UNITED STATES PATENT OFFICE.

WILLIAM F. MORANG, OF MANCHESTER, NEW HAMPSHIRE, ASSIGNOR TO MORANG CHEMICAL COMPANY, OF MANCHESTER, NEW HAMP-SHIRE.

COMPOSITION OF MATTER FOR SOFTENING AND BLEACHING SOLE-LEATHER.

No. 820,121.

Specification of Letters Patent.

Patented May 8, 1906.

Application filed January 16, 1906. Serial No. 296,384.

To all whom it may concern:

Be it known that I, WILLIAM F. MORANG, a citizen of the United States of America, residing at Manchester, in the county of Hillsboro, in the State of New Hampshire, have invented a new and useful Composition of Matter to be Used for Softening and Bleaching Sole-Leather, of which the following is a specification.

My composition consists of the following ingredients combined in the proportions stated, viz: Epsom salts, one pound thirteen ounces; hyposulfite of soda, one pound thirteen ounces; borax, one pound four and one-half ounces; permanganate of potash, one ounce; oil of mirbane, one-half ounce. These ingredients are to be thoroughly mingled by agitation.

In using the above-named composition five (5) pounds thereof should be added to one hundred (100) gallons of lukewarm water. The leather should then be immersed in the solution and should be allowed to remain there from five (5) to twelve (12) hours, according to the hardness of the leather used. The

leather should then be removed from the solution and allowed to dry sufficiently to handle. By the use of the above composition the leather becomes soft and pliable and easier worked, thereby preventing breaking of channels and cracking in the leveling-machine, and at the same time the leather is bleached without impairing its fiber, thus improving the ap-

pearance and finish.

I am not aware of any composition used for 35 the same purpose, nor am I aware that all the ingredients of my composition have been used together.

I claim—

1. The herein-described composition of 40 matter, resulting from mixing of Epsom salts, hyposulfite of soda, borax, permanganate of potash, oil of mirbane, as described and for the purpose specified.

2. The herein-described composition of 45 matter for softening and bleaching sole-leather, resulting from mixing Epsom salts, one pound thirteen ounces; hyposulfite of soda, one pound thirteen ounces; borax, one pound four and one-half ounces; permanga-50 nate of potash, one ounce; oil of mirbane, one-half ounce, substantially as described.

3. The herein-described composition of matter for softening and bleaching sole-leather, resulting from mixing Epsom salts, 55 one pound thirteen ounces; hyposulfite of soda, one pound thirteen ounces; borax, one pound four and one-half ounces; permanganate of potash, one ounce; oil of mirbane, one-half ounce; water, lukewarm, one hundred 60 gallons to each five pounds of the abovenamed composition.

WILLIAM F. MORANG.

Witnesses:

CHARLES A. PERKINS, J. B. CAVANAUGH,