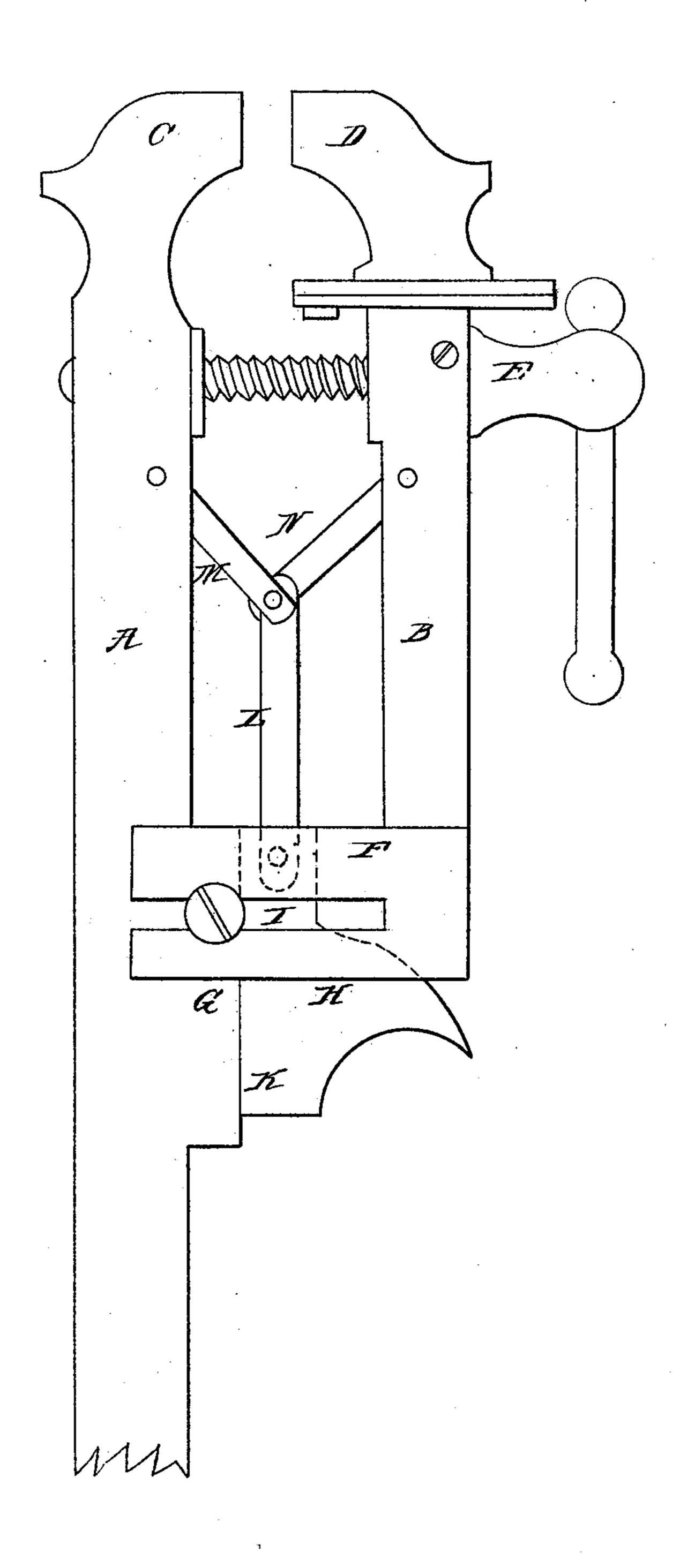
S. IIISSINGET,

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Nº 9/4,192.

Patented Reb.5, 1856.



## UNITED STATES PATENT OFFICE.

SAMUEL GISSINGER, OF ALLEGHENY, PENNSYLVANIA.

## BENCH-VISE.

Specification of Letters Patent No. 14,192, dated February 5, 1856.

To all whom it may concern:

Be it known that I, Samuel Gissinger, of Allegheny city, Pennsylvania, have made Improvements in Bench-Vises; and I do 5 hereby declare the following to be a full, clear, and exact description of the same, reference being had to the drawing lettered to correspond with and made part of this specification.

(A) is the long and (B) the short limb. (C) is the fixed jaw of the long and (D) the horizontally vibrating jaw of the short

limb.

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(E) is the ordinary screw and its fixtures. is a slide, projecting from each side of the short limb, with a slot to work in connection with a screw on each side of the long limb. This slide is at the bottom of the short limb, and the screw is upon a pro-<sup>20</sup> jection (G) on the long limb, the face of the projection being parallel or in the same vertical plane with the face of the fixed jaw (C) of the long limb. Against the face of (G) a wedge (H) works, the wedge point being toward the short limb so that the inclined face of the wedge works with the inclined face of the lower end of the short limb and the butt of the wedge against the face of (G) of the long limb. This wedge passes up between the limbs and the slide (F) and has a vertical upward projection of small size compared with another projection descending below; both projections (I) and (K) being extensions upward and downward of the butt of the wedge.

The upward projection connects by a link

(L) with the arms (M, N), which again connect by a pivot joint each with the long and short limbs at a suitable distance below the ordinary screw (E). These arms and 40 link hold the wedge up between the limbs and slide; and the projection (G) and the butt of the wedge are kept face to face by the superior weight of the descending projection (K); and the projection (G) being 45 in the same vertical plane, as to its face, with the face of the fixed jaw (C), the parallelism and practical operation of the wedge is thereby secured so that the bite on the inclined face of the wedge by the short 50 limb is always, in point of distance desired between the limbs at that level, in correspondence with the action of the screw E and the parallelism of the vise secured, the projection (G) and the upper lighter 55 and the lower heavier (each to each) projections (I) and (K) of the wedge (H) by the contact of their faces, and the extent of their faces vertically, preventing the tripping of the wedge as has hitherto been the 60 case.

What I claim as my improvement in bench-vises is—

The projection (G) and the projections (I) and (K) arranged as described and for 65 the purpose set forth.

SAMUEL GISSINGER. [L. s.]

Witnesses:

James J. Johnston, John S. Kingsland, C. Kingsland.