

(No Model.)

J. N. KAUFHOLZ.

SLOTTING ATTACHMENT FOR METAL PLANERS.

No. 360,530.

Patented Apr. 5, 1887.

Fig. 1.

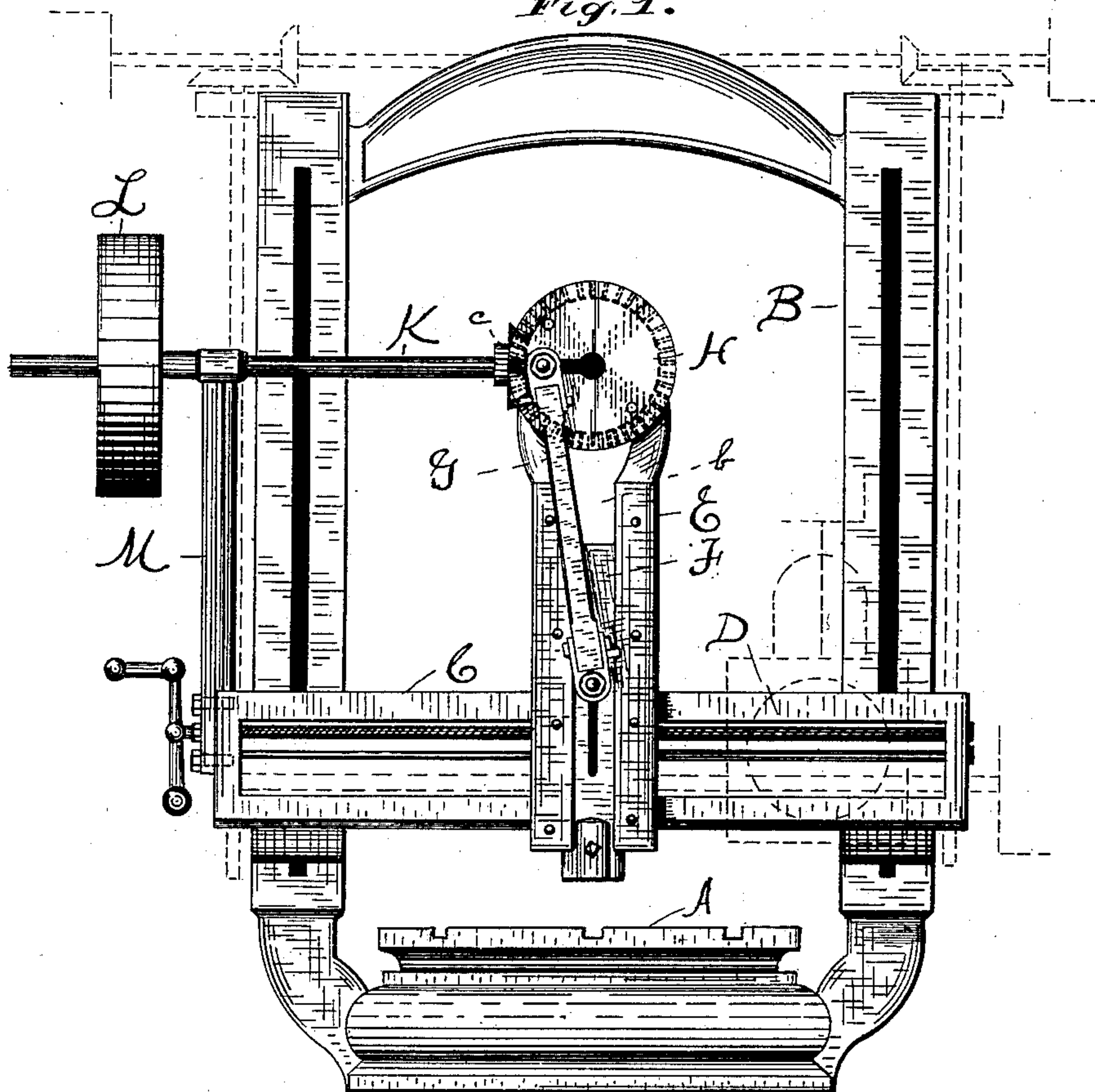
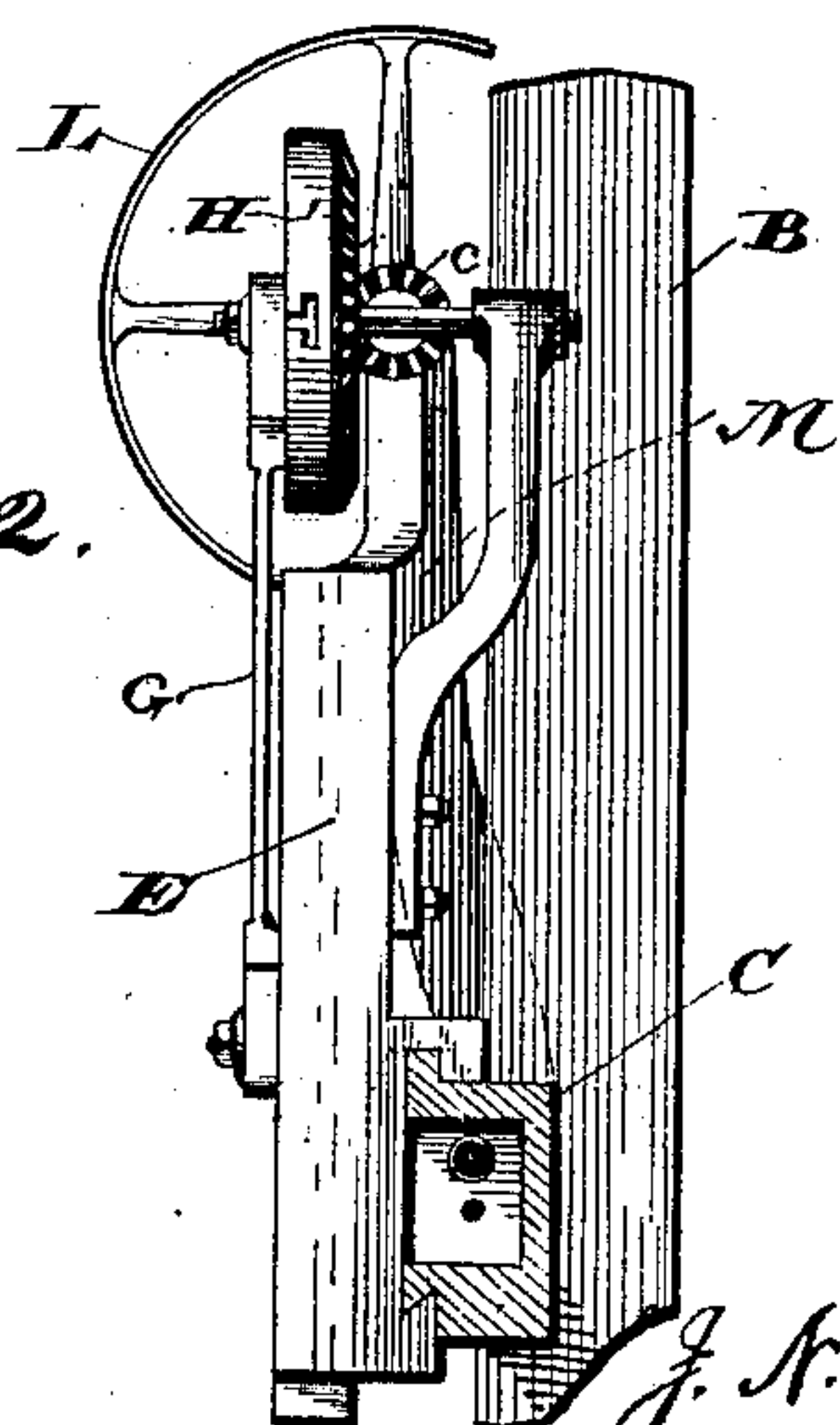


Fig. 2.



WITNESSES:

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SLOTING ATTACHMENT FOR METAL-PLANERS.

SPECIFICATION forming part of Letters Patent No. 360,530, dated April 5, 1887.

Application filed June 14, 1886. Serial No. 205,102. (No model.)

To all whom it may concern:

Be it known that I, JOHN N. KAUFHOLZ, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Slotting Attachments to Metal-Planing Machines; and I do hereby declare the following to be a description of the same, and of the manner of constructing and using the invention, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it appertains to construct and use the same, reference being had to the accompanying drawings, forming a part of the specification, the principle of the invention being herein explained and the best mode in which I have contemplated applying that principle, so as to distinguish it from other inventions.

The object of this invention is to provide a slotting attachment for a metal-planing machine, which attachment shall be mounted on the cross-head, and shall be adapted to vertically reciprocate the slotting-tool in a plane at right angles to the bed of the planer, the construction and adaptation being such that the article which is to be slotted may rest on the bed of the planer beneath the slotting attachment, and the latter may operate its slotting-tool in vertical reciprocation, said attachment being movable on the cross-head of the planing-machine, and adapted, when not in active use, to be moved to one end of said cross-head, so as then to be out of the way when the metal-planing is to be carried on.

In the drawings, Figure 1 is a front end elevation of the bed and upper portion of a metal-planing machine, showing my slotting attachment in operative central position thereon. Fig. 2 is a detail view showing the upright slotting attachment in side elevation.

The bed A of the planing-machine, together with the upright frame B, the cross-head C, the planer-head D, and the means for adjusting said cross-head and planer-head, may all be of the usual and well-known construction,

as shown. Mounted on the cross-head is the vertical frame E, having the slideway *b* formed in its face. Fitted in said slideway, and having free vertical movement therein, is the slide F, which constitutes the tool-holder for the slotting-tool. Pitman G connects said slide to bevel-gear crank-disk H, which latter is driven by bevel gear-wheel *c* on shaft K. Said shaft is provided with band-wheel L, so that the shaft may be driven by any suitable power. Upright arm M is secured at its lower extremity to one end of the cross-head, while its upper extremity furnishes sleeve-bearing for said shaft.

When the slotting attachment is not in active use, it may be slid along the cross-head, so as to be close to said upright arm, the shaft sliding freely in its sleeve-bearing. The slotting attachment will thus be located out of the way, so as not to interfere with the use of the planing-machine in its ordinary function as a planer.

It will be observed that the entire attachment is connected solely to the cross-head, and hence the latter is not interfered with in its customary adjustments.

What, therefore, I claim is—

1. The combination, with a metal-planing-machine cross-head, of an upright slotting attachment mounted thereon, and mechanism which operates the slotting-tool holder in vertical reciprocation, substantially as set forth.

2. The combination, with a metal-planing-machine cross-head, of an upright frame mounted thereon, a slotting-tool-holder slide adjustable in said frame, and actuating mechanism which operates said tool-holder slide in vertical reciprocation, substantially as set forth.

In testimony that I claim the foregoing to be my invention I have hereunto set my hand this 9th day of April, A. D. 1886.

JOHN N. KAUFHOLZ.

Witnesses:

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J. G. HALL, Jr.