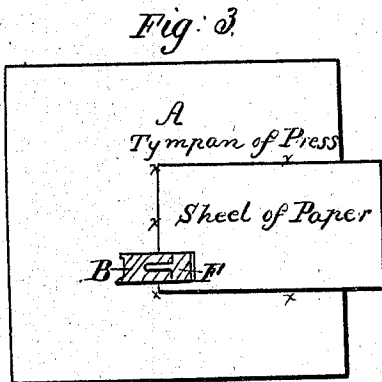
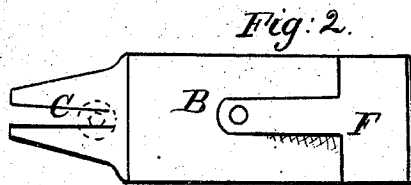
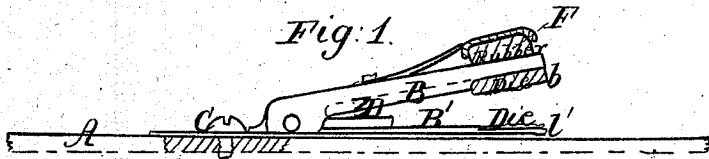


H. Willson.
Printing Press.
No 103,267. Patented May 17, 1870



Witnesses
J. B. Furchin
John Mcintosh

Inventor;
H. Willson

United States Patent Office.

HENRY WILLSON, OF CHICAGO, ILLINOIS.

Letters Patent No. 103,267, dated May 17, 1870.

EMBOSSING-ATTACHMENT FOR PRINTING-PRESSES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, HENRY WILLSON, of Hertford county, England, now a resident of Chicago, Illinois, United States of America, have invented certain new and useful Improvements in "Embossing Device;" and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings making part of this specification, and to the letters of reference marked thereon, like letters indicating like parts wherever they occur.

To enable others skilled in the art to construct and use my invention, I will proceed to describe it.

Figure 1 is the side elevation, and

Figure 2 is the top plan of the device.

Figure 3 represents a tympan-sheet and the device affixed.

The object of my invention consists in an embossing device, so arranged and attached to or connected with the bed, or any other part of an ordinary printing-press, in such a manner as to produce the embossing and the printing operation simultaneously.

I will describe the devices used, and the mode of operation for printing the headings of paper circulars or cards, and embossing the said circulars at the same operation.

The type for the heading or card is set and locked up in the ordinary manner.

The bed A of the press is covered with a tympan-sheet in the usual way, and then the embossing device is affixed.

This device consists of a metallic plate, B, connected at one end by hinge, or otherwise, with plate B', and bearing at the other end the die b, opposite which, at the end and to the plate B', the counter-die b' is affixed.

Sheet metal fork C can be attached, if desirable, to the lower part of the rear end of the device, for the purpose of better affixing the said device to the tympan-sheet.

An India-rubber or other elastic cushion, F, is affixed onto the end of the plate B, and covered with a metallic cap, for the purpose of equalizing the pressure on the die, and a coil spring, D, is placed between the plates.

The operation consists in this: that after the tympan-sheet is arranged, and the plate for the sheets or cards to be printed is marked on it by pins, the bottom plate B' of the device is pasted over underneath, the fork C is introduced into the tympan-sheet, and the plate B' is pressed down and adjusted so as to have the die b in proper position, the paste and the fork thus holding the device in place.

Then the sheet of paper or card to be printed and

embossed is placed on the bed A in such a manner as to have that part which is to be embossed between the die and the counter. The press is set in operation, and every time the chase comes down on the plate, the quoins, or some other piece of furniture substituted in place of the quoins, presses down the plate B and embosses the paper or card, while the type prints the same.

The same result can be obtained by having the plates B B' stationary, and by affixing in a proper slot in the plate B a movable die, in the shape of a plunger, held in place by a spring, and its counter-plate affixed to the lower plate B'.

As also the same may be accomplished by a simple die affixed to a metallic strip of suitable length, the other end of the strip or plate being firmly secured to the nipper-bar of the press, so that when the chase comes down and the nipper-bar revolves, the die comes down on the proper place of the paper or card, and embosses the same.

All the above devices, when attached to a printing-press, accomplish the same object; that is, they emboss the paper or card at the same time when they are printed with type, but for simplicity and effectiveness I prefer the first device above described.

When it is desirable to emboss a border around a card or some design, the plate B or the die and plate B', are accordingly extended, and are provided with two or more forks as C, if desirable, for the purpose of affixing the device to the tympan-sheet, and corresponding to the shape of the die, a frame or plate surrounding the type locked up in a chase, so as to come down exactly on the embossing-die, and press it down on the paper or card.

Having thus described my invention, I hereby state that the device herein described may be arranged in detail in many ways, all of which it is impossible to describe, but the principal object of the invention being to emboss and to print with type simultaneously; while at present both operations are performed separately.

I therefore claim as new, and desire to secure by Letters Patent—

The embossing device arranged in the manner herein described, or in any other similar and suitable manner, when affixed to tympan-sheet, nipper-bar, or any other part of the printing-press, in such a manner as to produce the embossing and the printing with type operation simultaneously, substantially as herein set forth.

HENRY WILLSON.

Witnesses:

J. B. TURCHIN,
JOHN McINTOSH.