

(No Model.)

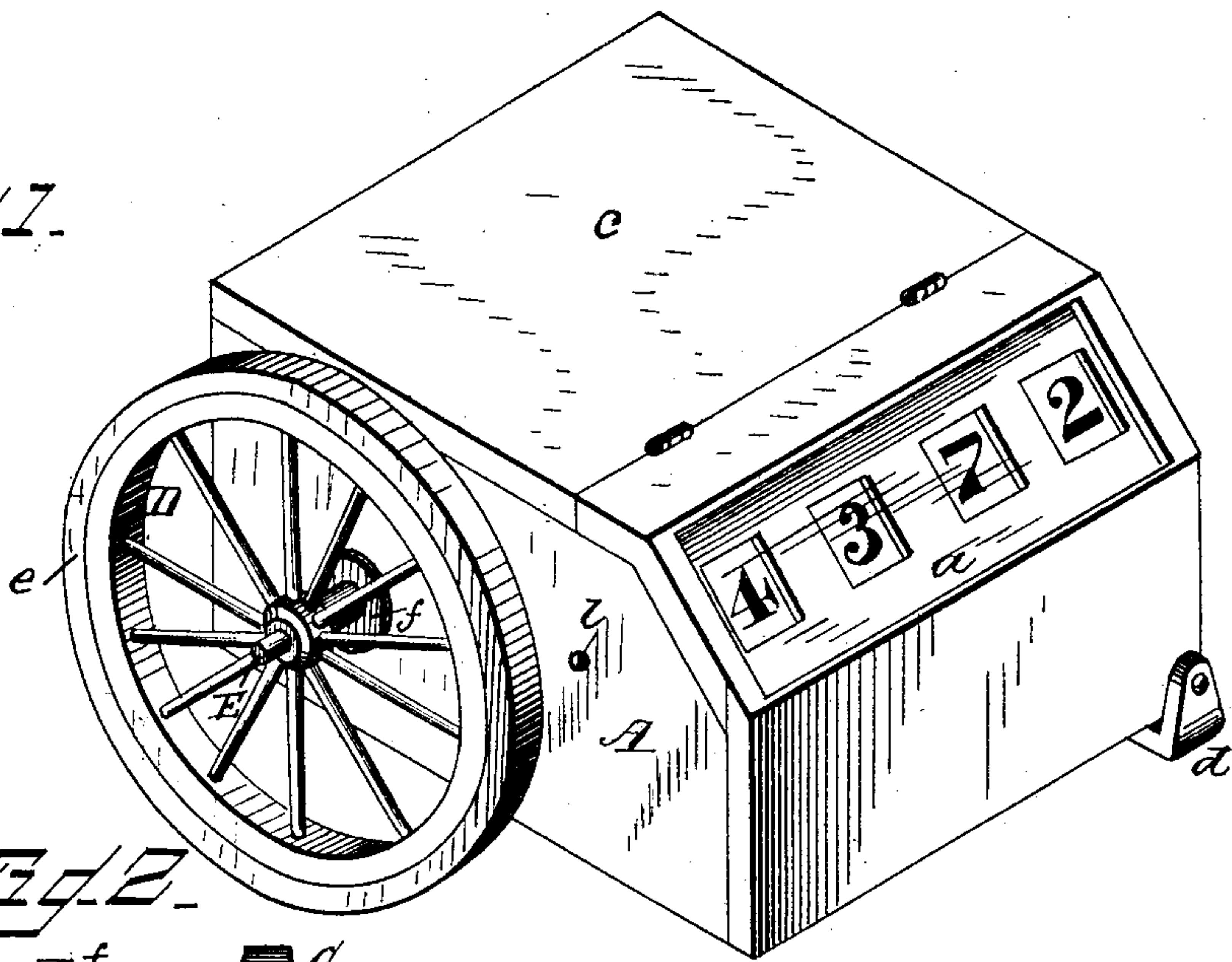
A. E. PALMER.

REGISTERING ATTACHMENT FOR WOOD WORKING MACHINES.

No. 273,383.

Patented Mar. 6, 1883.

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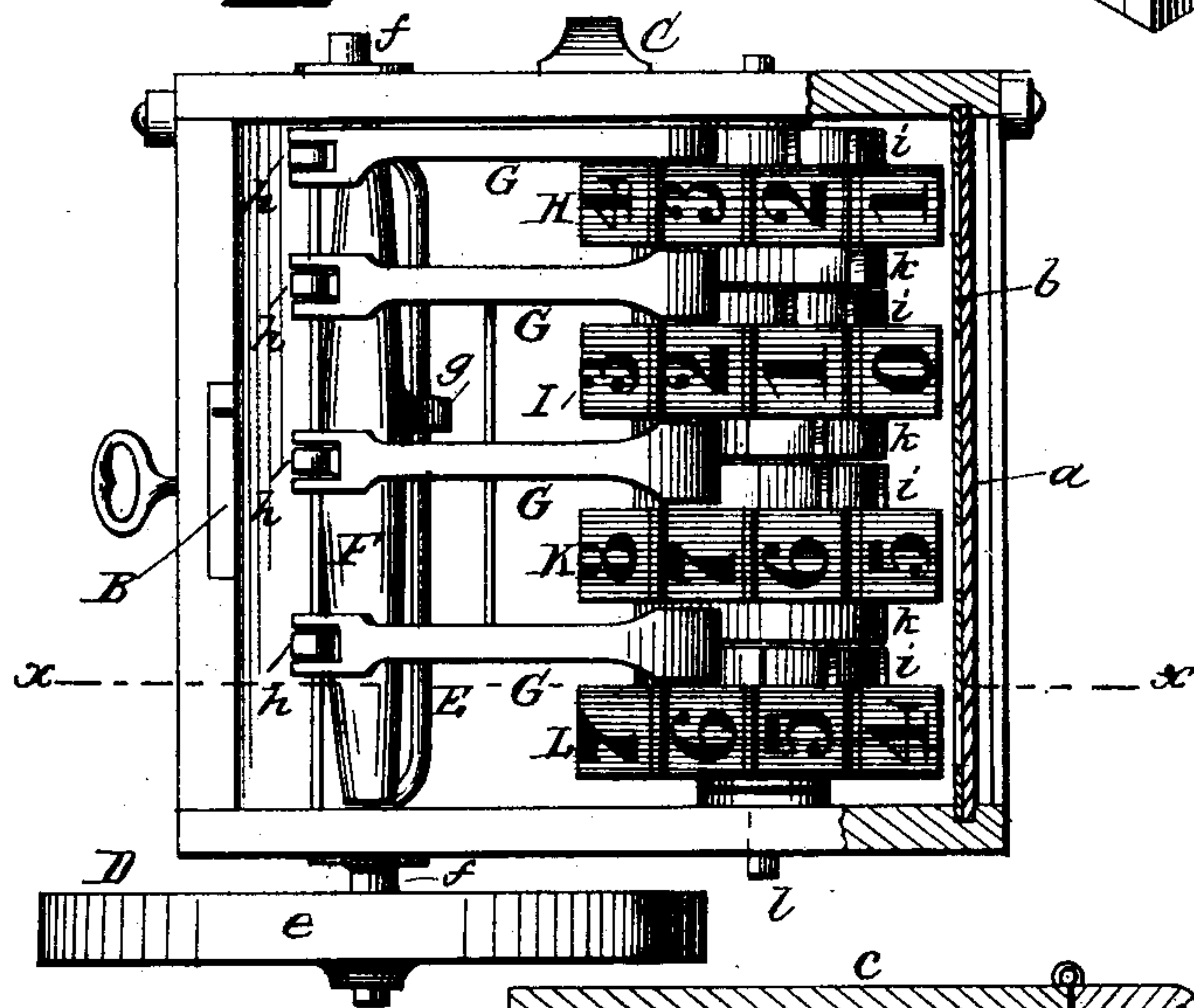


Fig 4

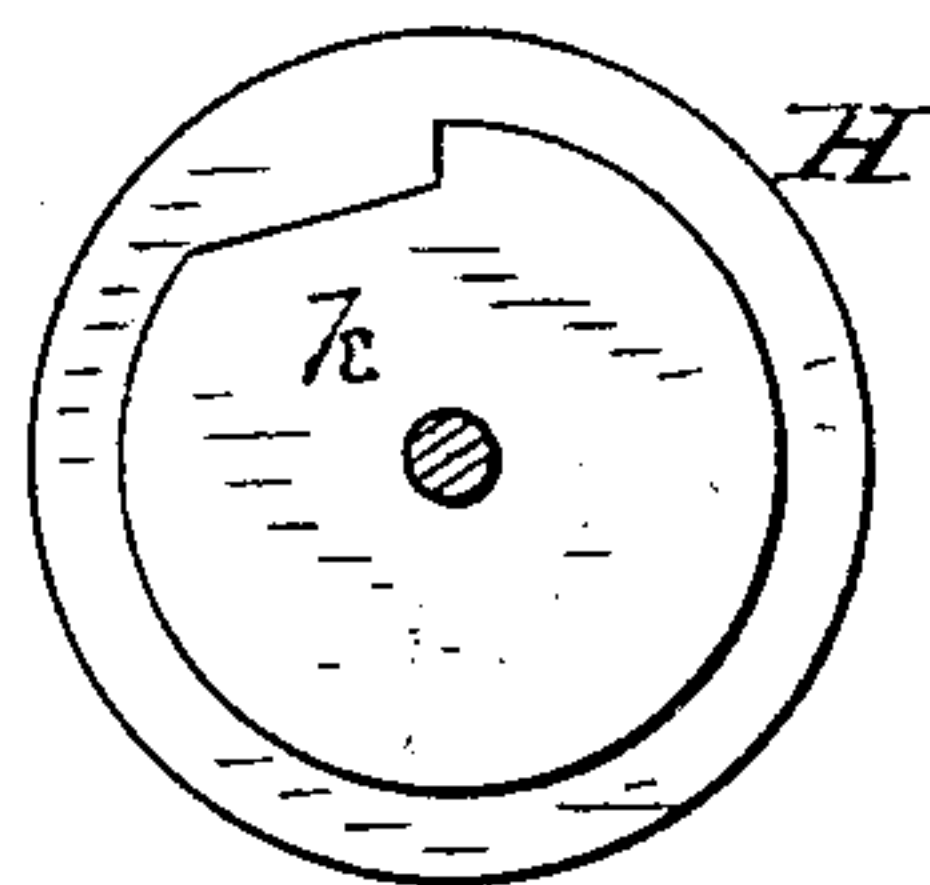
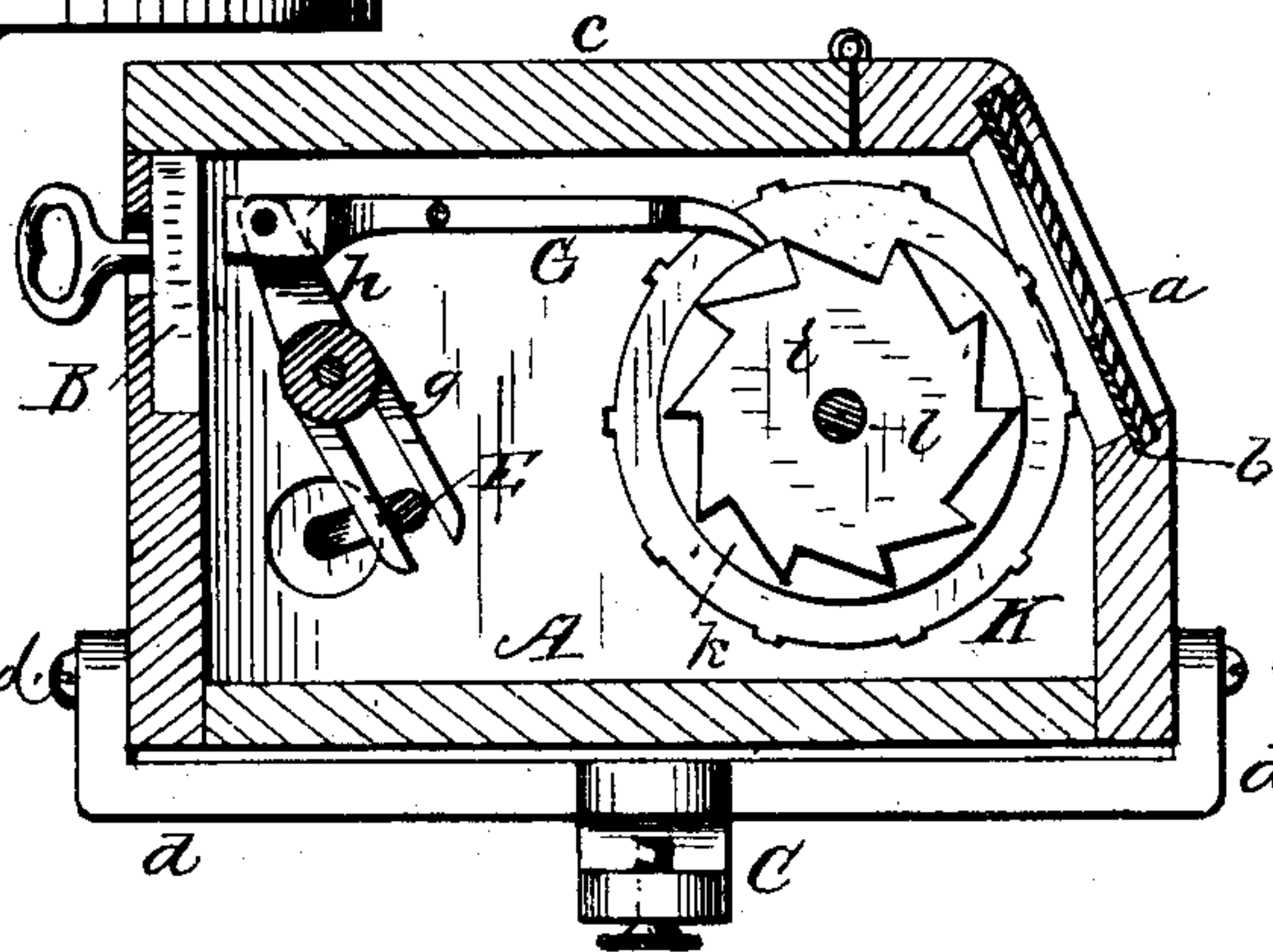


Fig 3



WITNESSES
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ALBERT E. PALMER, OF OWOSSO, MICHIGAN.

REGISTERING ATTACHMENT FOR WOOD-WORKING MACHINES.

SPECIFICATION forming part of Letters Patent No. 273,383, dated March 6, 1883.

Application filed December 21, 1882. (No model.)

To all whom it may concern:

Be it known that I, ALBERT E. PALMER, a citizen of the United States, residing at Owosso, in the county of Shiawassee and State of Michigan, have invented certain new and useful Improvements in Registering Attachment for Wood-Working Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a perspective view of my invention; Fig. 2, a plan view with the top removed; Fig. 3, a longitudinal vertical section through line *x x*, Fig. 2; and Fig. 4, a detail view of one of the registering-disks.

This invention relates to certain new and useful improvements in attachments for wood-working machines to automatically measure and register the number of feet of lumber worked thereby, the invention consisting in the general construction and arrangement of the several operating parts, as will be hereinafter set forth; and the object thereof is to provide a measuring and registering attachment that may be readily connected to or removed from a machine of the character mentioned, and at the same time admit of its having sufficient play to adjust itself to any inequalities or irregularities of the lumber, and thus perfectly measure and register the number of actual feet worked. These objects I attain in the manner substantially as shown in the accompanying drawings and hereinafter described.

In the drawings, A represents a box or casing provided with a transparent front, *a*, in which is set a plate, *b*, having a series of openings, said box or casing being provided with a hinged top, *c*, which may be secured by a lock, B, to prevent any tampering with the interior mechanism. This box or casing is removably connected to the frame of the machine by means of a clamp, C, having right-angular extensions *d* hinged or pivoted thereto, in order to give the same full play and allow the traversing wheel D to adjust itself to any inequalities or irregularities of the lumber, and thus perfectly measure and register the exact number of feet worked by the machine. This traversing wheel D is provided with a rubber tire, *e*, in order to

prevent its slipping when in frictional contact with the lumber, and is keyed to a crank-shaft, E, working in bearings *f*, secured to the box or casing A, said wheel and tire being exactly twelve inches in circumference. As the lumber feeds through the machine, and the wheel D comes in frictional contact therewith, the crank-shaft E imparts an oscillating motion to a shaft, F, by revolving in slotted extension *g* depending therefrom. Extending up from this oscillating shaft F are a series of ears, *h*, to each of which is connected a pawl, G, adapted to engage with ratchet-wheels *i k* upon the side of disks H I K L, having numerical characters upon their outer periphery from 1 to 0, inclusive, said disks revolving on a shaft, *l*, journaled in the box or casing A, and reading from left to right, to indicate units, tens, hundreds, and thousands. The ratchet-wheels *i* are upon the right, and those *k* upon the left, of the disks, the former being provided with ten ratchets, while the latter have but one. As the traversing wheel D makes one revolution, it has passed over one foot of lumber, and at the same time, having imparted motion to the oscillating shaft F through the medium of the crank-shaft E, the pawl G, engaging with the ratchet-wheel *i* of the unit-disk H, acts to propel said disk forward one degree, the disk being thus propelled at each revolution of the wheel E until nine such revolutions have been accomplished. At the tenth revolution the single ratchet in the wheel *k* of the unit-disk registers with one of the ratchets in the wheel *i* of the tens-disk I, and another of the pawls G placed in relation thereto drops into these ratchets, and said tens-disk is propelled forward one degree. This tens-disk, at its tenth revolution, or one-hundredth of the unit-disk, in a like manner registers with the hundredths-disk K, and this in turn with the thousandths-disk L, the numerical characters on the periphery of these disks being discernible at the openings in the plate *b*, set in the transparent front of the box or casing A, thereby at all times plainly showing the number of actual feet of the material passed through the machine, while from the simplicity of the several operating parts, there can be no danger of the attachment getting out of order or failing to properly measure and register the amount of completed work.

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

1. A registering attachment for wood-working machines, consisting of a suitable box or casing having a hinged top provided with means for locking it, a transparent front, and a series of rotating disks having numerical characters thereon, and a traversing wheel
10 connected with pawls for operating the ratchet-teeth upon the sides of the disks, substantially as and for the purpose set forth.

2. The box or casing A, provided with a transparent front, *a*, and hinged lock-engaging
15 top *c*, said box or casing containing a series of rotating disks having numerical characters upon their periphery, operated by a rubber-tired traversing wheel, D, and a pawl-and-ratchet mechanism, substantially as shown,
20 and adapted to be adjustably attached to the frame of a wood-working machine by means of a clamp, C, having right-angular extensions *d*, hinged or pivoted to said box or casing, for the purpose specified.

25 3. The oscillating shaft F, provided with ears *h* and depending extension *g*, in which works a crank-shaft, E, having connected thereto a traversing wheel, D, in combination with the pawls G and disks H I K L, having numerical characters upon their periphery, and
30 provided with ratchet-wheels *i k*, all rotating upon a shaft, *l*, and inclosed within the adjust-

able box or casing A, substantially as and for the purpose described.

4. The traversing wheel D, keyed to a crank-
35 shaft, E, and provided with a rubber tire, *e*, said wheel, with its tire, being of a particular circumference, in combination with the oscillating shaft F, pawls G, and rotating disks H I K L, provided with ratchet-wheels *i k*, placed
40 upon their respective sides, said disks and their operative mechanism being inclosed in a box or casing, A, capable of being adjustably connected to the frame of a wood-working machine, substantially as and for the purpose set forth. 45

5. The box or casing A, having a hinged cover and transparent front, said front having set therein a plate, *b*, provided with a series of openings, in combination with the rubber-tired
50 traversing wheel D, crank-shaft E, provided with a slotted extension, *d*, and ears *h*, the pawls G, rotating numerical disks H I K L, each having ratchet-wheels *i k* upon their respective sides, and the clamp C, having right-angular extensions *d*, all arranged and operating
55 substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ALBERT E. PALMER.

Witnesses:

C. S. GILBERT,

GEORGE F. ROBINSON.