

(No Model.)

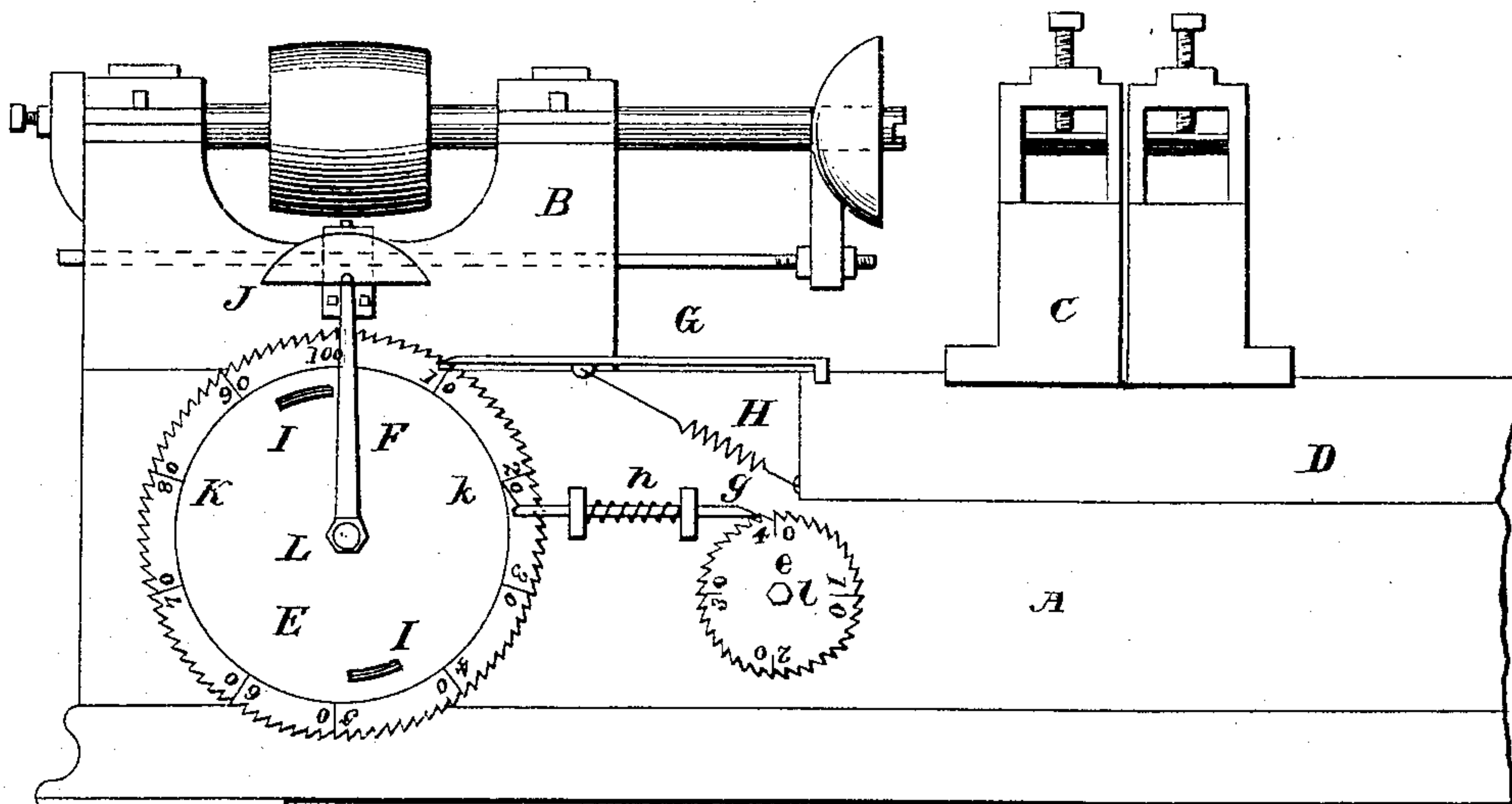
J. D. LAMMEL.

COUNTING ATTACHMENT FOR GAGE LATHES.

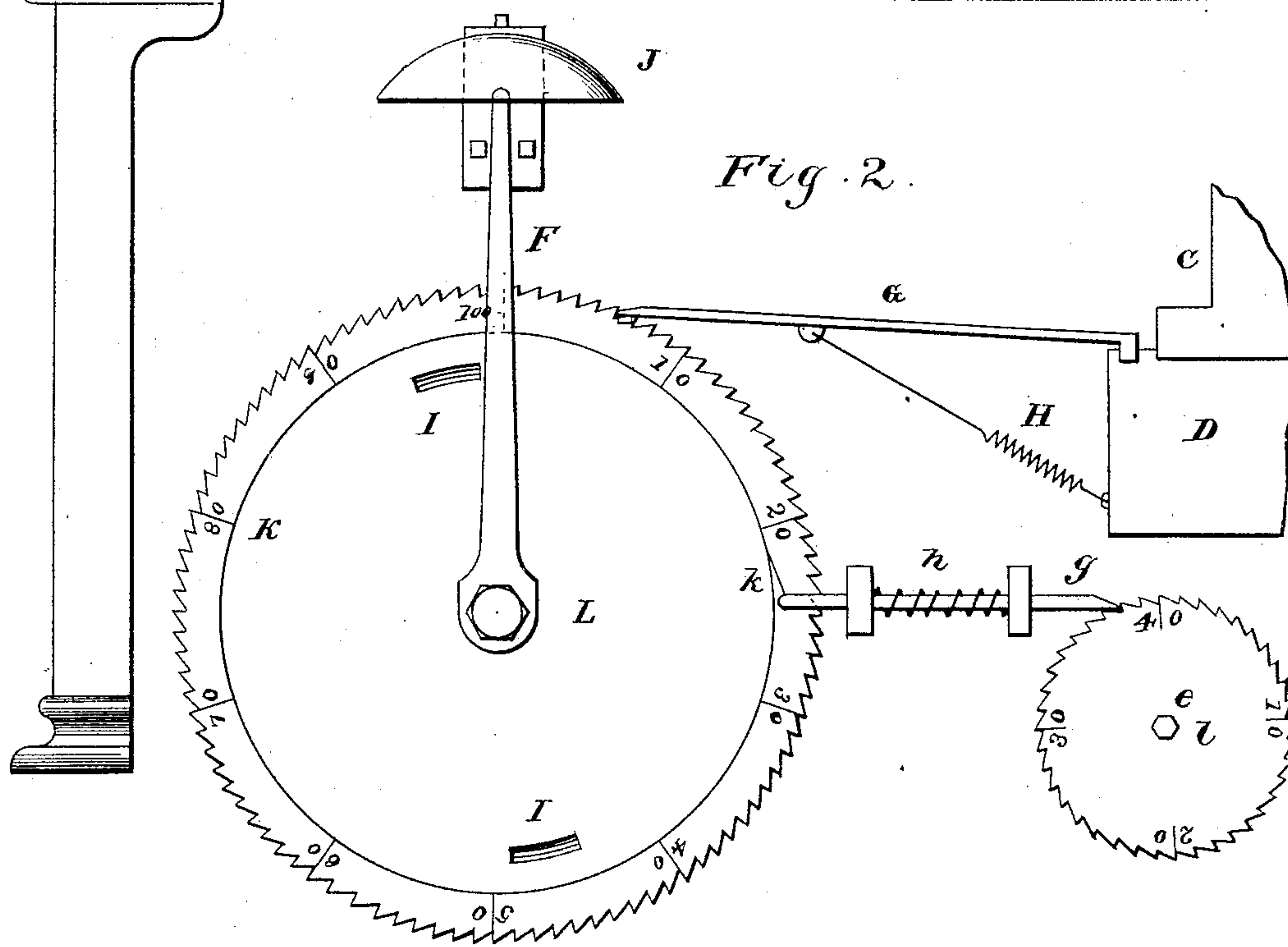
No. 274,950.

Patented Apr. 3, 1883.

*Fig. 1.*



*Fig. 2.*



Witnesses:  
 Silas Bullard  
 Henry S. Smith

Inventor.  
John D. Lammell  
per his Att. G. H. Albee.

# UNITED STATES PATENT OFFICE.

JOHN D. LAMMEL, OF MENASHA, WISCONSIN.

## COUNTING ATTACHMENT FOR GAGE-LATHES.

SPECIFICATION forming part of Letters Patent No. 274,950, dated April 3, 1883.

Application filed December 27, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN D. LAMMEL, a citizen of the United States, residing at Menasha, in the county of Winnebago and State of Wisconsin, have invented a new and useful Counting-Machine to be Applied to Gage-Lathes, of which the following is a specification.

My invention relates to a counting attachment applicable to all varieties of gage-lathes, by which the number of pieces which are turned upon the lathe are correctly counted without attention by the operator. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side view of part of the lathe-frame, the head-block, tool-holder, and the counting mechanism attached. Fig. 2 is a side view of the counting mechanism complete detached from the lathe, and illustrated upon a larger scale than in Fig. 1.

Similar letters refer to similar parts in the several views.

A is the frame of lathe.

B is the head-block.

C is the tool-holder, which is moved along upon the way D either by the hand of the operator or any self-feeding mechanism which may be suited to the requirements of the material being turned.

E is a ratchet-wheel revolving on the pin L, and having upon its circumference a series of teeth, numbering fifty, one hundred, or more, as is best suited to the requirements of the material being operated upon. One hundred will usually be the number adapted to the convenience of the operator.

G is a pawl, resting one end upon the way D, the other upon wheel E, and retained in its position by lips upon either end inclosing the sides of D and E, and also by the spring H.

I I are cams cast upon or secured to the face of wheel E.

J is a bell attached to head-block B.

F is a spring attached to pin L, upon which wheel E revolves, said spring passing close to face of wheel E and connected with the hammer which strikes the bell J.

Attached to the lathe near the wheel E is a toothed wheel, *e*, revolving upon the pin *l*. Wheel *e* has upon its circumference a series of teeth, numbering forty, fifty, or indicating as many units as the capacity of the lathe requires of hundreds in one day's operation. Upon wheel E is a circular rib, K, and upon its circumference is the cam *k*.

*g* is a sliding pawl, which engages with the teeth of wheel *e*, and has a spring, *h*, which forces it against the rib K.

The operation is as follows: As the tool-holder C is completing its final forward movement in finishing the article being operated upon it comes in contact with the pawl G, moving it longitudinally, thus revolving wheel E one tooth. This is repeated until fifty pieces are turned, or as many as the teeth in wheel E, between cams I, when the cams I, passing under spring F, suddenly release it, allowing the hammer to strike the bell, thus calling the attention of the operator, who can remove those turned and proceed as before. At each revolution of E the cam *k*, pushing the sliding pawl *h*, resting upon the teeth of *e*, causes said wheel *e* to revolve one tooth. Thus will be indicated upon the face of *e* the number of hundreds and upon E the number of units which have been completed at any time during the day, without attention by the operator, aside from so placing the wheels at beginning to operate that each will commence the enumeration at unity.

The counting mechanism can be placed in any position where convenient for the operator, so that the pawl G can be operated upon by the final forward movement of the tool-holder, thereby preventing the exceedingly imperfect and partly-turned pieces from being counted.

I am aware that previous to my invention counting-machines have been applied to a variety of purposes. I do not therefore claim a counting-machine in its broadest sense; but

What I do claim, and desire to secure by Letters Patent, is—

1. The combination, in a gage-lathe for turning articles of wood or other material, of the tool-holder C, the wheel E, cams I, combined spring and bell-hammer L, bell J, pawl G, and spring H, operating in the manner described, and for the purpose set forth.

2. The combination of the tool-holder C, the wheel E, cams I, combined spring and bell-hammer L, bell J, pawl G, and spring H with the wheel *e*, pawl *g*, and spring *h*, substantially as described.

JOHN D. LAMMEL.

Witnesses:

CHAS. R. SMITH,  
GEO. H. ALBEE.