

UNITED STATES PATENT OFFICE.

FRIEDRICH CARL THEIS, OF HÖCHST-ON-THE-MAIN, GERMANY, ASSIGNOR TO FARBWERKE VORM. MEISTER LUCIUS & BRÜNING, OF HÖCHST-ON-THE-MAIN, GERMANY, A CORPORATION OF GERMANY.

PROCESS OF BUCKING OR BLEACHING VEGETABLE FIBERS DYED WITH VAT DYESTUFFS.

983,951.

Specification of Letters Patent. Patented Feb. 14, 1911.

No Drawing.

Application filed October 22, 1909. Serial No. 523,969.

To all whom it may concern:

Be it known that I, FRIEDRICH CARL THEIS, a citizen of the Empire of Germany, residing at Höchst-on-the-Main, Germany, have invented certain new and useful Improvements in the Process of Bucking or Bleaching Vegetable Fibers Dyed with Vat Dyestuffs, of which the following is a specification.

Vegetable fibers dyed with vat dyestuffs have the drawback of bleeding into the white parts when they are bucked with caustic soda, carbonate of soda and the like, which is often necessary in bleaching dyed fabrics. It has been attempted to remedy this disadvantage by different means, for instance by adding permanganate or bichromate to the lye. Thus the bleeding of the dye into the undyed fibers (spun or woven) has been prevented, but the fibers were stained by precipitates of metallic oxid and had then to be bleached by treatment with an acid. For instance in French Patent No. 392,858 is described a process for bucking material dyed or printed with vat dyestuffs, which consists in adding easily reducible substances to prevent the bleeding of the dye, for which purpose exclusively certain organic compounds are used, whereas the process of the present invention consists in using a certain inorganic body which, contrary to the other inorganic substances which have been hitherto

tried, prevent the bleeding of the dye without staining the white portions of the material. I have now found that the bleeding can be prevented in the bucking process—whether it be carried out in the vat or under pressure—and the dyeings themselves protected, by introducing into the lye alkali-bromates.

Example: A lye is prepared containing, for each 100 kilograms of the fabric to be bucked, 1.2 kgr. of solid caustic soda and 0.2 to 0.5 kgr. of bromate of potash. About 500 kilograms of water is generally used for each 100 kilograms of the fabric. In this lye the material is boiled for two hours or longer, with or without pressure, according to the usual method of bleaching.

Having now particularly described my invention, what I claim is:

The process of bleaching vegetable fibers or fabrics dyed with vat dyestuffs avoiding the bleeding of the dye into the undyed portions, which consists in subjecting the dyed materials to the action of a boiling alkaline solution containing alkali-bromate.

In testimony whereof, I affix my signature in presence of two witnesses.

FRIEDRICH CARL THEIS.

Witnesses:

JEAN GRUND,
CARL GRUND.