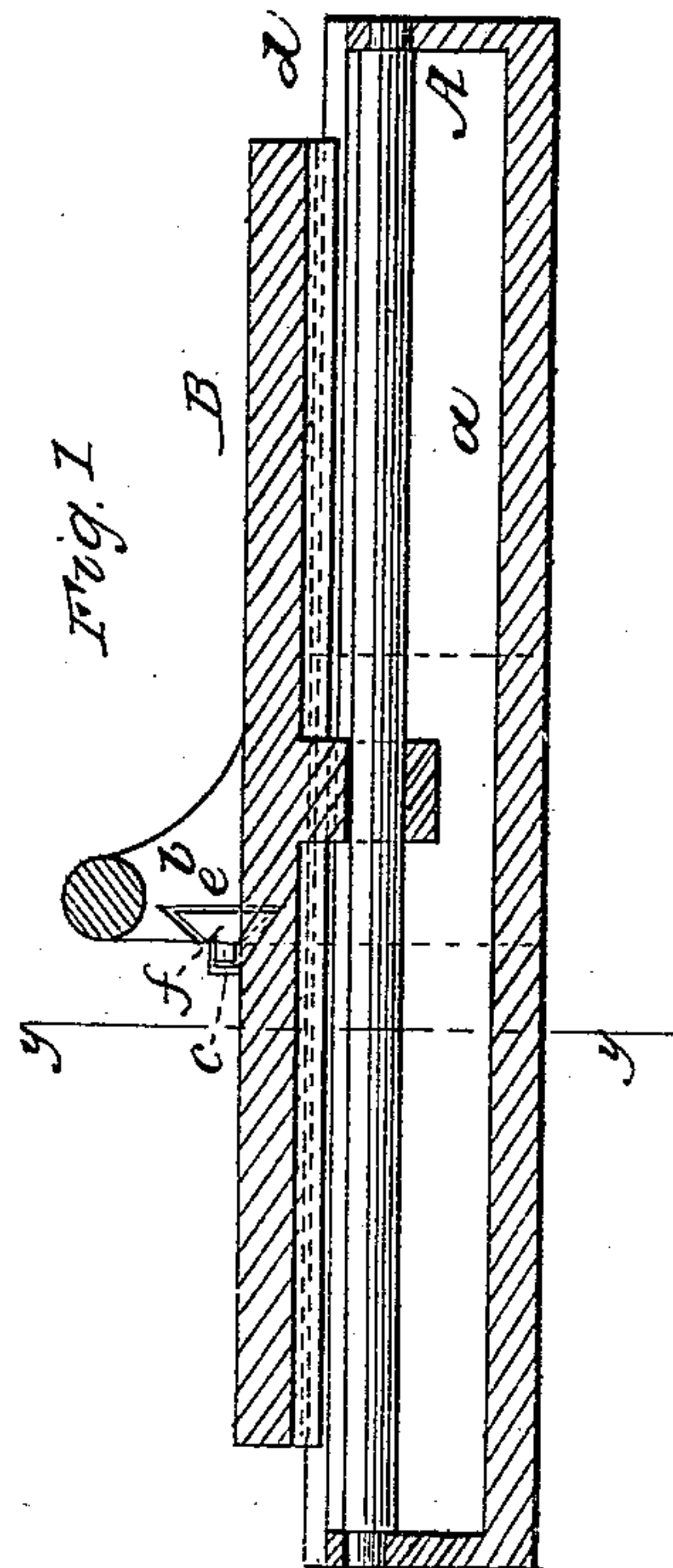
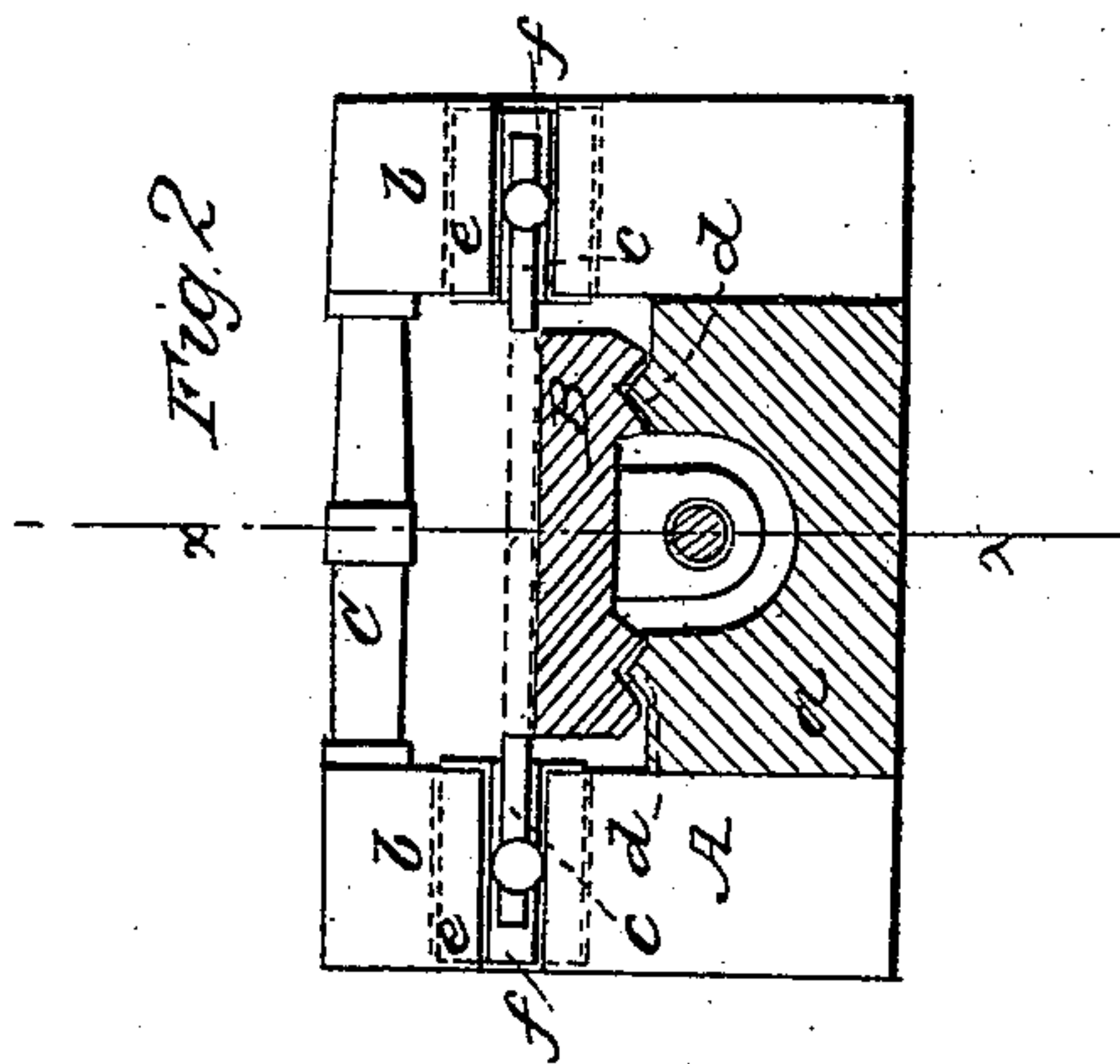


T. F. ROWLAND,
Planing Metals.

No. 36,624.

Patented Oct. 7, 1862.



witnesses
James Baird
J. H. Edgson

Inventor:
T. F. Rowland

UNITED STATES PATENT OFFICE.

T. F. ROWLAND, OF GREEN POINT, NEW YORK.

IMPROVEMENT IN MACHINES FOR PLANING METALS.

Specification forming part of Letters Patent No. 36,624, dated October 7, 1862.

To all whom it may concern:

Be it known that I, T. F. ROWLAND, of Green Point, in the county of Kings and State of New York, have invented a new and useful Machine for Planing the Two Edges or Sides of Metal Plates Simultaneously or at One Operation; 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 a side sectional view of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a transverse vertical section of the same, taken in the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts in the two figures.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the framing of the machine, which is composed of a rectangular hollow base, *a*, having an upright, *b*, at each side of it, the upper ends of which are connected by a cross-bar, *c*.

B represents a sliding bed, which is fitted on two parallel ways, *d d*, having a longitudinal position on the base *a*. This bed may be operated or moved by a screw or other suitable means.

In each upright *b* there is made a dovetail recess, *e*, in which slides *f f* are fitted or placed. To each slide *f* there is attached horizontally a cutter, C, as shown clearly in Fig. 2. These cutters may be adjusted horizontally by moving their slides.

The operation is as follows: The plate to be planed (shown in red outline) is placed on the bed B, its sides being parallel with the sides of the bed, and the cutters C C being properly adjusted, the bed B is moved along, and the two cutters plane both edges or sides of the plate simultaneously or at one operation.

This invention will greatly assist the finishing or jointing of metal armor-plates for vessels, and will perform the work in a perfect as well as in an expeditious manner, and also expedite the application of such plates to the vessel, as well jointed plates may be fitted to the vessel with much greater facility than those with rough or uneven sides. All chipping or manual jointing by a chisel will be avoided, and the work when completed have a neater and more uniform appearance than those previously jointed by hand.

I do not claim, broadly, the attachment of cutters to planing-machines upon both sides of the bed, so as to operate simultaneously upon both sides of the material that is to be cut; but,

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

Fitting the cutter C within the uprights *b*, in the manner herein shown and described.

T. F. ROWLAND.

Witnesses:

EDWD. W. HODGSON,
JAMES LAIRD.