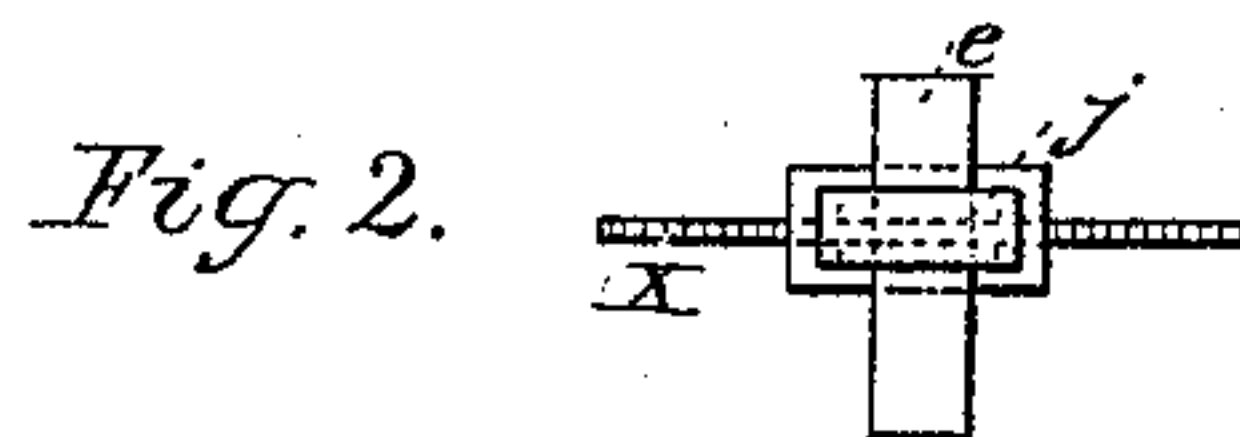
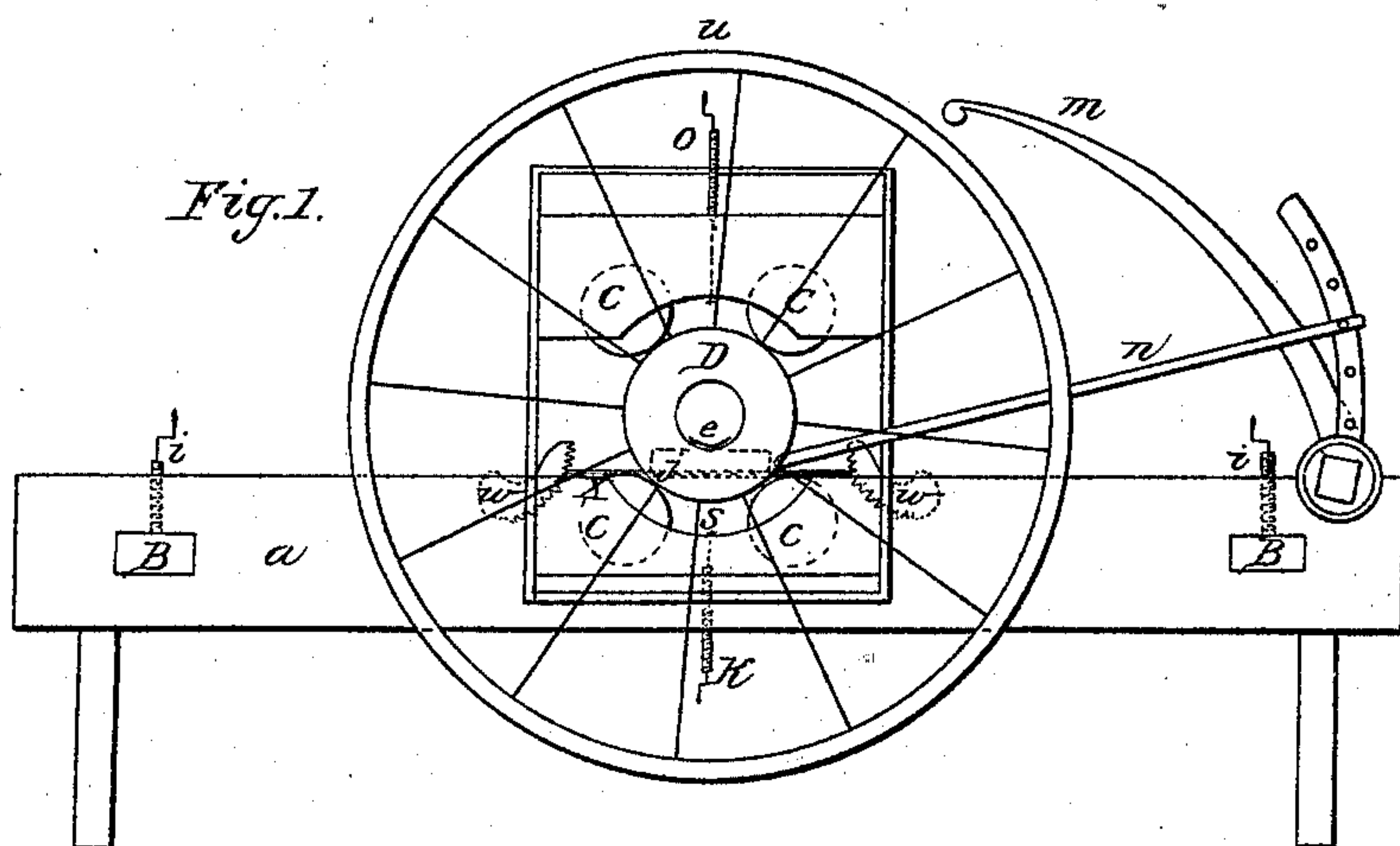


*S. H. Yocum,*

*Boring Hubs.*

*N<sup>o</sup> 15,678.*

*Patented Sep. 2, 1856.*



*Witnesses.*

*N. D. Hobbs*

*D. M. Burns*

*Inventor:*

*Samuel Yocum*

# UNITED STATES PATENT OFFICE.

SAML. H. YOCUM, OF SHELBYVILLE, INDIANA.

## METHOD OF BORING HUBS FOR BOXES.

Specification of Letters Patent No. 15,678, dated September 2, 1856.

*To all whom it may concern:*

Be it known that I, SAMUEL H. YOCUM, of Shelbyville, in the county of Shelby and State of Indiana, have invented a new and useful Machine for Turning Out Hubs for the reception of Boxes, as herein described; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making part of this specification in which—

Figure 1 is a vertical section. Fig. 2 is a horizontal section.

The frame of the machine is composed of two benches *a, a*, parallel with each other connected together by cross bars *B, B*, and set screws *i, i*, forming an adjustable frame in which wheel *u*, is hung, on four adjustable antifriction wheels *c, c, c, c*, regulated by temper screws *k, k*, cross bars *B, B*, and set screws *i, i*, so as to set the square ends of the hub *D*, up square on the plates *s, s*, which are on the inside of the benches *a, a*, and at a right angle with the bits *e, e*, and confined in that true position by four other adjustable antifriction wheels *c, c, c, c*, operated by temper screws *o, o*, placed over it.

*i, i*, are movable rests opposite each end of the hub *D*, dovetailed to benches *a, a*, so as to slide back and forth on said benches, on which are fastened firmly bits *e, e*, that

enter each end of the hub *D*, as far as required, operated by lever *m*, and adjustable feed rods *n, n*.

The different sized spaces for the different sized boxes required in the same hub are made by shortening the draft on the adjustable feed rod *n*, that feeds the bit *e*, at the end of the hub *D*, in which the smallest box is required, set the gages *w, w, w, w*, on scale *x, x* by slide rests *j, j*, to any size boxes required, put the wheel *u*, in motion and apply the hands to the lever *m*, draw the rests *j, j*, up to the set gages *w, w*, and the desired spaces for the reception of the boxes are complete, thus producing a cavity for the boxes, exactly in the center of each end of the hub *D*, at the same time.

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

Operating the bits *e, e*, by the adjustable feed rods *n, n*, and lever *m*, with the mechanism described or its equivalent, in combination with the eight antifriction wheels *c, c, c, c, c, c, c, c*, temper screws *o, o*, and *k, k*, that confine the hub *D*, and expose a true circle to the bits *e, e*, at any desired distance from the center of the hub.

SAMUEL H. YOCUM.

Witnesses:

N. D. ROBINS,  
B. F. YOCUM.