

UNITED STATES PATENT OFFICE.

CHARLES H. BRIGHAM, OF MARLBOROUGH, MASSACHUSETTS.

IMPROVEMENT IN OIL-PROOF COMPOSITIONS FOR LEATHER.

Specification forming part of Letters Patent No. **150,652**, dated May 5, 1874; application filed April 18, 1874.

To all whom it may concern:

Be it known that I, CHARLES H. BRIGHAM, of Marlborough, in the county of Middlesex and State of Massachusetts, have invented a new and valuable Improvement called an Oil-Proof Composition; and I do hereby declare that the following is a full, clear, and exact description of the oil-proof composition.

It is well known to those engaged in the business of shoe-making that when the sole is joined to the upper the oil with which the upper leather is saturated is liable to soak through the porous leather of which the sole is composed, so disfigure it, and rendering it impossible to produce a handsome finish on its under surface.

A common method of meeting this difficulty has been the application of sheet-paper between the upper and the sole. This, however, but partially remedies the matter.

My invention is intended to produce a thin impervious coating on the upper surface of the sole itself, thus dispensing with the use of paper or similar appliances.

For this purpose the following compound is applied by brushing it over the flesh side of the sole after it is shaped, and just previous to its application to the upper.

In order to prepare this compound, take one pound of caustic soda or potash, and dissolve it in one gallon of water; then add two ounces

of sugar of lead, two ounces of gum-shellac, and one-fourth ounce of oil of cassia. Place in a suitable vessel, and agitate occasionally until the shellac has become completely dissolved.

I have found by experiment that the oil of cassia, gum-shellac, and sugar of lead may, any or all of them, be omitted; but I find that the best results are obtained by using the compound as above described.

This penetrates but a short distance into the leather when applied to the flesh side, and produces no injurious results, while it prevents absorption of the oil by the sole.

What I claim, and desire to secure by Letters Patent, is—

1. The production of oil-proof films, impervious to oil, on the flesh surface of leather which is to be used for the soles of boots or shoes, by the use of caustic alkalies for the production of said films.

2. The use of caustic alkalies in combination with sugar of lead and gum-shellac, with or without oil of cassia, in about the proportions stated, and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

CHARLES H. BRIGHAM.

Witnesses:

EDWARD L. BIGELOW,
E. IRVING MORSE.