

UNITED STATES PATENT OFFICE.

ARTHUR FIELDING, OF SALFORD, ENGLAND.

PROCESS OF FIXING VISCOSE ON TEXTILES, &c.

SPECIFICATION forming part of Letters Patent No. 708,761, dated September 9, 1902.

Application filed February 18, 1902. Serial No. 94,687. (No specimens.)

To all whom it may concern:

Be it known that I, ARTHUR FIELDING, manufacturing chemist, a subject of the King of Great Britain, residing at George street, Salford, in the county of Lancaster, England, have invented a certain new and useful Improved Process of Fixing Viscose (Cellulose Sulfocarbonate) on Textile and other Fabrics and Materials, of which the following is a specification.

My invention relates to an improved process of fixing viscose (cellulose sulfocarbonate) on textile and other fabrics and materials.

The viscose prepared according to the specification of United States Letters Patent, granted to Cross, Bevan, and Beadle, No. 520,770, dated the 5th of June, 1894, has hitherto been imperfectly fixed by means of a brine-bath upon the goods to which it is applied for filling or finishing purposes, and this brine-bath has a detrimental effect upon many colors, and consequently diminishes their brilliancy and produces unevenness in the shades. According to my invention I dispense with the brine-bath and substitute a steaming or aging process, which does not alter or affect the color of the materials. For example, I impregnate the goods by padding or mangling or by any of the other well-known methods with a solution of the viscose containing from one to ten per cent. of dry cellulose, according to the effect desired. The alkali in the viscose may or may not be neutralized or partially neutralized by the addi-

tion of a solution of bisulfite of potash or other suitable bisulfites. I dry the goods and fix the viscose by passing them preferably through a heated chamber containing a sufficient number of rollers to dry quickly, and at the end of the chamber I inclose a space which I use as a steaming or aging box, having a pressure of steam of one to three pounds, or I may employ a stenter or steam-cylinder, then steam for two or three minutes, or pass through an aging-machine. By either of the foregoing processes of steaming I am able to dispense with the usual brine-bath for fixing the viscose. The viscose thus fixed can be utilized as a mordant for anilin and certain other colors, and also as a decomposing and fixing agent for mordants, such as metallic salts, employed in dyeing with certain colors, such as alizarin and dye-woods. The goods are finally washed and dried.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

The herein-described process of fixing viscose on goods, said process consisting of the impregnation of the goods with viscose, drying the goods, and fixing the viscose by means of steaming.

In witness whereof I have hereunto set my hand in presence of two witnesses.

ARTHUR FIELDING.

Witnesses:

H. B. BARLOW,
S. W. GILLET.