UNITED STATES PATENT OFFICE.

GEORGE ALFRED LANAUX, OF NEW ORLEANS, LOUISIANA.

PROCESS OF BLEACHING RICE.

SPECIFICATION forming part of Letters Patent No. 576,860, dated February 9, 1897.

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To all whom it may concern:

Be it known that I, GEORGE ALFRED LANAUX, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Processes of Bleaching Rice; and I do hereby declare that the following is a full, clear, and exact description of the same.

To enable those skilled in the art to use my invention, I shall now explain my newly-invented process of bleaching rice.

The hulling is done by means of stones or any other suitable means. The rice after being hulled by the stones is then ready to go to the pounders, to the Engleberg hullers, or to any other huller or machine to have the bran removed and then to the brushes or to the polishers, where the rice-grains receive a finish polish, which leaves it in a clean state. I can make the application of my bleaching compound prior to the removal of the bran, or during the process of removing the bran, or after the bran has been removed, or while the rice is passing through the brushes or polishers, or to rice which has already been brushed or polished.

The grade of rice which my improved process particularly relates to for treatment is what is known as "off" or "red" rice, the grains being off white with a reddish tint, which commands a lower price than strictly clean or white rice.

By the use of my bleaching process I clean and whiten the grains so that the quality of the rice is greatly improved and commercially rendered more valuable.

I use the following materials in my bleaching process: bluing, soft stony powders, and oil. Of these materials are preferred ultramarine-bluing, French chalk, (also known as "soapstone talc,") rice polish, powdered lime, powdered starch, wheat-flour, rice-flour, white chalk, or any other white powder which can be had in a fine powdered condition. I prefer "petrol-oil," by which term I mean a liquid petroleum product .870° specific gravity. The mixtures of these materials are controlled by the conditions and quality of the rice to be treated. For the ordinary red rice, usually termed "red" rice, the following proportions would be used: one ounce three drams fifteen grains of powdered soapstone or wheat-flour, one-half grain ultramarine-bluing, and about ten drops petrol-oil.

It will sometimes be found necessary to use the white powders and bluing and not the oil, according to the quality of the rice.

For cleaned rices which have been through the usual process of cleaning for the market I would use usually, say for twelve ounces, avoirdupois weight, of rice, one scruple and thirteen grains of mixture; for ten pounds of rice, seven drams and nine grains, or equivalent of little less than one ounce, avoirdupois weight. For one barrel of rice, weighing net three hundred and fifty pounds, put in two pounds of mixture which would contain less than nine grains of ultramarine-bluing. In treating rices which have already had the bran removed and the grains have not been polished or finished ready for the market I increase the ultramarine-bluing to the quantity of one and one-half grains instead of one-half grain and the petrol-oil to twenty-five drops instead of ten drops. I then apply the mixture, as altered, in the same proportion of the other compound as I do on cleaned rices.

To apply the bleaching mixtures to the rice-grains, I put the mixture in a shaker, preferably, and sprinkle it on the grains. This mode of application I do not confine myself to, as it may be applied to the rice-grains in any other suitable manner. When the mixture has been applied to the rice-grains, then the rice-grains are to be rebrushed or not, as the quality of the rice may require; but for rice which has had the bran removed and has not been brushed or polished then it is absolutely necessary that this rice should be well brushed and polished to make it marketable. During the brushing and polishing of the rice the grains free themselves of all foreign substances which are present, thereby leaving the rice-grains smooth and clean.

My bleaching process and mixtures are applicable to any kind of rice, but more particularly to off, red, or rosy rices, and does not penetrate the grain, but effects and acts directly and superficially on its enamel, which it bleaches, giving it a smooth, white, and high

polish, which greatly improves the actual and commercial value of the rice. When rices are to be held or stored for any length of time, the grains are protected from the attack of weevils by the fact of the enamel of the grain being in such good condition, resulting from the treatment received from my process of bleaching.

Having described my invention, what I claim is—

1. The herein-described process of cleaning and bleaching rice, consisting in applying to the rice-grains a mixture of bluing, white polishing-powders and oil, and finally brushing and polishing the rice, in the manner set forth.

2. A compound for cleaning and bleaching rice, consisting of ultramarine-bluing, soapstone and petrol-oil, compounded substantially in the manner and the proportions specified.

In testimony whereof I have hereunto subscribed my name in the presence of two witnesses.

GEORGE ALFRED LANAUX.

Witnesses:
GUSTAVE V. SONIAT,
LOUIS RENÉ VILLARS.