

A. KRUTSINGER.

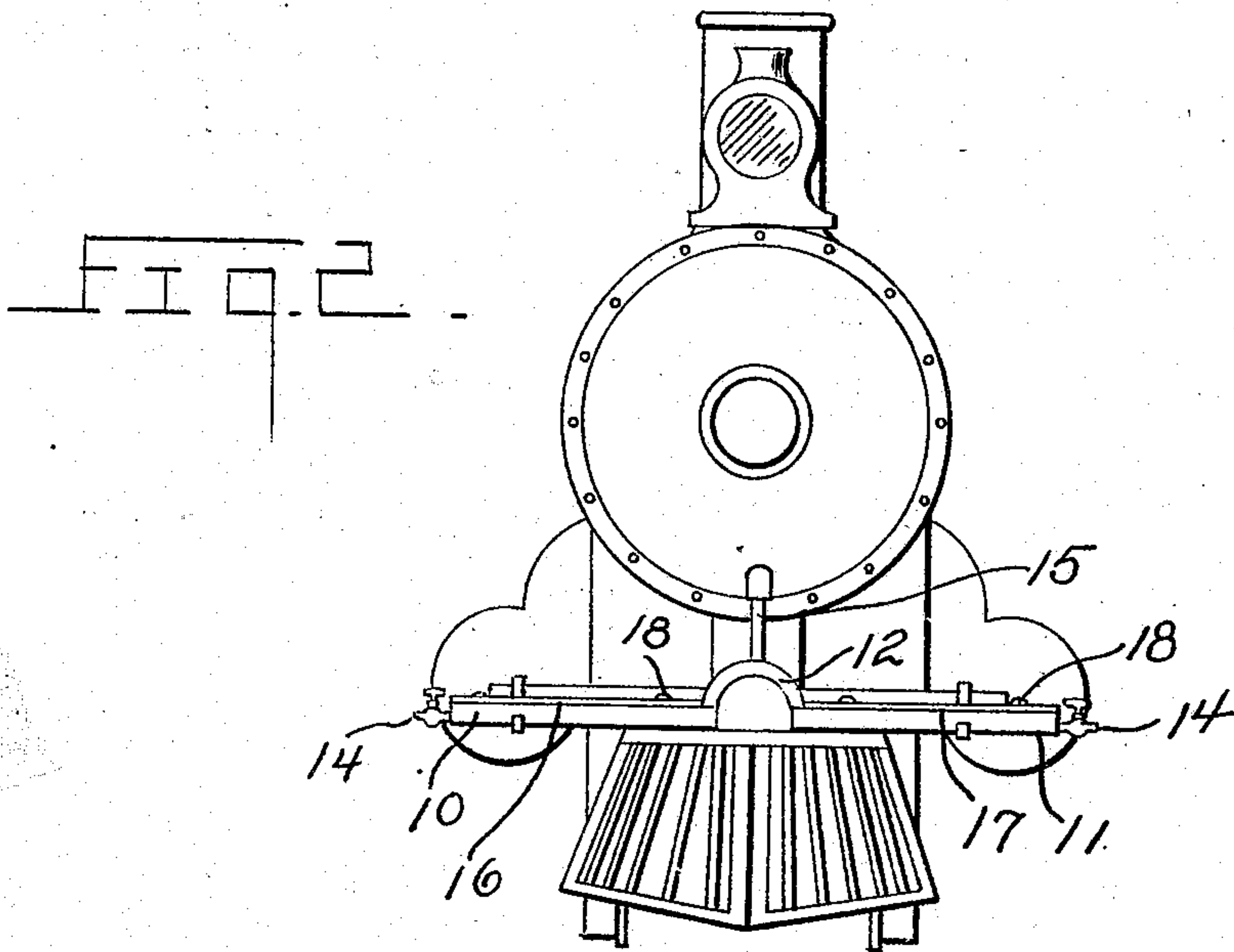
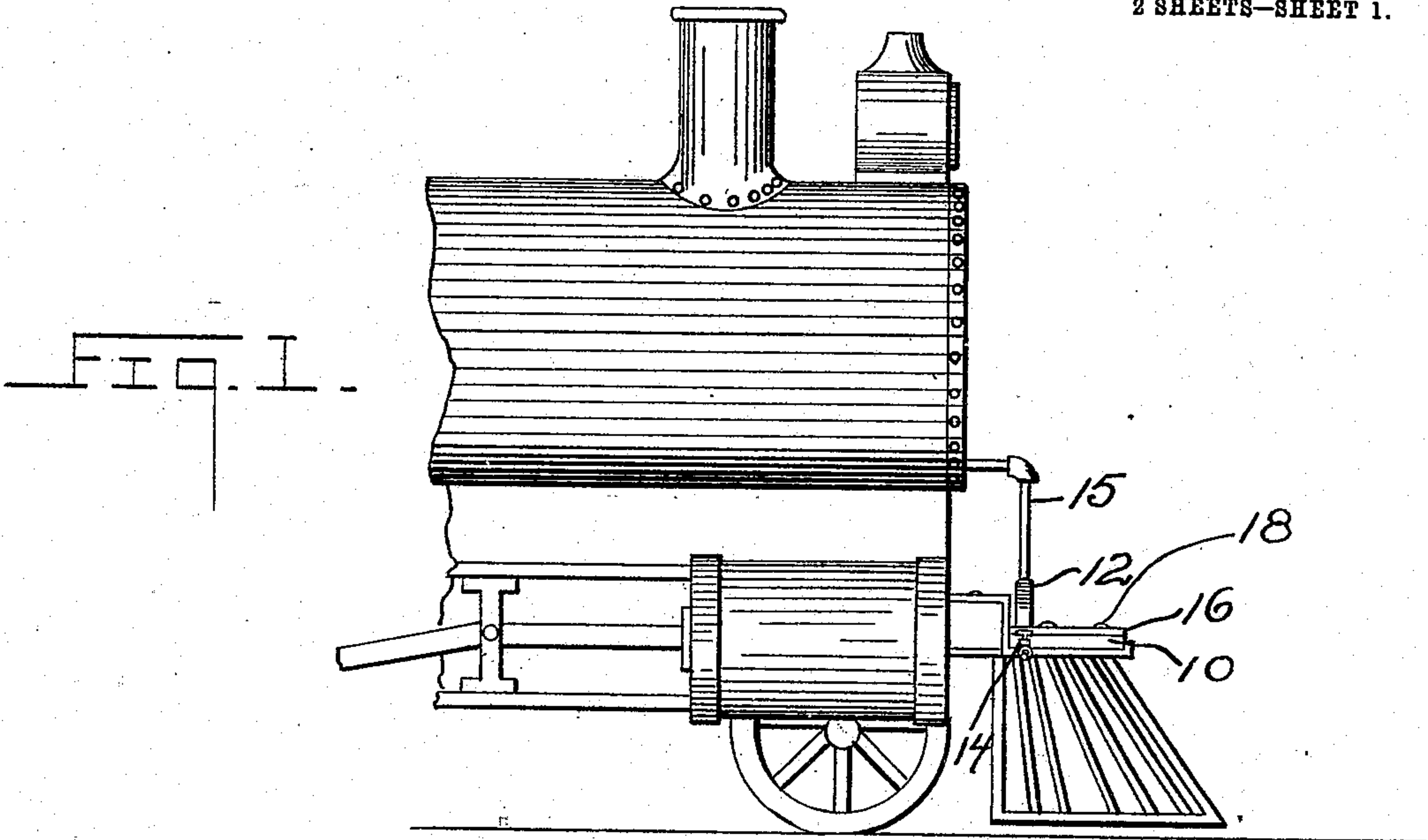
FOOTBOARD.

APPLICATION FILED APR. 26, 1909.

936,786.

Patented Oct. 12, 1909.

2 SHEETS—SHEET 1.



Witnesses

E. E. Johansen
E. F. Chandler

Inventor

A. Krutsinger.

By Woodward & Chandler

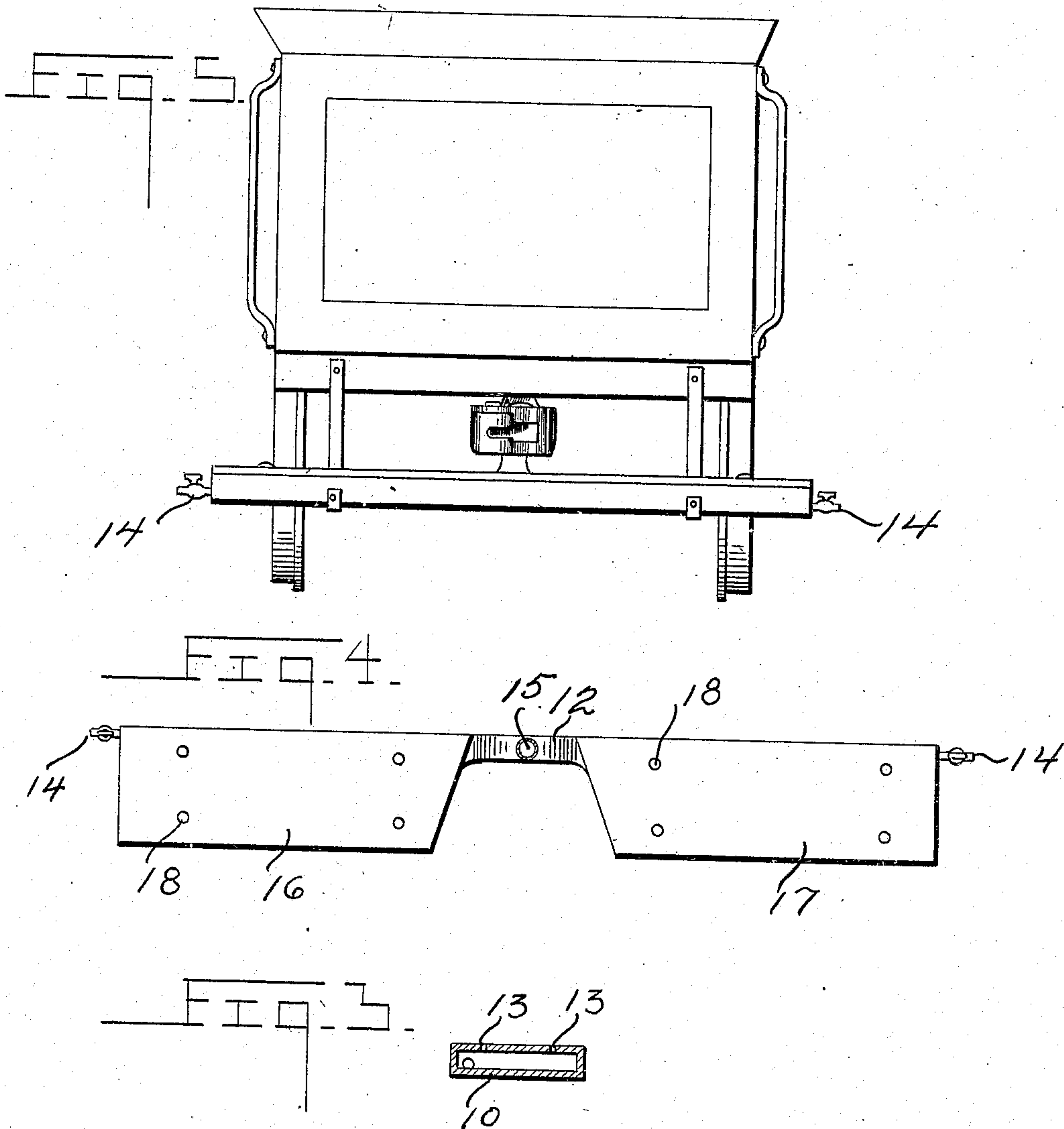
Attorney

A. KRUTSINGER.
FOOTBOARD.

APPLICATION FILED APR. 26, 1909.

936,786.

Patented Oct. 12, 1909.
2 SHEETS—SHEET 2.



Inventor

A. Krutsinger.

Witnesses
E. E. Johansen
E. L. Chandler

By Woodward & Chandler

Attorney

UNITED STATES PATENT OFFICE.

ALBERT KRUTSINGER, OF PASCO, WASHINGTON, ASSIGNOR OF ONE-HALF TO LEMUEL N. GOODELL, OF PASCO, WASHINGTON.

FOOTBOARD.

936,786.

Specification of Letters Patent.

Patented Oct. 12, 1909.

Application filed April 26, 1909. Serial No. 492,120.

To all whom it may concern:

Be it known that I, ALBERT KRUTSINGER, a citizen of the United States, residing at Pasco, in the county of Franklin and State of Washington, have invented certain new and useful Improvements in Footboards, of which the following is a specification.

This invention relates to railway appliances and has special reference to an improved foot board used upon railway vehicles.

An object of the invention is to provide a foot board of such construction that ice, snow and the like will not adhere to the same and to thus prevent many accidents which now occur according to the present use of running boards of common construction.

The invention has for another object to provide a device of this character which is provided with means for frictionally engaging the feet of the person using the same to prevent the slipping from the metallic portions of the device.

Other objects and advantages will be apparent from the following description and it will be understood that changes in the specific structure shown and described may be made within the scope of the claims without departing from the spirit of the invention.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side elevation of the device as applied to a locomotive, Fig. 2 is a front elevation of the same, Fig. 3 is a detailed sectional view through one of the wings of the device, Fig. 4 is a top plan view of the device detached from the locomotive. Fig. 5 is a rear elevation of a fender provided with the present invention.

Referring to the drawings, 10 and 11 designate the wings of the device which comprise chambered plates which are connected at their inner ends by the yoke 12 which has a steam supply pipe 15 connected thereto, and which is composed of a tubing and which extends upwardly between the extremities of the wings for the purpose of permitting the securing of the wings 10 and 11 upon the fender or to the forward sill of the locomotive. The wings 10 and 11 are provided at their outer extremities with valves 14 for the purpose of permitting the draining of the wings.

Positioned upon the upper faces of the

wings 10 and 11 are the facing boards 16 and 17 which are constructed to conform to the configuration of the rings and which are held thereupon by bolts 18 engaged through the apertures 13 and through the facing boards 16 and 17.

In operation, the device is employed as follows: Steam is introduced through the pipe 15 which is led from the boiler of the locomotive into the yoke 12 where it is conducted from the opposite ends thereof into the chambered portions of the wings 10 and 11. This causes the wings 10 and 11 to be heated and to prevent the accumulation of ice or snow upon the upper face thereof. As the facing boards 16 and 17 are clamped closely against the upper faces of the wings 10 and 11 the same are heated and are prevented from being covered with the ice which generally accumulates on devices of this character and the facing boards serve the purpose of preventing the burning of the feet of the rider. When it is desired to drain the wings 10 and 11, the valves 14 are opened and the steam and water of condensation are thereby permitted to escape. The valves 14 may also be employed in cleansing the chambered portions of the wings 10 and 11 when necessary.

Fig. 5 shows a modified form of single-piece foot board attached to a tender.

What is claimed is:—

1. A device of the class described comprising a chambered portion, means for introducing steam into said chambered portion, valves disposed on said chambered portion for permitting the exhausting of the steam and facing boards disposed upon said chambered portion for the purpose of protecting riders from the heat caused by the steam.

2. A foot board having means for heating the same to prevent the accumulation of ice or the like thereon.

3. A foot board comprising a chambered portion, facing boards mounted on said chambered portion and means for introducing and exhausting a heating element through said chambered portion.

4. A device of the class described comprising two hollow wings, a yoke disposed between said wings, said yoke being centrally chambered, a steam pipe connected to said yoke, valves disposed upon the opposite extremities of said wings, said wings having

apertures disposed therethrough and facing boards mounted upon said wings and held in such position by bolts passed therethrough.

5 5. A foot board for a vehicle comprising a hollowed body portion and means for introducing steam through said body portion.

6. In a device of the character described the combination with a locomotive, of a foot board disposed upon the same, said foot

board being chambered and having means 10 for conducting steam through said foot board for heating the same.

In testimony whereof I affix my signature, in presence of two witnesses.

ALBERT KRUTSINGER.

Witnesses:

J. D. McCARTHY,
L. N. GOODELL.