(12) **United States Patent**
**Kidder**

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(54) **CEMENT, HYDRAULIC**

(76) Inventor: **Levi Kidder**

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# Levi Ridler's Letters Patent

The Schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said Levi Ridler himself of his improvement in the Covers of wells Cisterns Cast pools &c.

These covers are cast wholes in sections and in any desired shape or moulds of earth in the following way. for an arched or dome shaped cover. which is considered the best form. in a shop or other place for manufacturing a mound of earth is erected and packed firmly in the shape of an arch or dome of dimensions as to height and diameter suited to the use and strength required of the cover. This arch or dome of earth forms the mould on which is cast the cover, and which determines the shape. Then for the purpose of forming an aperture in the cover by which to enter the well there is set and placed on any part of the mould which will give to such aperture the place wanted. a removable frame or curb of wood or other substance about one inch high. round. square or of any shape and dimensions desired for such aperture. This done upon the mould all over except within the frame or curb is cast the cement mortar in thickness about four inches or any thickness required for strength. And this mortar being smoothly moulded on the surface the cover is done requiring only time to set or harden to be fit for use. But the cover now described is wholes or one undivided mass. which if large will be removed with difficulty. To obviate this inconvenience, it may when partially hardened be cast into as many parts or sections as will be necessary to make it easily portable, or it may be cast in sections by previously setting in the mould as many very thin sheets of board (sheet iron or perhaps better) as will serve for partitions to divide the cover into as many sections as are wanted. The upper edge of these partitions should be arched corresponding with the mould above which they should be located to a height equal to the designed thickness of the cover.

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They should be inserted edgewise in the mould extending like radii from the apex to the base; or if the frame for the aperture occupy the central part of the mould, then they should extend from the frame to the base. After this preparation cast on the cement as before, and the cover will be divided into several wedge shaped sections which when sufficiently seasoned may be removed at pleasure to the well or cistern con which owing to their exact adaptation to each other produced by the above described manner of their separation they are easily put together forming a complete arch or dome.

The Improvement which they as first and claim to have invented consists in making said covers not for the well cistern or other vessel where they are to be used, but in a shop or suitable manufactory in which they can have time to season, and from which they can afterwards be removed to the place of use where they can bear immediate exposure without risk of injury to which those in an unseasoned state are liable.

Witnesses
Wm. F. J. Bourdain
James Bourdain

Levi Reddick

(Specification)

(Granted January 15. 1836)

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