

S. Davis,

Metal Punch,

Patented Feb. 21, 1840.

N^o 1,495.

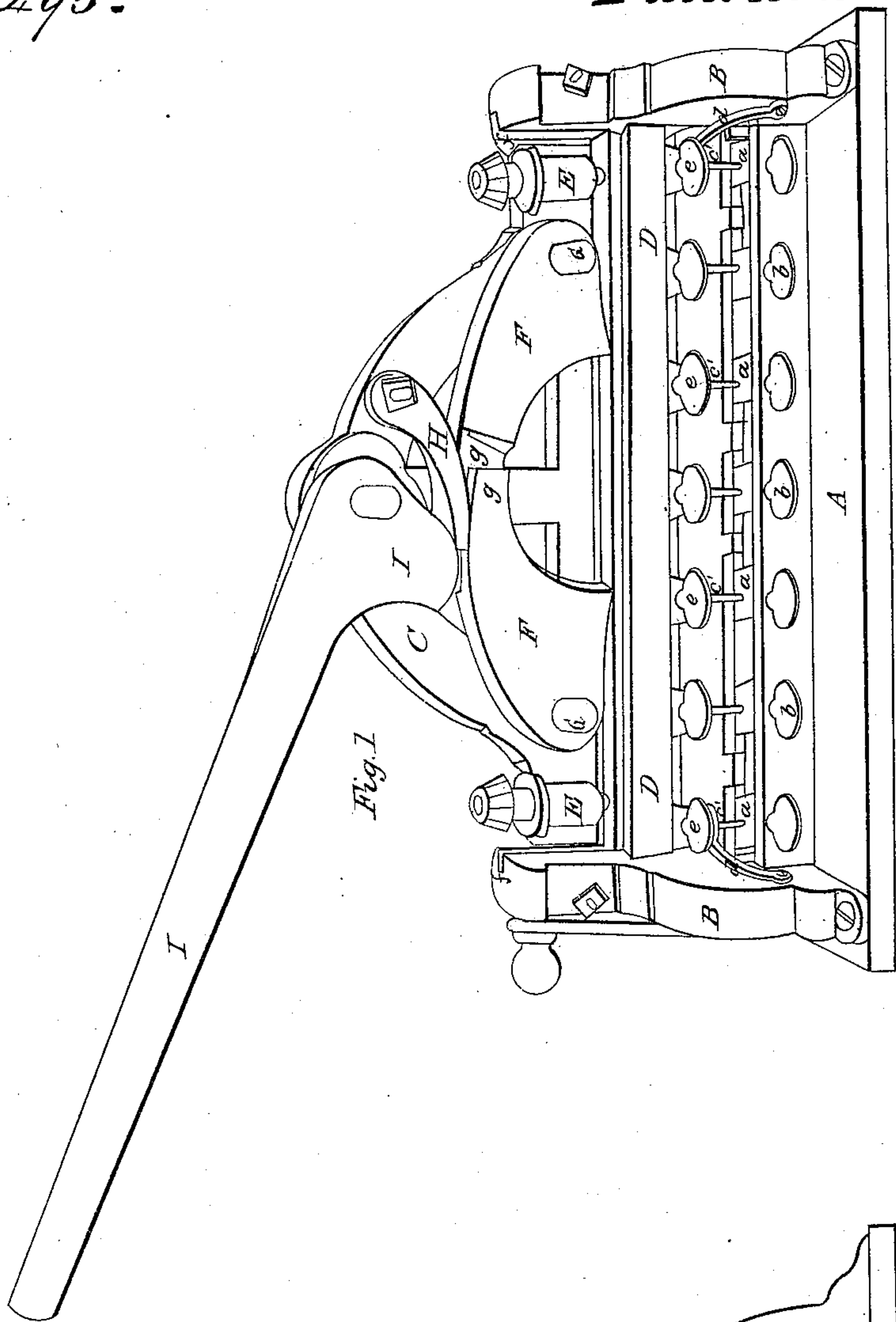
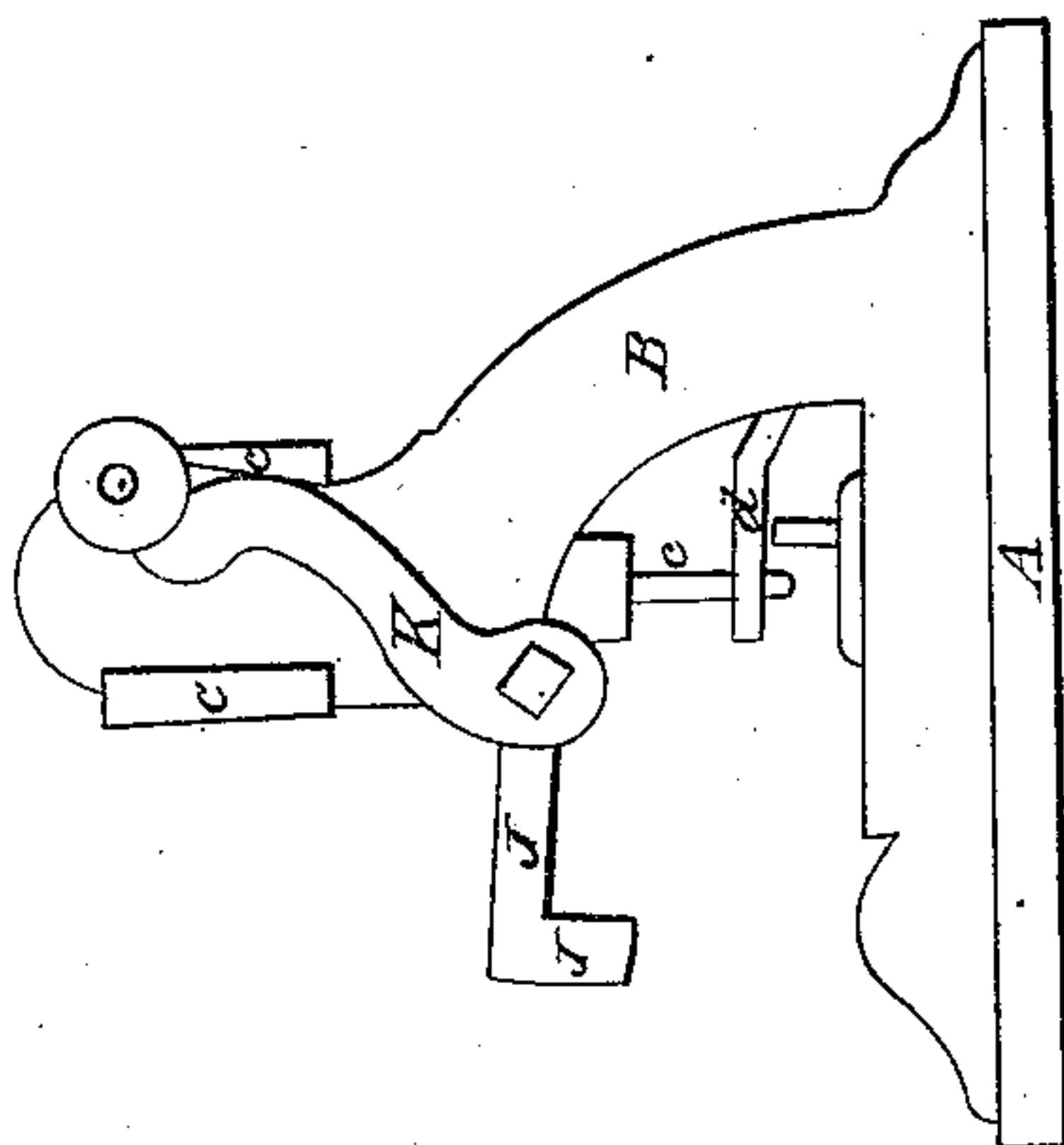


Fig. 2



UNITED STATES PATENT OFFICE.

SAMUEL DAVIS, OF MIFFLIN, PENNSYLVANIA.

MACHINE FOR PUNCHING SHEETIRON FOR MANUFACTURING STOVEPIPES AND OTHER PURPOSES.

Specification of Letters Patent No. 1,495, dated February 21, 1840.

To all whom it may concern:

Be it known that I, SAMUEL DAVIS, of the town of Mifflin, in the county of Juniata and State of Pennsylvania, have invented an improvement in the manner of constructing machines for punching sheetiron to admit the rivets in the manufacturing of stovepipes and for other purposes; and I do hereby declare that the following is a full and exact description thereof.

Figure 1, is a side, and Fig. 2, an end, view of my machine, the bed and frame of which I make of cast-iron.

A, A, is the bed, or basis, of the machine; B, B, the ends, and C, C, two connecting cheek pieces connecting the two ends, and sustaining the fulcra of the main lever and the cams. In Fig. 1, one of these cheek pieces is removed for the purpose of showing the manner in which the lever and cams are arranged.

a, a, a, are dies fixed in place by the thumb screws b, b, b. To these diès are adapted steel punches c, c, c. The two end punches c', c', I pass through holes in two guide pieces d, d, which serve to steady the slide as it moves up and down.

D, D, is the slide which holds the punches c, c, c, affixed in its lower side by the screws e, e, e. The ends of the slide are furnished with tongues which enter the grooves f, f, in the end pieces. When not borne down by the lever, the slide is raised by spiral springs contained in the boxes E, E, or by springs acting in any convenient way.

Two cams F, F, work on fulcra G, G, sustained by the cheek pieces C, C. These cams are halved together at their upper sides g, g, so that the bearing piece H, which is intermediate between them and the lever,

may rest upon both of them, and force them down simultaneously. The main lever I, rests upon the bearing piece, and, when brought down, causes the cams F, F, to force the slide down.

There is an adjustable gage piece at each end of the frame to serve as stops, or bearings, for the sheet metal. One of these is shown at h, Fig. 2.

To keep the plate from rising in withdrawing the punches, I employ a check plate J, J, sustained on pivots at each end of the machine, and turned up and down by means of the winch K. It is represented in the drawing as turned up, but when the winch is brought around a quadrant of a circle it will rest against the punched plate and keep it from rising as the punches are withdrawn.

Having thus fully described the manner in which I construct and use my machine for punching a row of holes, simultaneously in a metallic plate, what I claim as my invention therein, and desire to secure by Letters Patent, is—

The mode in which I have combined the whole together so as to produce the intended effect, that is to say, I do not claim the punches, or dies, or either of the parts described taken individually; but I do claim the particular manner in which I have combined, and arranged, the main lever I, the bearing piece H, the cams F, F, and the check plate J, J, so as to perform their respective offices, substantially as herein set forth.

SAMUEL DAVIS.

Witnesses:

THOS. P. JONES,
THO. WALLACE.