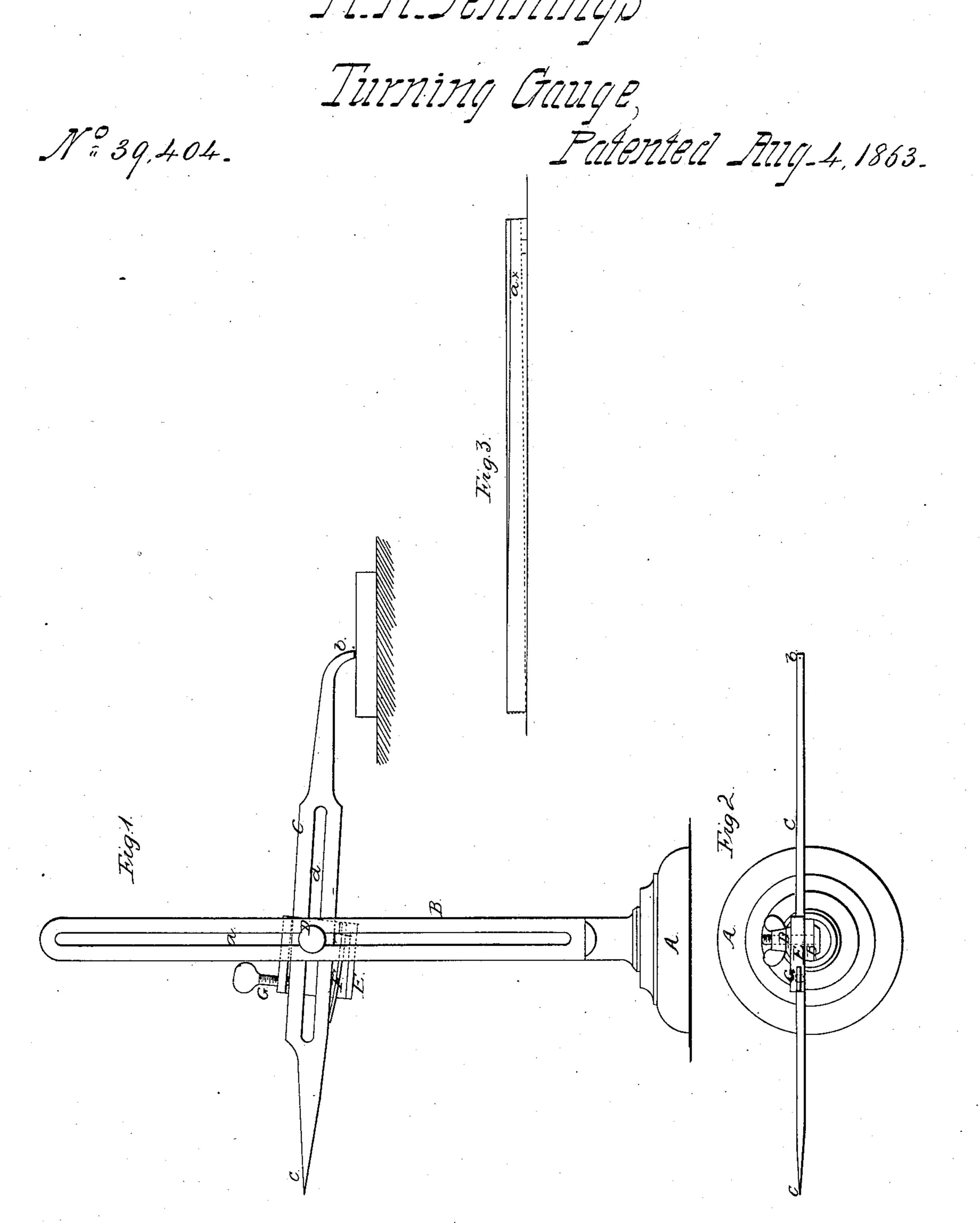
N° 39,404.



Witnesses.

Inventor H. Hekungs her illum &

## United States Patent Office.

H. H. JENNINGS, OF NEW HAVEN, CONNECTICUT.

## IMPROVED GAGE FOR METAL-PLANING.

Specification forming part of Letters Patent No. 39,404, dated August 4, 1863.

To all whom it may concern:

Be it known that I, H. H. Jennings, of New Haven, in the county of New Haven and State of Connecticut, have invented a new and improved gage for adjusting work or articles to be planed on the beds of metalplaning machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is an elevation of my invention; Fig. 2, a plan or top view of the same; Fig. 3, a detached side view of a piece of work to be planed and adjusted by my invention.

Similar letters of reference indicate corre-

ponding parts in the several figures.

This invention relates to an improvement in gages, such as are employed on metalplaning machines for adjusting work horizontally or inclined on their beds, as may be required.

The object of the invention is to obtain a gage of the class specified which may be adjusted or manipulated with far greater nicety than the ordinary ones in use, and with much greater facility, so as to economize in time in adjusting the work on the bed.

To this end the invention consists in the application of a spring and set-screw to the index-arm of the gage, as hereinafter set forth.

To enable those skilled in the art to fully understand and construct my invention, I

will proceed to describe it.

A represents a base, in which a flat vertical slotted bar, B, is permanently fitted, the slot a extending nearly the whole length or height of the bar B, and C represents an index-arm, which is also of flat form, one end terminating in a hook or curve, b, and the other end in a point, c, as shown clearly in Fig. 1. This index-arm has also a longitudinal slot, d, made in it, through which and the slot a of the bar - B a set-screw, D, passes, said set-screw also passing through a box, E, in which the indexarm C is fitted and allowed to slide freely. In this box E a spring, F, is secured, which presses against one side of the index-arm C, and through the opposite side of the box E a setscrew, G, passes, which bears against the index-arm, as shown clearly in Fig. 1.

From the above description it will be seen

ered on the vertical bar B, and secured at any desired point by means of the set-screw D; and, besides this adjustment of the index-arm, it will be seen that the ends of the latter may be raised and lowered by turning the set-screw G, which presses against the index-arm and causes the spring F to yield. This second adjustment of the index-arm admits of the ends of the latter being moved very nicely, and obviates the necessity of the repeated trials which have to be made when the sliding of the index-arm on the bar B is alone depended upon for the adjustment of the former.

In Fig. 1 a piece of work is shown in red outline, with the curved end b of the indexarm over it. The implement is moved by hand around the bed of the planing-machine, and the end b is the index by which the work

is adjusted in a horizontal position.

In Fig. 3 a piece of work is shown which is to have its upper surface planed to form an inclined surface. The work has a line,  $a^{\times}$ , scratched at each side of it to serve as guides for the adjustment of the work. In this adjustment the point c of the index-arm C is used, and the work is wedged up until the point c will tally or coincide with the lines at each side of the work, the gage being shoved along the bed of the planing machine at each side of the work. By this means the work is adjusted in an inclined position, and the upper surface of the work will, of course, be planed off level, so as to have an inclined surface when the lower side of the work rests on a level bed.

I do not claim the index arm C and upright bar B, for they constitute the gage in com-

mon use; but,

Having thus fully described my invention, what I do claim as new, and desire to secure

by Letters Patent, is—

The spring F and set screw G, in combination with the box E, index-arm C, and upright bar B, all arranged substantially as shown, to form an improved implement or device for the purpose specified.

H. H. JENNINGS.

Witnesses:

RUFUS S. PICKETT, HENRY J. HUBBARD.