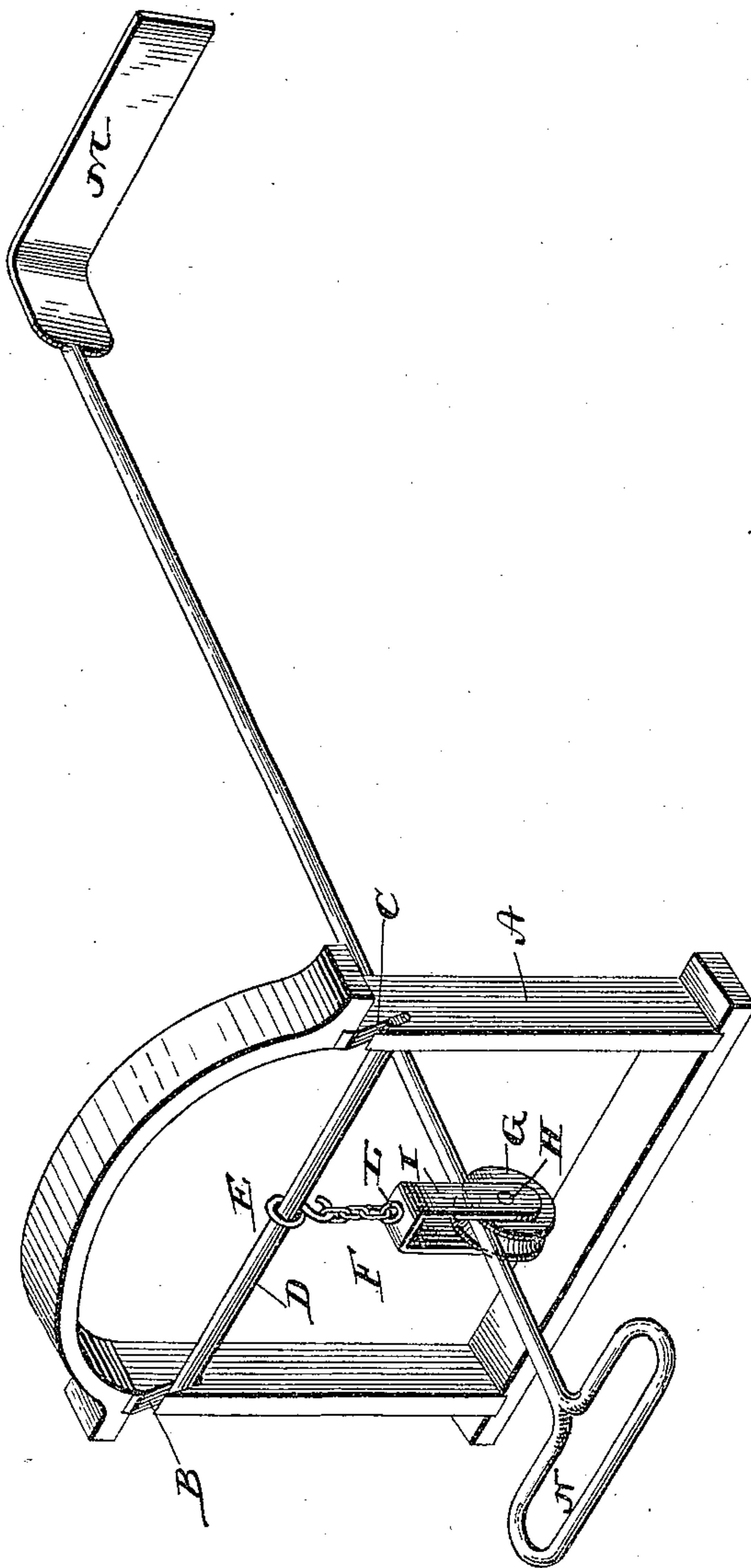


(No Model.)

W. H. DINSMORE.
DEVICE FOR REMOVING COKE FROM OVENS.

No. 428,466.

Patented May 20, 1890.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM H. DINSMORE, OF CONNELLSVILLE, PENNSYLVANIA.

DEVICE FOR REMOVING COKE FROM OVENS.

SPECIFICATION forming part of Letters Patent No. 428,466, dated May 20, 1890.

Application filed August 15, 1889. Serial No. 320,858. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. DINSMORE, a citizen of the United States, and a resident of Connellsville, in the county of Fayette and State of Pennsylvania, have invented certain new and useful Improvements in Devices for Removing Coke from Ovens; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to devices for removing coke from ovens; and it consists in the construction and novel combination of parts, as hereinafter fully described and claimed.

The figure of the drawing is a view in perspective of the device suspended in an oven-door ready for use, the oven proper being not shown, in order that the device itself may be more apparent.

Referring by letter to the accompanying drawing, A designates the door-frame, the side pieces of which are provided near their upper ends in their outer edges with downwardly and rearwardly inclined notches B C, arranged in the same horizontal plane, in which rests the removable horizontal metal bar D, which is provided with a sliding hook E, which is slipped to place thereon, and may be moved on said bar D from jamb to jamb of the door when necessary. From the hook E depends a chain F, comprising several links, according to the size of the door in the oven in which the coke-remover is used. From the chain F is suspended a pulley-block or open metallic frame I, the whole device being of metal in order to resist the heat to which it must necessarily be subjected when it is in use. The pulley G is journaled on a shaft H, having its bearings in the arms of the pulley-block I. The upper end of the pulley-block I is provided with a swiveled eye L, to which the chain F is connected.

The scraper or coke-removing device comprises a rod having an angularly-bent end or scraping-blade M at its front end, and a hand piece or ring N at its rear end, by which to manipulate it. The clearing-rod, it will be seen, is supported in and guided by the sheave of the pulley.

This means for suspending the scraper enables the operator to readily handle it, as he is relieved from much of the weight that has

to be incurred in operating the ordinary scraper or coke-remover. It will also be seen that inasmuch as the shank of the scraper works within the grooved pulley-wheel its inward and outward play is readily effected, the pulley, of course, greatly lessening the amount of friction. In this manner the innermost portions of the oven may be reached, and to further increase the efficiency of the device I have provided the construction hereinbefore described, whereby the suspending device may be adjusted laterally upon the transverse rod D, so as to reach the side portions of the oven; or, if preferred, instead of thus adjusting the device laterally for the purpose stated, the pulley-block I may be turned upon its swiveled eye L, thereby also enabling the inner end or blade of the scraper to reach the side portions of the oven.

Where the doors are low in the ovens, the sheave or pulley can be hung to suit the workman as to height.

The expense attending the keeping in order of the ordinary scraper is considerable, and the labor of operating them is great.

The improved construction herein illustrated and described lessens both the expense and the labor; hence its utility.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The herein-described device, consisting of a frame having the downwardly and rearwardly inclined notches, a transverse rod having its ends seated in said notches, a chain pendent from said rod and movable thereon, a pulley-block swiveled to the lower end of said chain, so as to turn freely in any direction, said pulley-block having mounted therein a pulley-wheel, and a clearing-rod fitting in the groove of said wheel and guided thereby, said rod provided on its outer end with a hand piece or ring and on its inner end with an angularly-bent scraping-blade, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

WILLIAM H. DINSMORE.

Witnesses:

JOHN KURTZ,
JAMES H. YATES.