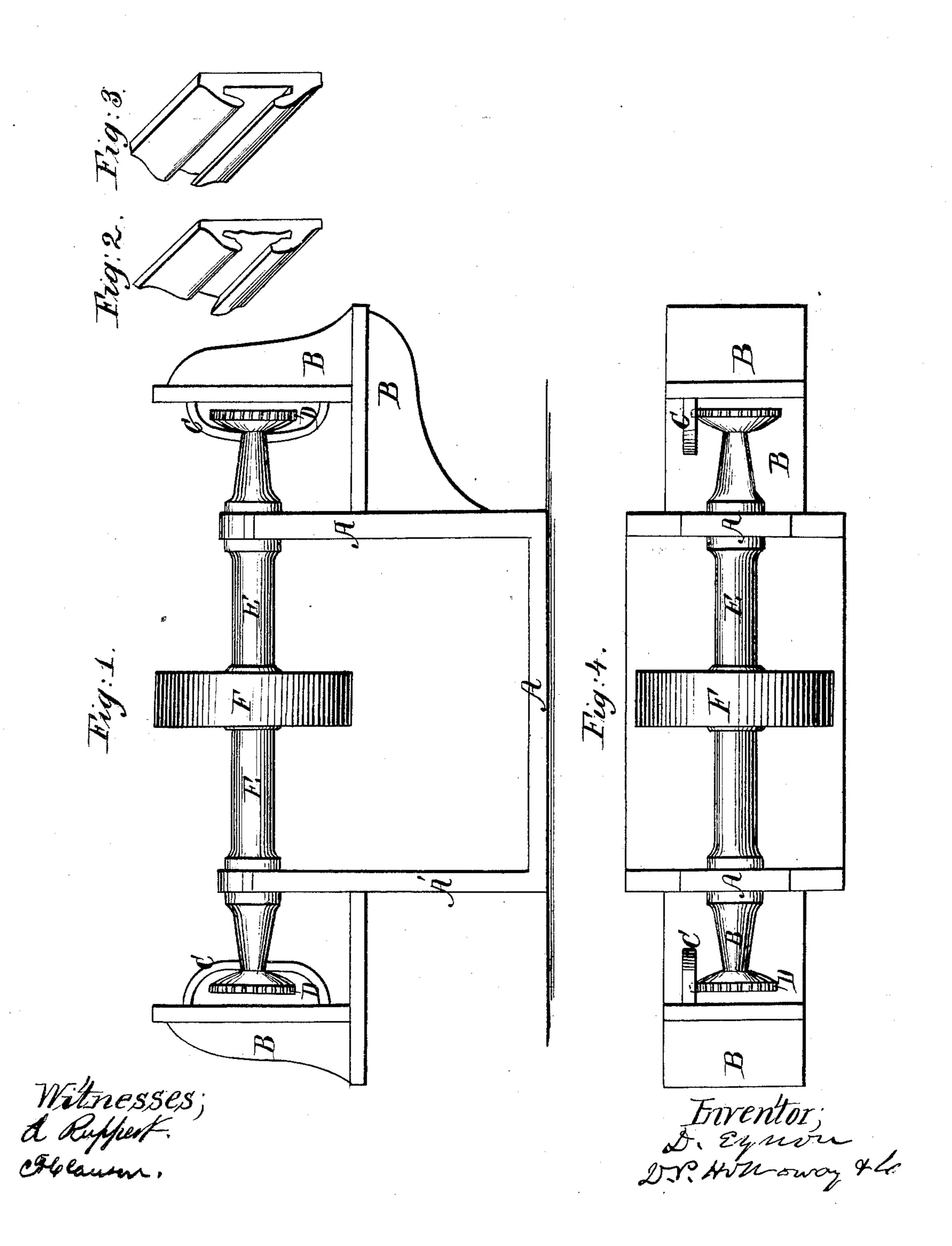


Burrowing Railroad Chairs. Nº 90,249. Patented May 18,1869.



Anited States Patent Office.

DAVID EYNON, OF RICHMOND, VIRGINIA.

Letters Patent No. 90,249, dated May 18, 1869.

IMPROVED MACHINE FOR REMOVING THE BURRS FROM RAILROAD-CHAIRS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, DAVID HYNON, of Richmond, in the county of Henrico, and the State of Virginia, have invented a new and useful Improvement in Machines for Removing the Burrs from Railroad-Chairs; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is an elevation of my improved machine. Figure 2 is a view of a chair as it appears after having been sawed from the bar, showing the burr or rough end thereof;

Figure 3 is a view of the same chair after having

the burr removed by my machine; and

Figure 4 is a plan or top view of the machine.

Corresponding letters refer to corresponding parts in all the figures.

This invention relates to a machine for removing the burrs from the ends of railroad-chairs, caused by sawing them from the bars into which they are first drawn; and

It consists in the construction and arrangement of the parts of such machine, as will be more fully de-

scribed hereafter.

A, in the drawings, represents a frame of metal or of other suitable material, consisting of a bed-plate, having two or more standards, A', arising therefrom, which have, in their upper or outer ends, boxes for the reception of a shaft.

B B represent brackets, which are secured to the standards A' and A', and which extend, first, in a horizontal position, and then in a vertical direction, for a distance sufficient to permit the guide C to be secured to the inner faces of the vertical portion thereof, such guide extending equal distances above and below the cutters D.

C C represent the guides for holding the chairs in position while being operated upon. They consist of bars of iron, cast upon or otherwise secured to the inner faces of the brackets B B, and are so arranged that they will receive the ends of the chair, and direct the same to the cutters D D, in such a manner that the cutters shall enter the cavity formed in such chair for the reception of the rail, and remove any burr that may have been formed thereon, and at the same time bevel the edges of such aperture to the extent which may be necessary to cause the rail to enter the same with facility.

D D represent cutters, which are to be made of steel, or other suitable material, and fluted or grooved upon their surfaces, which are to be of such form as

to fit the aperture in the chairs, the object of the fluted or grooved surfaces being to form cutting-edges upon such surfaces, for the purpose above described.

E represents a shaft, which is to be placed in the bearings formed in the standards A', beyond or outward from which it extends for a distance sufficient to receive upon its outer ends the cutters D D, and retain them in their proper position with reference to the brackets B B and guides C C.

F represents a pulley, which is to be secured to the shaft E, for the purpose of receiving a belt for rota-

ting said shaft and cutters.

I have described my improved machine as a double one, or as having a cutter and guide at each end of the shaft E, which, as a matter of economy and convenience, is the plan I prefer; but it is apparent that one of the brackets, guides, and cutters may be omitted if desired, without departing from the principles of my invention.

The operation of this device is as follows:

The parts having been constructed and arranged as shown in fig. 1 of the drawings, and motion imparted to the cutters D, the chair, which is in the condition represented by fig. 2 of the drawings, is taken by the operator, who presents one of its ends to the cutter, its lower surface coming in contact with the vertical face of bracket B, while its edge is resting upon guide C, when it is to be pressed toward the cutter until the burr has been removed, and a slight chamfer formed upon its edges, when it is reversed, and its opposite end is presented to the cutter, and the operation of burring and chamfering is repeated, causing the chair to appear as indicated by fig. 3 of the drawings.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent, is—

1. The combination of a cutter, D, formed for burring the inside of railroad-chairs, and the guide C, for holding the chair while being subjected to the action of the cutter, substantially in the manner and for the purpose set forth.

2. The combination and arrangement of the shaft E, guide C, bracket B, and cutter D, substantially as

shown and described.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

DAVID EYNON.

Witnesses:

D. P. HOLLOWAY,

A. RUPPERT.