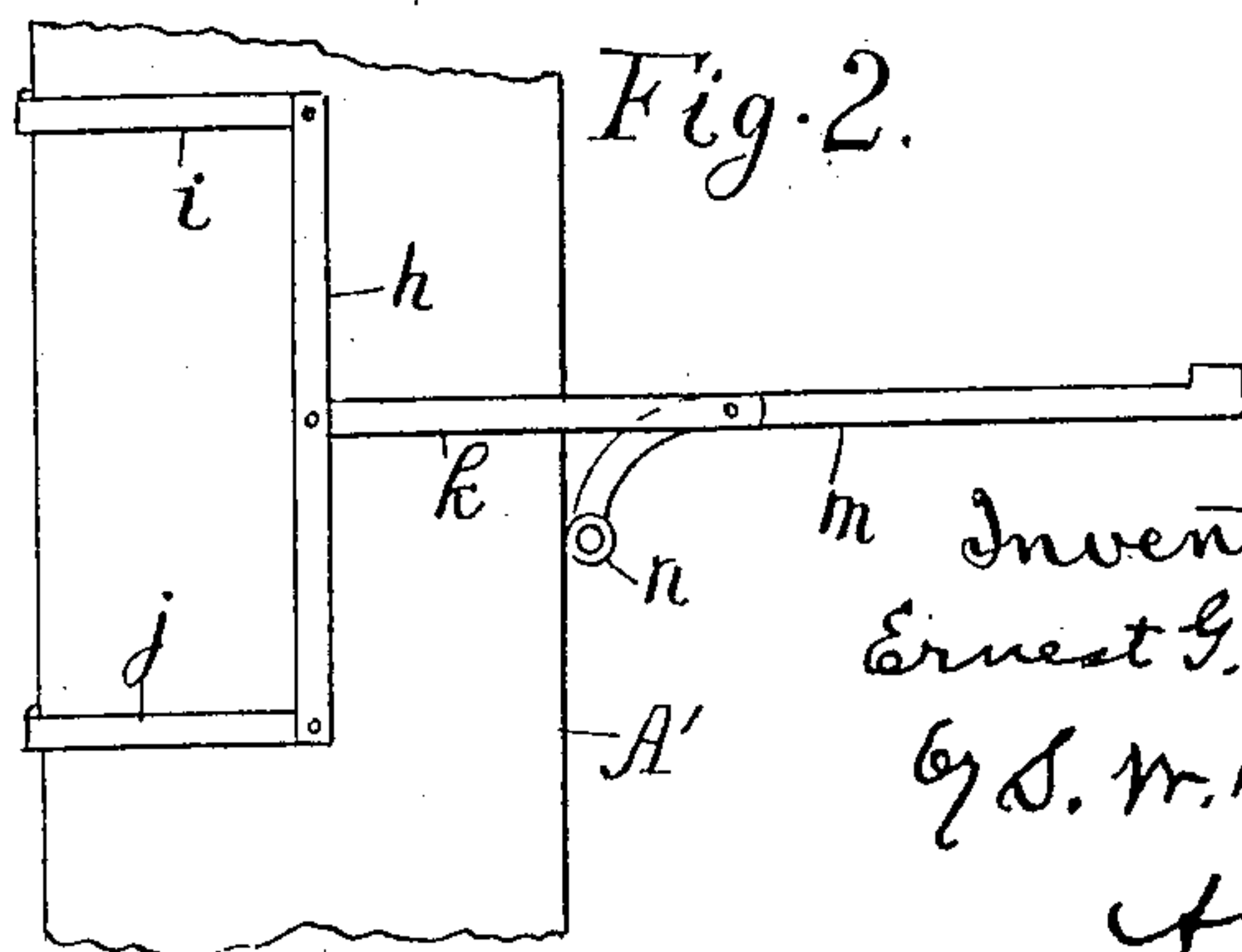


906,617.



Inventor:  
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Atty.

# UNITED STATES PATENT OFFICE.

ERNEST G. DAY, OF EAST MILLINOCKET, MAINE.

## BUILDER'S BRACKET.

No. 906,617.

Specification of Letters Patent.

Patented Dec. 15, 1908.

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*To all whom it may concern:*

Be it known that I, ERNEST G. DAY, a citizen of the United States of America, and a resident of East Millinocket, county of Penobscot, State of Maine, have invented certain new and useful Improvements in Builders' Brackets, of which the following is a specification.

My invention relates to a builders' bracket adapted to be used in building construction work where iron or steel columns are used and it is designed to be readily attached to the columns for the support of a suitable staging.

In erecting iron or steel building work much money is often spent in building wooden stagings which have to be practically thrown away when the building is complete.

The object of my invention is to design a bracket which may be readily attached to iron or steel columns which are generally of certain standard sizes and which may be moved freely up and down while remaining firmly in place when under the weight of the staging plank.

The invention consists of the bracket hereinafter described and claimed.

I illustrate my invention by means of the accompanying drawing in which is shown at Figure 1 a perspective view of my bracket as applied to the side of an iron or steel column and at Fig. 2 an elevation of a modified form of bracket.

In the drawing, A represents a built up metal column such as is commonly used in building construction, one of the elements which make up the column forming a front and rear edge or flange which serves to support the bracket. These flanges may be formed of a plate as here shown or they may be formed of the flanges of an I-beam or in any other suitable way, my bracket being designed to be fastened to any post or column having parallel and opposed edges or flanges.

The bracket is composed of a vertical "fulcrum bar" having pivoted to it three horizontal clamping members adapted to fit over the opposite edges of the post, one over one edge and two over the opposite edge, one of said clamping members having connected with it a horizontal supporting bar for supporting the staging adapted to fulcrum against one of the edges of the column. As here shown, the vertical fulcrum bar *b* ex-

tends vertically near the face of the column when the bracket is in place.

On the lower end of the bar *b* is pivoted a horizontal clamping bar *d* having formed on its end a hook *d'* adapted to hook over the forward edge or flange of the column. The single clamping member is shown as extending from the center of the bar *b* or from some point between its ends back to the rear flange. This clamping bar *c* has a hook *c'* formed on its end and it is pivoted to the vertical bar by a suitable bolt *c'*. The bar *c* is made adjustable as to its point of connection with the bar *b* by forming a plurality of holes in the bar *c* located so as to provide adjustment for columns of different widths.

To the upper end of the bar *b* there is a horizontal member which is both a support for the staging and a clamp to hold the bracket in place. This member is composed of the tension bar *f* extending horizontally forward beyond the front edge of the column and having pivoted to its outer end a supporting bar *e* for supporting the staging planks having at its inner end a downward extending offset adapted to fulcrum against the forward flange of the column. As here shown, this offset is provided at its lower end with a grooved roll or pulley *e'*. As I have shown it here, the inner end of the bar *e* is bifurcated by the addition of a second plate *e'* secured to the side of the bar *e*, the roll *e'* being journaled between the ends of the bar *e* and plate *e'*. It is evident that this roll may be otherwise secured or it may be dispensed with and the lower end of bar *e* may be recessed to fit over the edge of the column.

For the purpose of resisting any tendency of the upper part of the bracket to move laterally, I secure to the bar *f* a clip *f'* which fits around the front edge of the column and holds the bracket against lateral movement. The staging planks *g* are placed on the bar *e* and the brackets are placed near together as necessary to support the planks.

It will be seen that when the weight of the planks is on the bar *e*, the bar *e* acts as a lever fulcrumed at the roll, pulling outward on the tension bar *f* and inward on each of the bars *c* and *d* so that the whole bracket is firmly clamped to the column. When it is desired to raise or lower the bracket or to remove it the staging planks are removed,



the bar *c* lifted and the grip of the roll and the hooks on the bars *c* and *d* is released and the bracket may then be easily moved up or down or removed.

5 The adjusting holes in the bar *c* enables the bracket to be made wider or narrower to fit any of the standard columns now in use in ordinary building.

10 In Fig. 2, I have shown a modification of my bracket in which two of the clamping members extend rearward to clamp on the rear edge and the single supporting and binding member extends forward acting on the front edge of the column.

15 In Fig. 2 *h* is the vertical fulcrum bar, *i* and *j* are clamping bars secured to the ends of the fulcrum bar and embracing the rear flange of the column and *k* is the tension bar pivoted to the middle of the bar *h* and 20 having pivoted to it the supporting bar *m* with its roll *n*.

I claim:—

1. The herein described builders' bracket adapted to be used on metal columns having 25 front and rear flanges consisting of a vertical fulcrum bar having pivoted to it three horizontal clamping members adapted to fit over the front and rear flanges, one over one flange and two over the opposite flange, one 30 of said clamping members comprising a pivoted horizontal supporting bar for supporting the staging plank and having a downwardly extending projection adapted to fit over the front flange and to fulcrum thereon.

35 2. The herein described builders' bracket adapted to be used on metal columns having front and rear flanges, consisting of a vertical fulcrum bar having pivoted to it three 40 horizontal clamping members adapted to fit over the front and rear flanges, one over one flange and two over the opposite flange, one of said clamping members comprising a pivoted horizontal supporting bar for supporting 45 the staging plank and having a downwardly extending projection adapted to fit over the front flange and to fulcrum thereon, and having a clip for embracing the flange above the fulcrum point.

50 3. The herein described builders' bracket adapted for use on metal columns consisting of a vertical fulcrum bar having pivoted at its lower end a forwardly extending clamping bar with a hook at its end adapted to 55 embrace the front flange of the columns, a rearward extending clamping bar pivoted intermediate the ends of said vertical bar,

having at its end a hook, adapted to embrace the rear flange of the column, a forwardly extending tension bar pivoted to the upper end of said vertical fulcrum bar and 60 having secured thereto a hook or clip adapted to embrace the front flange of the post and a horizontal supporting bar pivoted to said upper clamping bar and having a downwardly extending end adapted to fulcrum 65 against the forward edge of the post.

4. The herein described builders' bracket adapted for use on metal columns having front and rear flanges consisting of a vertical fulcrum bar having pivoted at its lower 70 end a forwardly extending clamping bar with a hook at its end adapted to embrace the front flange of the column, a rearward extending clamping bar pivoted intermediate the ends of said vertical bar, having at its 75 end a hook adapted to embrace the rear flange of the column, a forwardly extending tension bar pivoted to the upper end of said vertical fulcrum bar and having secured thereto a hook or clip adapted to embrace 80 the front flange of the post and a horizontal supporting bar pivoted to said upper clamping bar and having a downwardly extending end adapted to embrace and fulcrum against the forward edge of the post. 85

5. The herein described builders' bracket adapted for use on metal columns having front and rear flanges consisting of a vertical fulcrum bar, having pivoted at its lower 90 end a forwardly extending clamping bar with a hook at its end adapted to embrace the front flange of the column, a rearward extending clamping bar pivoted intermediate the ends of said vertical bar, having at 95 its end a hook, adapted to embrace the rear flange of the column, a forwardly extending tension bar pivoted to the upper end of said vertical fulcrum bar and having secured thereto a hook or clip adapted to embrace the front flange of the post and a horizontal 100 supporting bar pivoted to said upper clamping bar and having a downwardly extending end provided with a grooved roller, adapted to fulcrum against the forward edge of the post. 105

In witness whereof, I have hereunto set my hand this 4th day of February, 1908.

ERNEST G. DAY.

Witnesses:

A. E. MacKINNON,  
N. O. BURTT.