

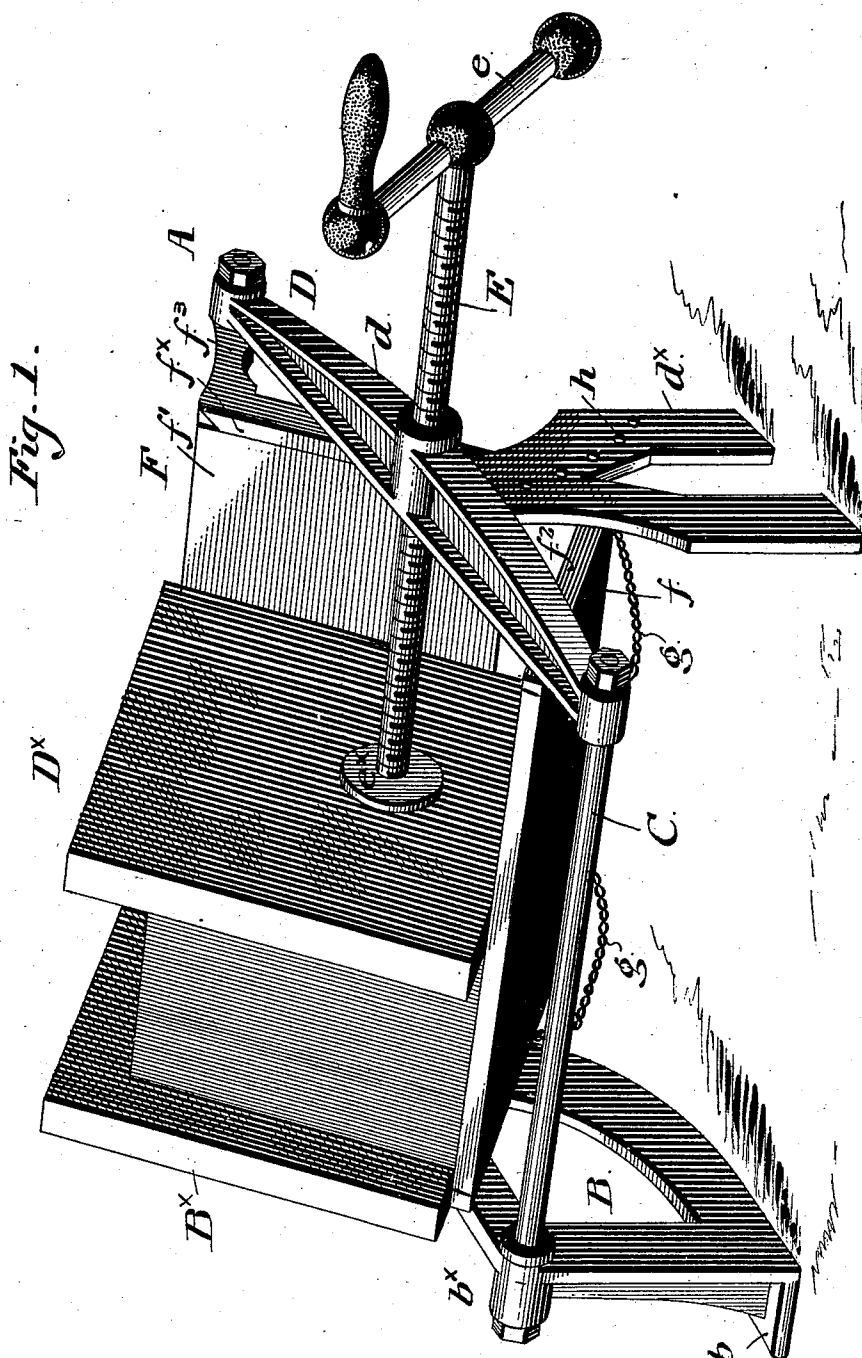
(No Model.)

2 Sheets—Sheet 1.

J. BEDDOW.
MACHINE FOR FORMING TABLETS.

No. 517,153.

Patented Mar. 27, 1894.



WITNESSES:

O. F. Chagles.

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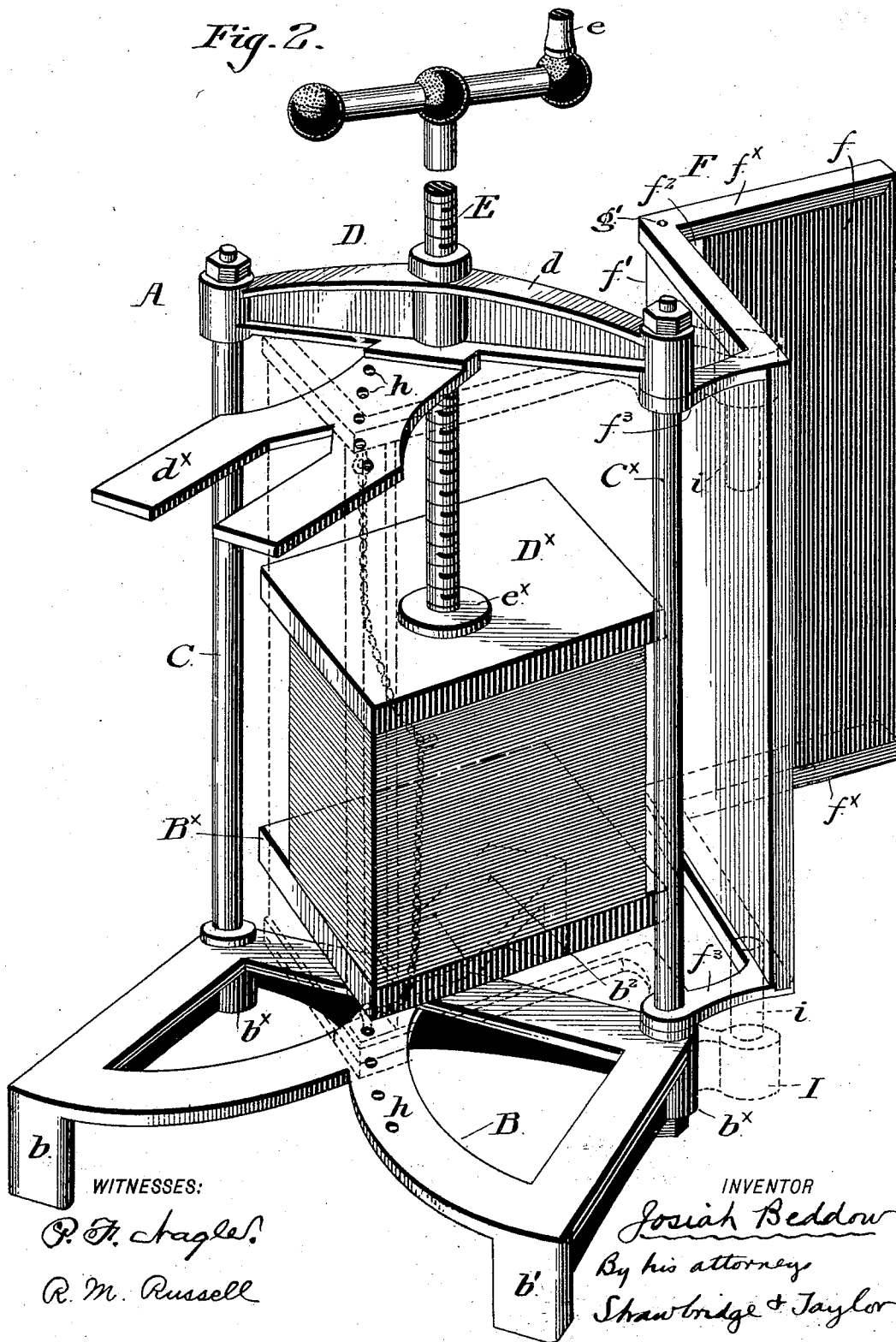
By his attorneys
Strawbridge & Taylor

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Fig. 2.



UNITED STATES PATENT OFFICE.

JOSIAH BEDDOW, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE
THOMAS W. PRICE COMPANY, OF SAME PLACE.

MACHINE FOR FORMING TABLETS.

SPECIFICATION forming part of Letters Patent No. 517,153, dated March 27, 1894.

Application filed November 29, 1892. Serial No. 453,550. (No model.)

To all whom it may concern:

Be it known that I, JOSIAH BEDDOW, a citizen of the United States, residing in Philadelphia, in the county of Philadelphia, in the State of Pennsylvania, have invented an Improved Machine for Forming Tablets of Paper, of which the following is a specification.

My invention, although of utility in various applications, relates especially to mechanism by the aid of which a number of blanks of paper are, first, assembled in position in which selected edges of all are even or exist in a common plane; second, secured in such position; and, third, exposed as to their even edges to allow of the application of suitable adhesive materials to bind the blanks together to form tablets.

It is the object of my invention to provide an apparatus of the foregoing character of simple and inexpensive construction, and capable of being operated with greater ease than such apparatus as heretofore constructed.

In the drawings I show and herein I describe a good form of a convenient embodiment of my invention, the particular subject matter claimed as novel being hereinafter definitely specified.

In the drawings, Figure 1 is a view in perspective of an apparatus conveniently embodying my invention, and shown as resting upon its side, or in horizontal position. Fig. 2 is a similar view, showing the apparatus as resting upon its end, or in vertical position, and illustrating in dotted lines a slight modification in the application of the swinging frame.

In the drawings, A is the main frame of the apparatus, consisting, in the embodiment illustrated, of the two end members B D, connected by the two tie bars C C^x. The member B is conveniently made of a metal plate, and is preferably provided with three feet b b' b², upon the sides of two of which, namely b b', the apparatus rests when in the position illustrated in Fig. 1, and upon all of which it rests when in the position shown in Fig. 2. It also embodies bosses b^x through which the tie bars pass and beyond which said bars are equipped with retaining nuts. The member D embodies a cross bar d through bosses in the respective extremities of which the tie

bars pass and beyond which said bars are equipped with retaining nuts,—and a leg or pedestal d^x the free extremity of which, when the apparatus is in the position represented in Fig. 1, rests upon the floor and constitutes with the feet b b' the support for the apparatus.

B^x is one of a pair of corresponding clamp plates, and is fixedly secured to the member B in a position intermediate of the tie bars. D^x is the other of said clamp plates, and is movable toward and from the member B^x, being provided with mechanism by which it may be advanced and retracted at will. In the embodiment illustrated the clamp actuating mechanism consists of a screw shaft E engaged in a suitably threaded aperture in the cross bar d, having a crank handle e, at its outer end, and a bearing plate e^x swiveled or otherwise mounted upon its inner end,—which bearing plate presents against, or is secured to, or may take the place of, said clamp member D^x.

F is a swinging trough casing, or box, formed by preference of a pair of plates f f' supported in angular relationship by means of V-shaped angle irons f^x at their respective extremities, and preferably arranged so that their contiguous edges are some little distance from each other to leave a central slot f². One extremity of each of the angle irons f^x is extended beyond the trough box or swinging casing to form a lug f³, and these lugs are each provided with an aperture through which the tie bar C^x passes, so that the trough is mounted in hinged relation to the main frame.

To lock the trough in the position shown in Fig. 1, and which I term its closed position, I provide the following fastening devices: At the apex of each of the angle irons f^x is formed an aperture g', and in the end members B D are formed apertures h with any of which the apertures g', when the trough is in closed or nearly closed position, are adapted to be placed in registry. g g are a pair of chains, both secured to a staple or eye mounted upon the trough about midway of the length of the latter, and each provided at its free extremity with a bolt, which bolts are adapted to be inserted one through the aper-

ture g' in the iron f^x and a corresponding aperture h in the end member B, and the other through the aperture g' in the other iron f^x and a corresponding aperture h in the end member D. By the provision of the series of apertures h , as will be understood, the trough may be locked in such closed position of adjustment as the form and size of the blanks operated upon may render desirable.

The operation of the apparatus will be readily understood. To place the apparatus in condition to receive the blanks, it is arranged in its horizontal position, or that illustrated in Fig. 1, the trough is secured by the bolts described in closed position, and the clamp plates are opened, that is to say, the movable clamp plate is by the rotation of the screw E to the left withdrawn from the fixed clamp plate. The blanks are deposited in the trough and between the clamp members, with the binding edges downward so as to present said binding edges against the inner faces of the trough, and to allow of the projection of the blank corners through the opening f^2 in said trough. When the blanks are all in position, the screw shaft E is rotated to advance the movable clamp member D^x and compress the blanks between it and the fixed member B^x . Thereupon the machine is lifted from the horizontal position it is illustrated as occupying in Fig. 1 in which it rests upon the feet $b b'$ and the pedestal d^x , to the vertical position which it is shown as occupying Fig. 2, in which it rests upon the feet $b b' b^2$, and in which last mentioned position, the mass of blanks rest one upon another, and naturally tend to maintain themselves in position without the external assistance of the clamp plates. When the apparatus is thus in upright position, the bolts are withdrawn from their apertures $g' h$ and the trough swung on the tie bar C^x as a pivot to its open position, as shown in Fig. 2, thus exposing the binding edges of the blanks in convenient position for the application of the paste or other binding medium employed. After the paste has been applied, the blanks may upon the loosening of the clamp plate D^x be removed at the convenience of the operator.

In Fig. 2 of the drawings I illustrate in dotted lines a slight modification in the application of the trough, which modification consists in providing each of the frames B D with a lateral extension I, each provided with a stud i , upon which studs the lugs f^3 of the trough may be mounted in case it is not desired to have said lugs mounted upon the tie

bar C^x . In connection with the employment of the extensions I and studs i it will be necessary to slightly lengthen the lugs f^3 of the trough, and to slightly curve them to enable their clearance of the bar C^x .

Having thus described my invention, I claim—

1. In a tablet clamp, in combination: a rigid main frame adapted to occupy at will either a horizontal or a vertical position, a trough, one edge of which is in permanent hinged engagement with the adjacent portion of the main frame, so that said trough is, when the apparatus is in vertical position, adapted to be swung away from sheets contained in the apparatus without being manually lifted from said apparatus, a movable plate adapted to bear against sheets contained in the trough, and a clamp screw mounted in one end of the main frame and adapted to occasion the advance of the said plate, substantially as set forth.

2. In a tablet clamp in combination: a rigid main frame adapted to occupy at will either a horizontal or a vertical position, a trough mounted upon and in hinged relationship with respect to said main frame, means for locking said trough in various positions of adjustment with respect to the main frame, a pair of plates adapted to clamp sheets between them, and a clamp screw mounted in one end of the frame and adapted to occasion the advance or retraction of one of the clamp plates, substantially as set forth.

3. In a tablet clamp, in combination: a rigid main frame consisting of two end plates connected by tie bars, and adapted to occupy at will either a horizontal or vertical position, a trough mounted upon and in hinged relationship with respect to said main frame, apertures in said end plates, and an aperture in each end of the trough adapted to be carried into registry with the apertures of the end plates in succession, pins adapted to engage in said apertures, a pair of plates adapted to clamp the tablet sheets between them, one of said plates being fixed and the other adjustable, and a clamp screw mounted in one of the end plates and engaged with the movable clamp plate, substantially as set forth.

In testimony that I claim the foregoing as my invention I have hereunto signed my name this 31st day of May, A. D. 1892.

JOSIAH BEDDOW.

In presence of—

WM. C. STRAWBRIDGE,
F. NORMAN DIXON.