

(No Model.)

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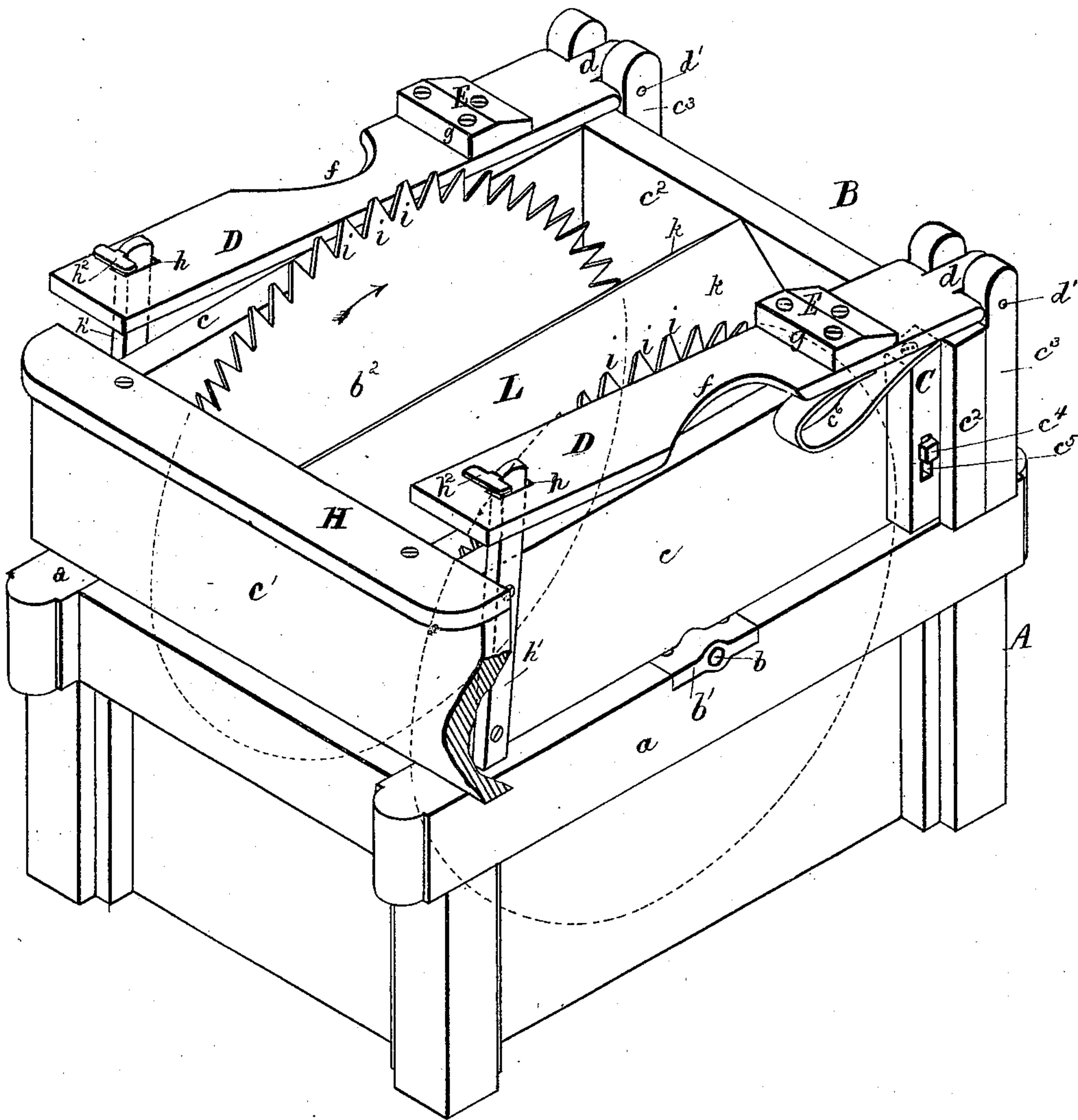
W. CARSON.

SHINGLE JOINTING MACHINE.

No. 299,619.

Patented June 3, 1884.

*Fig. 1.*



*Attest.*

*B. C. Fenwick.*  
*Robt. L. Fenwick*

*Inventor:*

*William Carson.*  
*by Fenwick & Lawrence.*  
*His Attorneys.*

(No Model.)

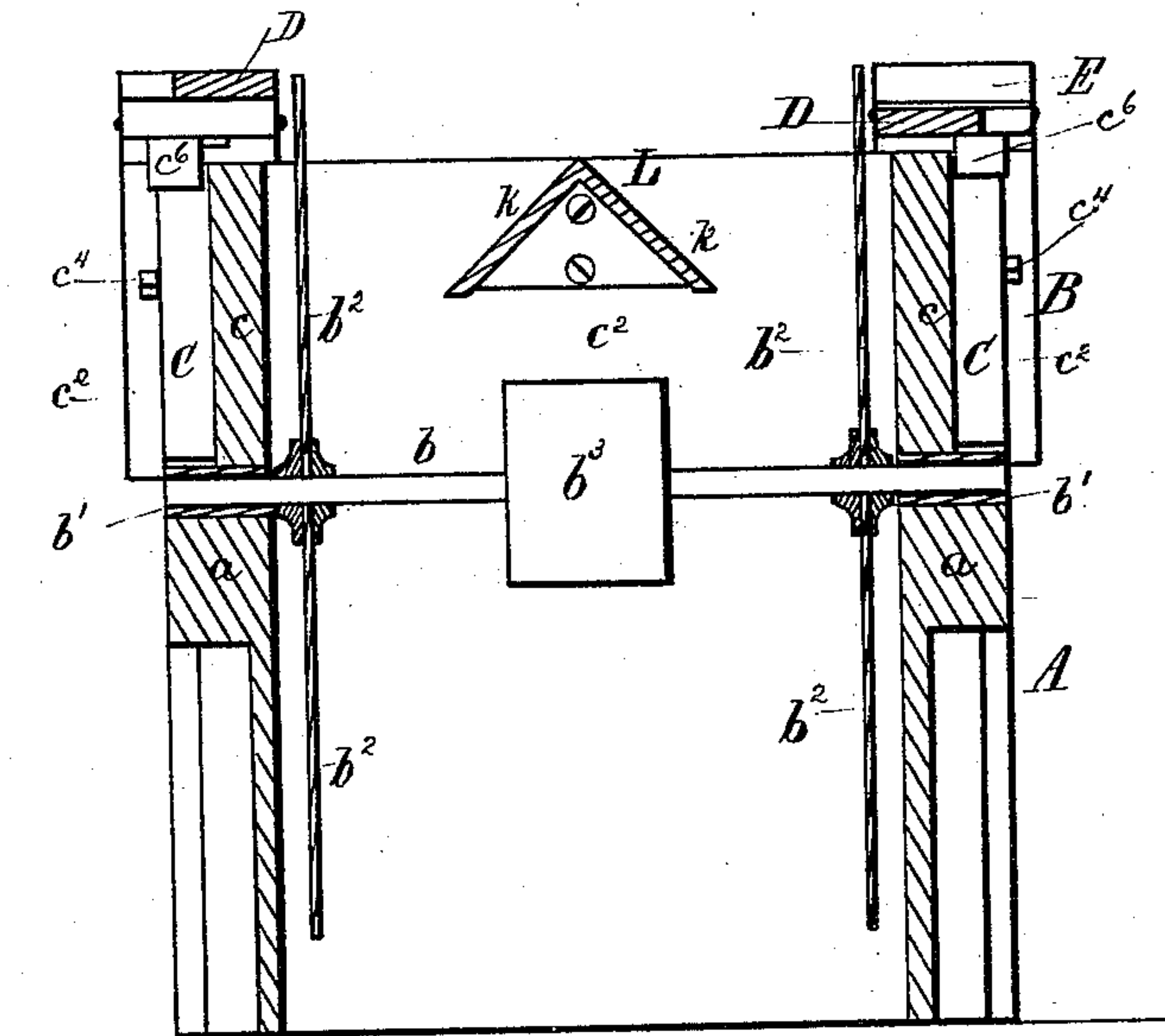
2 Sheets—Sheet 2.

W. CARSON.  
SHINGLE JOINTING MACHINE.

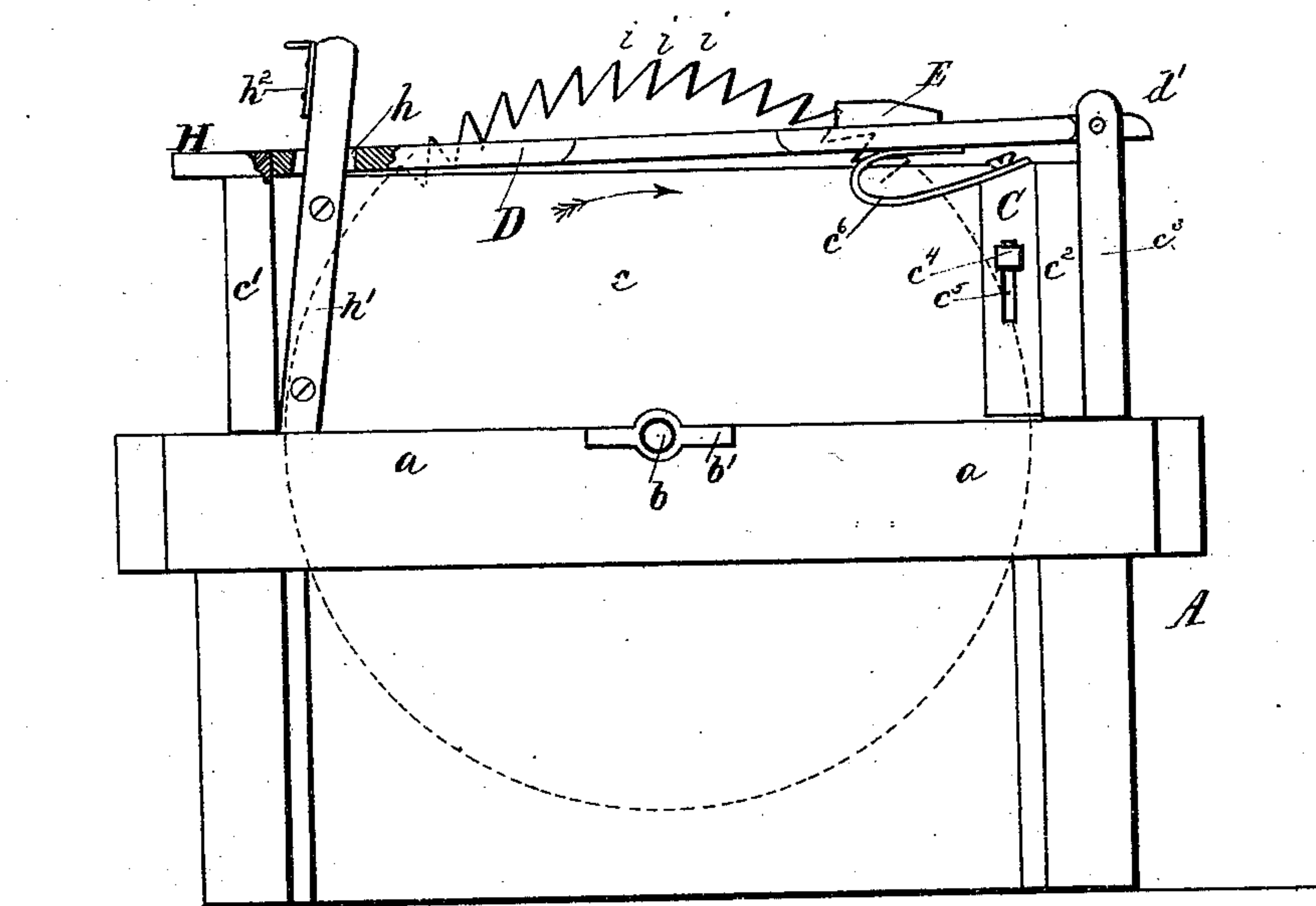
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*Fig. 2.*



*Fig. 3.*



*Attest:*

*B. C. Fenwick.*  
*Robt L. Fenwick.*

*Inventor:*

*William Carson,*  
*by Fenwick & Lawrence*  
*His Attorneys:*



# UNITED STATES PATENT OFFICE.

WILLIAM CARSON, OF ST. PAUL, MINNESOTA.

## SHINGLE-JOINTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 299,619, dated June 3, 1884.

Application filed December 18, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM CARSON, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented a new and Improved Shingle-Jointer, of which the following is a full, clear, and exact description, regard being had to the annexed drawings and letters of reference marked thereon, forming a part of this my specification of said invention.

The object of my invention is the production of a simple, inexpensive, but effective machine for jointing the edges of shingles, and one in which that class of work can be performed with great expedition.

In the drawings, Figure 1 is a perspective view of my improved shingle-jointer; Fig. 2, a central cross-section, and Fig. 3 a side elevation of the same.

In said figures, A indicates a heavily-framed rectangular foundation, as shown, upon side timbers, *a a*, of which is mounted, as represented in the figures, a shaft, *b*, having bearings in boxes, as *b'*, and carrying two circular saws, *b<sup>2</sup> b<sup>2</sup>*, firmly fixed to the shaft, and with a driving-drum, *b<sup>3</sup>*, centrally of the length of said shaft, as clearly represented in Fig. 2.

Mounted upon the foundation A is a box-frame, as B, having side pieces, *c c*, and end pieces, *c' c'*. Posts, as *c<sup>3</sup> c<sup>3</sup>*, properly secured to the end piece, *c<sup>2</sup>*, receive at their upper ends, as shown, and hold in place a rear reduced portion, *d*, of spring-tables D and D, a pin, as *d'*, forming the axis of articulation for the spring-tables, being passed through the upper end of the posts *c<sup>3</sup> c<sup>3</sup>* and the reduced part *d*, thereby securely holding the rear portion of the spring-tables in proper working position.

As seen in Figs. 1 and 3, C are adjusting-posts having a bearing against the side pieces, *c*, and end piece, *c'*, as shown, and so guide the posts C when adjusted up and down upon clamping-bolts *c<sup>4</sup>*, working in the slots *c<sup>5</sup>*, and engaging with the side pieces, *c*, whenever it becomes necessary to cause the springs *c<sup>6</sup>* to act with more or less energy against the spring-tables D D to force them into the elevated position, as shown in Fig. 1, one end of the springs *c<sup>6</sup>* being held confined to the top of the posts C, while their reversely-bent portion, as

shown, impinges and works against the under surface of the tables D D, as represented in said figure. Thus when the table D, for example, is depressed, as shown in Fig. 3, the spring *c<sup>6</sup>* immediately causes it to return to its normal position (shown in Fig. 1) when pressure upon the table is removed.

As shown in Fig. 1, E E are stops fixedly applied to the tables D D, against the square edge *g* of which the butt-end of a shingle is placed during the act of jointing the same. At *f*, as shown in said figure, the tables D D are cut away, so that when a shingle is placed in working position upon the tables the upper and under side of the shingle may be grasped by the hand of the operator, and thus held firmly in place against the stop E, and also firmly held down upon the table against the action of the saw while trimming or cutting off the wavy or irregular edge of the shingle. At the forward end of the tables D a rectangular opening, *h*, is made in the same, through which a bar, *h'*, passes, which is secured to the side pieces, *c*, and at the top of the bar a stop, as *h<sup>2</sup>*, is provided, as shown, which limits the upward throw of the table. As represented in Figs. 1 and 3, the bar *h'* has an oblique set, and as the opening *h* of the table D is of a width greater than the thickness of the bar, and of a length greater than the width of the bar *h'*, as shown, the upward and downward throw of the table is effected without binding upon the bar, and thus the table D is guided and steadied in its up and down movements, while at the same time the upward throw of the table is limited, as shown.

In Fig. 1 the tables D D are shown in their normal position—to wit, at their full upward throw—in which position the points of the uppermost saw-teeth, *i*, will be slightly below the working-face of the tables, and thus when the shingle is adjusted for operation upon the tables the shingle can be set laterally over the saw-teeth a sufficient distance to cut off the irregular edge without touching them. Thus placed in position, the operator now grasps the shingle at *f* with a firm, steady hold, and simultaneously presses down upon the table, whereupon the saw engages with the shingle and saws off the irregular edge, and thus straightens its edge, the refuse falling upon



the inverted-V-shaped table L, between the saws, and, falling down on a carrier beneath, is conveyed to a refuse-car for removal away from the machine. In this manner it will be  
 5 seen that the cut of the saws  $b^2$  is in line with the grain of the shingle, thus performing smooth work, which is very desirable.

As shown in Fig. 1, the inverted-V-shaped table L extends between the saws the whole  
 10 length of the machine, and with its sloping sides  $k$   $k$  sufficiently near the saws to effect a proper discharge of the refuse cut from the shingles, as well as serve as a shield to the driving-pulley  $b^3$ :

15 As shown, the machine is a double one, and two operators will find no difficulty in operating upon the machine at the same time, thus effecting a great amount of work in a brief period of time. A table, as at H, on the front  
 20 end of the machine may be utilized to hold a quantity of shingles ready for having their edges made straight, and which will also serve to prevent the operator from pressing forward in too near contiguity with the saws when in  
 25 operation. In practice the saws will be set so as to just clear the tables D D, and thus the action of the saws will have a more direct bearing against the stops E, and so the cut will be made without strain either upon the  
 30 shingle or the saw.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the double-inclined central stationary guard, L, affixed to the  
 35 frame above the driving-pulley, with the single supporting-frame A, carrying shaft  $b$ , with driving-pulley, and provided with two hinged adjustable tables, D, arranged outside of the  
 40 outer face of the saws, for supporting the shingles while being jointed, and with two disk-saws,  $b^2$ , arranged on the inside of the frame A on shaft  $b$ , and outside of the said inclined stationary guard L, substantially as described.

2. A machine for jointing shingles, comprising in its construction a table, D, pivoted at  
 45 its rear end to a post,  $c^3$ , and provided with an actuating-spring, as  $c^6$ , which has its rear end applied to an adjustable post, C, whereby the tension of the spring can be increased or  
 50 diminished, substantially as and for the purpose described.

3. A machine for jointing shingles, which comprises in its construction a table, D, pivotally hinged at its rear end to a rear portion  
 55 of the machine and slotted at its forward end, as at  $h$ , in combination with a stationary obliquely-set post,  $h'$ , having a stop,  $h^2$ , to limit the upward throw of the table, and a spring,  $c^6$ , for actuating the table D in an upward di-  
 60 rection, substantially as described.

WILLIAM CARSON.

Witnesses:

WM. H. SMITH,  
 E. H. DRAKE.