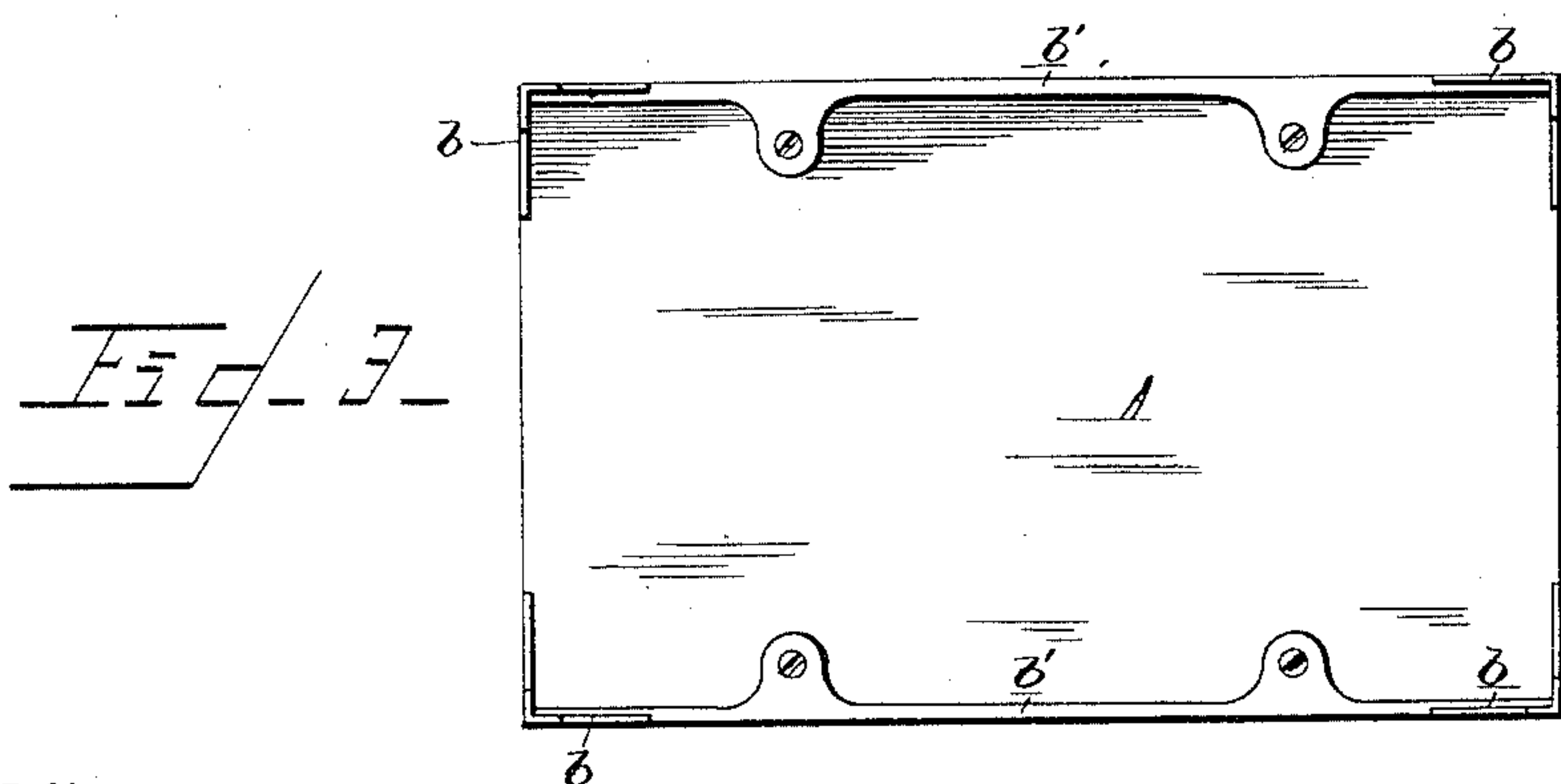
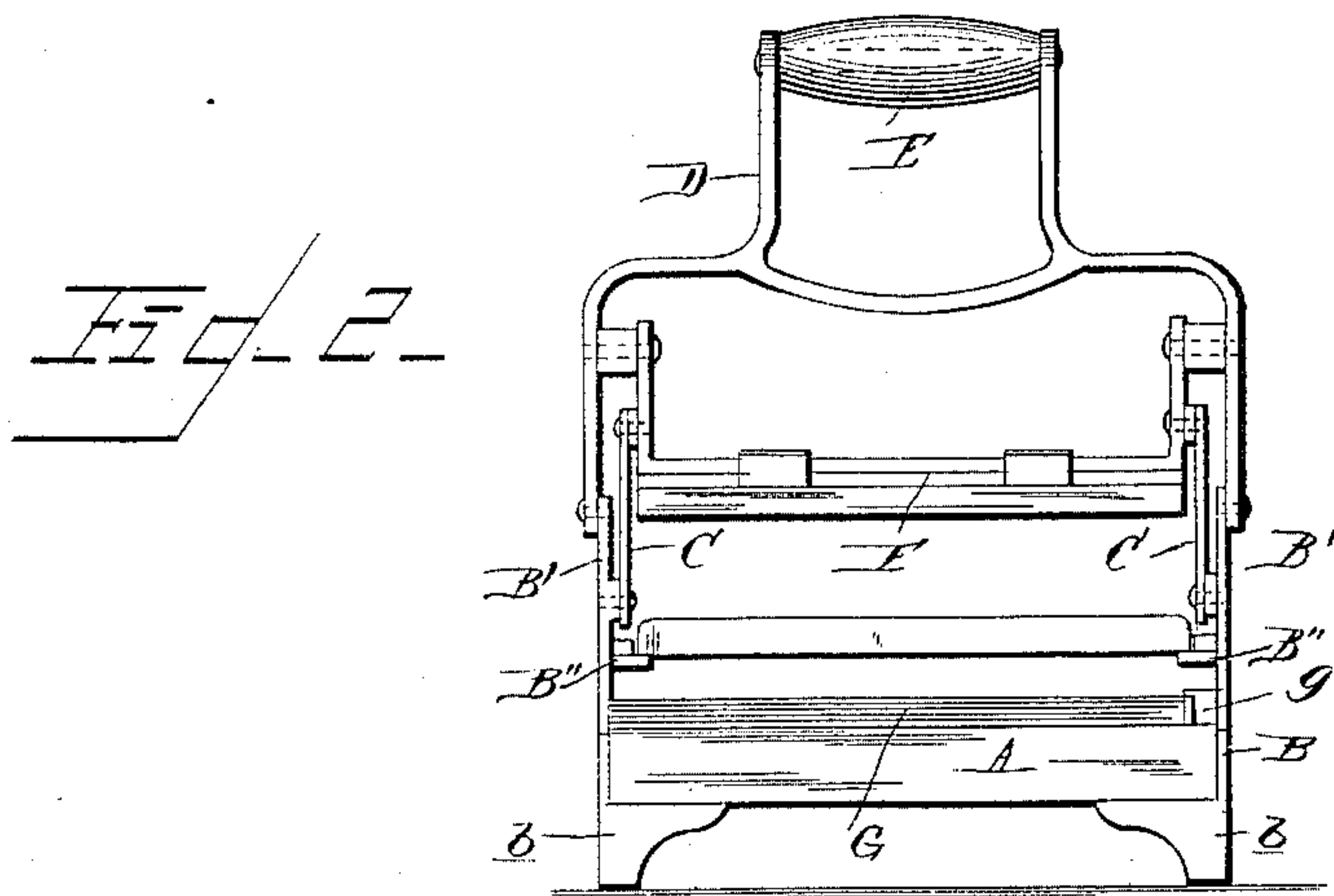
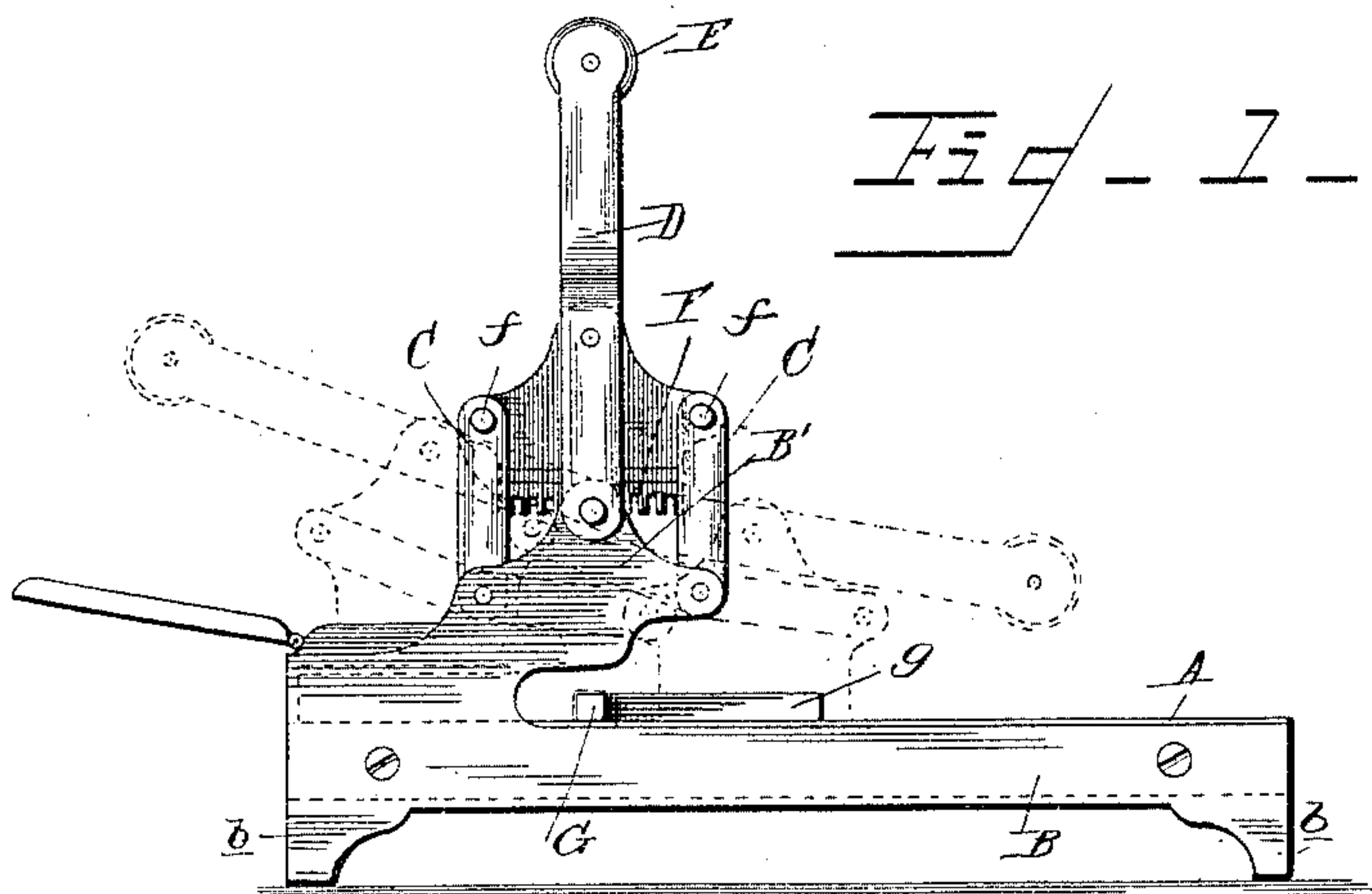


(No Model.)

B. B. HILL.  
HAND PRINTING PRESS.

No. 433,169.

Patented July 29, 1890.



Witnesses  
Wm. J. Robertson  
 J. B. Robertson

Inventor  
Benjamin B Hill,  
By his Attorney J. W. Robertson

# UNITED STATES PATENT OFFICE.

BENJAMIN B. HILL, OF PHILADELPHIA, PENNSYLVANIA.

## HAND PRINTING-PRESS.

SPECIFICATION forming part of Letters Patent No. 433,169, dated July 29, 1890.

Application filed September 14, 1889. Serial No. 323,919. (No model.)

*To all whom it may concern:*

Be it known that I, BENJAMIN B. HILL, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Hand Printing-Presses, of which the following is a specification, reference being had therein to the accompanying drawings.

This improvement relates to that class of hand-presses in which the type is held by a carrier guided by links and is pressed alternately upon an inking-pad and upon the paper to be printed; and the invention consists in the peculiar construction and arrangement of parts hereinafter more particularly described, and then definitely claimed.

In the accompanying drawings, Figure 1 represents a side elevation of one of my presses; Fig. 2, an end view of the same; Fig. 3, a bottom plan.

Referring now to the details of the drawings, A represents the bed, preferably made of wood, resting upon castings B, having legs extending under the bed at each corner, and flanges *b'*, which are widened out at suitable distances apart and provided with counter-sunk holes, through which are passed screws to secure the bed and castings together. Screws are also passed through the sides of the casting into the sides of the bed, as shown. Rising from and forming part of the castings are the ears *B'*, to which are pivoted four short links *C* and the lower ends of the yoke or lever *D*, whose upper ends carry between them the handle *E*, which is pivoted so as to turn, and thus prevent chafing of the hands, which would result if the handle were rigidly fixed in the yoke. These links and the yoke are also pivoted at *f f f* to form-carrier *F*, to which a form or type-plate may be affixed in any suitable manner; but as the mode of attaching the form is no part of my present invention it is unnecessary to describe it.

The pivots connecting the ears *B'* to the yoke and the links, it will be seen, are arranged at the corners of a triangle, and the pivots connecting the same parts to the type-carrier are arranged at the corners of a corresponding triangle, by which construction the type-carrier is at all times held perfectly steady and in a parallel position with respect

to the bed and the inking-pad, so as to always strike both squarely, and thus prevent slurring in printing, which is very common in such presses as have but two links besides the yoke or lever.

The ears *B'* have ribs *B''* formed on their inner sides, on which rests an ordinary "fountain" ink-pad, under which is a space which will allow of paper being passed underneath the same, if desired; but usually this is not necessary, and I set a bar *G* for a gage, against the side of which the paper to be printed is set. Attached to this fixed gage is a movable gage *g*, whose attached end is made so as to embrace the fixed gage, and being made of spring material will remain by friction where set, and thus form a convenient and readily-adjustable gage. If necessary, however, both gages may be readily removed, and then paper may be passed up underneath the inking-pad should it be found necessary. As nothing is here claimed for this, further description is unnecessary.

The operation of this press is such as to hardly need description, and it is therefore sufficient to say that by simply moving the lever or yoke in one direction the form is pressed down on the inking-pad and thus supplied with ink, and by a reverse action of the lever the form is pressed upon the paper set on the bed, and the paper is thus printed.

I consider it important that the castings *B* extend along the sides of the bed, for by this means the latter is prevented from warping, and said castings therefore perform the double function of keeping the bed in shape and as a support for the operating parts.

It will be seen that, although the lower parts of the yoke are made in one piece with said yoke, they are in effect links connecting the form-carrier with the ears, and when in the following claim I refer to "links" I mean to be understood as including the lower parts of the yoke in said term, except where the contrary is especially indicated in the claim.

From the above description it will be seen that I have invented a cheap, durable, and convenient press, suitable for printing medium-sized work, which will work very rapidly and is not liable to get out of order.

I am aware that it is not new to connect a bed and platen together by two links and a



handle, as in the United States Patent No. 378,065 and the English Patent No. 16,397, of 1884; but these constructions, although working well when new, do not hold the surfaces  
5 of the bed and platen parallel when the pivots of the links become worn, whereas with the four links arranged at opposite corners and the handle pivoted between them, as shown, the table and bed are always kept  
10 parallel even if the pivots are worn, so as to become quite loose.

What I claim as new is—

The combination, in a printing-press, of the bed A and castings B, extending along the

side of the bed from one end to the other and 15 provided with flanges *b'*, running under the bed, and ears *B'*, with a form-carrier pivotally connected with the ears, and the lever connected with and operating said form-carrier, substantially as described. 20

In testimony whereof I have affixed my signature, in presence of two witnesses, this 13th day of September, 1889.

BENJAMIN B. HILL.

Witnesses:

WALTER S. TOWNSEND,  
WILLIAM C. STOEVER.