UNITED STATES PATENT OFFICE.

ALFRED ZUCKER, OF DRESDEN, GERMANY.

CARBONIC-ACID BATH.

No. 869,610.

Specification of Letters Patent.

Patented Oct. 29, 1907.

Application filed August 23, 1906. Serial No. 331,695.

To all whom it may concern:

Be it known that I, Alfred Zucker, a subject of the King of Bavaria, and a resident of 63 Schnoor street, Dresden, in the Kingdom of Saxony, German Empire, bave invented certain new and useful Improvements in Carbonic-Acid Baths, of which the following is an exact specification.

My invention relates to carbonic acid baths, and has for its object to increase the effective action of baths of 10 this type on the surface to be bathed. As known hitherto such baths have been prepared by introducing the bicarbonate of the alkali into the water before or after having added the acid to the bath, whereby the water was carbonated through its entire mass, much of 15 the carbonic gas escaping in large bubbles.

Baths prepared in such manner show the defect that the formation and distribution of the carbonic acid gas cannot be regulated. This disadvantage is overcome by the present invention, and the novelty consists in this, that the bath, after the acid has been added to the water, is prepared in such manner that the gas produced by the action of the acidulated water on the alkali is prevented from permeating the whole bath, so that the

formation of the carbon dioxid takes place only at the desired places of the bath and only as slowly as the customer may want it. This purpose is attained by placing the alkali within a porous cover, envelop or bag of a soft, compressible fabric, the meshes of which are so small as to be adapted to produce a regular liberation of carbon dioxid in very small bubbles when placed in the 30 acidulated water, so that the customer of the bath may press the bag and liberate the carbon dioxid in desired measure, and at such places in the bath as he may desire.

Having thus described my invention, what I claim as 35 new and desire to secure by Letters Patent is:

A carbonic acid bath consisting of acidulated water and containing a package consisting of an alkaline bicarbonate inclosed in a porous bag of fiexible, compressible fabric adapted to produce a regular liberation of carbon dioxid 40 in very small bubbles.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

ALFRED ZUCKER.

Witnesses:

HENRY HASPER, WOLDEMAR HAUPT.