No. 632,877.

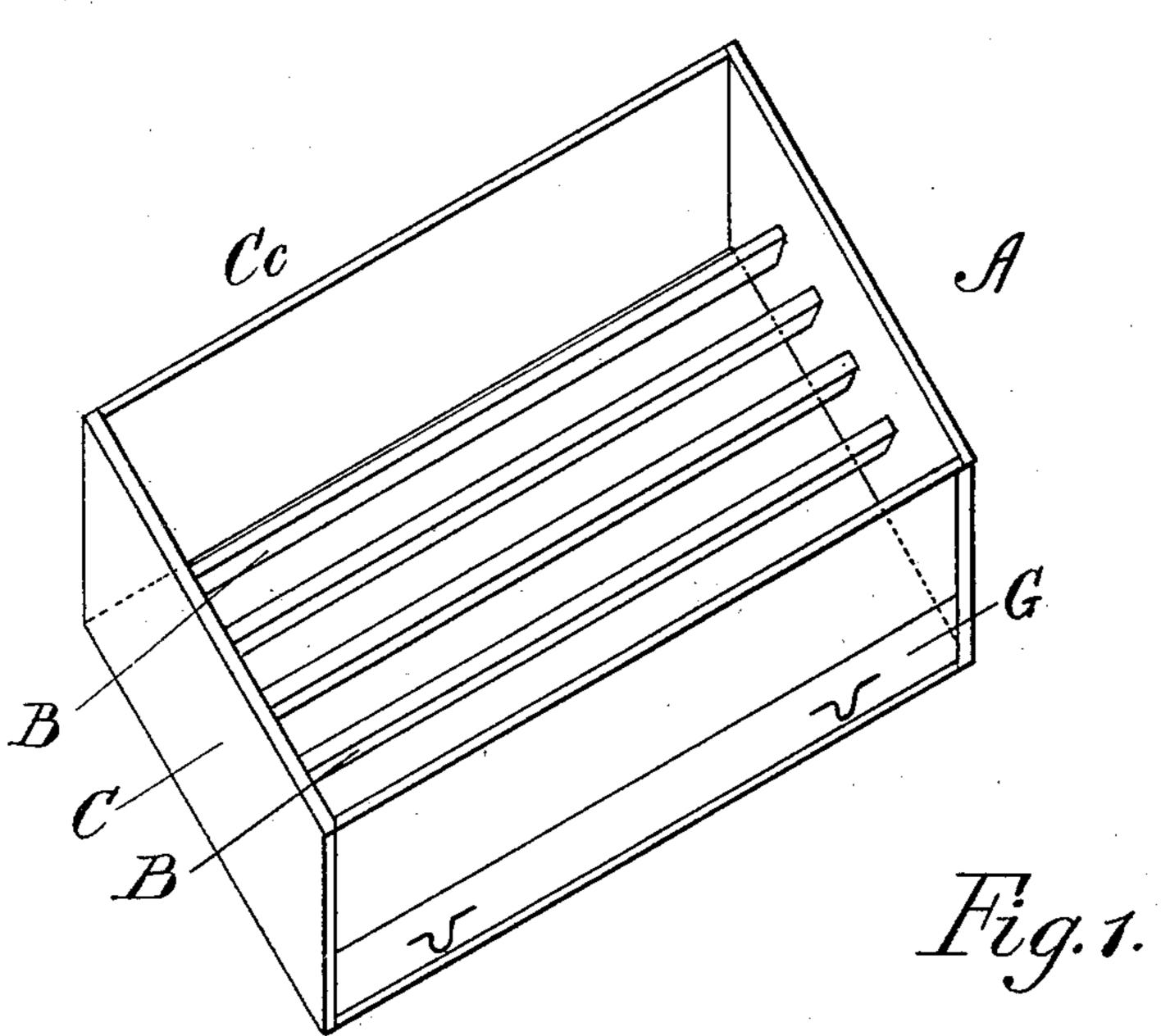
Patented Sept. 12, 1899.

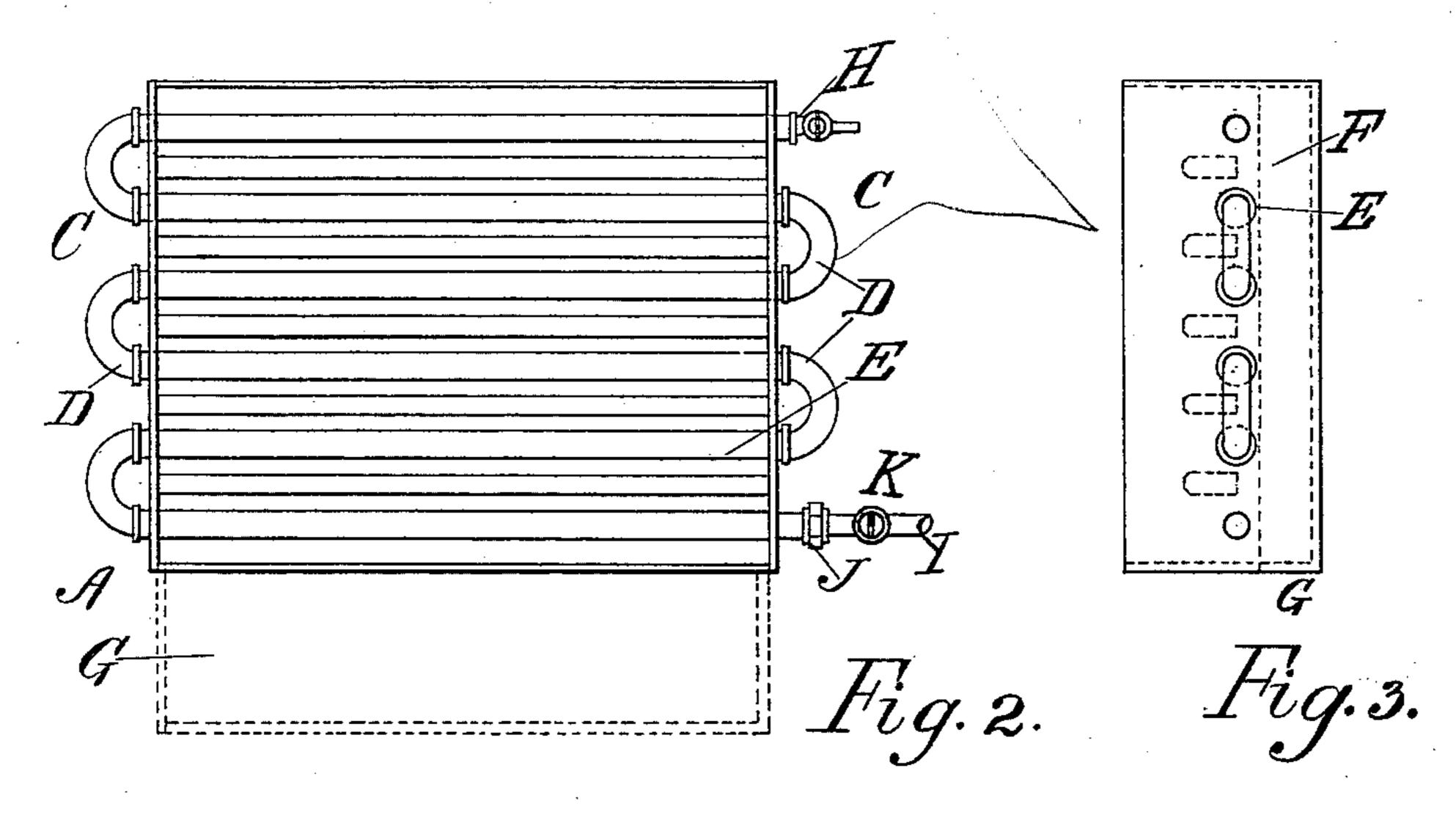
### M. McCUNE.

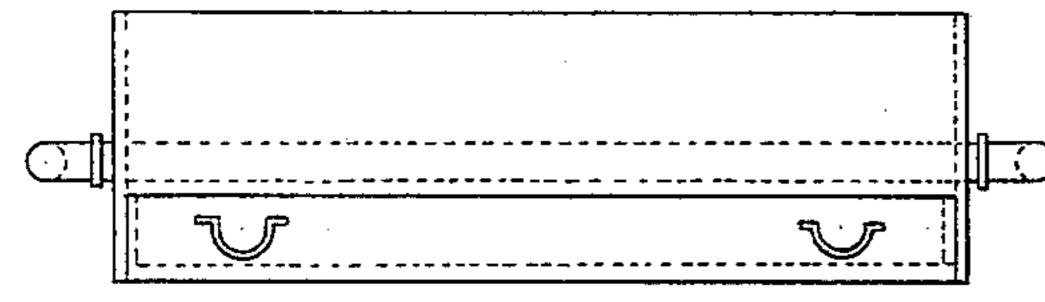
#### LOCOMOTIVE ENGINEER'S FOOT WARMER.

(Application filed Mar. 21, 1898.)

(No Model.)







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MICHAEL MCCUNE, OF PARSONS, KANSAS.

# LOCOMOTIVE-ENGINEER'S FOOT-WARMER.

SPECIFICATION forming part of Letters Patent No. 632,877, dated September 12, 1899.

Application filed March 21, 1898. Serial No. 674,574. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL MCCUNE, a citizen of the United States, residing at the city of Parsons, in the county of Labette and 5 State of Kansas, have invented new and useful Improvements in Locomotive-Engineers' Foot-Warmers to Warm the Feet of Locomotive-Engineers while they are on the locomotive; and I do hereby declare that the fol-10 lowing is a full, clear, and exact description of the invention, which will enable skilled mechanics to make and use the same.

My invention relates to improvements in locomotive-engineer's foot-warmers in which 15 steam passes through pipes and warms the

engineer's feet by radiation of heat.

The foot-warmer is portable, durable, and cheap, and the steam is taken from the boiler of the locomotive and connected with the 20 foot-warmer by a tube or pipe; and the objects of my improvement are an arrangement of pipes in a frame, with supports on which to rest and warm the feet, so that the warmer can be quickly connected or disconnected 25 from any locomotive-boiler and may lie on the floor and that may be carried in one hand, the frame to be high enough to break the draft of cold air from the feet of the engineer while the locomotive is in motion and allow 30 the warmth by radiation of heat from the steam-pipes to circulate under the pipes and and foot-supports and about the engineer's feet and warm them. I attain these objects by the apparatus and arrangement illustrated 35 in the accompanying drawings, in which--

Figure 1 is a view of a frame of wood or other material to hold in place the steampipes and the supports on which the feet rest. Fig. 2 is a view of said frame, the steam-40 pipes, supports, union to connect with any pipe, tube, or hose to the boiler, and cock to let out water or condensed steam, with dotted lines to indicate the action of the drawer. Fig. 3 shows an end elevation of the footwarmer. Fig. 4 is a side elevation of Fig. 2.

Similar letters refer to similar parts through-

out the several views.

A is a view of the frame for the pipes and foot-supports.

B shows the foot-supports, made of wood or 50 other material and above the steam-pipes, on which to rest the engineer's feet and which strengthen the frame and also keep the engineer's feet above and off of the steam-pipes; so as not to heat his boots too much or injure 55 them, although the flow or amount of steam is regulated by cock K.

C denotes the ends of frame A, and Ce its sides, which rise high enough to break the current of cold air off of the engineer's feet 60

while the locomotive is moving.

D shows the steam-pipe extending and returning through ends C.

E is the steam-pipe between and a little be-

low the foot-supports B.

F indicates the open space under steampipes E and supports B, in which drawer G operates. Drawer G goes through one side of frame A and slides under the steam-pipes and foot-supports and catches and holds the 70 mud and dirt that may fall from the engineer's boots and can be drawn out and emptied at will.

H is a cock to let water or condensed steam out of the pipe.

I is a pipe or hose to conduct steam from the boiler to the foot-warmer, and J is a union to connect the foot-warmer to I.

In operating this invention lay the warmer on the floor of the cab and connect pipe I to 80 either of the cocks of the boiler, or otherwise let steam into I, and the engineer can warm his feet as aforesaid.

What I claim as my invention, and desire

to secure by Letters Patent, is—

In a foot-warmer, the combination with a box open at the top and having a drawer at the bottom and foot-supports intermediate said bottom and top, of pipes arranged beneath the said foot-supports and over the said 90 drawer and adapted to be attached to the boiler of an engine, substantially as set forth.

## MICHAEL MCCUNE.

Witnesses:

W. MADDOCKS, A. B. SMITH.