

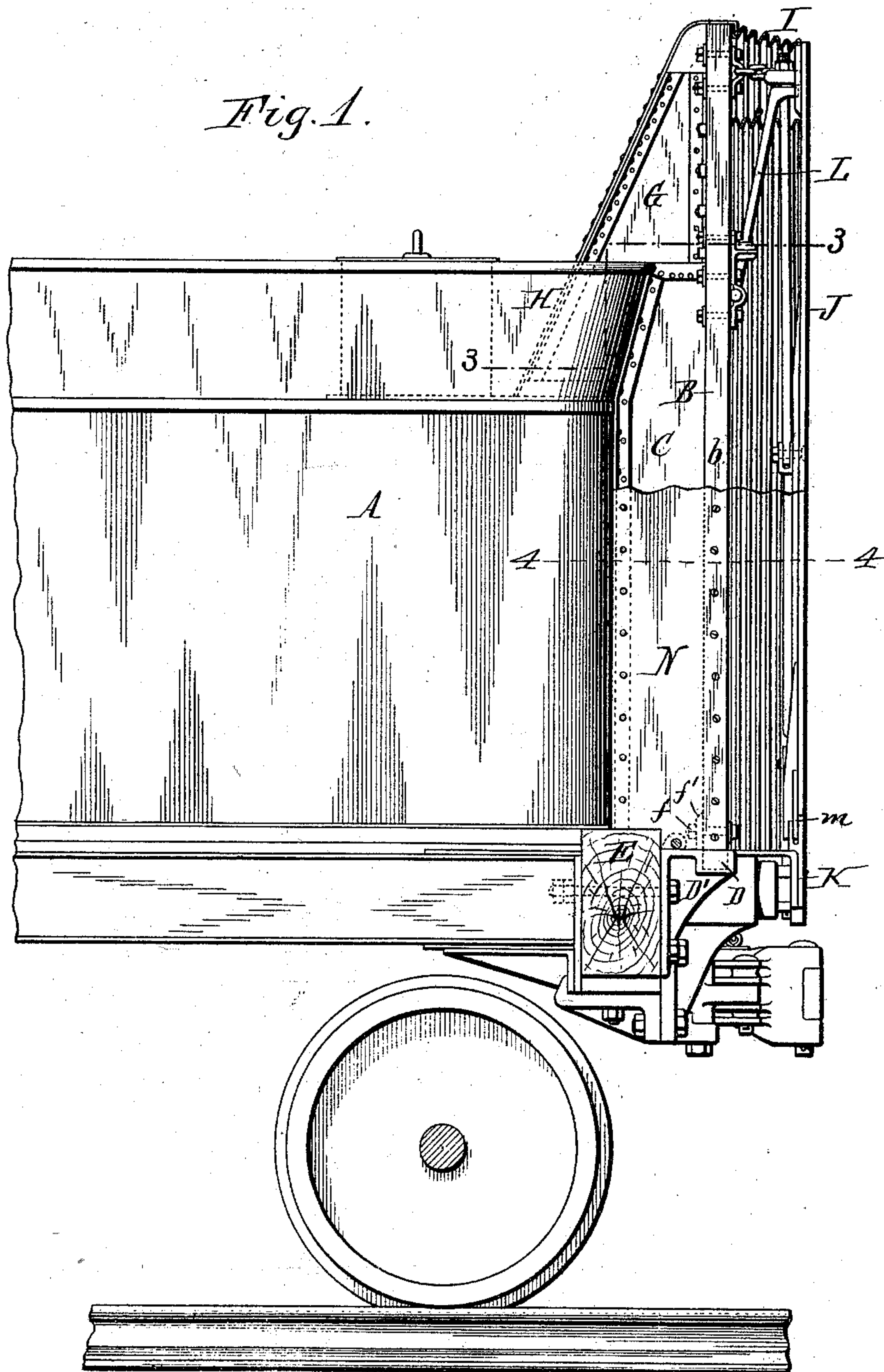
(No Model.)

3 Sheets—Sheet 1.

W. F. RICHARDS.  
LOCOMOTIVE TENDER.

No. 559,496.

Patented May 5, 1896.



WITNESSES:

*Chas. F. Burkhardt.*

*F. Guiter Wilhelm.*

*W. F. Richards*

INVENTOR.

*By Wilhelm & Forner.*

ATTORNEYS.

(No Model.)

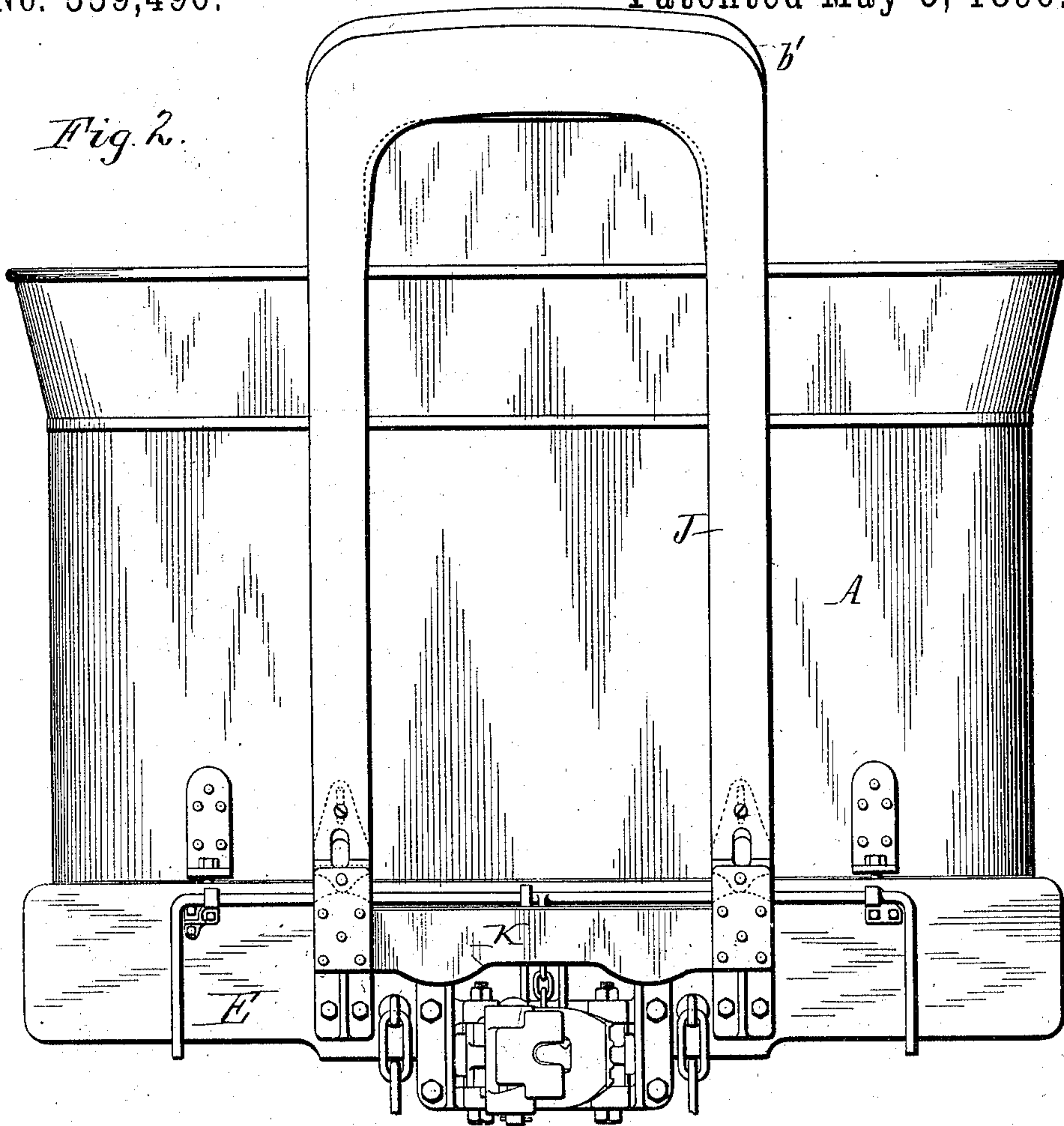
3 Sheets—Sheet 2.

W. F. RICHARDS.  
LOCOMOTIVE TENDER.

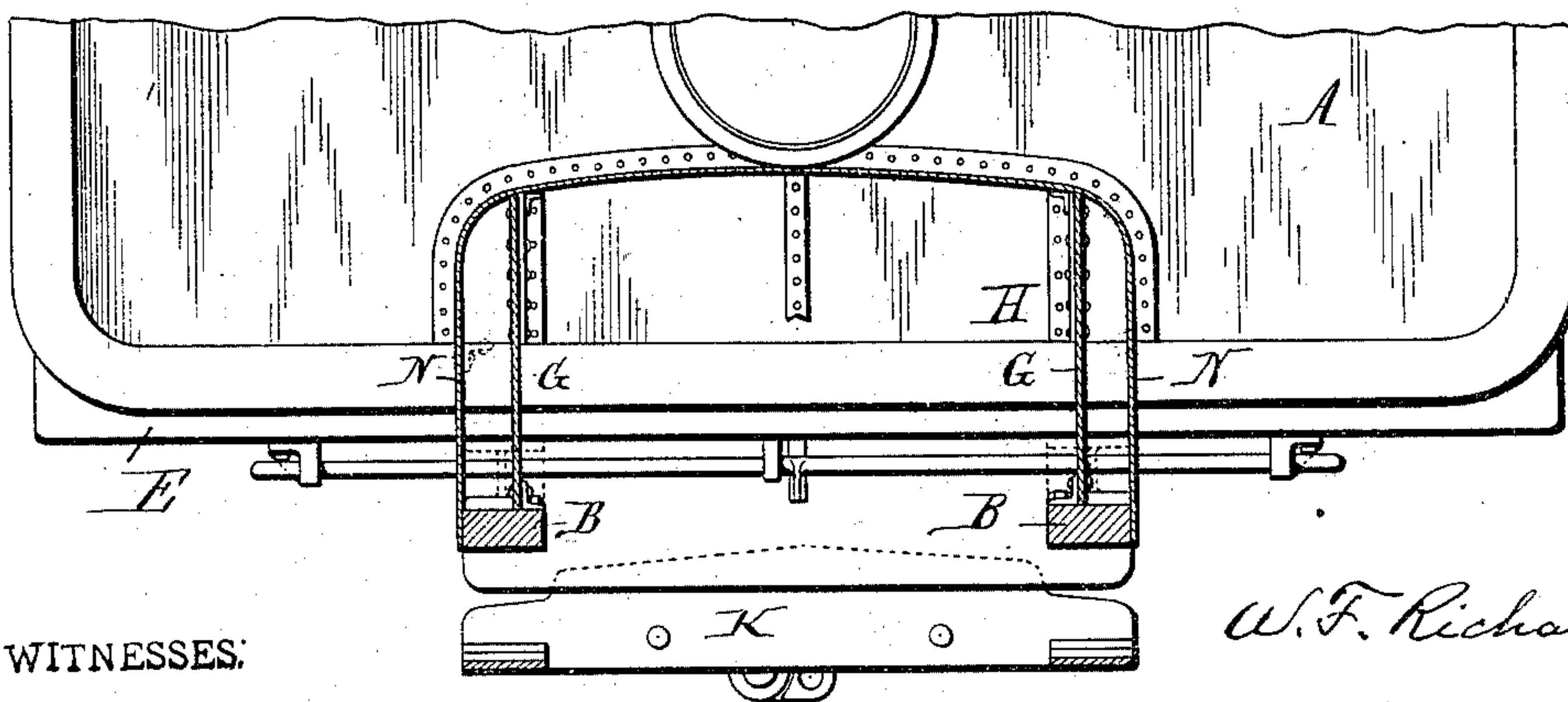
No. 559,496.

Patented May 5, 1896.

*Fig. 2.*



*Fig. 3.*



WITNESSES:

*Chas F Burkhardt*  
*F. Gustav Wilhelm*

*W. F. Richards*

INVENTOR.

*By Wilhelm H. Gornet*

ATTORNEYS.

(No Model.)

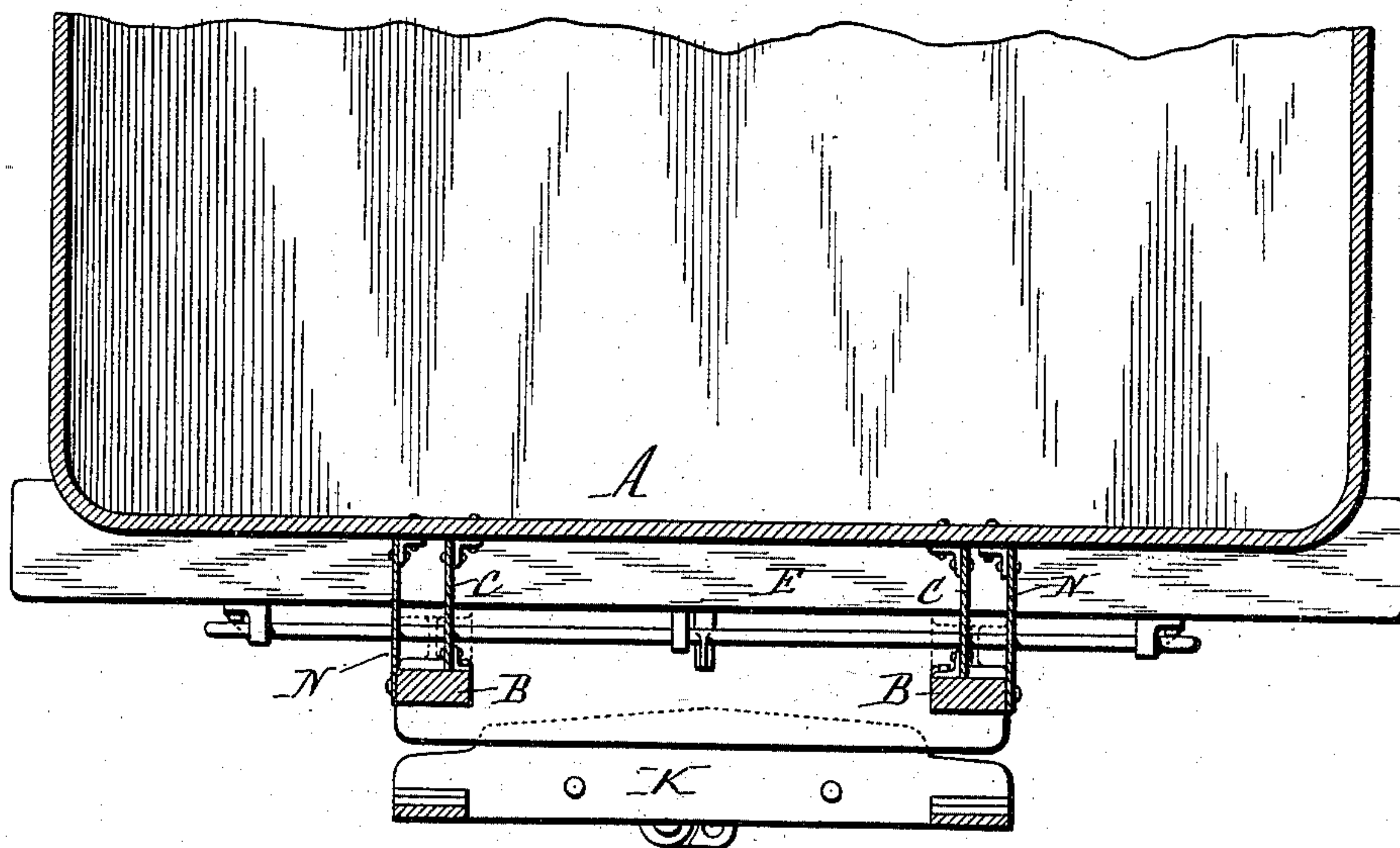
3 Sheets—Sheet 3.

W. F. RICHARDS.  
LOCOMOTIVE TENDER.

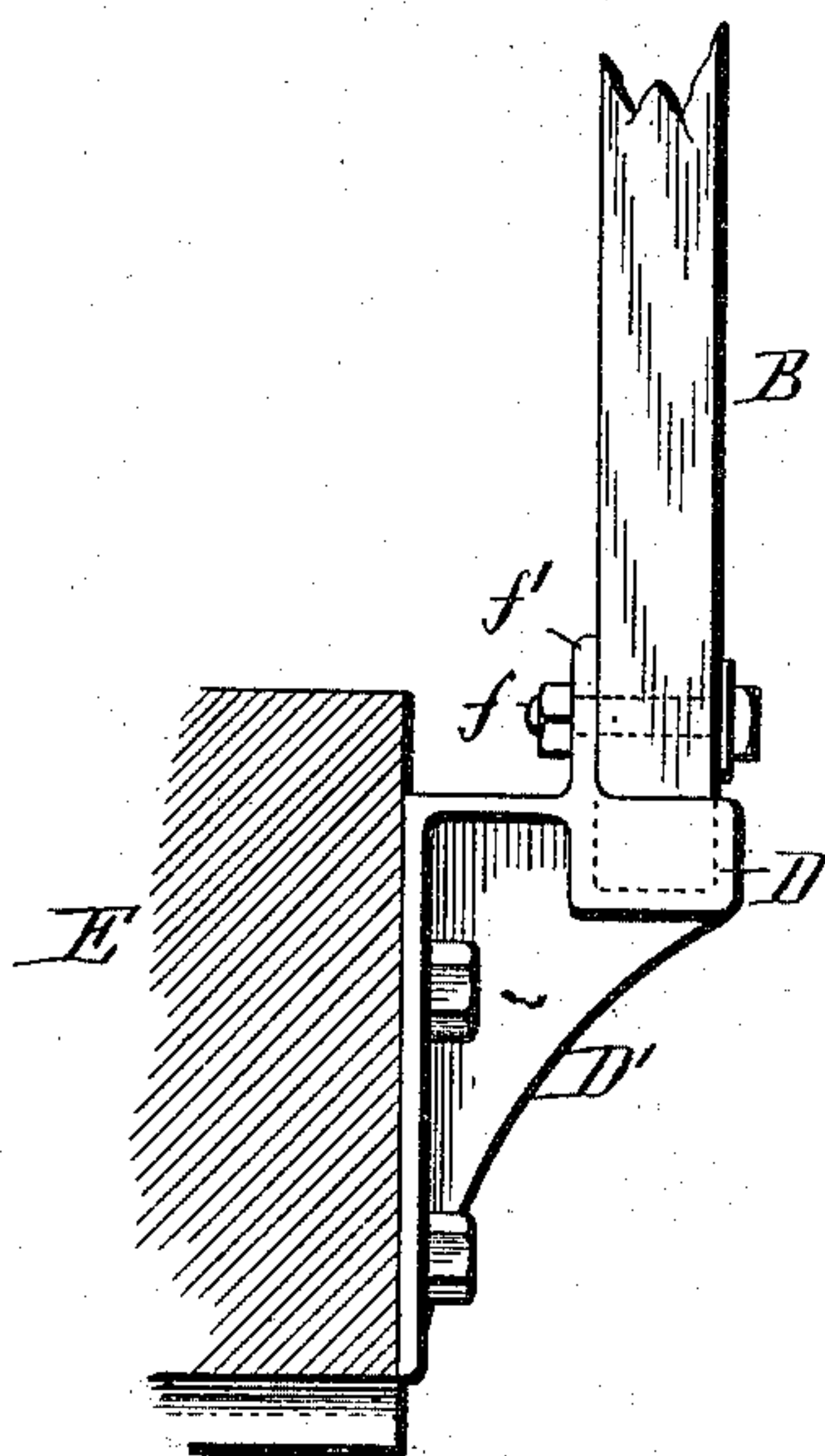
No. 559,496.

Patented May 5, 1896.

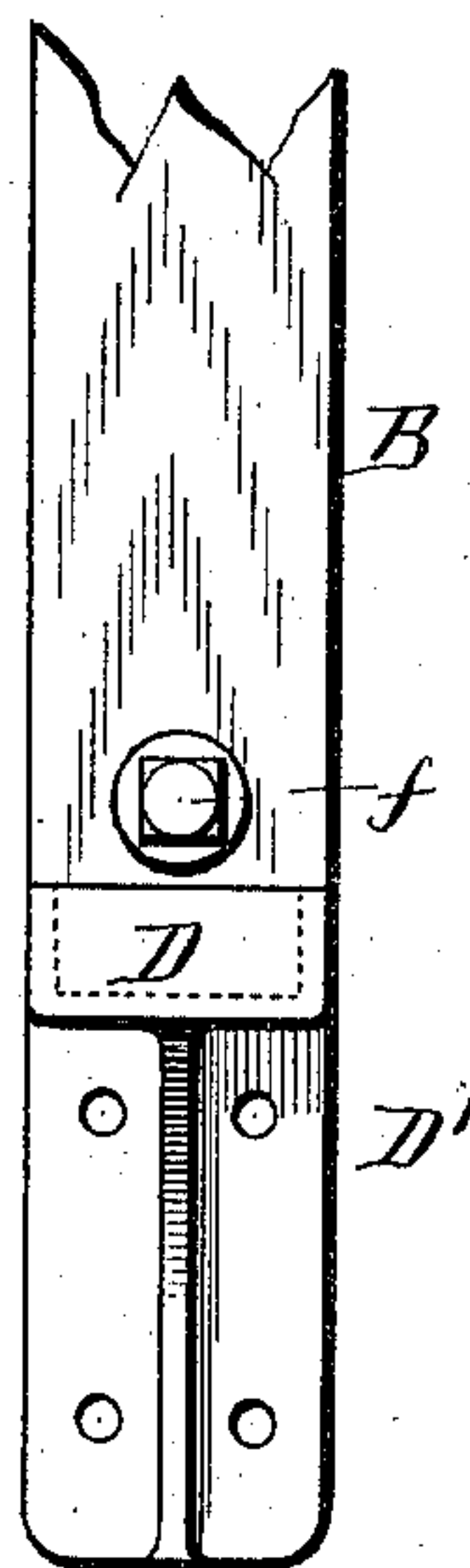
*Fig. 4.*



*Fig. 5.*



*Fig. 6.*



WITNESSES.

*Chas. F. Burkhardt.*  
*F. Gustav Wilhelm.*

*W. F. Richards* INVENTOR.

*By Wilhelm Dornier.*  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

WILLARD F. RICHARDS, OF BUFFALO, NEW YORK, ASSIGNOR TO THE  
GOULD COUPLER COMPANY, OF NEW YORK, N. Y.

## LOCOMOTIVE-TENDER.

SPECIFICATION forming part of Letters Patent No. 559,496, dated May 5, 1896.

Application filed January 9, 1896. Serial No. 574,846. (No model.)

*To all whom it may concern:*

Be it known that I, WILLARD F. RICHARDS, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Locomotive-Tenders, of which the following is a specification.

My invention relates to an attachment for locomotive-tenders.

10 The mail-cars now in use, like the well-known passenger vestibule-cars, are generally provided with vestibules and extensible hoods, which form closed passage-ways with the hoods of similar adjoining cars. When  
15 such a car is coupled to the tender of a locomotive, its front hood, which faces the rear wall of the tender, is not only temporarily useless, but objectionable, because it provides shelter and a hiding-place for tramps and  
20 other persons in the habit of riding stealthily on railway-trains.

The object of my invention is to provide the locomotive-tender with a hood or inclosure of simple construction for effectually closing the front or idle hood of the car coupled thereto, so as to exclude unauthorized persons from said hood and also check the lateral or rocking motion of the car.

25 In the accompanying drawings, consisting of three sheets, Figure 1 is a fragmentary sectional side elevation of a locomotive-tender provided with my improvement. Fig. 2 is a rear view thereof. Fig. 3 is a horizontal section in line 3 3, Fig. 1. Fig. 4 is a horizontal  
35 section in line 4 4, Fig. 1. Fig. 5 is a fragmentary side elevation of the bracket and supporting-frame. Fig. 6 is a front elevation thereof.

40 Like letters of reference refer to like parts in the several figures.

A is the body of the tender, which may be of any ordinary construction.

45 B is an upright transverse frame or support secured to the rear end of the tender, preferably by upright longitudinal webs or plates C, of sheet metal, which are fastened at their front and rear edges to the rear wall of the tender-body and the front side of the supporting-frame by angle-irons or other suitable means. This frame B is rectangular in  
50 form and composed of stiles or upright side

pieces *b* and a lintel or transverse top piece *b'*, which connects the upper portions of the side pieces. The lower ends of these side pieces are seated in sockets D, formed in brackets D', secured to the rear side of the end sill E of the tender-body, as shown in Figs. 1 and 5. The side pieces *b* are secured in said sockets by horizontal bolts *f*, passing through the side pieces and through lugs or ears *f'*, projecting  
60 upwardly from the inner walls of the sockets. The portion of the supporting-frame which extends above the tender is firmly braced by upright longitudinal webs or plates G, of sheet metal. These plates are secured at their front  
65 edges to the side pieces of the frame B and at their lower ends to the top plate H of the tender-body, as shown in Figs. 1 and 3.

I is a flexible or extensible hood supported on the rear side of the upright frame B and adapted to coincide with the flexible hood of an opposing mail-car or other hooded car, so as to close the open end of said opposing hood when the car is coupled to the tender and form a tight inclosure therewith.  
75

The flexible hood may be of any suitable or well-known construction and is made of the same dimensions as the hoods of the ordinary vestibule-cars. The hood shown in the drawings is constructed with the customary accordion or bellows folds and is secured at its inner end to the rear side of the upright frame B and provided at its outer end with an open face-plate J, adapted to bear against the corresponding plate of an opposing hood.  
80

The face-plate of the hood is preferably connected at its lower end with an oscillating spring-buffer K of any suitable or ordinary construction, so as to be capable of assuming  
90 an angular position when the tender passes around curves, and thereby maintain a close joint with the opposing face-plate. The upper portion of the face-plate is preferably suspended from the frame B by overhanging  
95 links L, and its lower end is connected with the buffer-plate by laterally-swinging links *m*, as shown and described in Letters Patent of the United States No. 453,782, granted  
100 June 9, 1891, to T. A. Bissell. Any other suitable connections may, however, be employed between the face-plate and the up-



right frame B and between the face-plate and the buffer.

The connecting plates or webs C G may be inclosed by a rigid covering-plate or hood N, of sheet metal or other suitable material, as most clearly shown in Fig. 3. The upper portion of this plate is approximately U-shaped and incloses the upper connecting-plates G, while its wings or lower portions are contracted, so as to fit between the frame B and the rear wall of the tender, as shown in Fig. 3. This inclosing plate is secured to the tender and supporting-frame by angle-irons or other fastenings.

When a mail or other car having a vestibule and hood is coupled to my improved locomotive-tender, the face-plate of the car-hood abuts against the face-plate of the tender-hood, thereby closing the front hood of the car as well as the tender-hood and preventing unauthorized persons from entering the same, while at the same time obstructing or filling a considerable portion of the space between the tender and the adjoining car and rendering it practically impossible for such persons to steal passage at this point without detection, while at the same time protecting the inside of the vestibule against the weather and checking the swaying or rocking motion of the cars.

I claim as my invention--

1. The combination with the body and the

rear frame-sill of a locomotive-tender, of fixed supports projecting rearwardly from said sill, an upright vestibule-frame secured with its lower end to said supports and connected above said supports with the tender-body, and a flexible hood secured to said frame, and projecting rearwardly therefrom, substantially as set forth.

2. The combination with the body of a locomotive-tender provided at its rear end with upright supporting-sockets, of a separate upright frame having stiles or side pieces seated in said sockets, webs or plates connecting said frame with the body of the tender, and a flexible hood secured at its inner end to said frame, substantially as set forth.

3. The combination with the body of a locomotive-tender provided at its rear end with upright supporting-sockets, of a separate upright frame having stiles or side pieces seated in said sockets, webs or plates connecting said frame with the body of the tender, a flexible hood secured at its inner end to said frame, and a hood or covering-plate inclosing said connecting-plates, substantially as set forth.

Witness my hand this 13th day of November, 1895.

WILLARD F. RICHARDS.

Witnesses:

JNO. J. BONNER,  
CARL F. GEYER.