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DILUENT FOR MEDICAL COMPOUNDS.

SPECIFICATION forming part of Letters Patent No. 757,419, dated April 12, 1904.

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To all whom it may concern:

Be it known that I, JOSEPH M. SCHUTZ, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented new and useful Improvements in Diluents for Medical Compounds, of which the following is a specification.

My invention relates to medical compounds, and has special reference to a novel diluent for such compounds as "animal-foods," stock medicines, tonics, deodorants, and disinfectants. The diluent commonly employed in such compounds or preparations is powdered foodstuff—for example, ground mill-feed or shorts, linseed-oil-cake meal, or cotton-seed meal. None of these has any distinct medicinal value, and all are objectionable for this reason; but the chief objection thereto is that germ life quickly develops in compounds containing such diluents and destroys them.

The purpose and object of this invention is to provide a diluent for compositions of the character described which will keep or retain the condition of original preparation indefinitely and which will itself possess considerable medicinal virtue.

My discovery or invention consists in a diluent for medicinal compounds of dry or semidry character, same being pulverulent resinous tree-bark; and, further, my invention resides in a novel powdered diluent consisting of resinous tree-bark wherefrom the objectionable principles, such as tannin, have been removed; and, further, my invention consists in a medicinal compound comprising well-known medicinal ingredients in combination with a large proportion of above-described diluent—to wit, resinous tree-bark free from tannin—the whole being in a condition of impalpable pulverulence. The manufacture or preparation of this novel diluent is preferably as follows: The bark—that of conifers, such as the pine—unground, is first leached in running water or water that is frequently changed. After prolonged treatment with water the bark is dried and is then pulverized. The medicinal ingredients may be admixed with the diluent bark in the process of pulverization or after pulverization. For a stock food or tonic I employ various well-known tonic, stimulative, sedative, purifying, and fattening principles—such as gentian, capsicum, sulfur, ginger, and fenugreek—in suitable proportions.

My invention is not restricted to stock-foods; but, as already stated, embraces deodorants, disinfectants, &c. In all of the various compounds wherein my novel diluent is employed substantially thirty to thirty-five per cent. of the compound is composed of medicinal ingredients, the remainder (of the one hundred parts) being bark diluents.

In compounds containing the above-named ingredients or principles the proportions are substantially as follows: gentian, five per cent.; capsicum, one per cent.; sulfur, three per cent.; ginger, three per cent.; fenugreek, five per cent.

The bark of conifers contains certain valuable ingredients of a condimental and tonic character—for example, resin and aromatic oil—and also other ingredients of an objectionable nature—viz., tannin and associated glucocides. The previous treatment of the bark with water is to remove the greater part of the objectionable bodies, such as tannin, while at the same time the valuable ingredients, such as resin and aromatic oils, are insoluble in water and are not removed. Tannin is harmful, because of its styptic and binding nature, tending to produce constipation. For this reason the bark cannot be used in its natural state, but is admirably suited to the intended purposes when the tannin is reduced to a negligible quantity. The tannin and associated bodies unless removed by water act as incrusting substances which would prevent ground natural bark from properly attracting and holding the active principles of the final compositions. The ground bark acts at the same time as a carrier of its own valuable ingredients and as a diluent and vehicle for the added ingredients, which latter, by reason of their nature, cannot be given in their undiluted natural condition. The previous treatment with water serves to open up the structure of the bark particles and fit them for the special purposes to which they are put—to wit, the holding of

the added particles. Substances such as those present in the bark of conifers are in their natural state better suited to serve as tonics and alterants than when artificially prepared. It follows, therefore, that resin and aromatic oils given in their natural state, as they exist in the bark of conifers, are more efficacious than when extracted and given in an artificial state, and by removing from the bark a harmful quantity constituent it is made possible to give its valuable constituents in a natural state, which would not be otherwise possible.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. A germicidal diluent consisting of powdered resinous bark substantially free from tannin, in admixture with ingredients having medicinal value, substantially as described.

2. A composition of matter, comprising substantially dry ingredients of condimental and tonic character, and a dry diluent consisting of pulverulent resinous bark substantially free from tannin.

3. A composition of matter, comprising medicinal pulverulent ingredients in dry, artificial form, and a diluent consisting of pulverulent pine-tree bark substantially free from tannin.

4. The improvement in the art of manufacturing substantially dry medicinal compounds, that consists in leaching resinous bark with water, then drying the bark, then adding suitable medicinal ingredients thereto, and finally reducing the whole to an impalpable powder, substantially as described.

5. The improvement in the art of manufacturing dry diluents for medicinal compounds, that consists in removing tannin and associated glucocides from resinous tree-bark by leaching the unground bark with running water, then drying the resultant bark product, still in its natural form, and finally reducing the same to powder, substantially as described.

6. The improvement in the art of manufacturing substantially dry medicinal compounds, that consists in leaching resinous bark with running water, then removing the bark from the water, then drying the bark, and then simultaneously pulverizing and mixing the bark with suitable medicinal ingredients, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH M. SCHUTZ.

Witnesses:

C. G. HAWLEY,

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