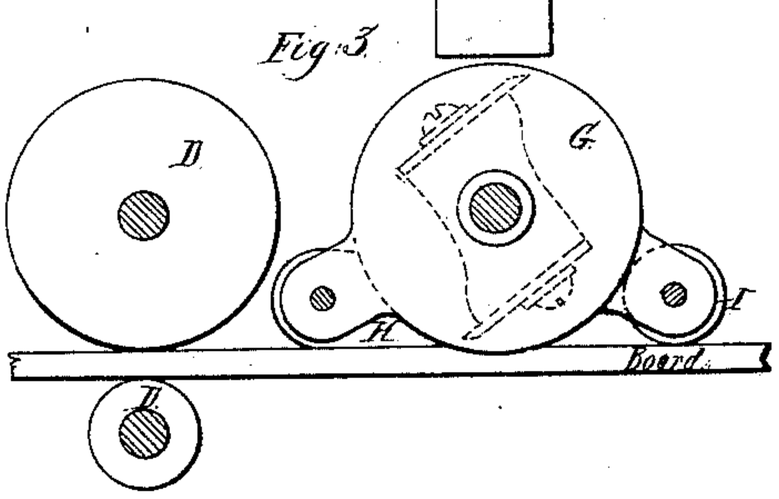

Fig. 4.

UNITED STATES PATENT OFFICE.

H. SNOW, OF DUBUQUE, IOWA, ASSIGNOR TO JAS A. WOODBURY.

PRESSER-BAR FOR PLANING-MACHINES.

Specification of Letters Patent No. 11,984, dated November 21, 1854.

To all whom it may concern:

Be it known that I, HARVEY SNOW, of Dubuque, in the State of Iowa, formerly of Lowell, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement on Machines for Dressing Boards and other Material.

Figure 1 is a top view of the machine.

The frame A is made of wood or iron, with two sides, two legs on each, connected by the platen B as shown in Fig. 2, made of wood or iron of sufficient strength to keep the machine all stiff and true, also it is made to support the cutter cylinder, pressure bar and roller, springs, &c., being a very cheap method of construction.

C is a rotating two knife cutter cylinder, not differing very much from those in common use, except being all cast, or may be cast upon a wrought iron or steel shaft, which makes much less expense than fitting them together in the usual way.

D D are feed rollers driven in the common way, by pulley and pinion, geared to the small roller, the small roller being fluted, and less than half the size of the large one; which is an improvement over the common method of making them both of equal size, thereby giving a strong grip to the board, and making it less necessary to gear the two rollers together, for it must be seen that the large roller will turn more readily on its center when acted upon by a small roller, giving a more powerful and effective moving pressure, than can be so easily obtained, by using two rollers of equal size, thereby saving the expense of coupling gears, and giving to the machine a more simple working action.

G G are guards placed on the round part of the boxes, which hold the cutter C, and made so as to move freely on said boxes; and are made a little larger diameter than the cutters, so as to keep clear of the edge of the knife; and so fixed as to make it nearly impossible for the bar and roller which hold the board, to come in contact with the cutters when in use. They also may be used to connect the bar and roller as shown in Figs. 3 and 4 in the accompanying drawings.

F F are links to connect the bar and roller, which are fixtures to hold the material while being planed, and may be used in connection with the guards G, or may be dispensed with, and the guard G used in their stead, as shown in Figs. 3 and 4.

H is a concave bar which lies parallel with the cutters, and on the feed, inside of the machine, and is connected with the central part of the cutter cylinder, by the links F, or by the guards G as may be thought best, and so arranged as to rise and fall with the variation of the thickness of the material, so as to reduce the same to an uniform thickness; always keeping the thin or inner edge of the bar at an equal distance from, and as close as practicable to, the edge of the cutters; and serving as a mouth piece to protect the material from splitting and breaking out, and holding the knots so that they will not be taken out by the lifting action of the cutters, thus compelling the pressing or inner edge of the mouth piece next to the cutters, to remain under all circumstances at the same distance from the path of the cutting edge of the knife; being thus adapted to plane very thin material.

I is a roller to keep the material steady, and connected in the same manner as the bar H as above described, or a bar may be used in its place like H if thought best.

E is a roller to ease the material as it passes into the machine.

All the other parts, as shown in the accompanying drawings, are so common as not to need further description.

What I claim is—

Combining the pressure bar H with the rotary cutters; so as to secure the same relative position of the inner edge of the bar, and the path of the cutting edge, in holding and cutting the surface of a board throughout its varying thickness, substantially as described.

HARVEY SNOW.

Witnesses:

WILLIAM ANDREW,

J. H. THEDINGA.