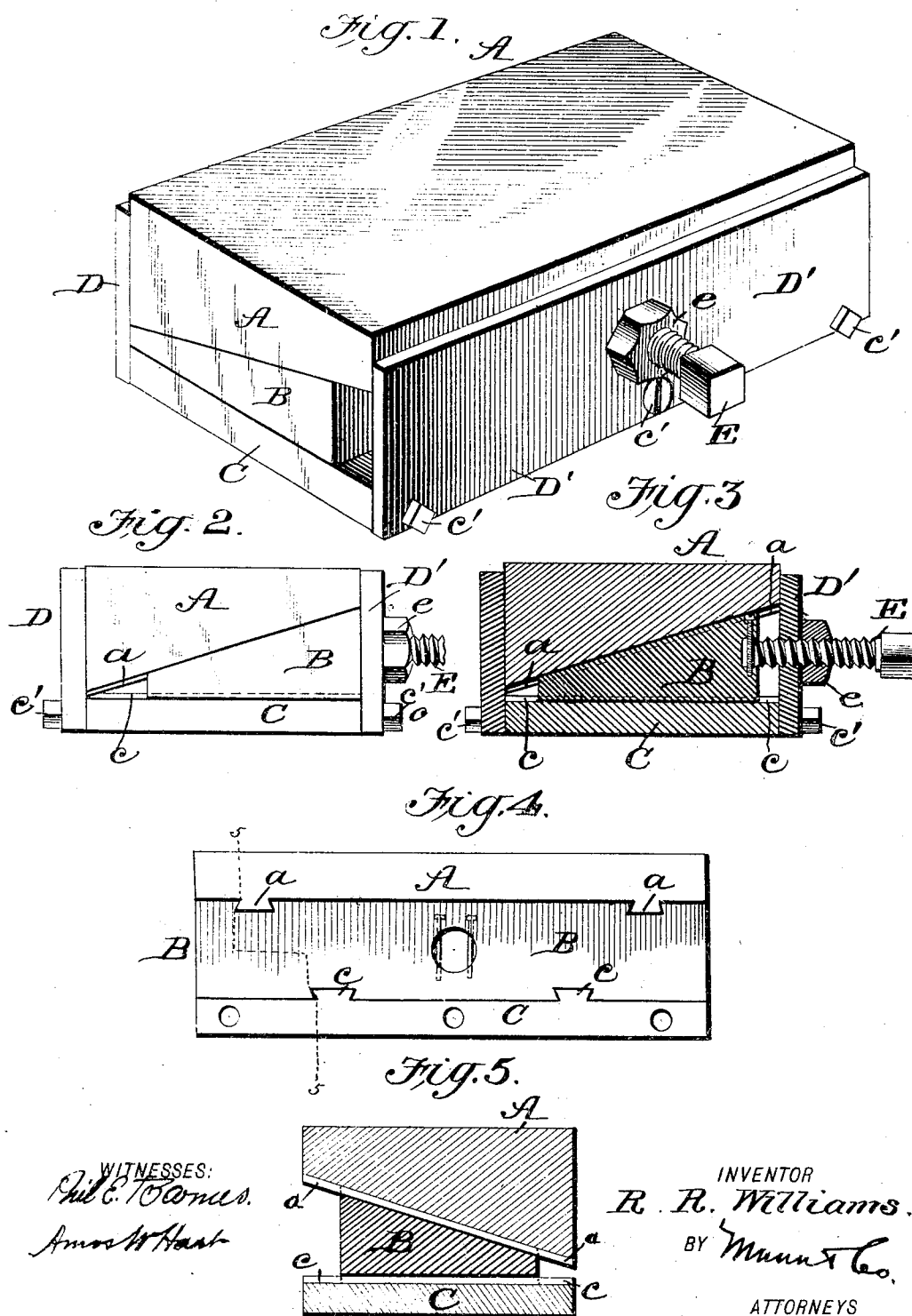


R. R. WILLIAMS.
PLATEN PRINTING PRESS.
APPLICATION FILED AUG. 21, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



No. 764,096.

PATENTED JULY 5, 1904.

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NO MODEL.

2 SHEETS—SHEET 2.

Fig 6.

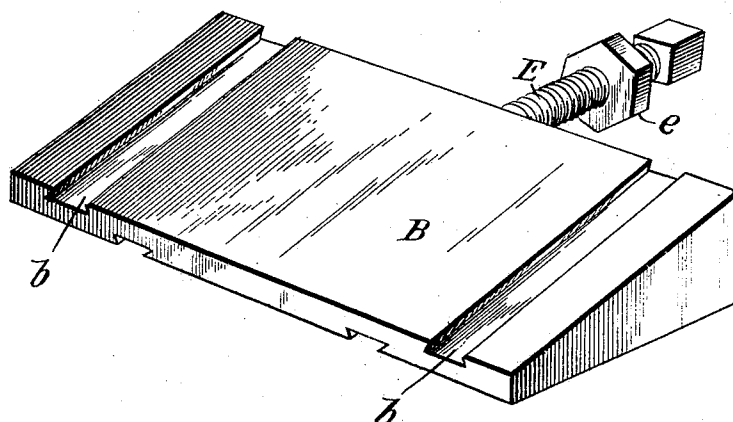
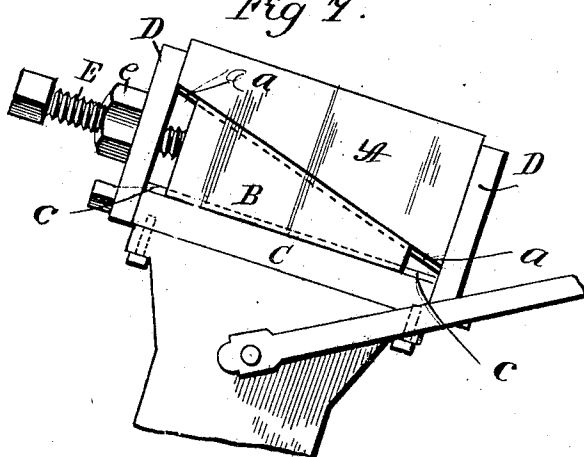


Fig 7.



WITNESSES:

Phil E. Barnes.
Amos W. Hart

INVENTOR

R. R. Williams.

BY *Munn & Co.*

ATTORNEYS

UNITED STATES PATENT OFFICE.

RAYMOND RANDALL WILLIAMS, OF MARSHFIELD, WISCONSIN.

PLATEN PRINTING-PRESS.

SPECIFICATION forming part of Letters Patent No. 764,096, dated July 5, 1904.

Application filed August 21, 1903. Serial No. 170,303. (No model.)

To all whom it may concern:

Be it known that I, RAYMOND RANDALL WILLIAMS, a citizen of the United States, and a resident of Marshfield, in the county of Wood and State of Wisconsin, have made certain new and useful Improvements in Platen Printing-Presses, of which the following is a specification.

In order to obtain a perfect impression in platen-presses, the platen often requires to be adjusted higher or lower, corresponding to slight variations in the height of the type-form. Such adjustment is usually effected by several jack-screws, which operation requires considerable time, and it is also difficult to secure a perfect adjustment or one in which the platen will be perfectly parallel to the type-form.

It is the object of my invention to provide an improvement whereby the required adjustment can be effected very quickly and easily with perfect accuracy.

My invention is embodied in the construction, arrangement, and combination of parts hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of the apparatus embodying my invention, the same being separate from the parts of a platen-press to which it will be attached in practice. Fig. 2 is an end view of the same, but showing a different adjustment of the movable parts. Fig. 3 is a central transverse section of the apparatus. Fig. 4 is a side view, one of the side guide plates or flanges being removed. Fig. 5 is an irregular cross-section on the line 5 5 of Fig. 4. Fig. 6 is a perspective view of the adjustable wedge-block. Fig. 7 is a view illustrating one method of securing my attachment to a swinging platen.

The chief parts of the apparatus are the top plate A, a wedge B, upon which it is supported, a base or bottom plate C, upon which the wedge rests, parallel longitudinal side flanges or guides D D', and a screw E for adjusting the wedge.

The top plate or block A has a flat horizontal top surface and parallel vertical sides

and ends. Its under surface is inclined, as shown, and provided with two transverse dovetailed ribs *a*. The wedge B is made of less width than the top plate A, but has the same length. Its top surface is inclined at an angle corresponding to the adjacent or contact surface of plate A and is provided with dovetailed grooves *b*, (see Figs. 4 and 6,) which receive the dovetailed ribs *a*. The base-plate C has practically the same width and length as the top plate A and is provided with two dovetailed ribs *c*, (see Figs. 4 and 5,) which fit in corresponding transverse grooves in the bottom of the wedge B. The base-plate C has vertical parallel side flanges or guide-plates D D', which are secured by screws *c'*. The screw E works in a threaded hole formed in the center of the side guide D' and is swiveled to the wedge B. The screw is also provided with a square head adapted for the application of a wrench or turn-key.

It is apparent that by lateral adjustment of the wedge B the top plate A may be adjusted vertically, since in such case the wedge will slide on the adjacent inclined and horizontal surfaces of the top plate A and bottom plate C, it being guided by the dovetailed ribs and grooves before described. As shown in Fig. 1, the wedge B has been adjusted to the left as far as practicable, so that the top plate A is raised to its greatest height, and in Fig. 2 the opposite position is shown, the wedge being adjusted to its farthest limit to the right and the top plate consequently lowered to its lowest limit. In Figs. 3 and 5 the wedge B is shown adjusted to the middle position, or half-way between the limits of its movement to the right and left. In any case when the wedge is adjusted laterally the top plate A is raised or lowered vertically, it being guided in a vertical plane by means of the parallel side pieces D D', which also hold it from lateral movement when any desired adjustment has been effected. The screw E is locked by means of a jam-nut *e*, whose operation is obvious.

It is apparent that the dovetailed ribs and grooves of the parts A B C interlock the latter as well as serve as guides in the lateral ad-

justment of the wedge. It will be further seen that by the arrangement of two interlocking ribs and grooves at top and bottom of the wedge on each side of the middle portion thereof the wedge may be adjusted by a single screw, since it is guided in such manner that there is no considerable tendency to bind and lock. Thus by the simple manipulation—*i. e.*, rotation—of the screw one way or the other the top plate A may be adjusted easily and quickly, higher or lower, while its top surface remains perfectly parallel to the type or other form to which it is opposed in the operation of printing.

In brief, by means of my improved apparatus I overcome a difficulty which has been heretofore experienced by operators of platen-presses in adjusting or varying the impression to type-forms of different height or kind, and this is effected by the substitution for the independent jack-screws commonly used to support the platen of practically a single mechanical agent or device—to wit, the wedge—whereby the platen is adjusted uniformly or equally, so as to preserve perfect parallelism to the opposing surface.

The invention is applicable to various forms of platen-presses for doing various kinds of work.

In practice the top plate A and wedge B may be constructed hollow or in skeleton form for the purpose of lightness and economy in manufacture.

The entire apparatus forms at all times a practically solid body or platen attachment for presses and is especially adapted to those of a heavy type or requiring great strength. The flat top surface of the adjustable top plate is held at all times rigid, so as to firmly resist the centrifugal tendency of the motion of the

press as well as the weight and crushing force of the impression.

What I claim is—

1. The improved attachment for a platen printing-press, comprising the top plate having its underside inclined, the movable wedge for supporting and adjusting such top plate, the two having their inclined contact-surfaces provided with interlocking means consisting of transverse dovetail ribs and grooves, the base-plate having transverse dovetail ribs that fit and interlock with like grooves in the bottom of the wedge, vertical parallel side pieces projecting upward from the base-plate and serving to guide the top plate vertically and hold it from lateral movement when in use, and a single adjusting-screw passing through the middle of one of said side pieces and swiveled to the base of the wedge as shown and described.

2. The improved attachment for platen-presses consisting of a base-plate having two transverse dovetail ribs, and parallel vertical side plates, a top plate having its under side inclined and provided with two dovetail ribs, the intervening wedge made of less width than the base-plate and top plate and having transverse dovetailed grooves in its horizontal bottom portion and inclined top portion, and a screw working in one of the side plates and arranged equidistant from the two sets of dovetailed ribs and grooves by which the movable top plate and wedge are connected with each other and the base-plate substantially as described.

RAYMOND RANDALL WILLIAMS.

Witnesses:

KATHERINE WEILAND,
P. A. WILLIAMS.