

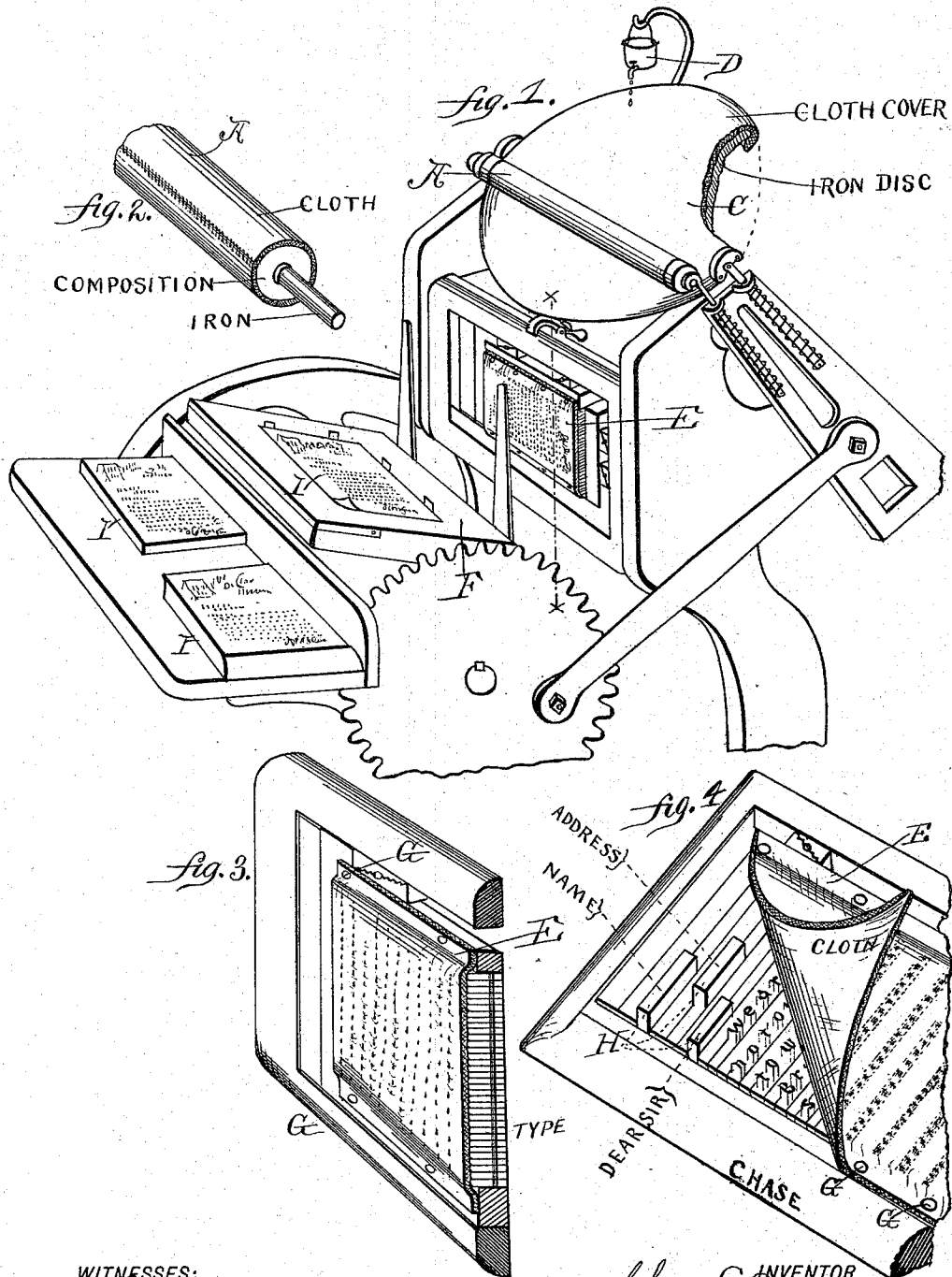
(No Model.)

C. E. ADAMSON.

METHOD OF PRODUCING COPIED EFFECTS ON PRINTED MATTER.

No. 528,133.

Patented Oct. 30, 1894.



WITNESSES:

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METHOD OF PRODUCING COPIED EFFECTS ON PRINTED MATTER.

SPECIFICATION forming part of Letters Patent No. 528,133, dated October 30, 1894.

Application filed January 8, 1894. Serial No. 496,177. (No specimens.)

To all whom it may concern:

Be it known that I, CHARLES ELLSWORTH ADAMSON, a citizen of the United States, residing at Muncie, in the county of Delaware and State of Indiana, have invented a new and useful Method of and Apparatus for Producing a Copied Effect on Imitation Type-Writer Letters, of which the following is a specification.

My invention relates to improvements in a copying method and apparatus, and the objects of my invention are, first, to provide a simple method and apparatus for producing a clear copied effect of each word or printed character without smutting or blurring the copy stain between the lines and words; second, producing a copied effect on type printed characters which consists in spreading or blurring the character by dampness in all radial directions from its common center; third, producing a radial copied effect by first printing the character from type or type plates, then covering the said type with heavy cloth and dampening the cloth and reprinting the character by the dampened cloth covered type; fourth, using the same type form covered with a heavy cloth, and reprinting the sheets to the same gages or register, using water on the cloth instead of ink; and fifth, to provide a press with suitable apparatus for carrying and distributing water over the type form, rollers, and disk, for producing a copied effect on press printed imitation typewriter letters. I attain these objects by the mechanism illustrated by the accompanying drawings, in which—

Figure 1 is a perspective view of the upper part of a job printing press, showing my invention in working order. Fig. 2 is a detail view of a roller used to distribute the water in working my apparatus. Fig. 3 is a vertical section of the form taken on lines *xx* of Fig. 1; and Fig. 4 is a detail view of a type form partly covered with the heavy impression cloth.

Similar letters refer to similar parts throughout the several views.

Imitation typewriter letters are produced on a printing press in the same manner as ordinary printing by using a style of type that is made to imitate the style of type used

on typewriters, and this type is now quite common in most printing offices. There are patented processes of printing imitation typewriter letters so as to produce the cloth or "ribbon effect" on the printing which is the same effect that is produced in typewriting on all machines that use an inked ribbon. The ribbon effect however does not bring out the effect that is produced on typewriter letters by a copying press, and as most all business letters are copied before mailing it is quite necessary that imitation typewriter letters to be of a personal character should have the "copied effect." I first print my letters from the imitation type writer type using a copying ink that will match the typewriter ribbon. After the letters have all been printed I remove the type form from the press and wash the type thoroughly clean. I then remove the press rollers and substitute one or two rollers A, which have been covered with a thick layer of cloth, as is clearly shown in Fig. 2. The thick cloth or felt is fitted around the ordinary composition press roller and secured by the ends or edges being stitched or otherwise fastened together. Before the cloth covered roller is placed on the press the ink disk is covered with a cloth or felt covering C which is suitable to hold water. This cover C may be placed on the ink disk of the press and secured in any suitable manner, but I prefer to use what I call a "disk cover" such as is shown and described in a separate application for a patent which was filed by me in the United States Patent Office on the same date and with this case.

The cover C shown in Fig. 1 is one of my regular disk covers, one edge of the same being broken away showing a section of the cover and disk, the parts of which are designated by the words "Cloth cover" and "Iron disk." Above the disk is an arm or wire suspending a small water pail D, which is provided with a faucet or drip for regulating the flow of the water. This pail is filled with water and the faucet opened, and the press started to running, so as to thoroughly and evenly distribute the water over the disk cover and cloth covered roller. The faucet is then closed and the form which has been drying all this time, is covered with a sheet

of cloth or felt E similar to that used on the roller A. The cloth covered form is then placed back in the press and the press started and run a few moments in order to distribute the water or dampen the cloth E so that it will be of about the same moisture as the disk cover and rollers.

Now the press and apparatus for producing the copied effect are ready, and the form being in the same position on the press as it was in printing, the letters I are again fed in the press on the same gages and to the exact same register as they were in the first printing. The faucet in the pail is opened gradually so that just enough water will drop on the disk to keep up the proper amount of dampness on the cover E that is being absorbed by the paper in copying. It will thus be seen that the cloth E is kept at a uniform dampness, as long as the press is run, and that the dampened cloth does not press on the printed sheet except directly over and on each printed character, and in this way the ink stain or copied effect is not pressed over the entire surface of the sheet, but it is confined in detail to the exact lines and letters that were first printed by the copying ink, from the same form that is now being used to press out the copied effect. The ink stain that is pressed from the type printed sheets is confined on the cloth directly over the type faces which are back of it, and by the printed sheets being fed to the same feed gages on the platen F it will be seen that the copied effect is something different from that obtained by all other forms of copying, as in other processes, such as the Hall patent of March 18, 1890, and of the ordinary copying press, and of any and all processes wherein the copy is produced by pressing the letter in a flat surface or between smooth rollers, the blending or copy effect is spread mostly in one direction, and it runs or spreads more or less all over the entire surface of the letter.

My method presses the radial copied effect in each character by corresponding characters made larger by the cloth covering them, producing an even blurring or blending of the copy stain around each character, thereby leaving the spaces between the printed lines and words perfectly white and clean.

The cloth E may be secured over the type in any suitable manner, but I prefer to use ordinary thumb tacks G, as shown in the drawings, so that it may be fastened down on all sides around the type form.

Where letters are intended to have the name and address written in on a typewriter, above the printing, it is better to write them in before the sheets are printed. Then, when the form is arranged to copy, type characters or lines of brass rule may be set in the form as shown at H in Fig. 4, so as to register directly over the typewriting, and these rules being the same height of the type and covered with the same cloth they will press the copied effect in the typewritten part at the same

time the copied effect is pressed on the imitation printing.

The rules may be set to correspond with the usual style of heading a letter; one, for the "name," another a proper distance down for the "address," and another still lower down for the "Dear Sir" or "Gentlemen." This same method and apparatus may be used in copying autograph letters, and where it is desired to rush the work out very fast two presses may be used, one having the type form and printing the imitation letters, and the other press having the copying apparatus with a form of rules set to correspond with the lines of the printing and covered with the cloth. In this way the copying effect is produced on the lines of printing only, with no blurring between the lines, but, the blurring or copy stain will be more likely to show a continuance between the letters and words, as the rule lines are solid and press the paper their entire length, while in a type covered form the pressure is produced directly over or on each separate printed character.

In using a copying form of rules or strips H it is best to attach a cloth to the grippers of the press, as this second cloth will prevent the stain from spreading from word to word, and in such cases the cloth should be a heavy fine felt, extending from one gripper to the other, covering and registering with the cloth on the type. This gripper cloth when used must be rigidly secured to the grippers and not moved from its position after the copying has been commenced.

I do not confine myself to the exact apparatus herein shown and described for dampening the cloth E, as other means of dampening the said cloth may be employed.

I am aware that it is not new to cover a form with cloth, or to attach a cloth to the grippers of the press, such devices being shown by a patent to myself of May 7, 1889, and the patent to Weaver of November 30, 1886. In each of these patents the cloth is used in the printing of the letters and not for copying, and the cloth is of the thinnest that can be made, so that the printing ink will go through it, while in my copying the cloth must be very thick. I do not claim such matter in this application, but mention these patents as in this art and line of printing.

Having thus described my invention, I claim the following and desire to secure the same by Letters Patent:

1. A method for producing a "copied effect" on imitation typewriter letters which consist first, in printing the letters in a copying ink; second, covering the same form with a heavy cloth and re-printing the said letter from the said cloth covered form which is kept dampened by the press rollers acting on the said cloth cover and cloth covered ink disk to which water is supplied, all for the purpose set forth.

2. A method of producing a copied effect on imitation typewriter and autograph let-

ters, which consists in running the letters through the press the second time on the same printing surface after the said surface has been covered with a heavy cloth or porous material and kept damp by the press rollers.

5 3. A method of producing a copied effect on printed imitation typewriter and autograph letters by pressing the said printed letters

with a series of lines or characters corresponding to that used in the printing, the said lines or characters having a dampened cloth or porous material over their surface.

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Witnesses:

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