

(No Model.)

G. MATHIS.
WOOD CARVING MACHINE.

No. 257,957.

Patented May 16, 1882.

Fig. 1.

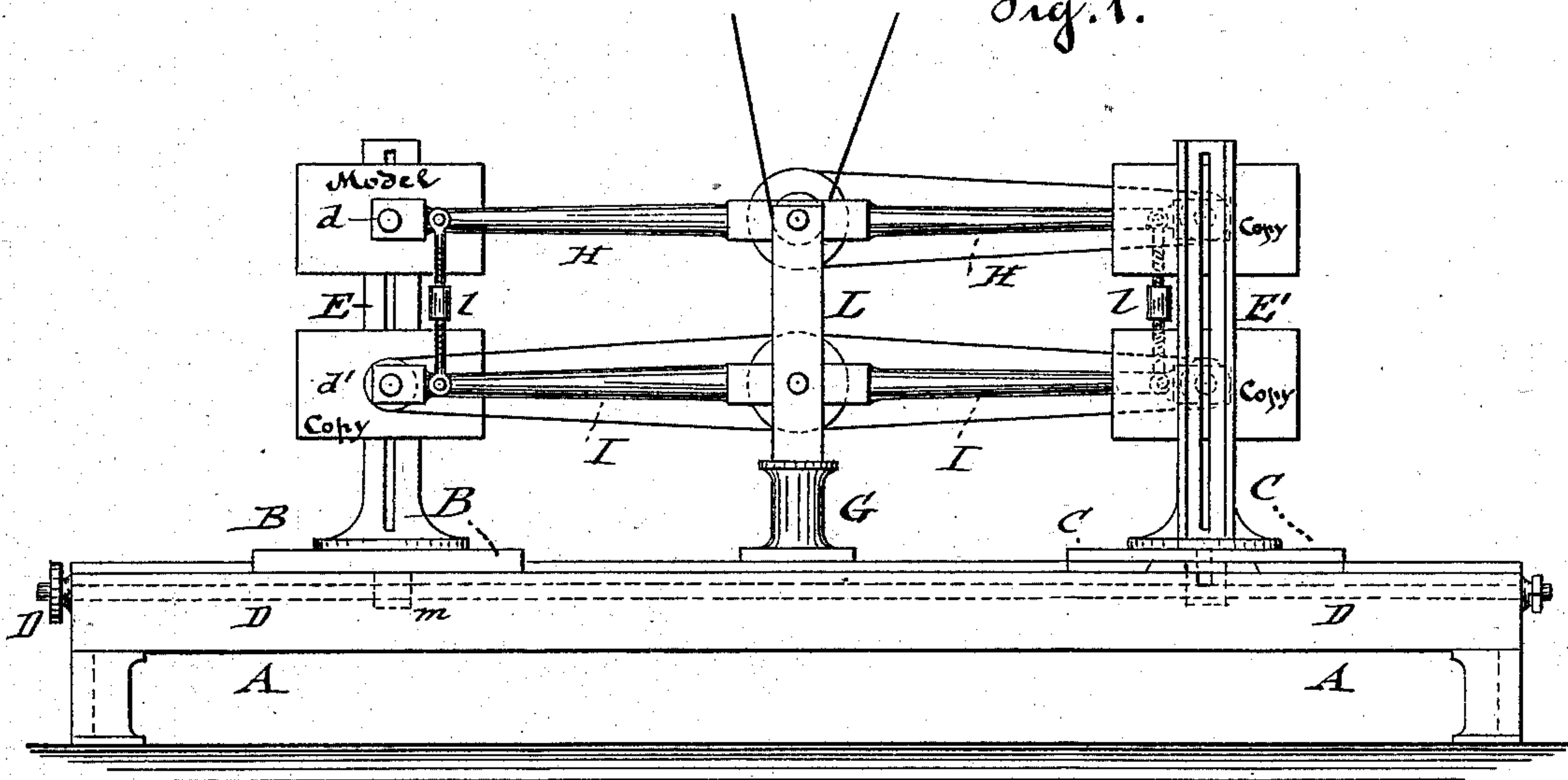


Fig. 2.

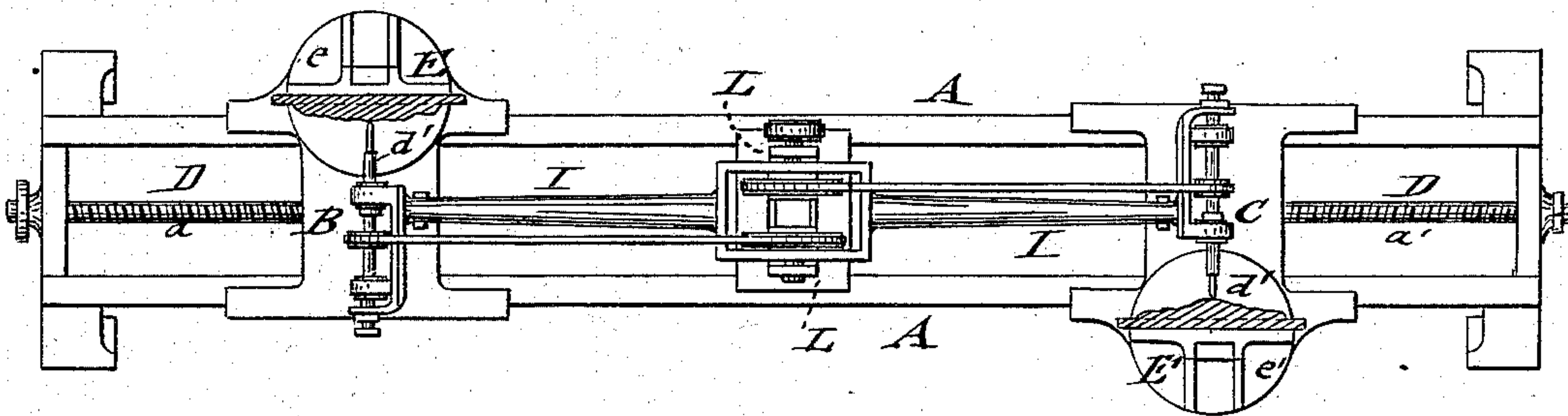
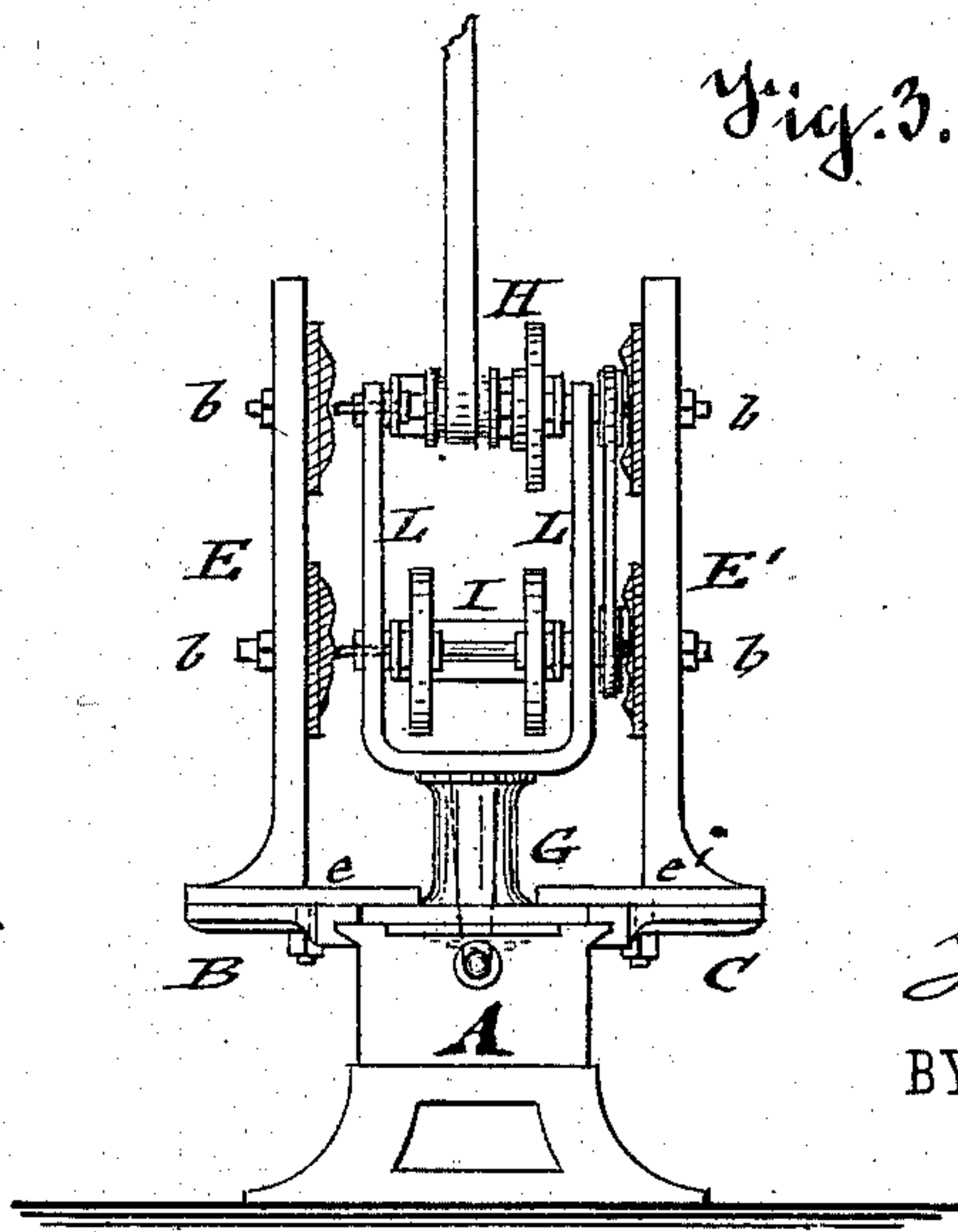


Fig. 3.



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WOOD-CARVING MACHINE.

SPECIFICATION forming part of Letters Patent No. 257,957, dated May 16, 1882.

Application filed March 11, 1882. (No model.)

To all whom it may concern:

Be it known that I, GERHARD MATHIS, of the city, county, and State of New York, have invented certain new and useful Improvements in Wood-Carving Machines, of which the following is a specification.

This invention relates to an improved carving-machine, whereby one or more copies may be carved at the same time from an original carving. It consists of a guide bed or table, on which rest two carriages which can be moved in opposite directions to and from each other by a spindle with a right-and-left-hand screw-thread passing through nuts at the under side of the carriages. On the latter are supported slotted and axially-turning standards. The original and the blanks to be carved are fastened to these standards, and can be moved up and downward in slots of the same. Centrally between these two standards is arranged a fixed socket supporting an axially-movable forked standard having bearings for the pivot-shaft of one or more levers which carry at their ends journals for the transverse carving-tools. One of the levers carries at one end a guide-pin moving along the model. The carving-tools are revolved by belt-and-pulley transmissions.

In the drawings, Figure 1 represents a side elevation of my improved carving-tool. Fig. 2 is a plan, and Fig. 3 an end elevation, of the same.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents a guide bed or table of oblong shape having longitudinal ways, upon which are two carriages, B and C, which are moved in opposite direction to and from each other by a longitudinal spindle, D, having right-and-left-hand screw-threads *a* and *a'*. The spindle passes through fixed nuts *m* and *m'* at the under side of said carriages. Upon the carriages B and C are supported upright standards E E' by turn-tables *e* *e'* at their lower ends, and by central pivots set into sockets of the carriage. The standards E E' are firmly clamped to the carriages by screw-nuts applied to the pivots at the under side of the carriages. The standards have vertical slots to which the plates that carry the model and the blanks to be worked upon are fastened by

clamp-screws or other devices, *b b*. The model and blanks can also be turned axially on their clamping-bolts, so as to be set into any desired position to the guide-pin and carving-tools. The carving-tools are journaled in bearings at the outer ends of levers H and I, Fig. 1, which are fulcrumed to a forked upright standard, L, that is set into a fixed socket, G, of table A. The forked standard L is axially movable in the supporting-socket G, whereby the levers may be oscillated in horizontal planes. The levers H and I are connected to each other by coupling-rods *l l*, near both ends of the same. As both levers H and I are coupled together, they are compelled to perform exactly the same motion throughout. One end of one of the levers is provided with a guiding-pin, *d*, which corresponds exactly to the size of the carving-tools *d'*, mounted in the remaining ends of the levers. The guiding-pin *d* is placed opposite the original which is to be copied, while the carving-tools *d'* are designed to cut out the contours of the original upon the blanks arranged on the vertical standards E E'. The carving-tools are revolved by belt-and-pulley transmissions, which are indicated clearly in Figs. 1 and 3, so that when the guide-pin is passed over the face of the original the carving-tools will reproduce the contours of the same on the blanks. As the standards supporting the original and blanks are moved in opposite direction to each other by the spindle D the model and blanks are passed along the guide-pin and the carving-tools, whereby when two levers are employed three copies are made. While one lever is employed only one copy is made. If more than two levers are used, a correspondingly larger number of copies can be made at the same time. The machine may also be made with two or more levers extending only to one side of the central forked standard, in which case only one movable standard is necessary, to which the model and blanks are applied.

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

The combination of a bed-plate, A, carriages B C, arranged to reciprocate in opposite directions to each other, upright standards E E', applied to the carriages for supporting model and blanks, one or more levers, H and I, which

are fulcrumed to a forked axially - turning
standard, G, and provided at the ends with a
guide-pin and carving-tools, and means for
transmitting rotary motion to the carving-
5 tools, substantially as and for the purpose set
forth.

In testimony that I claim the foregoing as

my invention I have signed my name in pres-
ence of two subscribing witnesses.

GERHARD MATHIS.

Witnesses:

PAUL GOEPEL,
CARL KARP.