## UNITED STATES PATENT OFFICE.

JOHN P. BRYAN, OF CANTON, OHIO, ASSIGNOR TO THE CENTRAL SOAP COMPANY, OF SAME PLACE.

## IMPROVEMENT IN IMPALPABLE SOAPS.

Specification forming part of Letters Patent No. 163,571, dated May 25, 1875; application filed March 29, 1875.

To all whom it may concern:

Be it known that I, John P. Bryan, of Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Soap; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improved process in the preparation of toilet and other soaps; and consists in the steps, hereinafter specified and claimed, for reducing said soap to the form of an impalpable powder.

In carrying out my process the steps are substantially as follows: I take cocoa-oil and caustic lye, in suitable proportions, and saponify them. While in a fluid state I add twenty-five per cent., more or less, of silex, or some equivalent thereof. I also take tallow, or some kindred substance, and caustic lye, in suitable proportions, and saponify them, and while in a fluid state add twenty-five per cent., more or less, of silex, or any equivalent thereof. The office of the silex will hereinafter more fully and at large appear. I then take one part of the former to three parts of the latter, mix them, and reduce to a powder by cutting, drying, and pulverizing them. The mass is pulverized between millstones, or in any other suitable way, whereby it is thoroughly ground and reduced. It is then bolted through silk bolting-cloths. The drying is preferably ef-

fected by hot air. After the soap has thus been properly prepared by mixing, drying, grinding, and bolting, as above stated, I then perfume it, if desired, by casting into it a spray of essential oils, or any perfuming substance.

The object in adding the silex is to make the soap pulverize easily, and to render it dry. It serves also to keep it dry. Moreover, it has a detersive quality.

I do not, however, limit myself to the employment of silica, as some other ingredient may perform a like function of enabling me to pulverize and reduce the mass to a dry impalpable powder.

The product of my invention is a light, dry, and impalpable powder, that is readily sifted through a perforated surface—as, for instance, a pepper-box, or the like—and it will not cake or glue itself together.

What I claim as my invention is—

The process, substantially as herein described, consisting in mixing with any saponaceous compound such substance or material as shall render the mass readily pulverizable, then drying and grinding the mass, whereby it is reduced to an impalpable powder, substantially as and for the purposes described.

In testimony whereof I have signed my name to this specification in the presence of

two subscribing witnesses.

JOHN P. BRYAN.

Witnesses:

R. S. SHIELDS, C. F. Perkins..