

C. G. HAVENS & F. C. PENFIELD.

Printing-Presses.

No. 131,950.

Patented Oct. 8, 1872.

fig. 1.

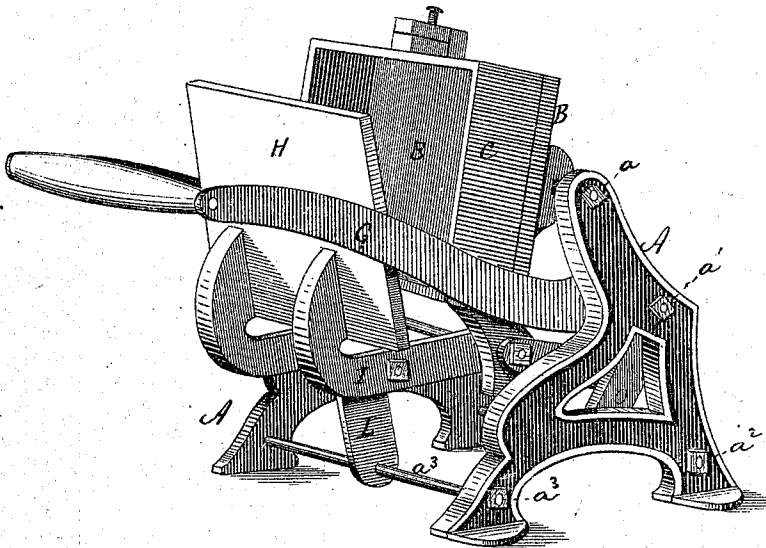
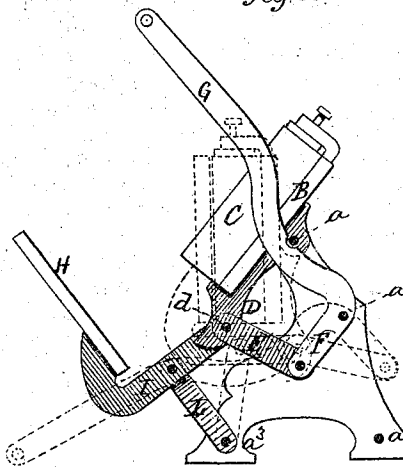


fig. 2.



Witnesses

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By Atty.

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# UNITED STATES PATENT OFFICE.

CHARLES G. HAVENS AND FRED. C. PENFIELD, OF WEST MERIDEN,  
CONNECTICUT; SAID HAVENS ASSIGNOR TO SAID PENFIELD.

## IMPROVEMENT IN PRINTING-PRESSES.

Specification forming part of Letters Patent No. 131,950, dated October 8, 1872.

*To all whom it may concern:*

Be it known that we, CHARLES G. HAVENS and FRED. C. PENFIELD, of West Meriden, in the county of New Haven and State of Connecticut, have invented a new Improvement in Printing-Presses; and we do hereby declare the following, when taken in connection with the accompanying drawing and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification and represents, in—

Figure 1 a side view, the standard removed for illustration of the invention, and in Fig. 2 a sectional view.

This invention relates to an improvement in printing-presses, the object being the production of a small press of cheap construction—such as are commonly known as boys' or toy presses; and the invention consists in the combination of the bed and platen, both swinging and combined by levers with mechanism, whereby the platen drops from the front and the bed is turned up to receive the paper and closed together for the impression in nearly a vertical position.

A are the two ends of the frame-connected together by rods  $a^1 a^2 a^3$  extending from one frame to the other. On the rod  $a$  the bed B is hung so as to turn freely thereon to the position denoted in broken lines and return. On this bed the chase C is secured in any convenient manner. Beneath the bed an arm, D,

extends downward, from which a connecting-rod, E, extends to an arm, F, of the lever G, the said lever G being pivoted at  $a^1$ , so that drawing down the lever to the position denoted in broken lines, Fig. 2, the bed with the chase is brought into a vertical position. H is the platen arranged upon an arm, I, the said arm I extending to and connected with the pivot  $d$ , which connects the arm D of the bed with the arm E. This arm I is supported by a connection, L, rocking upon the rod  $a^3$ . The length and pivoting of these levers are proportioned, and relatively to each other, as seen in Fig. 2, so that the drawing down of the lever G, as denoted in broken lines, brings down the bed and carries up the platen to meet each other in nearly a vertical position, as seen in Fig. 2; hence, the paper placed upon the platen, (or upon the type,) the platen and bed with the type pressed together produce the impression required.

We claim as our invention—

The reciprocating bed B, combined with the reciprocating platen H, by means of the lever I and connection L, and operated by the lever G and link E, substantially as described, and so as to operate as herein set forth.

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Witnesses:

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