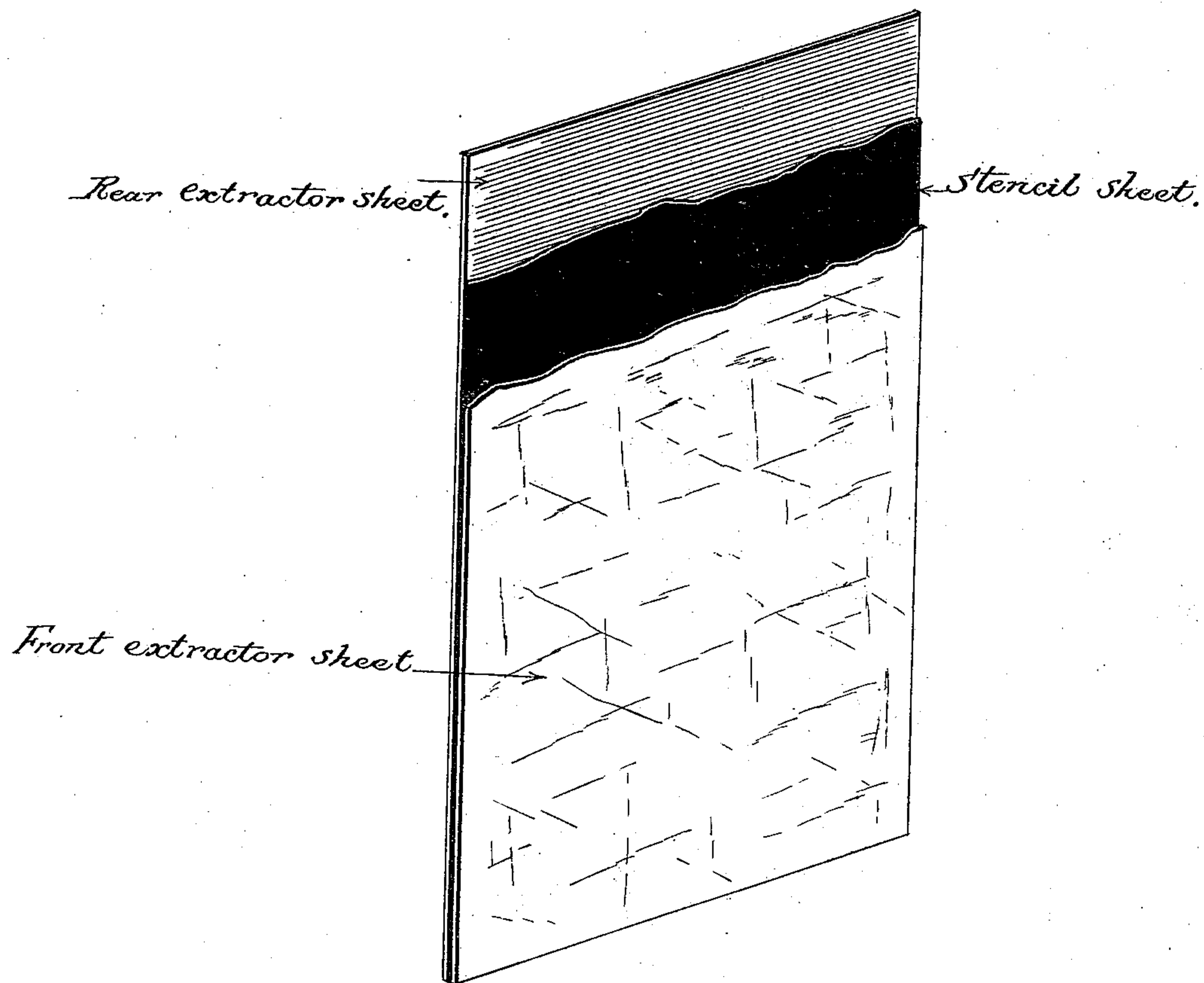


(No Model.)

W. G. FUERTH.  
TYPOGRAPHING STENCILING MATERIAL.

No. 441,235.

Patented Nov. 25, 1890.



Witnesses  
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# UNITED STATES PATENT OFFICE.

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## TYPOGRAPHING STENCILING MATERIAL.

SPECIFICATION forming part of Letters Patent No. 441,235, dated November 25, 1890.

Application filed June 5, 1890. Serial No. 354,394. (No specimens.)

*To all whom it may concern:*

Be it known that I, WILLIAM G. FUERTH, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Typographing Stenciling Material, to be used for the purposes of printing or reduplicating type-written or other matter requiring fac-simile reproduction, of which the following is a full, clear, and exact description.

The figure represents the front and rear extractor-sheets and the interposed stencil-sheet.

In order to enable others skilled in the art to make and use my invention, I will now describe its construction and indicate the manner in which I carry it out.

I first prepare a sheet of very porous tissue-paper, of bamboo or other suitable fabric having sufficient strength of fiber with a coating of an albumen-paraffinoid mixture to make it soft and pliable as well as impervious to the ink that is used in printing. I then ordinarily take a sheet of similar porous or fibrous material to be used over the paraffinoid or coated sheet for the reception of the impression or contact of the character to be reproduced on the prepared paper underneath. This uncoated sheet I call the "protective sheet" or "extractor," every contact intended for the stencil-sheet underneath being direct upon the surface of the extractor, which takes up the preparation or coating from off the front side of the coated sheet beneath, laying bare the fiber portion within the space of such contacting character for stenciling purposes. I next take a sheet of soft paper, which I prepare to form a backing, which is designed to act, first, to resist the force of contact and to embed the contacting character without rebounding; secondly, to remove the preparation of the coated paper on the reverse or rear side of the point of contact, so as to lay bare the fiber on both sides of the sheet, thus forming a stencil by extraction instead of cutting or perforating. It is evident that by this extracting process instead of the perforating process the more delicate characters—such as the looped letters o, p, b, &c.—are not liable to be punched

or pulled out, as the case may be, and the characters when reproduced do not appear broken or mutilated. The protecting-sheet prevents the clogging of the contacting characters with the preparation or coating of the stencil-sheet, thus obviating the necessity of stopping during the operation in order to pick out these secretions, which occasions a great loss of time.

With the extractor or protection sheet it is practically impossible to punch out or weaken the looped characters, and I produce the strongest and cleanest possible (paper) stencil for reduplicating purposes.

By the use of my soft prepared backing I secure a proper alignment of the characters, while the hard substances now used—such as oiled paper, &c.—do not roll the work covering the same through the carriage or platens without a certain amount of play or space between the said backing and the platen, thus causing the bended or bulged material to play back and forth at each contact and causing the material to be held out of the proper line of contact and causing an imperfect alignment.

I am aware it is not broadly new to place a sheet of paper or like material behind the stencil-sheet to serve as a backing for the same. I therefore do not broadly claim the same as my present invention. Sheets of stiff or oiled paper are open to serious objections, such as the inability of these stiff backings to closely hug the roller or bearing-surface to insure proper alignment of characters and uniform work. In my case I preferably use a sheet of soft ordinary writing or book paper and intend that the same shall be soft enough to have the characters embedded therein. I have also used bolting-cloth and similar fabrics in connection with the stencil-sheet, but found the same objectionable for my use, for the reason that certain of the letters—such as the loop-letters o, p, b, &c.—were cut through by the bolting cloth or fabric, the said stencil-sheet becoming perforated by reason of the wax on the stencil being driven through the fabric and oftentimes deposited within the perforation, so that clear and distinct impressions were not always obtainable. To overcome the objections above noted, I



use my soft-paper backing and extract the coating from the face of the stencil-sheet instead of driving it through the same, while I also cause the characters to be embedded in  
5 the soft-paper backing without rebounding.

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

In combination with a stencil-sheet, an ex-

tractor-sheet composed of soft paper in rear 10 thereof next to the bearing-surface to serve as a bearing for the contacts and to have the characters embedded therein.

WILLIAM G. FUERTH.

Witnesses:

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