

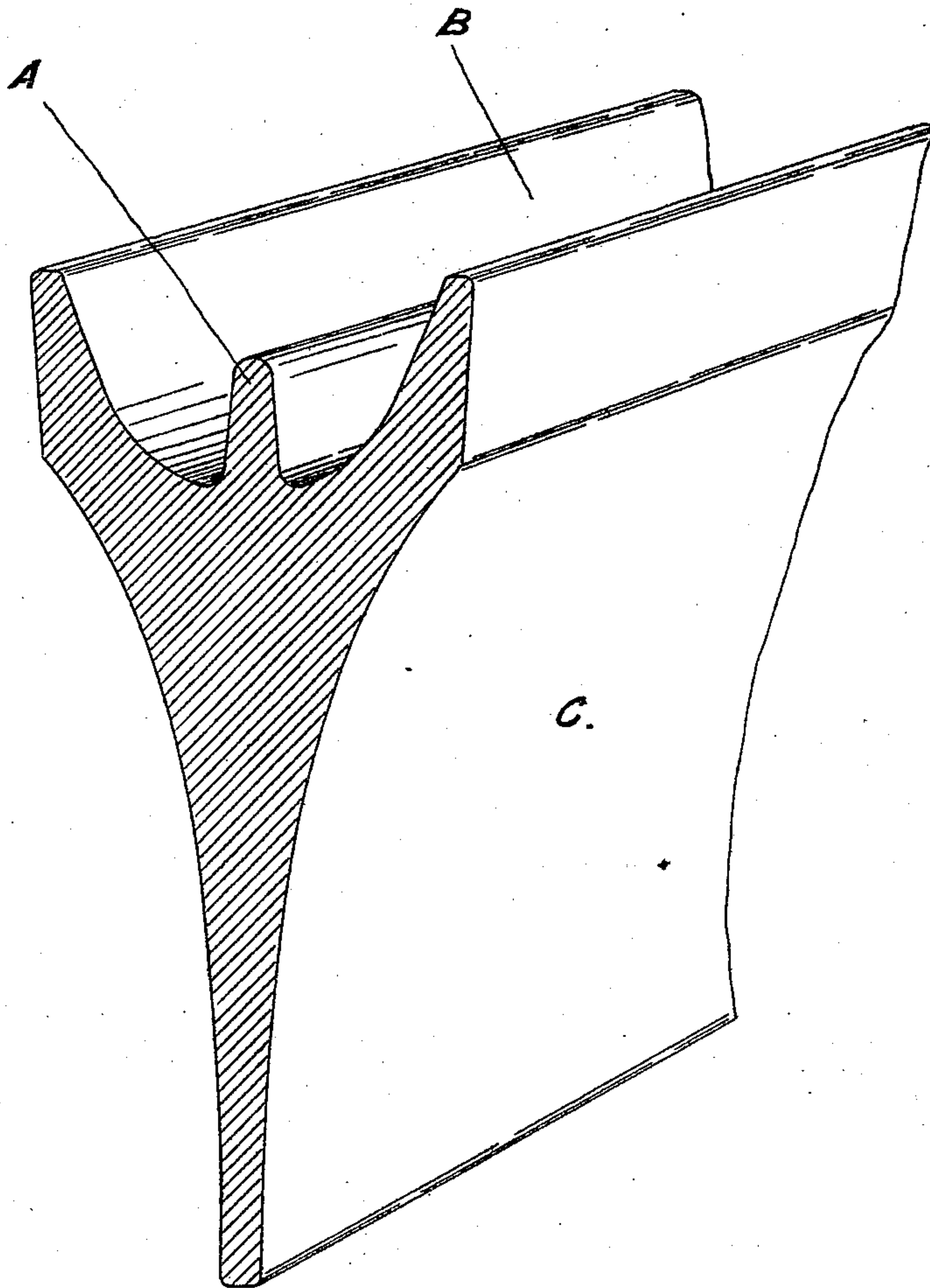
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FIRE BAR.

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933,967.

Patented Sept. 14, 1909.



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UNITED STATES PATENT OFFICE.

ALEXANDER ESPLEN, OF LIVERPOOL, ENGLAND.

FIRE-BAR.

933,967.

Specification of Letters Patent. Patented Sept. 14, 1909.

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To all whom it may concern:

Be it known that I, ALEXANDER ESPLEN, a subject of the King of Great Britain and Ireland, residing at 9 Rumford street, Liverpool, England, have invented a new and useful Improvement in Fire-Bars, of which the following is a specification.

The type of firebar to which this invention relates is that which possesses a groove or trough in its upper surface, the object of such groove being to receive a deposit of dust and small ash, such deposit serving to prevent clinker from adhering to the bar and also as a non-conductor of heat. Such grooved bars have heretofore been open to objection inasmuch that the slicer or pricker or similar implement employed by the firemen, by entering the groove in the bar has removed the deposit of dust therefrom and afforded an opportunity for the clinker to adhere, and a result of this action has been that upon a subsequent use of such implement it has encountered a piece of clinker fixed in the groove, and has torn away a portion of the bar in dislodging the adhering clinker.

The present invention is directed to the formation of the groove referred to, in such a manner that the slicer or other implement used by the firemen is prevented from entering therein.

The annexed drawing illustrates the cross section of a grooved firebar formed according to this invention.

For the purpose hereinbefore mentioned, a central ridge, or midfeather, A, is formed in the groove or furrow B in the bar, C, such ridge extending from end to end of the groove B. The apex of such ridge A lies below the level of the upper edges of the bar C, and thus divides the lower portion of the groove B into two subsidiary furrows, that is to say, the lower portion—it may be

one half or more—of the groove or furrow B, is divided by the midfeather A. The midfeather A thus prevents the firemen's implements from bottoming the groove B and removing the deposit of dust therefrom, the divided lower portions of the groove B always remaining charged with deposit. Consequently there will always be a deposit of dust in such lower portions of the groove B, and clinker will be prevented from adhering to the bar, and may readily be removed therefrom, thus lengthening the life of the bar and considerably reducing the time now occupied in cleaning the fires. Such midfeather A by forming an upward continuation of the present fishbelly or web of the bar, strengthens or reinforces that part of the bar.

Having now described my invention, what I claim as novel and desire to secure by Letters Patent is:—

1. A furnace fire-bar having a groove in its upper surface extending the length of the fire-bar, and a mid-feather projecting upwardly from the bottom of the groove for approximately half the height of the sides of the groove.

2. A furnace fire-bar having a groove in its upper surface diminishing in width from its upper part to the bottom of same, and capable of freely admitting the end of a stoking implement, and a mid-feather projecting upwardly from the bottom for approximately half the height of the sides of the groove, which serves as a support or runner for the stoking implement, and prevents its jamming between the sides of the groove near the bottom thereof and breaking such sides away.

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