

# United States Patent Office.

GEORGE F. WILSON, OF EAST PROVIDENCE, RHODE ISLAND, AND EBEN  
NORTON HORSFORD, OF CAMBRIDGE, MASSACHUSETTS.

*Letters Patent No. 75,338, dated March 10, 1868.*

IMPROVED PROCESS OF TREATING ACID PHOSPHATES IN THE MANUFACTURE OF YEAST-  
POWDERS, &c.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that we, GEORGE F. WILSON, of East Providence, in the county of Providence, and State of Rhode Island, and EBEN NORTON HORSFORD, of Cambridge, in the county of Middlesex, and State of Massachusetts, have invented a new and improved Process of Treating Acid Phosphate of Lime, by which its homogeneity is secured preparatory to mixing with farinaceous dilutants; and we do hereby declare the following to be a full and exact description thereof.

The object of this invention is to secure, in the continuous manufacture, in large quantities, of Horsford's pulverulent phosphoric acid, or acid phosphate of lime, the homogeneity and constant degree of acidity of the product of each concentration of acid liquor, and also to mechanically mix the viscid mass resulting therefrom with farinaceous dilutants, preparatory to the subsequent stages of the manufacture.

A certain number of gallons of liquor to be concentrated is assigned to each man, who has charge of a certain number (in general twelve) of kettles, such as described in our application for a patent for a new and improved process of concentrating acid phosphate of lime liquor, of even date herewith. To this quantity of liquor, according to its specific gravity, a certain weight of ground white bones is to be added. When the white bones have been distributed, as nearly as may be by hand, to the several kettles, the degree of acidity of the viscid product in each kettle will differ more or less from that of all the others. By emptying the kettles into a common receptacle, and mixing them intimately together, the resultant mixture is, of course, homogeneous, and of uniform acid strength. The heated viscid mass may be easily mixed with a stirrer, a hoe, or spade. In this condition it may or may not be left to cool and set before mixing with farinaceous matters.

What we claim, and desire to secure by Letters Patent of the United States, is—

The use of the kettle or common receptacle for mixing together the viscid mass resulting from each day's work, after partial crystallization, with farinaceous dilutants, in the manner and for the purpose above set forth.

GEO. F. WILSON,  
E. N. HORSFORD.

Witnesses:

WILLIAM HEDGE,  
W. H. MCGRENNERY.