Patented July 22, 1930 1,771,151

UNITED STATES PATENT OFFICE

OTTO TREICHEL, OF BERLIN, GERMANY

PROCESS FOR EXTINGUISHING FIRES

No Drawing. Application filed October 31, 1927, Serial No. 230,185, and in Germany November 15, 1926.

My invention relates to a process for extinguishing fires.

According to my improved process a crystallized mixture of carbonic acid and carbon tetrachloride is used as extinguishing agent. It has already been proposed to use carbonic acid in the form of snow for extinguishing fires. In the known process only a fraction of the carbonic acid is converted into snow, whereas, in my process only very small quantities of carbonic acid are lost in the formation of the mixed crystals of carbonic acid and carbon tetrachloride which start forming at +5° C. For mixing the carbon tetrachloride with the carbonic acid, which is stored in liquid form, a Daniell cock, for example, may be employed. In this case the cock will also serve as the extinguishing device. As the mixture issues from the cock it is rapidly cooled down by the evaporating carbonic acid and snow crystals are formed. This snow is the crystallized mixture of carbonic acid and carbon tetrachloride per se known. In this way it is possible to impart to both substances solid form without the application of excessively low temperatures and to convey them in suitable manner to the place where they should perform their extinguishing action.

If it is not desired to utilize the effect of the heat developed by the solution when the carbonic acid and carbon tetrachloride are mixed together to obtain a crystallized mixture, the crystallized mixture may be obtained in a satisfactory amount by storing the liquids together, for example, in the proportion of 1 to 1 and, when a fire is to be extinguished, releasing them into partly open receptacles, such as, pipes, funnels, etc. within which the crystalline mixture will then be formed.

Various changes may be made within the scope of my claims without departing from the spirit of my invention.

I claim as my invention:—

1. The method of extinguishing fires which consists in discharging liquid carbon dioxide and carbon tetrachloride into a lower pressure medium while maintaining them in intimate contact whereby a crystalline mixture is formed, and directing said mixture onto the fire.

2. The method of extinguishing fires which consists in releasing liquid carbonic acid and carbon tetrachloride, coming from separate sources, at a common point into the atmosphere whereby a crystalline mixture is formed, and directing said mixture onto the fire.

3. The process of extinguishing fires which consists in storing in separate containers liquid carbonic acid and carbon tetrachloride, effecting a mixture of said carbonic acid and said carbon tetrachloride by means of a mixing cock having two concentric tubes connected respectively with said containers, and directing said mixture onto the fire.

In testimony whereof I affix my signature.

OTTO TREICHEL.