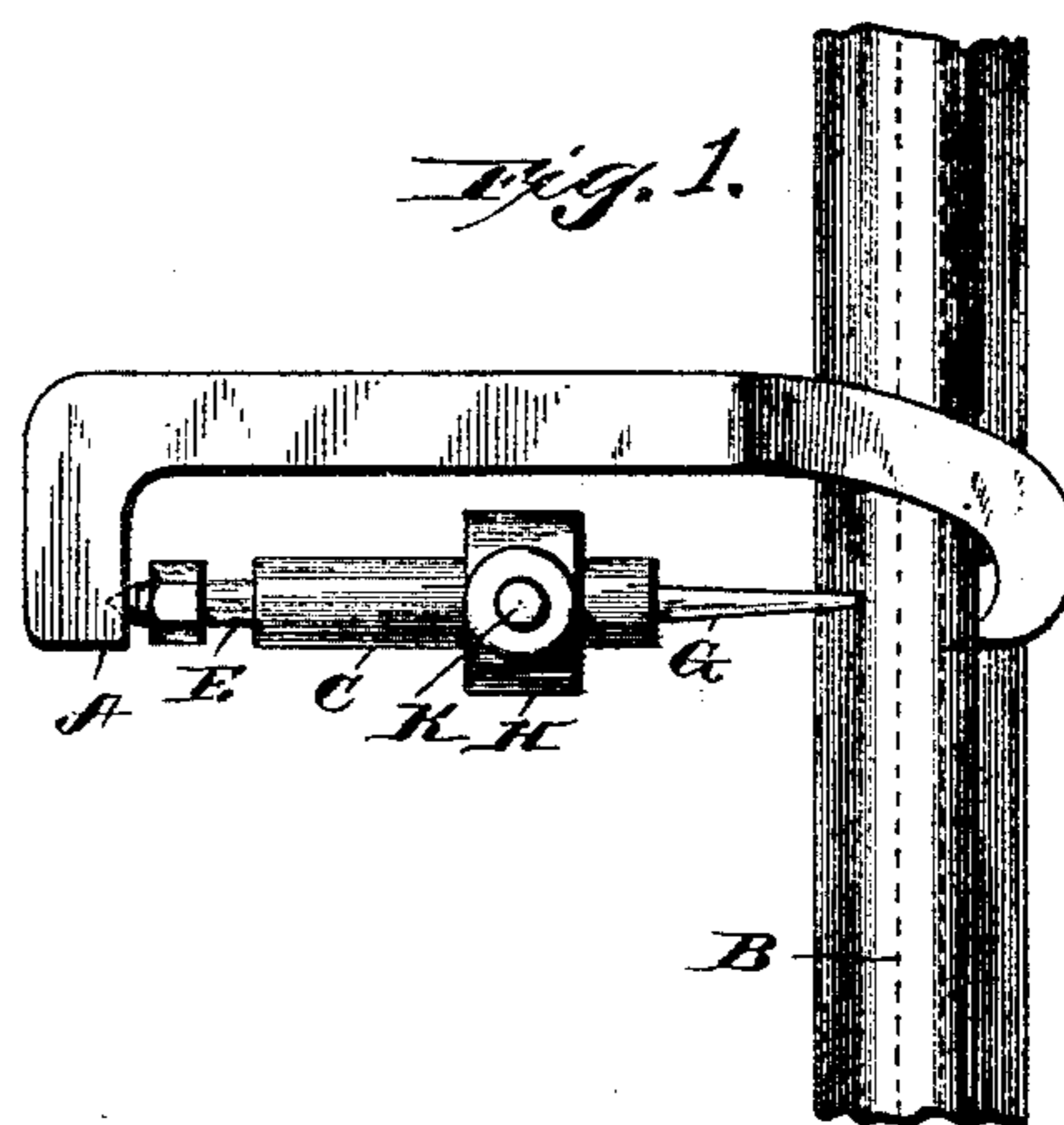
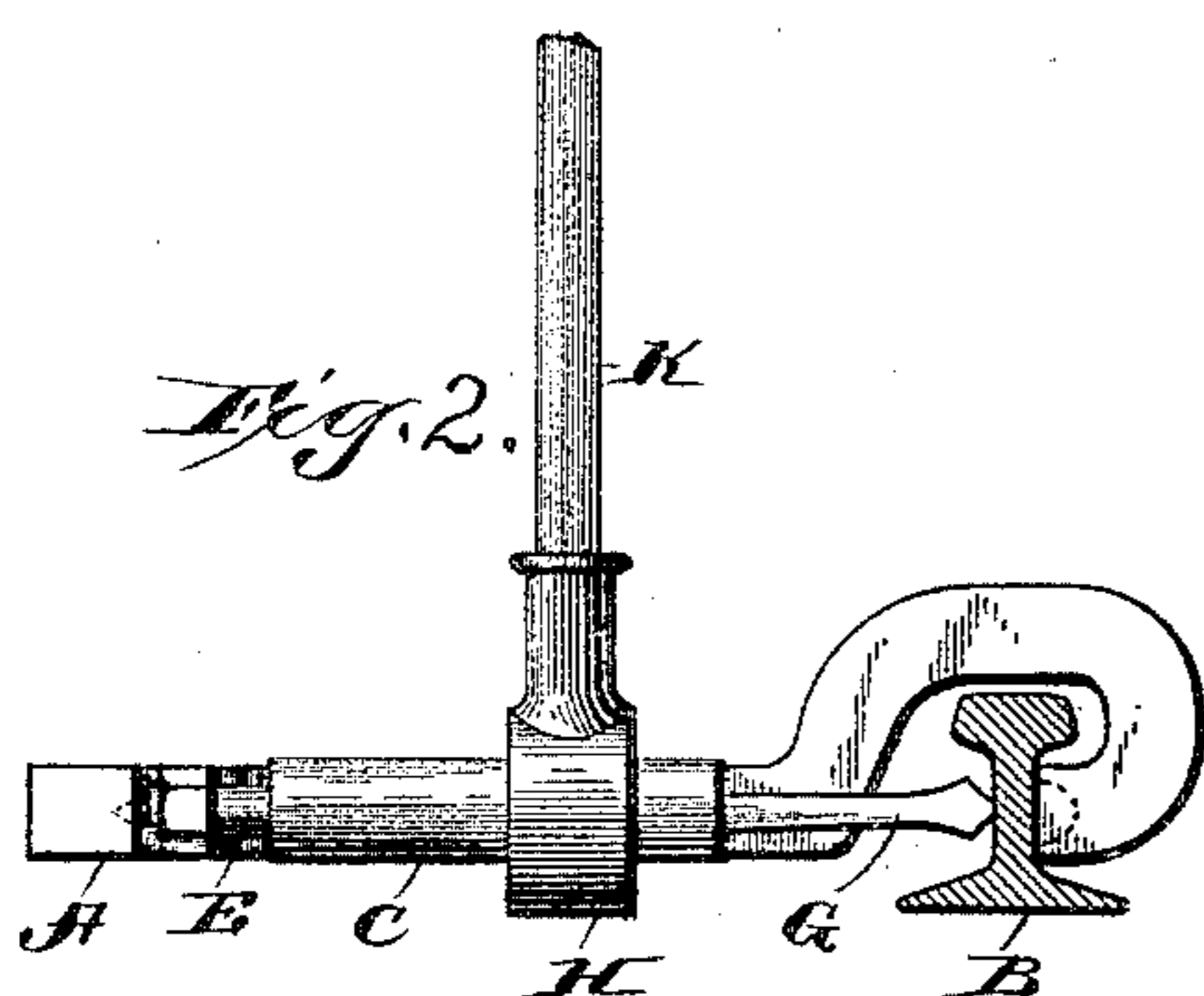


(No Model.)

A. L. STANFORD.  
DRILL FRAME.

No. 453,748.

Patented June 9, 1891.



*Witnesses:*

*Wm. M. Rheem.*

*E. J. Hurdman.*

*Inventor:*

*Arthur L. Stanford*

*By Banning & Banning Payson*

*Attys*

# UNITED STATES PATENT OFFICE.

ARTHUR L. STANFORD, OF EVANSTON, ILLINOIS.

## DRILL-FRAME.

SPECIFICATION forming part of Letters Patent No. 453,748, dated June 9, 1891.

Application filed January 14, 1891. Serial No. 377,729. (No model.)

*To all whom it may concern:*

Be it known that I, ARTHUR L. STANFORD, of Evanston, in the county of Cook and State of Illinois, have invented a new and useful  
5 Improvement in Drill-Frames, of which the following is a specification.

The object of my invention is to improve the construction of hand metal drills for boring metal, particularly railroad-rails; and the  
10 invention consists in the features and combinations hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a plan view of the drill in position for use, and Fig. 2 a side elevation of the drill in such  
15 position.

A is the frame; B, the rail; C, the drill-stock; E, the feed-screw; G, the drill-bit; H, a head-piece fitting over the drill-stock, and K the drill-handle.

20 The frame of my improved drill consists, essentially, of a single arm having these characteristics: one of its ends is turned or bent to enable it to pass over the head of the rail preferably clear of the head, and then side-  
25 wise and inwardly to enable it to press against the web of the rail, and its other end is turned or bent to form a lateral or elbow extension, preferably at right angles to the arm proper. The end passing over the head of the rail is  
30 bent in the same direction laterally as the

elbow-extension at the other end, and thus caused to press against the outside of the rail at a point corresponding substantially to the outer end of the elbow-extension. This elbow-extension forms a support or bearing-point 35 for the pivot of the hand-drill, the bit of which is brought into contact with the rail at a point substantially opposite the end of the bent portion supporting or pressing against the rail. In this way, the rail being supported just op- 40 posite the portion against which the drill-bit presses, the frame is only required to have one arm, which of course gives greater space for the movements of the operating-handle, and the use of clamps, wedges, or other sup- 45 porting devices is rendered unnecessary.

I claim—

A hand-drill frame comprising an arm having one of its ends turned or bent upwardly to pass over the rail and sidewise and inwardly 50 to come in contact with the outer side thereof, and its other end turned or bent sidewise to form a support for the pivot of the drill, the two ends being bent in the same direction laterally, substantially as described.

ARTHUR L. STANFORD.

Witnesses:

EPHRAIM BANNING,  
SAMUEL E. HIBBEN.