

UNITED STATES PATENT OFFICE.

GUSTAF DALÉN, OF STOCKHOLM, SWEDEN, ASSIGNOR TO AKTIEBOLAGET GAS ACCUMULATOR, OF STOCKHOLM, SWEDEN.

FILLING MASS FOR RECEIVERS FOR STORING EXPLOSIVE GASES.

No. 904,183.

Specification of Letters Patent.

Patented Nov. 17, 1908.

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To all whom it may concern:

Be it known that I, GUSTAF DALÉN, engineer, subject of Sweden, residing at Stockholm, Sweden, have invented new and useful
5 Improvements in Filling Masses for Receivers for Storing Explosive Gases, of which the following is a specification.

It has been previously proposed for the purpose of storing explosive gases, such as
10 acetylene gas, to employ blocks or bricks of porous material, such as asbestos, pulp and the like, which have been introduced in a receiver, adapted to contain the gas. Said blocks or bricks however necessitate a comparatively large opening in the receiver, for
15 their introduction, and said opening must be closed by a cover, which in turn is difficult to get sufficiently tight and moreover augments the weight of the receiver. For
20 this reason it has been held more convenient to employ rolled receivers of the kind commonly used for storing liquid carbonic acid and to employ the filling substance in a pasty condition, so that it can be introduced
25 in the receiver through a small opening, closed by a screw plug. The substance hitherto employed for this purpose has constituted substantially a ceramic material, such as cement, lime, clay or the like mixed with
30 charcoal and silicious earth. Or it has been composed of charcoal and silicious earth mixed with some absorbent, such as zinc oxid and zinc chlorid. Said substance has shown the inconvenience of bursting, when
35 the same after having been filled in the receiver, is dried, so that the filling in fact has not constituted a whole brick, which is desirable for storing the acetylene gas.

The present invention has for its object
40 to avoid the disadvantages of prior compositions for the purpose specified and to produce a pasty mass which can be introduced through a small opening in the gas receptacle and which will be thoroughly satisfactory in use.

My invention consists broadly in incorporating fibers of elastic or plastic material, such as asbestos or the like, in pasty ceramic

material in such proportions that the resulting mass will be of a tough fibrous consistency. 50

The following ingredients mixed in the proportions specified yield a composition which is well adapted to serve the purposes of the invention: 55

Clay	20	grams	
Silicious earth	10	"	
Charcoal	10	"	
Zinc oxid	5	"	
" chlorid	5	"	60
Asbestos fiber	5	"	

Satisfactory results may be obtained by the use of pasty ceramic material and asbestos fiber alone, or with charcoal added
65 thereto, but the best results are obtained by the use of the ingredients specified.

In using the material, it is introduced in the usual manner through a hole in the receiver and is thereafter heated to thoroughly dry and harden the mass. 70

Having described my invention, I claim:

1. A filling mass for receivers for storing explosive gases, comprising pasty ceramic material mixed with fibers of elastic material. 75

2. A filling mass for receivers for storing explosive gases, comprising pasty ceramic material, charcoal and fibers of elastic material. 80

3. A filling mass for receivers for storing explosive gases, comprising pasty ceramic material, charcoal, silicious earth and fibers of elastic material.

4. A filling mass for receivers for storing
85 explosive gases, comprising pasty ceramic material, charcoal, silicious earth, zinc oxid, zinc chlorid, and asbestos fiber.

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

GUSTAF DALÉN.

Witnesses:

WALDEMAR BOMAN,
T. EKBOHM.