

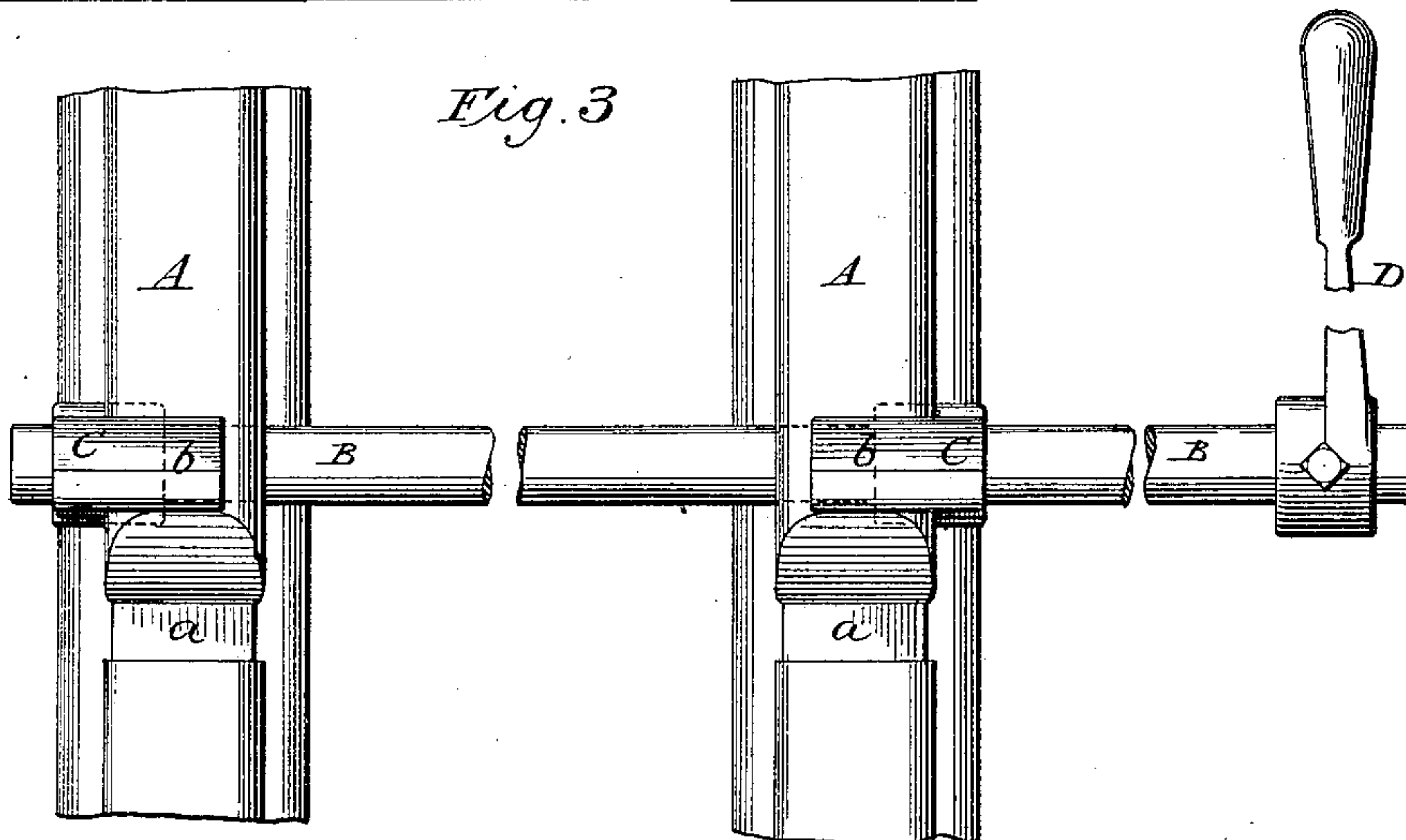
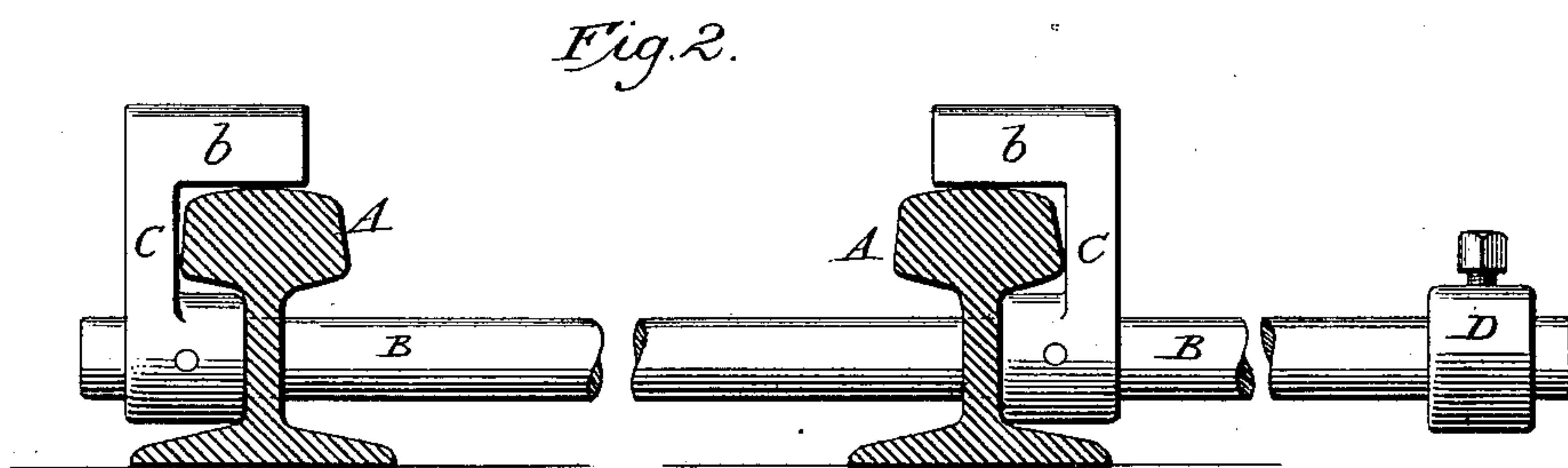
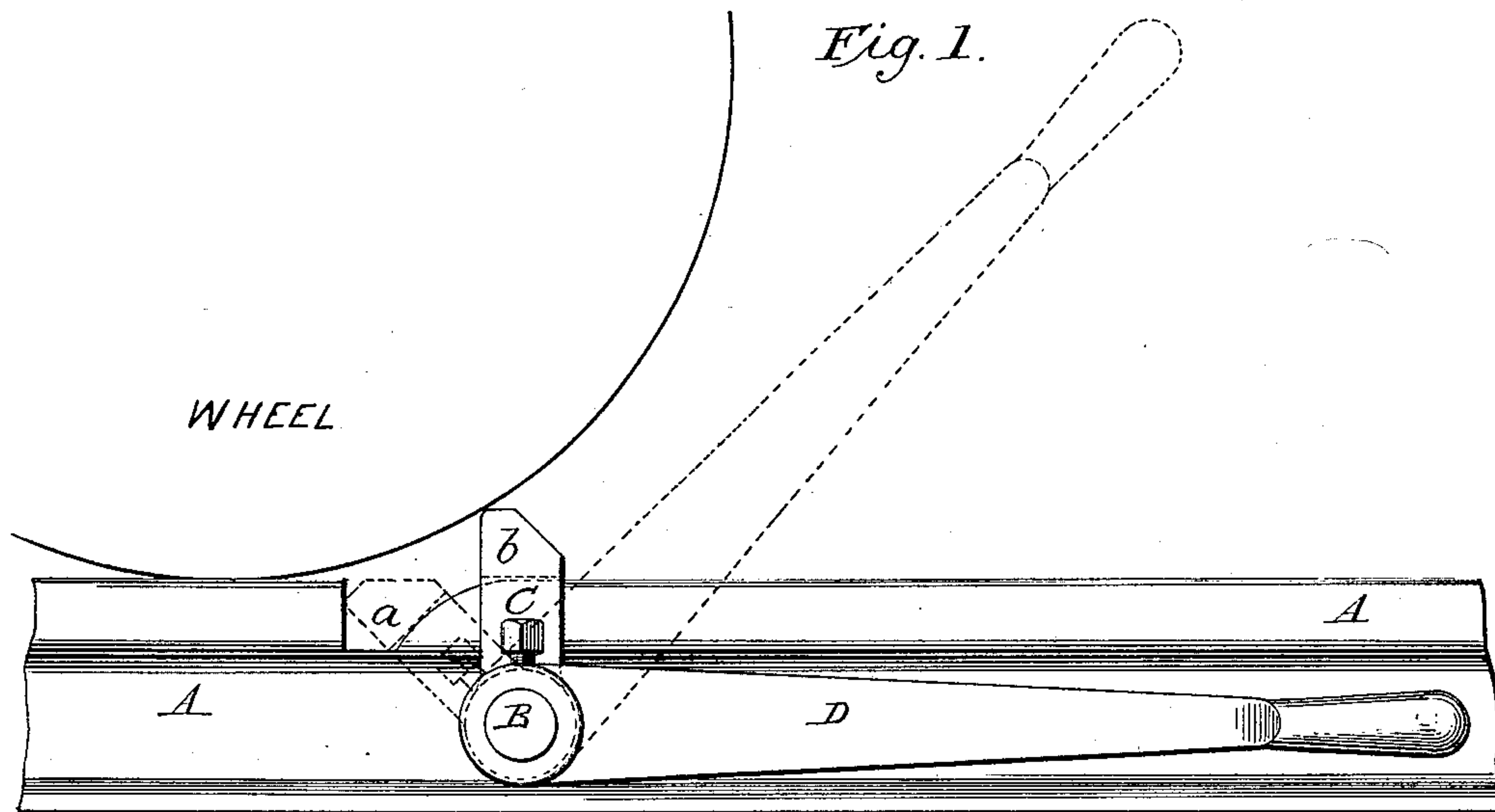
(No Model.)

F. MERTSHEIMER.

AUTOMATIC STOP BLOCK FOR LOCOMOTIVES.

No. 366,594.

Patented July 12, 1887.



WITNESSES

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# UNITED STATES PATENT OFFICE.

FREDERICK MERTSHEIMER, OF EVANSTON, WYOMING TERRITORY, ASSIGNOR  
OF ONE-HALF TO GEORGE W. DICKINSON, OF SAME PLACE.

## AUTOMATIC STOP-BLOCK FOR LOCOMOTIVES.

SPECIFICATION forming part of Letters Patent No. 366,594, dated July 12, 1887.

Application filed November 9, 1886. Serial No. 218,399. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK MERTS-  
HEIMER, of Evanston, in the county of Uinta  
and Territory of Wyoming, have invented an  
Improvement in Automatic Stop-Blocks for  
Locomotives, of which the following is a speci-  
fication.

My invention relates to an automatic stop  
device to prevent the advance of locomotives  
in the event of their being started by the acci-  
dental opening of the throttle by leakage or  
otherwise, and is designed more particularly  
for use in connection with turn-tables to pre-  
vent the engines from running into the open  
pit when the table is out of position; but the  
device is also applicable wherever it is neces-  
sary to check the gradual advance of the en-  
gine.

The invention consists, essentially, in a mov-  
able block or stop of the peculiar construction  
hereinafter described, adapted to project above  
the rails to encounter and arrest the advance  
of the locomotive-wheels, and to be moved out  
of the path of the wheels in order to permit  
the advance of the locomotive.

My invention is susceptible of modification  
in various minor details, which will suggest  
themselves to the skilled mechanic after read-  
ing the following specification; but I prefer to  
employ the particular form of device repre-  
sented in the drawings, consisting of dogs  
hinged or pivoted to turn upward on top of a  
rail or downward into a recess therein, and  
combined with a connecting-shaft and a hand-  
lever, which latter serves the twofold purpose  
of a weight to hold the dogs normally in an  
elevated position and to effect their depression  
at the will of the attendant.

In the accompanying drawings, Figure 1  
represents a side elevation of my device in its  
operative position. Fig. 2 is an elevation of  
the device, looking endwise against the rails.  
Fig. 3 is a top plan view.

Referring to the drawings, A A represent  
the ordinary railway-rails, each provided with  
a notch or recess, *a*, in its upper side.

B represents a rock-shaft extending at its  
ends transversely through the two rails, and  
turning freely therein.

C C represent two dogs secured firmly to the

rock-shaft adjacent to the respective rails, each  
dog having its upper end formed, as shown,  
with a lateral arm, *b*.

D represents a hand-lever secured rigidly to  
one end of the rock-shaft. This lever is made  
of such weight and applied in such position  
that when released it will drop to the position  
shown in full lines in Fig. 1, and by turning  
the shaft lift the blocks to the position shown  
in the several figures, with their arms *b* bear-  
ing on top of the rails in position to arrest the  
wheels of the advancing locomotive. When  
the lever is lifted, it serves to depress the arms  
or blocks to the position represented in dotted  
lines in Fig. 1, thus leaving the track clear  
and uninterrupted, so that the wheels may  
pass to and fro thereover in the usual manner.

In using the apparatus in connection with a  
turn-table and a roundhouse into which the  
engines pass from the table, I place the stop  
blocks or arms on that side of the notch near-  
est the turn-table, so that as the wheels pass  
from the table they will encounter the beveled  
side of the arms C and automatically depress  
them, passing over them to the house. After  
the wheels have passed, the parts will auto-  
matically assume their normal positions, and  
thus prevent the engine from advancing again  
to the table until the stop device has been  
operated by hand. Of course a single stop-  
block may be used instead of two blocks, as  
shown in the drawings; but it is preferred for  
various reasons to use both.

The essential feature of my invention con-  
sists in the use of a stop device which arises  
automatically to arrest the retrograde motion  
of a wheel which has passed thereover, and it  
is manifest that they may be modified in form,  
in position, and in their direction of move-  
ment in any desired respect, provided they  
retain a mode of action substantially such as  
herein set forth.

Having thus described my invention, what  
I claim is —

1. In combination with the rail recessed in  
its upper face, the pivoted vertically-swinging  
stop C, having the laterally-projecting arm *b*,  
adapted to turn into the recess below the sur-  
face of the rail, or to bear upon and receive  
support from the rail, as occasion may require.



2. In combination with the notched rails A  
A, the transverse rock-shaft B, the stop blocks  
or arms C, secured to said shaft, and provided  
with the lateral projections *b* to overlie the  
5 rails, and the hand-lever D, applied as shown,  
and serving as a weight to hold the stops nor-  
mally in their elevated position.

3. In combination with a rail notched or re-  
cessed in its upper face, a stop-block, C, hav-  
10 ing a lateral arm at its upper extremity, a  
rock-shaft on which said arm is mounted, and  
a hand-lever applied to said rock-shaft in the  
manner described and shown, whereby it is

caused to hold the block normally in an ele-  
vated position to stop wheels advancing in 15  
one direction, while at the same time the block  
is left free to descend under the pressure of  
wheels advancing from the opposite direction.

In testimony whereof I hereunto set my hand  
this 1st day of October, 1886, in the presence 20  
of two attesting witnesses.

FREDERICK MERTSHEIMER.

Witnesses:

A. E. KINGSBURY,  
J. F. SAUXAY, Jr.