

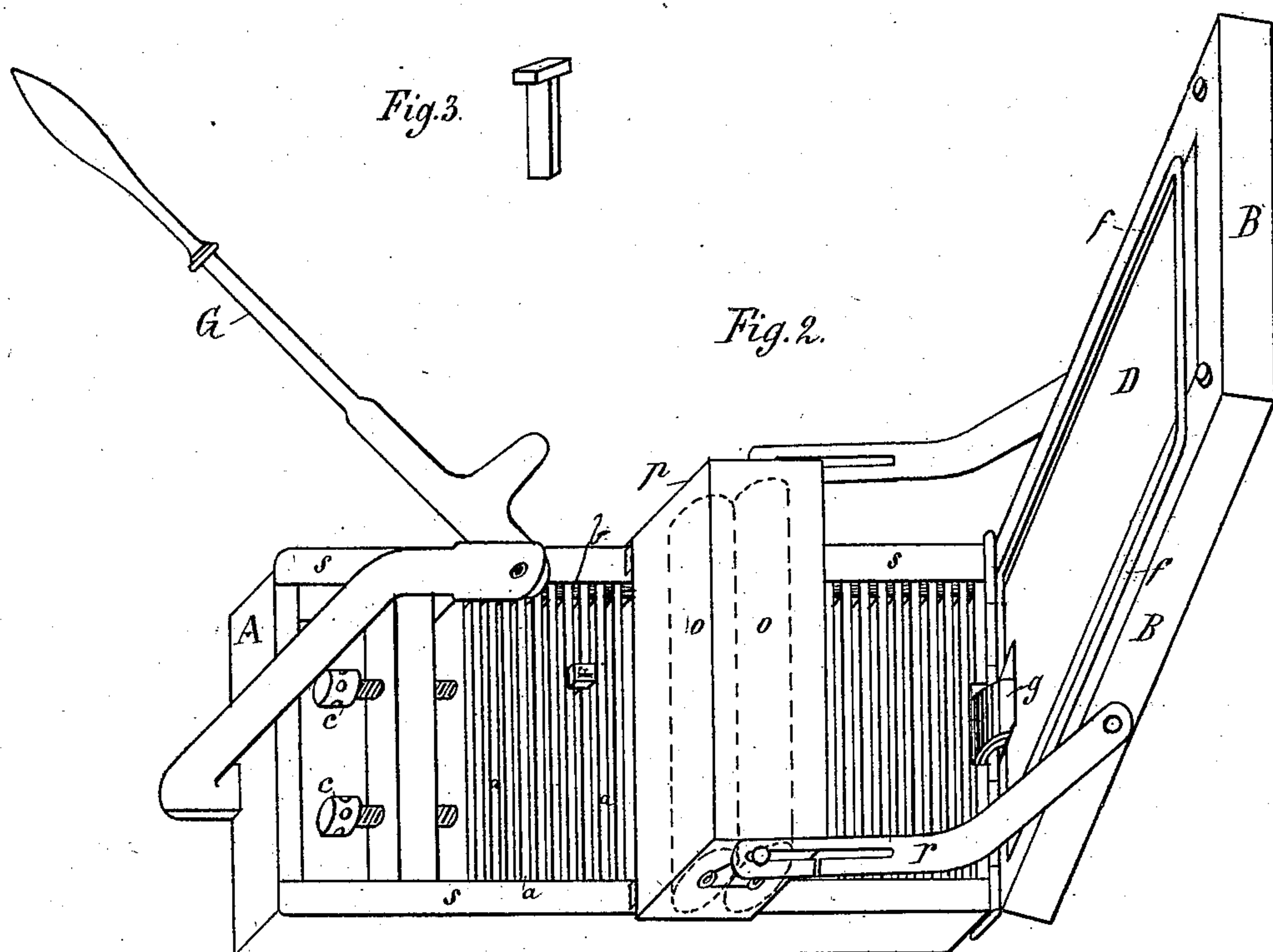
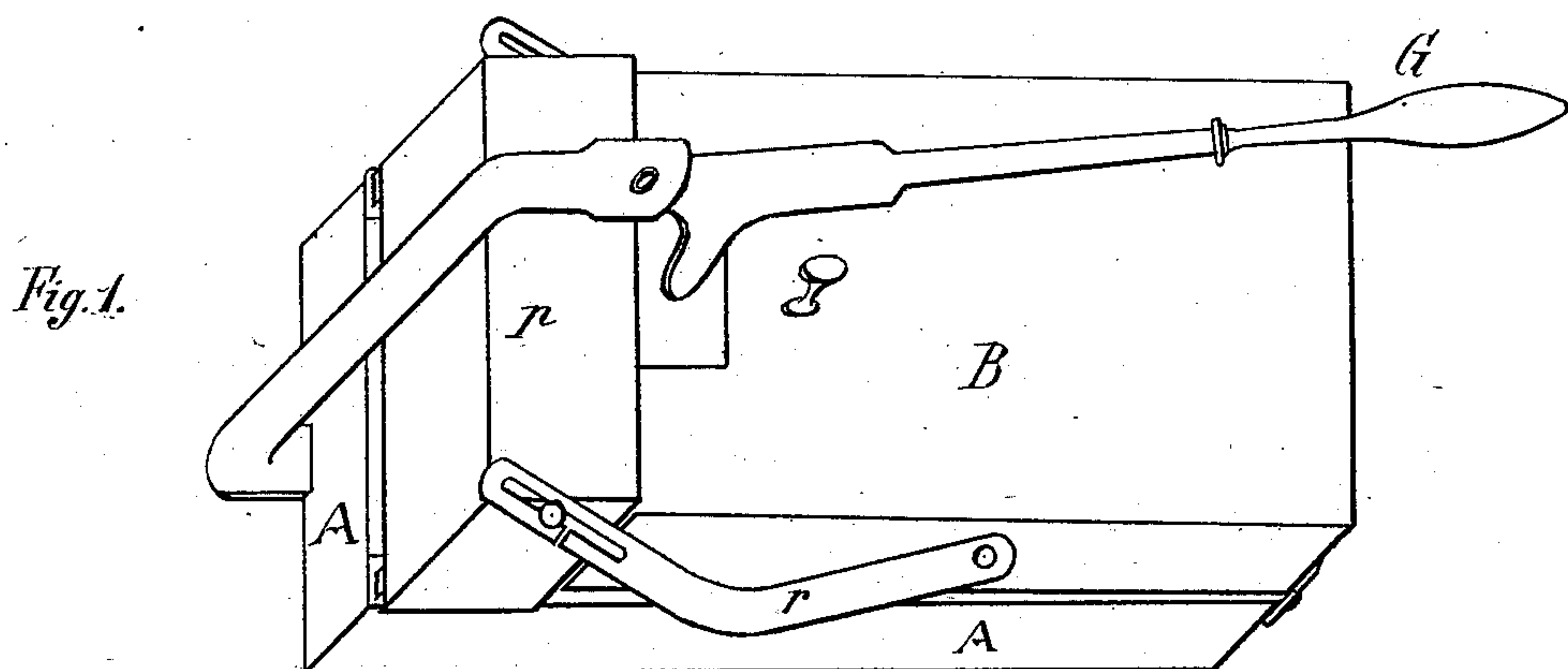
(No Model.)

M. ECK.

HAND TYPOGRAPHIC APPARATUS.

No. 373,344.

Patented Nov. 15, 1887.



Witnesses  
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# UNITED STATES PATENT OFFICE.

MARTIN ECK, OF FRANKFORT-ON-THE-MAIN, GERMANY.

## HAND TYPOGRAPHIC APPARATUS.

SPECIFICATION forming part of Letters Patent No. 373,344, dated November 15, 1887.

Application filed December 28, 1885. Serial No. 186,865. (No model.) Patented in Austria-Hungary April 27, 1885, No. 41,146 and No. 16,105; in England November 9, 1885, No. 13,601; in Germany November 10, 1885, No. 35,711, and in France November 12, 1885, No. 172,240.

*To all whom it may concern:*

Be it known that I, MARTIN ECK, a citizen of Germany, residing at Frankfort-on-the-Main, in the Empire of Germany, have invented certain new and useful Improvements in Hand Typographic Apparatus, (for which I have obtained the following patents: English Patent No. 13,601, dated November 9, 1885; German Patent No. 35,711, dated November 10, 1885; Austria-Hungarian Patents No. 41,146 and No. 16,105, dated April 27, 1885, and French Patent No. 172,240, dated November 12, 1885;) and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

In the drawings, Figure 1 represents an isometric view of the apparatus closed; Fig. 2, a similar view of the apparatus open, and Fig. 3 a similar view of one of the hammer-shaped type.

My invention relates to a typographic apparatus termed "typograph," which is used for taking small impressions by means of rubber types of special form.

It consists of a frame or box, A, of wood or other suitable material, which may be of any size, carrying inside small rods or bars *a*, separated from each other by small rubber plates *b*. In the spaces between the rods or bars *a* the type are placed, and the rods or bars are screwed up by means of set-screws *c*.

The frame or box A is furnished with a hinged lid or covering-plate, B, the inner side of which is faced with a sheet, D, of rubber, cloth, or other material, or with printers' roller composition or gelatine of the size of the surface to be printed. On this sheet is laid the material to be printed, which, by means of small blades *f* and by the action of a spring, *g*, is pressed against the plate. By closing the lid or covering-plate and by pressing lightly on the top of this plate by means of a lever, G, the desired impression is obtained.

The types employed herein are made in india-rubber and have large heads of the form of a T or hammer. By reason of this form

the types do not become reversed or turned upside down while they are being placed in the spaces or grooves. They do not become compressed, neither do they become crooked, and, as their heads rest on the rectilinear plane formed by the rods or bars *a*, they give an extremely clean impression.

I will now describe the manner of inking the types and the mechanism provided therefor. For this purpose I employ two rollers, *o o*, covered with cloth, or with an elastic composition, such as glue, gelatine, and of an aniline color. The rollers *o o* are placed parallel and with pivots in a bottomless box, *p*, which, by means of small bars *r r*, bent at an obtuse angle, is connected to the lid or covering-plate B in such a way that in opening and closing the latter the rollers *o o* with their box *p* are conducted and slid with a slight pressure over the types. The small box *p* is guided by metal bands *s s*, which at the same time serve to prevent the rods or bars *a* from leaving their position.

The roller-box *p* may be removed from the frame, and to reink the rollers *o o* (which need only take place after a sufficiently large quantity of copies have been printed) a pad saturated with color is used, over which they are caused to pass. The gelatine rollers need not be inked. The gelatine itself contains the aniline colors with glycerine, which enables the rollers to communicate sufficient color to the types. When rollers of this kind have ceased to give color, it is then necessary to replace them by new ones.

Having described my invention, what I claim as new, and wish to secure by Letters Patent, is—

The combination, with a typographic press, of a type-frame composed of a rectangular frame containing a series of parallel bars extending from side to side of said frame and separated from each other by elastic blocks or plates, and means, substantially as described and shown, for forcing said bars toward each other, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

MARTIN ECK.

Witnesses:

L. MASCHMANN,  
F. ROMPEL.