

UNITED STATES PATENT OFFICE.

CHARLES CAMPBELL, OF NEW YORK, N. Y.

TRANSFER SHEET.

No Drawing.

Application filed September 13, 1923. Serial No. 662,367.

To all whom it may concern:

Be it known that I, CHARLES CAMPBELL, a citizen of the United States, residing at New York city, N. Y., have invented a certain new and useful Improvement in Transfer Sheets, of which the following is a clear, full, and exact description.

This invention relates to an improved sheet material for various uses, and particularly to an improved sheet material for use in the making of transfer sheets such as carbon sheets used in manifolding.

In many manifolding systems in use at the present time, the blow of the machine is so heavy that the ordinary papers used in the making of carbon sheets are rapidly punched full of holes.

The present invention aims to provide a sheet material which will be as effective when coated with the carbon or other transfer pigment as the present paper sheets, but which will be more durable.

The invention aims further to provide a sheet material having peculiar characteristics which adapt it for other uses besides that of a base for the transfer pigment of transfer sheets.

Other objects and important features of the invention will appear from the following description and claims.

In carrying out the invention I provide what is practically an absorbent tissue coated with the carbon dope or other transfer pigment but which has preferably first been backed up with a layer of fabric, the fabric being of such a weight and character as not to interfere with the transfer action of the absorbent tissue and being so connected with or applied to the absorbent tissue as not to make it unnecessarily thick or clumsy to manipulate.

In its broader aspects the sheet material may be formed simply by pasting the fabric upon the back of the absorbent tissue, which may be paper of suitable weight and texture, but preferably the paper is introduced into the fabric or the fabric into the paper in the process of making the paper.

One method of effecting this result is to

feed the fabric into the paper making machine at a point where the paper web is not yet completely formed, in such a manner that the fabric will be filled with the pulp or other fibre used in the making of the paper. The fabric then proceeds through the rest of the machine with the paper.

By this method there is obtained a sheet material in which the absorbent tissue and the fabric are closely and uniformly united without the use of any adhesive, the fibres of the paper being entwined or interlaced with the fabric in the matting operation.

By regulating the amount of moisture in the fabric and in the paper uniform shrinkage is obtained, thereby producing a smooth sheet. Moreover, the absorbency of the paper sheet is retained, which is of great importance for some industries.

By this method it is possible to combine light weight tissue with a light weight fabric and thereby produce a sheet material quite different from anything heretofore known in the art.

It will be understood, of course, that various proportions of fabric and paper material may be employed, and that the invention is not restricted to an absorbent surface of paper tissue backed up with fabric or to fabric coated and impregnated, or coated or impregnated with paper pulp or fibre, and that various combinations of fabric and paper pulp or fibre may be employed such, for example, as a plurality of layers of fabric in a single sheet, a layer of pulp interposed between two layers of fabric or a sheet in which the paper is only partly, that is, in places combined with the fabric or in which the fabric is only partly, that is, in places combined with the paper.

What I claim as new is:

1. A transfer sheet comprising a textile fabric on one side of which paper fibres are deposited forming a closely matted absorbent and adherent coating thereon held only by adherence of the paper fibres to the said textile fabric, the said paper fibres being impregnated with a transfer pigment.

2. A sheet material for the purposes described, comprising a textile fabric having upon one face a coating of absorbent tissue impregnated with a transfer pigment.

5 3. A new article of manufacture comprising a sheet of fabric reinforced paper impregnated with a transfer pigment.

4. A transfer sheet comprising a sheet of fabric having thereon a coating of paper, said paper being treated with a transfer pigment. 10

Signed at New York city, N. Y., this 11th day of September 1923.

CHARLES CAMPBELL.