252. COMPOSITIONS,

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EXAMINER

UNITED STATES PATENT OFFICE.

ISABELLA J. WRIGHT, OF KALAMAZOO, MICHIGAN.

INK-REMOVING AND BLEACHING COMPOUND.

1,226,735. Specification of Letters Patent. Patented May 22, 1917.

No Drawing. Application filed June 29, 1916. Serial No. 106,635.

To all whom it may concern:

Be it known that I, ISABELLA J. WRIGHT, a citizen of the United States, residing at Kalamazoo, Michigan, have invented certain new and useful Improvements in Ink-Removing and Bleaching Compounds, of which the following is a specification.

This invention relates to improvements in ink removers.

My improved ink remover is especially designed by me for use in preparing paper stock from paper having printed matter thereon, such as newspapers, magazines, books and the like.

The main object of my invention is to provide an improved ink remover for use in preparing paper stock for paper making which is very efficient and not injurous to the stock, and at the same time very economical to use.

A further object is to provide an ink remover which is very effective as bleach.

Further objects will definitely appear in the detailed description to follow. The invention is clearly defined and pointed out in the claims.

In the preparation of my improved ink remover, I use the following ingredients in about the proportion stated: 4 pounds sodium carbonate, variously known commercially as soda ash, sal soda or washing soda; ¾ pound chlorid of lime; 1 gallon kerosene and 6 pounds soap. These ingredients are thoroughly mixed, water being added to facilitate mixing. In mixing, the sodium carbonate is dissolved in water before mixing the chlorid of lime or the kerosene therewith. Laundry soap is preferred although there are various soaps that may be used, and quite satisfactory results secured. The soap is also dissolved before mixing with the other ingredients. The compound or mixture thus prepared is added to about 1 barrel of water. The proportion of the water, however, may be greatly varied although if the solution is made too weak considerably more time is required to free the ink.

The stock to be treated is placed in the solution, preferably heated, although the process can be effectively carried out with cold water. Heating, however, lessens the time required to free the ink. The stock is left in the solution until the ink is freed and may be readily washed out. This ordinarily requires but little time, but the time required for this step varies not only with the strength of the solution but varies according to the different characters of paper and of the ink used thereon. It is not, however, injurious to the stock to leave it in the solution longer than is actually required for the removal or freeing of the ink. The stock is removed from the solution and washed clean or until the ink is washed away.

The ink freeing or removing step is facilitated by a beater engine, while the washing step may be effectively carried out by washers commonly employed in paper mills. After proper washing the stock is ready for use and will be found to be clean and white. If desired, the stock may be rinsed with water having bluing therein which will add somewhat to its whiteness.

My ink removing compound is very efficient and, as stated, leaves the stock clean and well bleached. The ingredients may be considerably varied in proportion and satisfactory results still secured. While I preferably use kerosene other hydrocarbons may be substituted with quite satisfactory results.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. An ink remover for paper stock comprising sodium carbonate, 4 pounds; chlorid of lime, ¾ pound; kerosene, 1 gallon; soap, 6 pounds; combined with water substantially as described.

2. A solution for the treatment of paper stock comprising sodium carbonate, chlorid of lime, kerosene, soap, and water, combined substantially as specified.

3. A solution for the treatment of paper stock including sodium carbonate, chlorid of lime, a hydrocarbon, and water combined substantially as specified.

In witness whereof, I have hereunto set my hand and seal in the presence of two witnesses.

ISABELLA J. WRIGHT. [L. S.]

Witnesses:

M. L. GLASGOW,

M. J. GREGORY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."