(No Model.)

G. H. WEISS.

BLUING PAPER.

No. 384,804. Patented June 19, 1888.

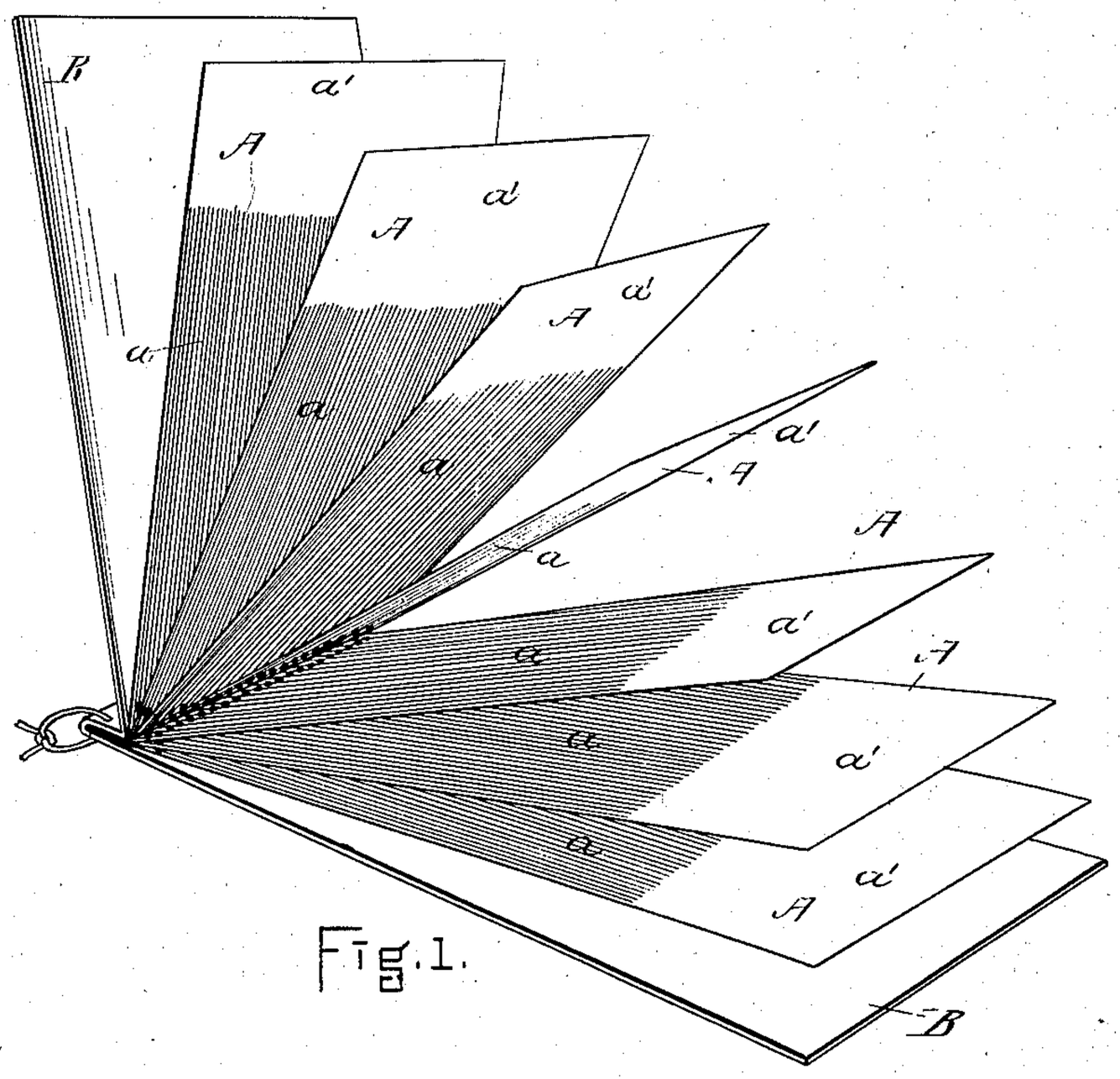

Fig. 1.

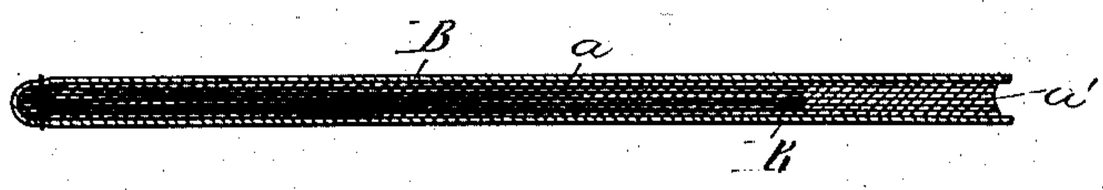

Fig. 2.

Witnesses.
Fred. B. Dolan.
J. M. Dolan.

Inventor.
Geo. H. Weiss.
by his atty
Clarke & Raymond.

UNITED STATES PATENT OFFICE.

GEORGE H. WEISS, OF NEWTON, MASSACHUSETTS, ASSIGNOR TO CARTER, DINSMORE & CO., OF BROOKLYN, NEW YORK.

BLUING-PAPER.

SPECIFICATION forming part of Letters Patent No. 384,804, dated June 19, 1888.

Application filed April 19, 1887. Serial No. 235,301. (No model.)

To all whom it may concern:

Be it known that I, GEORGE HENRY WEISS, a subject of the Emperor of Germany, and now residing in Newton, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in the Preparation of Bluing for Marketing and Use, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature.

The invention relates to the method of marketing and using bluing which comprises the application of a bluing solution to strips or sheets of paper of any desired size, which sheets act to hold the bluing for transportation, and also as a vehicle by which the bluing is introduced into the water or washing solution. Heretofore these sheets have been prepared for use by coating both surfaces of the sheet with bluing composition and by saturating the sheet with a bluing composition, so that the entire sheet is covered upon both sides, or filled with the bluing composition, and these sheets have been loosely packed in envelopes for transportation and marketing. When the bluing sheets or strips are thus prepared, it is necessary in using them to submerge the entire sheet or strip in water or other liquid to which the bluing is applied, and as this is done by hand it follows that this cannot be done without wetting and bluing the fingers to a greater or less extent; and as the sheets are packed together in an envelope it is practically impossible after one sheet has been taken from the envelope to take another sheet therefrom without wetting some of the sheets in the envelope, which may spoil them to some extent.

My invention is designed to obviate the objections which arise from this manner of preparing the bluing for use; and it comprises, first, a blued sheet or strip which consists of a sheet or strip of paper saturated or coated with a bluing solution upon a portion of one or both surfaces, leaving a portion of the sheet uncoated or unsaturated with the bluing composition, which acts as a tab whereby the sheet may be held by the thumb and fingers while the portion of the strip or sheet which carries the bluing is introduced into the water or other liquid.

The invention further relates to the assembling of these sheets or pages thus prepared in the form of a book, with the uncovered sections or tabs at the outer ends of the blued sheets or strips which make the leaves of the book, the inner ends of the sheets or strips being secured to each other in any desired way, and preferably within covers of paper or any other suitable material. The sheets, preferably, are also perforated or weakened close to the seam uniting them together, so that they may be readily detached or removed from the book.

Referring to the drawings, Figure 1 represents the leaves or sheets incorporated in a book, the book being represented as open. Fig. 2 is a section through the book when closed.

A represents the sheets or strips carrying the bluing. *a* represents the portions of the sheets, strips, or leaves covered or saturated with the bluing composition; and *a'*, the tab ends thereof, which are free from bluing. In preparing these sheets or slips for use I take paper of any suitable quality, preferably Manila paper, and cut it to the form of the sheet or strip desired. I then prepare a composition of bluing, which may be made in any desirable way, but which I prefer to make substantially as follows: One solution which is desirable for this purpose I make by taking soluble Prussian blue or a suitable aniline-blue and dissolve the same in water, so as to obtain a solution as concentrated as possible. In case aniline-blue is used there should be added some acetic acid to the water in order to develop the color thoroughly. There may be added to the solution dextrine, starch, or other suitable thickener. I would say, however, that there are other ways of making a solution suitable for application to paper in the manner specified, and that I do not confine myself in practicing my invention to the one herein specified. Into this solution the sheets or strips are dipped by their tab ends, and so that about from two-thirds to three-quarters of each strip or sheet shall be immersed in the solution, and they are allowed to remain there-

in sufficiently long to properly receive the bluing. If the paper is of a porous character, its substance is more or less saturated with the solution. If it is not porous, then the bluing covers the surfaces thereof submerged in the composition as a coating or layer. The sheets thus prepared when dried are brought together, and so that their tab ends shall be upon the same line, and they are then united at their opposite or blued ends by any desirable means. I have represented them in the drawings as secured together by thread; but I would say that I do not confine myself to this means of attaching them, as they may be secured together in any desirable way. I prefer, as a rule, to inclose them within a cover, B, of a size sufficient to cover and protect the blued sheets, and when a cover is used the sheets are assembled within it, and are united to each other and to the cover by thread or other fastening passed through the cover and close to its back, the cover generally being formed from a strip of unblued paper of somewhat more than twice the length of the blued sheets.

Where thick or tough paper is employed for the blued sheets or leaves, I prefer to perforate or otherwise weaken it close to the line of the fastening securing them together, in order that the leaves or sheets may be easily detached from the book.

I would say that the book form for holding the blued sheets or leaves can be employed where the sheets or leaves are entirely covered or saturated with bluing. I would also say that I do not confine myself to the especial form or arrangement of the sheets or leaves and cover represented in the drawings, nor to the special location of the tab in relation to the portions of the sheets or leaves saturated or covered with bluing, nor to the special method of obtaining such tab, as I consider that my invention involves a bluing sheet or leaf which shall have a portion of its substance arranged or adapted to carry bluing either by saturation or by coating, or both, and which shall also have either integral therewith or affixed thereto an unblued tab or section, by which the sheet or leaf can be handled without soiling or dirtying the fingers. I would say, also, that I do not confine myself to the use of paper as a vehicle for carrying the bluing, but may use in lieu thereof a other suitable material.

It will be observed that by this form of blu sheet or leaf and method of securing them gether not only can the sheets be used wi out soiling the hands or anything else, but t they may be used more economically, as t leaves are held together as a book until t time of use, and only as many are then remov from the book as may be needed for proper preparing the water or liquid.

Having thus fully described my invention claim and desire to secure by Letters Patent the United States—

1. As an improved article of manufacture, bluing leaf, sheet, or strip consisting of a lea sheet, or strip of paper or other similar ma terial having one section coated or saturate with a bluing composition soluble, or substa tially soluble, in water, and having also a sec tion free from bluing, by which it may b handled without soiling the fingers, an adapted to supply the water or fluid with given amount of bluing, as and for the pur poses described.

2. As a new article of manufacture, a blue book containing a number of strips or leaves of paper or other similar material having the inner sections, *a*, saturated or coated with a bluing composition soluble in water and the outer sections, *a'*, free from bluing, as and for the purposes specified.

3. The blue-book comprising a number of sheets, leaves, or strips of paper or other material, sections of which are coated or saturated with a bluing composition, and sections of which are uncoated or unsaturated, and which are used for tabs, united together and to their holding-covers, as and for the purposes described.

4. The blue-book comprising the covers B, the blued sheets or leaves A, having the blued sections *a* and the tab ends *a'* united to each other and to the cover, and having perforations or weakened close to the line of the attaching-seam, as and for the purposes described.

GEO. H. WEISS.

In presence of—
F. F. RAYMOND, 2d,
FRED. B. DOLAN.

Correction in Letters Patent No. 384,804

It is hereby certified that the residence of the assignees in Letters Patent No. 384,804, granted June 19, 1888, upon the application of George H. Weiss, of Newton, Massachusetts, for an improvement in "Bluing Paper," was erroneously written and printed "Brooklyn, New York;" that said residence should have been written and printed *Boston, Massachusetts, and New York, N. Y.;* and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed, countersigned, and sealed this 10th day of July, A. D. 1888.

[SEAL.]

D. L. HAWKINS,
Assistant Secretary of the Interior.

Countersigned:

BENTON J. HALL,
Commissioner of Patents.