

UNITED STATES PATENT OFFICE.

ARTHUR FIELDING, OF SALFORD, ENGLAND.

MANUFACTURE OF VISCOSE.

SPECIFICATION forming part of Letters Patent No. 708,760, dated September 9, 1902.

Application filed November 5, 1901. Serial No. 81,250. (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 certain new and useful Improvements in or Relating to the Manufacture of Viscose, (Cellulose Sulfocarbonate,) of which the following is a specification.

10 My invention relates to improvements in or relating to the manufacture of viscose (cellulose sulfocarbonate) prepared according to the specification of United States Letters Patent granted to Cross, Bevan, and Beadle, No. 15 520,770, dated June 5, 1894; and the object of my invention is to manufacture a colorless or approximately colorless viscose.

At the present time viscose is employed in the manufacture of certain kinds or qualities 20 of paper; but its application has been limited to a great extent by its comparatively dark shade, which has hitherto prevented its use in the manufacture of white paper or certain light and delicate shades of paper.

25 According to my invention I make a solution of bisulfite of soda or other suitable bisulfites, and I mix a certain proportion of the solution with the viscose in order to neutralize its color and make it suitable for the manufacture of white paper from wood-pulp or 30 fibrous pulp from other suitable material.

It is obvious that the bisulfite of soda or other bisulfite in solution may be added to any mixture of fibrous pulp, &c., with viscose

for the purpose named. After treatment 35 with the mixed solution of bisulfite and viscose the paper is steamed after drying in order to complete the decolorization and fixation of the viscose. For example, I employ in the manufacture of paper, say, six gallons 40 of bisulfite of soda at 70° Twaddle mixed with twenty-four gallons of viscose, (five-per-cent. solution.) These quantities are suitable for adding to a beater containing the equivalent of six hundred pounds of dry pulp. The 45 bisulfite may be added to the fibrous pulp before or after the viscose has been put into the beater instead of being mixed beforehand. Instead of bisulfite of soda any other suitable bisulfite, such as bisulfite of alumina, 50 may be used, or a mixture of both.

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

The herein-described process consisting of 55 the admixture of a suitable bisulfite with viscose (cellulose sulfocarbonate) and the incorporation of the mixture with fibrous pulp in the manufacture of paper, and subsequent drying and steaming to complete the decolori- 60 zation and fixation of the viscose.

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

ARTHUR FIELDING.

Witnesses:

H. B. BARLOW,
S. W. GILLETT.