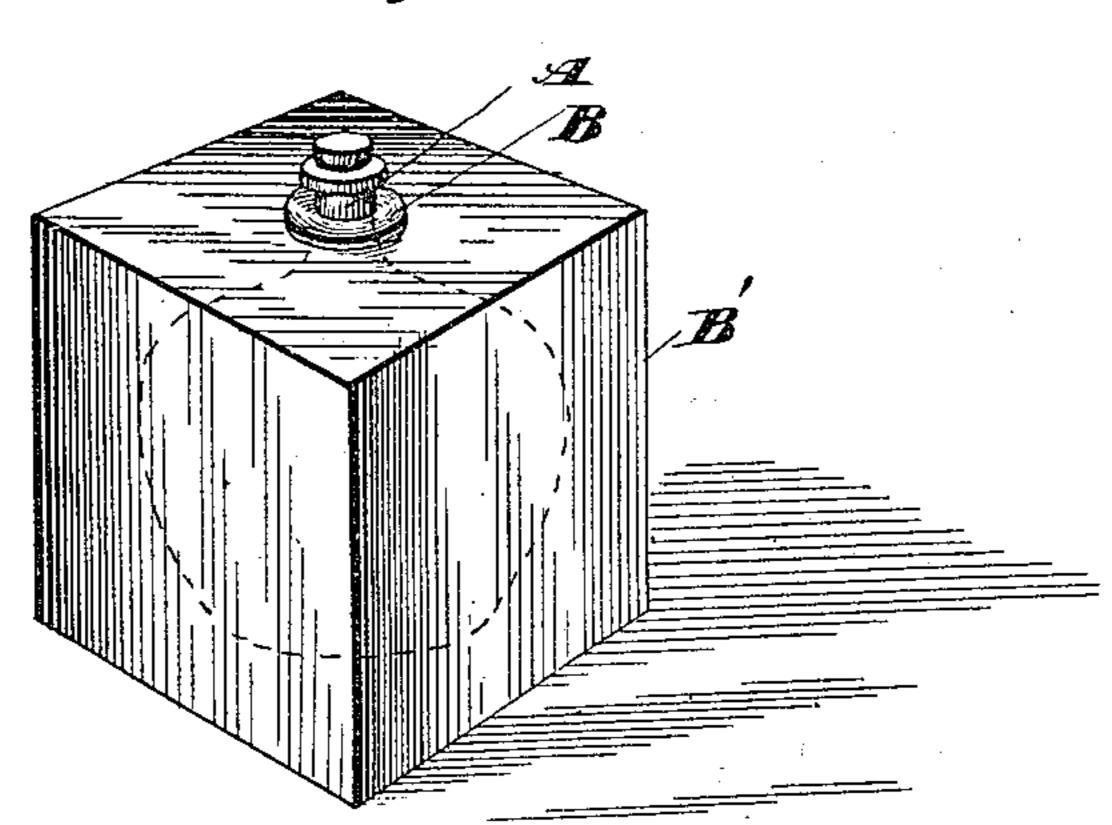
(No Model.)

J. W. FOX. CARBOY FOR ACIDS.

No. 438,149.

Patented Oct. 14, 1890.





Witnesses Amest Monroe. F. H. Moore John W. Fol. A.S. Sherman Attorney.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN W. FOX, OF CLEVELAND, OHIO.

CARBOY FOR ACIDS.

SPECIFICATION forming part of Letters Patent No. 438,149, dated October 14, 1890.

Application filed December 28, 1889. Serial No. 335, 267. (No model.)

To all whom it may concern:

Be it known that I, John W. Fox, a citizen of the United States, residing at the city of Cleveland, in the county of Cuyahoga and 5 State of Ohio, have invented a certain new and useful Improvement in Carboys, intended to be used for the purpose of safely handling and transporting nitric and other powerful acids, of which the following is a specifica-

10 tion.

Heretofore in the handling and transportation of such acids much danger, loss, and damage to persons and property have been occasioned by the breakage of the carboys 15 and other vessels in which such acids have been put up for handling and transportation, and great loss and damage by fire have been occasioned by contact of the contents of the carboys when broken with the inflammable 20 materials used for packing, and frequently thereby persons have been seriously injured, and railroad-cars and other property used in the transportation of the same have been seriously damaged and oftentimes wholly de-25 stroyed.

The object of my invention is to provide an improved carboy intended to contain powerful acids, whereby danger, damage, and loss from breakage and fire may be reduced, if

30 not wholly overcome.

In the accompanying drawings, Figure 1 is a perspective view of a frame or box inclosing the carboy, showing the neck thereof projecting through said frame or box. Fig. 2 is 35 a vertical sectional view of one form of carboy, packing, and frame.

To enable others skilled in the art to which my invention relates, I do hereby declare the following to be a full, clear, and exact descrip-

40 tion of said invention.

A is any ordinary glass carboy or other vessel suitable for the handling and carriage of

powerful acids.

B is a frame or box of wood or other suit-45 able material, inclosing the carboy A, and having a space between the inside surface of such box or frame and the exterior surface of the carboy.

C is a packing of mineral wool or other 50 suitable fire-proof material, to fill said space. This mineral wool is soft and pliable and linclosing the carboy or vessel.

makes an excellent packing to prevent breakage, and in addition to these properties it has the advantage and value over ordinary packing material used for a like purpose in that 55 it is wholly fire-proof and non-combustible, so that in case of any breakage or leakage of the carboy the acid contents thereof coming in contact with such mineral wool and being absorbed thereby are prevented from caus- 60 ing injury to the person handling the package and loss or damage by fire to the car or vehicle in which it is being transported, or to other packages with which the same may be in contact.

I do not limit myself to the use of mineral wool, for it is evident that any other fireproof and non-combustible material suitable to be used for packing may be substituted in my invention for mineral wool.

B is a packing of plaster-of-paris or other suitable material, intended to hold the carboy firmly in place within the box or frame inclosing it and to exclude water or moisture

from the packing C.

The carboy A, when inclosed in the box or frame B, will ordinarily have its neck projecting through a hole in said box or frame. This neck of the carboy is liable in the handling or transit of the package to be fractured 80 or broken against the side of the box or frame from which it projects, and moisture or water is liable to penetrate to the packing C through this hole in the box around said neck, and in such case the packing C is lia- 85 ble to freeze in cold weather, and when so frozen any rough handling of the package may cause breakage of the carboy. Around this neck of the carboy I tightly pack plasterof-paris or other suitable material, as shown 90 at B, for the purpose of firmly holding the carboy in place within the box or frame, thus decreasing the danger of breakage while the package is being handled or in transit, and also for the purpose of excluding moisture or 95 water, and thus preventing breakage of the carboy caused from freezing of the packing material C in cold weather.

I do not limit myself to any particular form of carboy or vessel containing the acid or to roc any particular kind or form of box or frame

Having thus described my invention, what I claim, and desire to secure by Letters Pat-

ent, is—

The combination, with a carboy or vessel of glass or other suitable material containing nitric or other powerful acid and the frame or box within which the same is inclosed, the space between such box and the carboy being packed with mineral wool or other suitable

fire-proof soft packing material, of a packing of praster-of-paris around the neck of such carboy, substantially as and for the purposes shown and described.

JOHN W. FOX.

Witnesses:

F. T. SHOLES, S. R. HARRISON.