

UNITED STATES PATENT OFFICE.

ADOLPH SOMMER, OF BERKELEY, CALIFORNIA.

EXTINGUISHING MERCURY.

SPECIFICATION forming part of Letters Patent No. 416,760, dated December 10, 1889.

Application filed August 8, 1887. Serial No. 246,422. (No specimens.)

To all whom it may concern:

Be it known that I, ADOLPH SOMMER, a citizen of the United States, and a resident of Berkeley, in the county of Alameda and State of California, have invented a new and useful Improvement in Extinguishing Mercury; and I do declare that the following is an exact description of the invention, which will enable others skilled in pharmaceutical manipulations to apply and execute the same.

Heretofore, when metallic mercury was to be brought to a state of fine division, it was generally agitated or triturated with either a natural fat, oil, or oleo-resin, glycerine, honey, or some dry powdered substance. The time which this operation required was always a comparatively long one, lasting, according to the quantity of the mercury operated on and the efficiency of the apparatus or operator, from two to twenty-four hours. Another disadvantage of the means heretofore employed consists in the impossibility of producing a highly concentrated form of extinguished mercury containing, say, ninety per cent. of metallic mercury, which would be permanent and not allow the minute mercurial globules to coalesce on standing for a long time. These difficulties I have overcome by using as a vehicle for the mercury certain compounds formed by mixing one part of chloride of sulphur with seven to eight parts of a natural fat or fatty oil. The compounds which I generally employ are those made from cotton-seed oil and from tallow; but many others made from other oils and fats answer this purpose equally well. Although it is not absolutely necessary to have such compounds neutral, yet, as a precaution, I prefer to use them in that state.

The manner in which I accomplish my object is as follows: One hundred parts of fat or oil are mixed and combined with about fourteen parts (more or less) of chloride of sulphur, either in the manner described in Patent No. 389,021, of September 4, 1888, entitled "Compounds of tallow and chloride of sulphur," if a tallow-like fat is used, or in the manner described in application No. 209,637, filed July 31, 1886, entitled "Viscid fatty compounds," if a fluid oil is used, and the compound made neutral by any of those processes described in the application already alluded to or in Patent No. 389,020, of September 4, 1888, entitled "Process of mak-

ing neutral compounds of chloride of sulphur." The metallic mercury, together with about one-tenth of its weight of one or a mixture of the stated compounds, is put, if it be a small quantity, into a warm mortar; if it be a large quantity, into a triturating-machine, such as are employed in the manufacture of mercurial ointment. The machine or mortar is kept at a temperature of about 50° centigrade. By active trituration the mercury is mixed with the compound and will, according to the quantity operated on, be found completely extinguished in from five to thirty minutes.

When I desire to produce an extinguished mercury, which shall keep unaltered for an indefinite length of time, I employ as a vehicle a mixture of about equal parts of the cotton-seed oil and the tallow compound. From mercury extinguished by this means all the weaker medicinal preparations of metallic mercury are easily prepared, as follows: mercurial ointment, by adding to the extinguished mercury a sufficient quantity of lard and tallow; mercurial plaster, by adding to the extinguished mercury a sufficient amount of lead plaster; mercurial pill-mass, by adding the extinguished mercury to a proper proportion of confection of roses; mercury and chalk, by adding to the extinguished mercury first a volatile diluent—such as ether, naphtha, bisulphide of carbon—and then incorporating with this mixture a proper amount of prepared chalk and exposing the whole compound to the air until the volatile diluent has evaporated.

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

1. The improvement in the extinction of mercury, which consists in first adding to and combining with the fat or oil with which the mercury is to be extinguished chloride of sulphur to the extent of about fourteen per cent. of the weight of the fatty body, and then triturating the finished compound with the mercury, substantially as described.

2. As a new composition, finely-divided mercury, in combination with sulpho-chlorinated oils or fats.

ADOLPH SOMMER.

Witnesses:

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