

United States Patent Office.

JOSEPH E. HOVER, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 61,338, dated January 22, 1867.

IMPROVED WRITING PAPER.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOSEPH E. HOVER, of Philadelphia, Pennsylvania, have invented an Improved Writing Paper; and I do hereby declare the following to be a full, clear, and exact description of the manner in which the same is manufactured.

It is well known that the ordinary writing inks or fluids, when deposited on ordinary paper, will not attain their deepest color until they have been exposed to the atmosphere for a sufficient length of time for the materials in the ink to become oxidized, and that for this reason many writings are pale and indistinct for a long time after they are executed.

Many efforts have heretofore been made to manufacture an ink which would be of a deep color when first placed upon the paper; these efforts, however, have been but partially successful, as the inks, although darker in color, are also necessarily of greater consistency, and will not therefore flow with the desired freedom from the pen. In order to overcome this difficulty, I manufacture a writing paper, by coating the surface of an ordinary paper with pulverized chalk, magnesia, or other substance which will neutralize the acids in the ordinary inks, the chalk being in some instances mixed with a solution of alum before being applied to the paper.

When a mixture of chalk and alum is employed, the proportions of the materials vary according to the nature of the paper, but about five grains of alum and thirty grains of chalk may be generally used with each ounce of water; the mixture being applied with a brush or in any other suitable manner. If necessary, the paper when dry may be passed between calendering rolls. When paper thus prepared is written upon with any of the ordinary inks, the acid in the latter will be instantly neutralized by the material on the surface of the paper, and the coloring matter in the ink, instead of being held in solution or suspension, will be immediately precipitated, an ink will thus in a few moments acquire a depth of color which it would not possess for hours after being deposited upon ordinary paper. A weak solution of gum or other material, which will cause the chalk to adhere to the paper, may be substituted for the alum, or the chalk or its equivalent may be used alone, and may be deposited on the surface of the paper in any suitable manner. In some instances chalk may be mixed with the ordinary size, so as to apply it to paper before the latter is calendered, the coating mixture being colored when colored papers are made.

Without confining myself to the special ingredients herein mentioned, or to any particular mode of applying the coating to paper, I claim as my invention, and desire to secure by Letters Patent, as a new manufacture—

Writing paper, the surface of which is coated with chalk or other material, which will neutralize the acids in writing inks or fluids.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOS. E. HOVER.

Witnesses:

CHARLES E. FOSTER,
WM. HALL WAXLER.