

UNITED STATES PATENT OFFICE.

KURT WALTER, OF BERLIN, GERMANY.

STENCIL-SHEET FOR AUTOGRAPHIC APPARATUS.

SPECIFICATION forming part of Letters Patent No. 660,606, dated October 30, 1900.

Application filed January 13, 1900. Serial No. 1,401. (No specimens.)

To all whom it may concern:

Be it known that I, KURT WALTER, a subject of the King of Saxony, residing at Berlin, in the Kingdom of Prussia and German Empire, have invented certain new and useful Improvements in Stencil-Sheets for Autographic Apparatus, of which the following is a specification.

The subject of the present invention is an improved stencil-sheet for autographic apparatus—such as the mimeograph, cyclostyle, and the like—whereby a large number of copies of a document are produced. With such apparatus, as is well known, use is generally made of a sheet of paper or tissue, which receives a film of suitable material. The prepared sheet is then laid upon a plate having a surface ruled to resemble the face of a file and written upon with a style, or it may be laid upon a smooth plate and written upon with a style having a small-toothed wheel as the writing-point, whereby the prepared sheet is perforated, forming a stencil. The sheet is then laid upon the paper on which the copy is to appear and ink pressed through the perforations by means of a roller or the like.

Hitherto paraffined tissue-paper has principally been used for the stencil-sheet; but this it is found has many disadvantages. The paraffin, for instance, clogs the finely-ruled surface of the plate on which the stencil-sheet lies or in similar manner blocks up the teeth of the wheel of the style, so that sharp perforations cannot be made. Paraffin-paper, moreover, becomes very easily friable, and in writing rapidly cracks occur, greatly disfiguring the copy. A further inconvenience in the case of paraffin-paper is that it cannot be sufficiently tightly stretched, whereby in applying the ink the sheet creases under the roller, so that in some places the writing is duplicated or shifted out of position. All these disadvantages are overcome by means of the improved stencil-sheet forming the subject of the present invention. This new sheet is composed of the external membrane or coats of the large intestine of cattle, such as is known in pharmacy as "em-plastrum animale." This membrane, as is well known, is extremely thin, but at the same time remarkably tough and capable of

being stretched to a high degree. It can be employed for the purpose in question without any paraffin or other film having to be applied to it. The perforations produced in it when laid on a ruled plate and written upon with a style are extremely sharp and uniform, and it is capable of being stretched so exceedingly tight that creasing under the inking-roller is impossible.

In order to adapt the intestinal membrane for use as a stencil-sheet, I prefer to treat it with water and acidum sulfurosum. For this purpose the membrane is set in a bath, which may advantageously consist of one part acidum sulfurosum and nine parts water. Any other acid, however, which is capable of ungreasing such membrane may be employed. Nor do I limit myself to the precise proportions of acid and water. After such treatment I then stretch the membrane over a rack or the like until it becomes exceedingly thin, presenting an absolutely-smooth surface resembling a very thin tightly-stretched drumhead. I leave the membrane in this stretched condition for some time and dry it, when it is admirably suited for the purpose in view.

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

1. A stencil-sheet for autographic apparatus, composed of external coats of the large intestine of cattle, as described.
2. A stencil-sheet for autographic apparatus, composed of intestinal membrane treated by being stretched in wet condition over a rack and dried, substantially as described.
3. A stencil-sheet for autographic apparatus, composed of external coats of the large intestine of cattle, prepared by being treated with water and acid, stretched in wet condition over a rack and dried, substantially as described.

In witness whereof I have hereunto signed my name, this 23d day of December, 1899, in the presence of two subscribing witnesses.

KURT WALTER.

Witnesses:

WOLDEMAR HAUPT,
HENRY HASPER.