UNITED STATES PATENT OFFICE.

JOHN KIMBALL, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN ANTI-ATTRITION COMPOUNDS.

Specification forming part of Letters Patent No. 207,874, dated September 10, 1878; application filed July 29, 1878.

To all whom it may concern:

Be it known that I, John Kimball, of Boston, in the county of Suffolk and Commonwealth of Massachusetts, have invented an Improved Compound for Preventing the Squeaking of Boot and Shoe Soles, &c., of which the

following is a specification:

This invention consists in the following-described compound, to be applied between the soles of boots and shoes, or between any contiguous surfaces of leather, to prevent the same from squeaking by the attrition of one surface upon the other. Various means have been devised for preventing the squeaking of boot and shoe soles when in use, among which may be mentioned the driving of a line of wooden pegs up and down the center of the outer sole to more firmly fasten the two soles together; but this as well as other devices for so firmly uniting the two soles is objectionable, because it stiffens the bottom of the shoe when it is desirable that the same should be as pliable as possible.

I employ a quantity of French chalk, soapstone, or any suitable material of a like nature, finely pulverized and mixed with water or flour-paste, or any suitable vehicle which will serve to receive the argillaceous base, and deposit it evenly and uniformly upon the surface to be coated therewith, and cause it to adhere firmly thereon. I have ascertained that the use of mere soap-stone or French chalk alone will not answer the purpose, because it cannot be evenly distributed upon the surface of the sole or other article, and because it interferes with the manipulations of the workmen by getting onto other parts of the work.

men by getting onto other parts of the work. I find that water and the finely-powdered French chalk, soap-stone, &c., will answer reasonably well, although it does not hold the

base together as firmly upon the article when dry as though a paste was employed, and I prefer to use paste of some kind in connection with the said argillaceous base, although I do not confine myself to it.

In mixing this compound I take about a pint of water to a pound of the finely-pulverized soap-stone, French chalk, or other base employed, and mix them thoroughly together to the consistence of cement, and it must not be too stiff, as it should leave the brush freely and uniformly. When paste is employed about the same quantity is used as of water, care being taken not to make the mixture too thick.

By depositing the French chalk, soap-stone, &c., base in the manner above indicated I can get a larger quantity of it upon the surface in an even and uniform layer. This compound having been mixed, as above described, either with water or with paste, to the consistency of whitewash, or a little thicker, is brushed upon the surface of the sole in a thin and even layer, and upon drying will adhere thereto.

Having thus fully described my invention, I claim and desire to secure by Letters Patent

of the United States—

The described compound for preventing the squeaking of boot and shoe soles or other leather articles, consisting of finely-pulverized French chalk, soap-stone, or any other suitable base mixed with water alone or with a suitable paste to a consistence which will enable it to be deposited upon a level surface in a uniform manner, substantially as described.

JOHN KIMBALL.

Witnesses:

F. F. RAYMOND, 2d, A. J. OETTINGER.