CLAIMS

[Claim 1]

A method for fixing carbon dioxide to a cement hardened body, comprising:

supplying an aqueous solution of at least one carbonate selected from the group consisting of sodium carbonate, sodium bicarbonate, potassium carbonate, and potassium bicarbonate to the cement hardened body;

wherein the pH of the aqueous solution is 11 to 14, but excluding a case in which the cement hardened body is an existing concrete structure, and a hole having a predetermined length is drilled from the surface of the existing concrete structure toward the interior, and the aqueous solution is supplied to the hole.

[Claim 2]

The method according to claim 1, wherein the aqueous solution contains potassium carbonate, and a potassium carbonate concentration in the aqueous solution is 15 mass% or higher.

[Claim 3]

The method according to claim 1, wherein the method of supplying the aqueous solution to the cement hardened body comprises immersing the cement hardened body in the aqueous

solution.

[Claim 4]

The method according to claim 1, wherein the method of supplying the aqueous solution to the cement hardened body comprises scattering the aqueous solution to the cement hardened body.

[Claim 5]

The method according to claim 1, wherein an equivalent amount of fixed carbon dioxide per 1 ton of the cement hardened body on a site with carbon dioxide fixed is 30 kg or more.

[Claim 6]

The method according to claim 1, comprising:

causing a potassium ion-containing aqueous solution to absorb carbon dioxide gas to obtain a potassium carbonate aqueous solution,

wherein an operation of the carbon dioxide gas absorption step is performed prior to the carbonate supplying step.

[Claim 7]

A carbon dioxide-fixed cement hardened body,

comprising carbon dioxide,

wherein the carbon dioxide is wholly or partially fixed using the method according to any one of claims 1 to 6.

[Claim 8]

A carbon dioxide-fixed cement hardened body production method, comprising:

fixing carbon dioxide to the whole or a part of the cement hardened body using the method according to any one of claims 1 to 6.