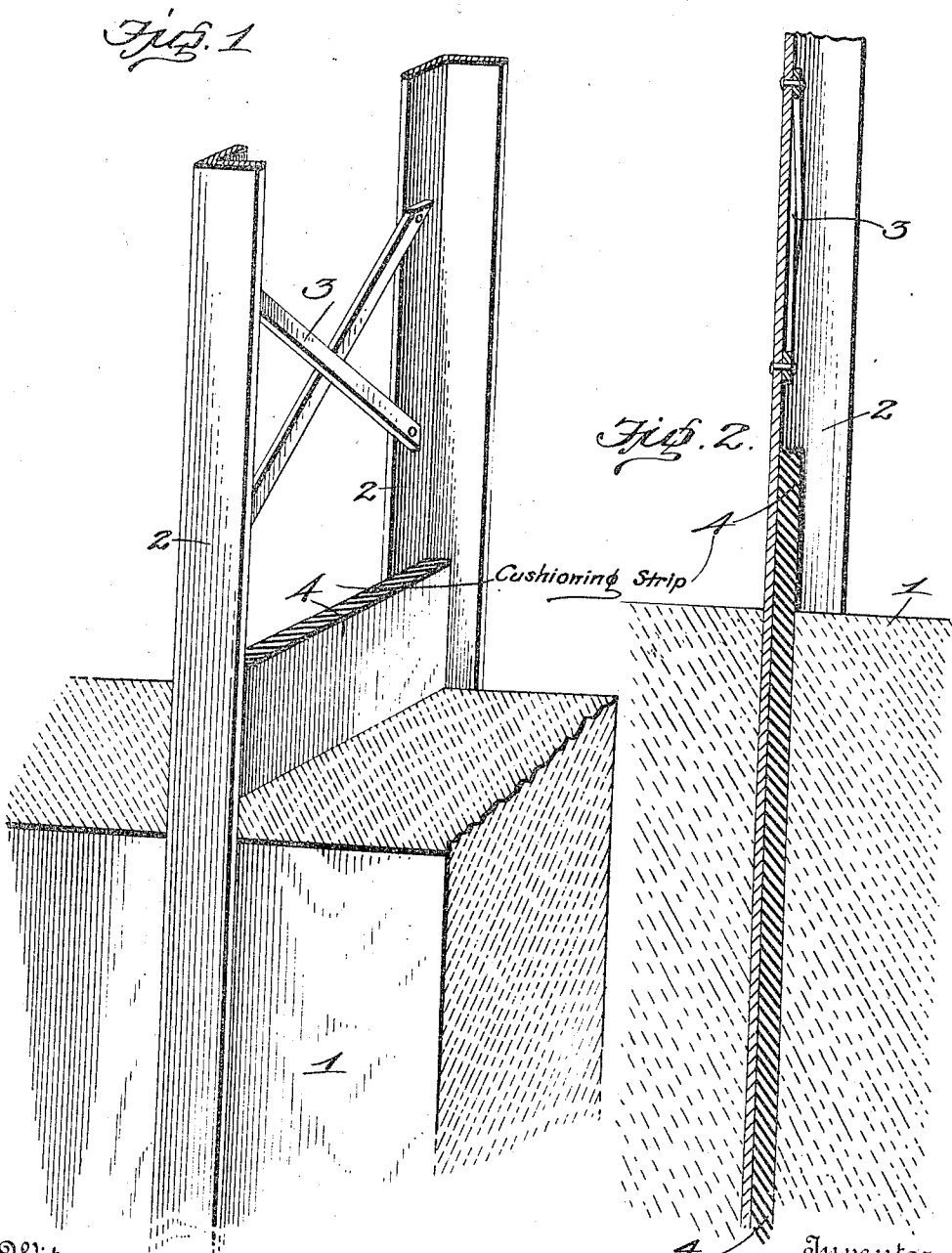


D. W. DALEY.
REINFORCED CONCRETE STRUCTURE.
APPLICATION FILED JAN. 31, 1910.

990,963.

Patented May 2, 1911.



Witnesses
C. E. Hunt.
C. H. Giesbauer.

Inventor
D. W. Daley—
by *A. B. Williams*
Attorneys

UNITED STATES PATENT OFFICE.

DINIS WILLIAM DALEY, OF PARKERSBURG, WEST VIRGINIA.

REINFORCED CONCRETE STRUCTURE.

990,963.

Specification of Letters Patent.

Patented May 2, 1911.

Application filed January 31, 1910. Serial No. 541,068.

To all whom it may concern:

Be it known that I, DINIS W. DALEY, a citizen of the United States, residing at Parkersburg, in the county of Wood and State of West Virginia, have invented certain new and useful Improvements in Reinforced Concrete Structures; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in reinforced concrete wall construction.

The object of the invention is to provide a wall of this character having means to permit the expansion of the wall without rupture and to fill the spaces due to the contraction of the wall so that no crevices will be left for moisture to collect in and corrode the metal reinforcement.

With the foregoing and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts, as will be more fully described and particularly pointed out in the appended claim.

In the accompanying drawings, Figure 1 is a sectional perspective view of a concrete wall constructed in accordance with the invention. Fig. 2 is a vertical section of the same taken through the wall, the elastic cushion and the inner edge of one of the reinforcing bars.

Referring more particularly to the drawings, 1 denotes the wall in the opposite sides of which are set reinforcing bars 2, which may be of T, angle-iron or any other suitable construction, said bars being here shown as angle-iron bars, one side or edge of which projects transversely into the wall as shown. The inner projecting edges or sides of the bars are securely tied together by braces 3 or other suitable fastenings and when the wall is being formed boards are laid against the outer sides of the bars to form the mold for receiving the concrete.

The bars 2 are arranged at suitable intervals along the length of the wall and with the inwardly extending sides of the bars is engaged a cushioning strip 4 formed of suit-

able elastic or resilient material which, when the wall expands, will be compressed, thus preventing the bulging or rupture of the wall from such expansion. When the wall again contracts, the cushioning strip 4 will expand and thus fill up the space which would otherwise be left by such contraction of the wall and in which would collect moisture. The collection of moisture in such spaces or crevices left by the contracting of the wall would in time corrode the reinforcing bars and thus weaken the wall.

From the foregoing description taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention, as defined in the appended claim.

Having thus described my invention what I claim is:—

In a concrete wall construction, the combination of two wall sections, a vertically disposed reinforcing structure arranged transversely between said wall section and consisting of angle metal uprights united by crossed braces and having inner flanges extending between the opposing wall sections and outer flanges engaged with the side faces of one of the wall sections, and an upright rectangular sheet of elastic cushioning material arranged in said supporting structure and between the opposing wall sections, said cushioning sheet extending from bottom to top of the wall and arranged entirely within the reinforcing structure and having its edges seated in the angles of said angle metal uprights, substantially as described and for the purpose set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

DINIS WILLIAM DALEY.

Witnesses:

JOHN WENTZ,

MARTIN J. DURKIN.