

No. 729,034.

PATENTED MAY 26, 1903.

L. R. BATTLE.
RAILWAY BRAKE.

APPLICATION FILED JULY 14, 1902.

NO MODEL.

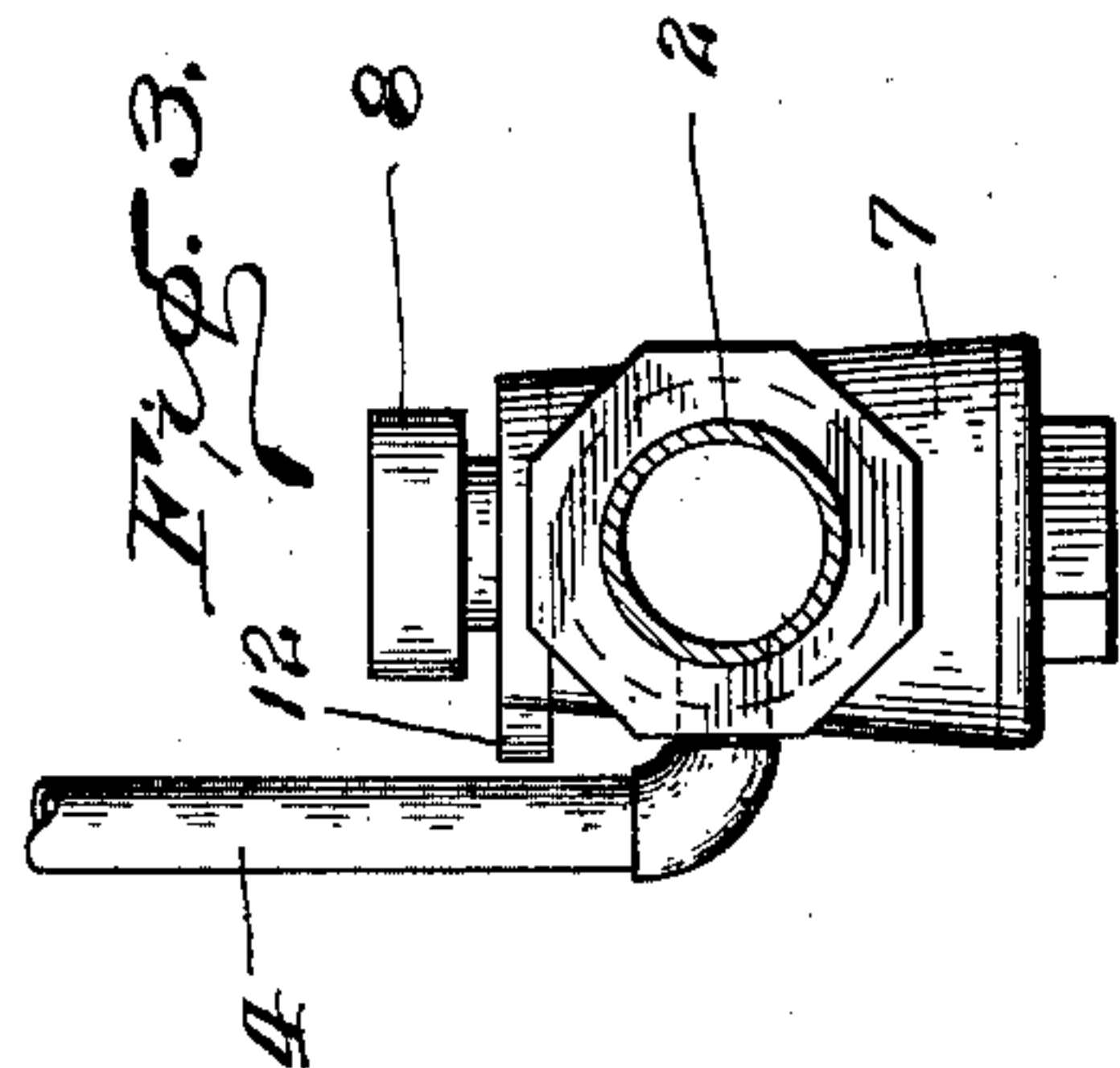


Fig. 3.

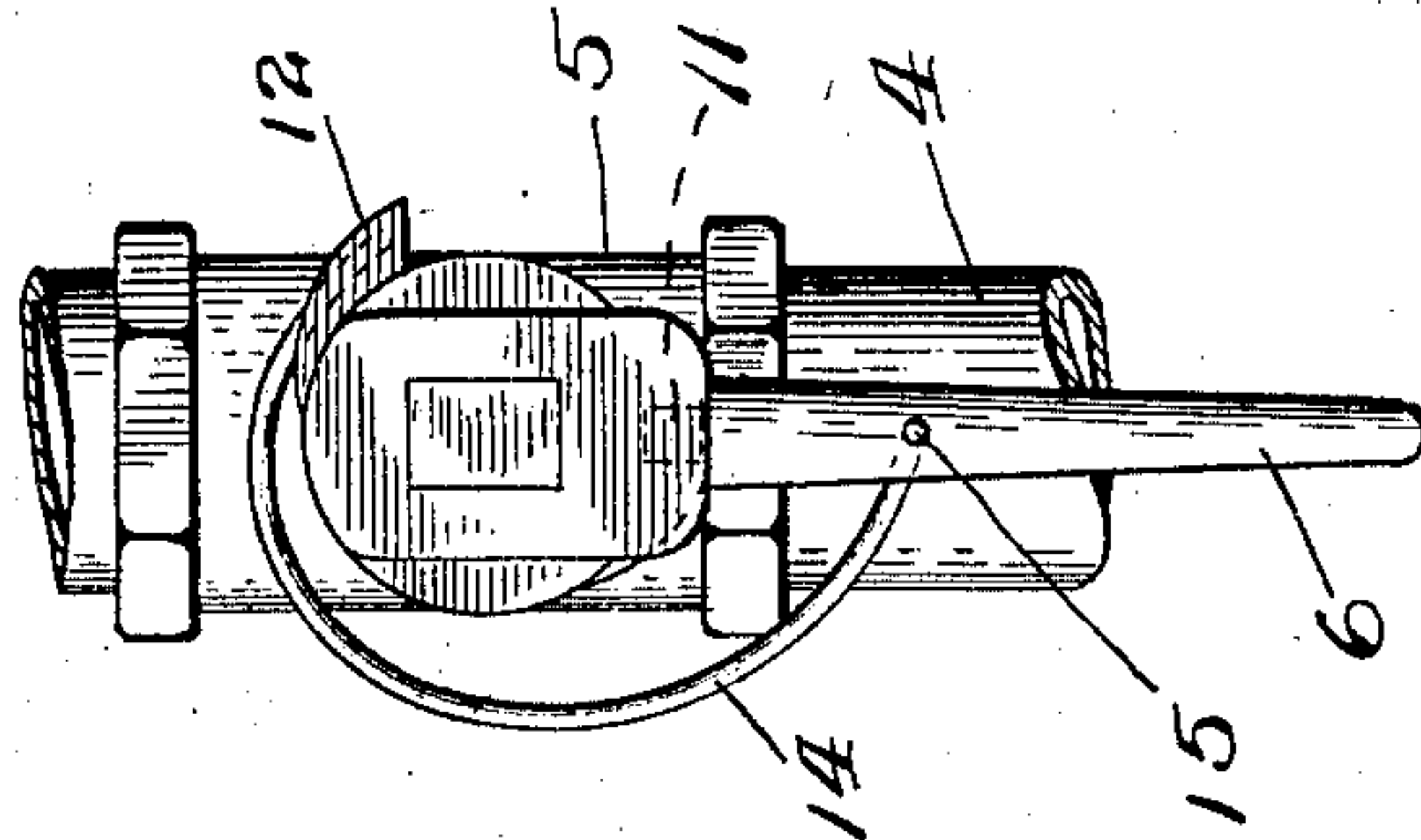


Fig. 5.

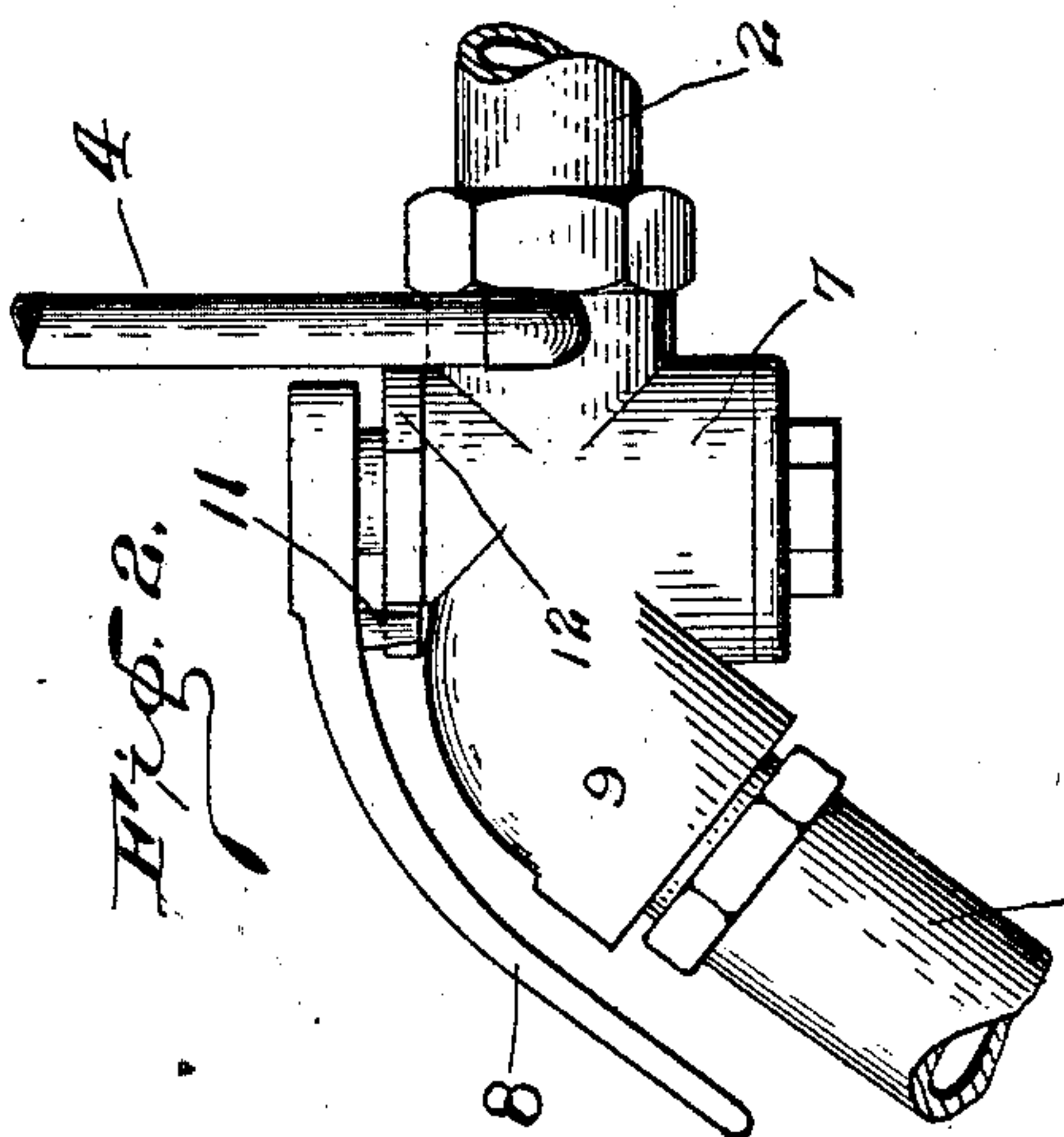


Fig. 2.

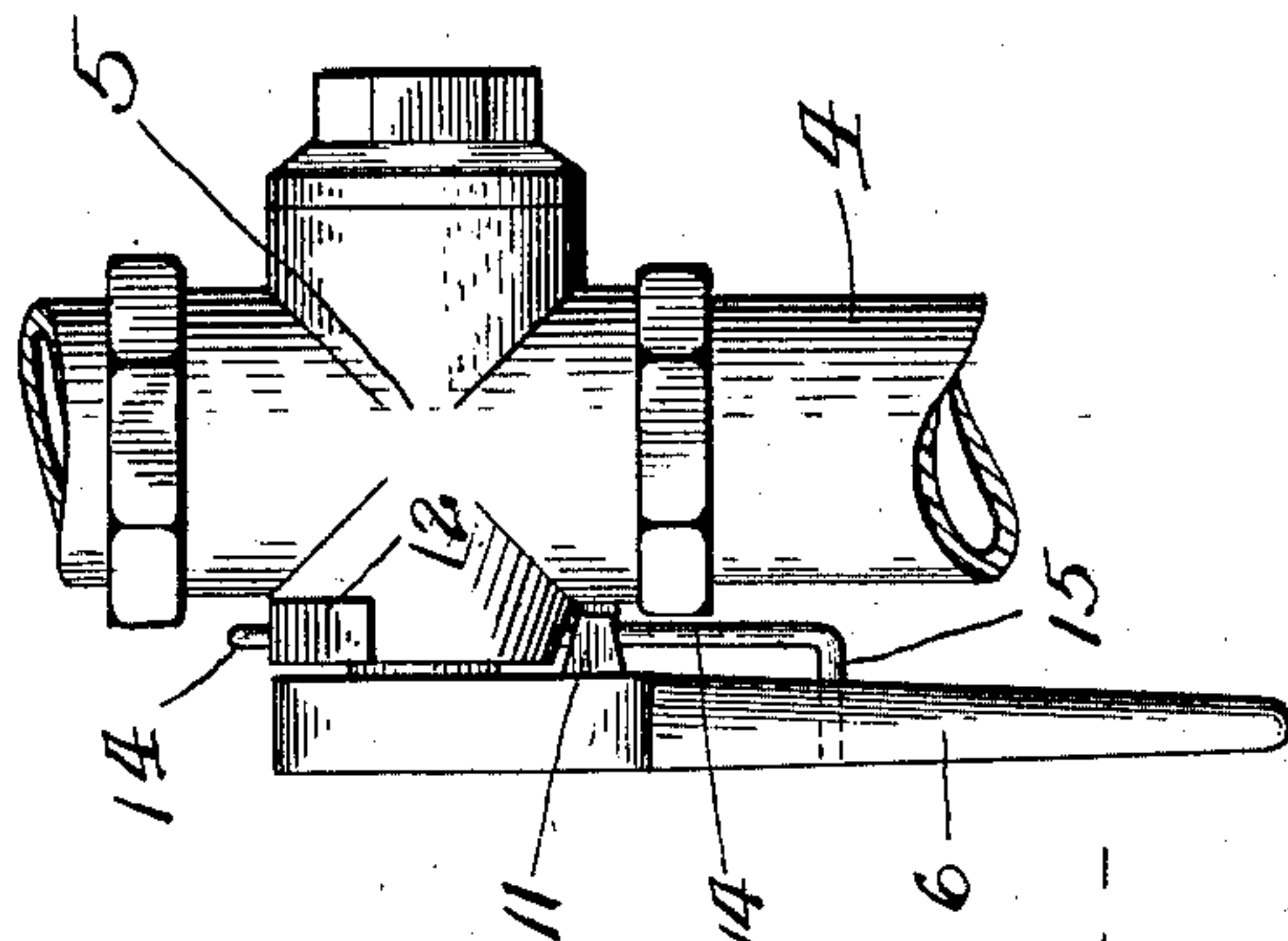


Fig. 4.

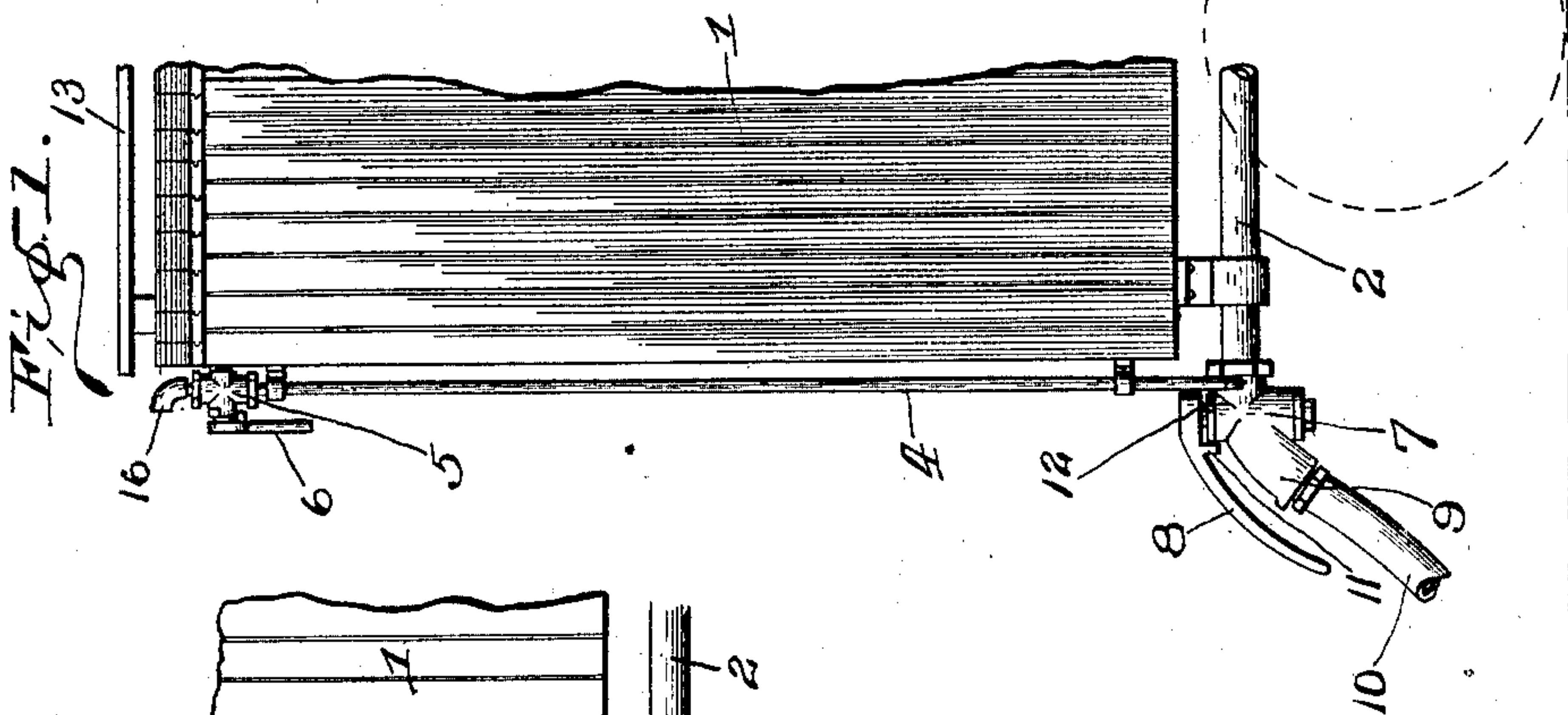


Fig. 1.

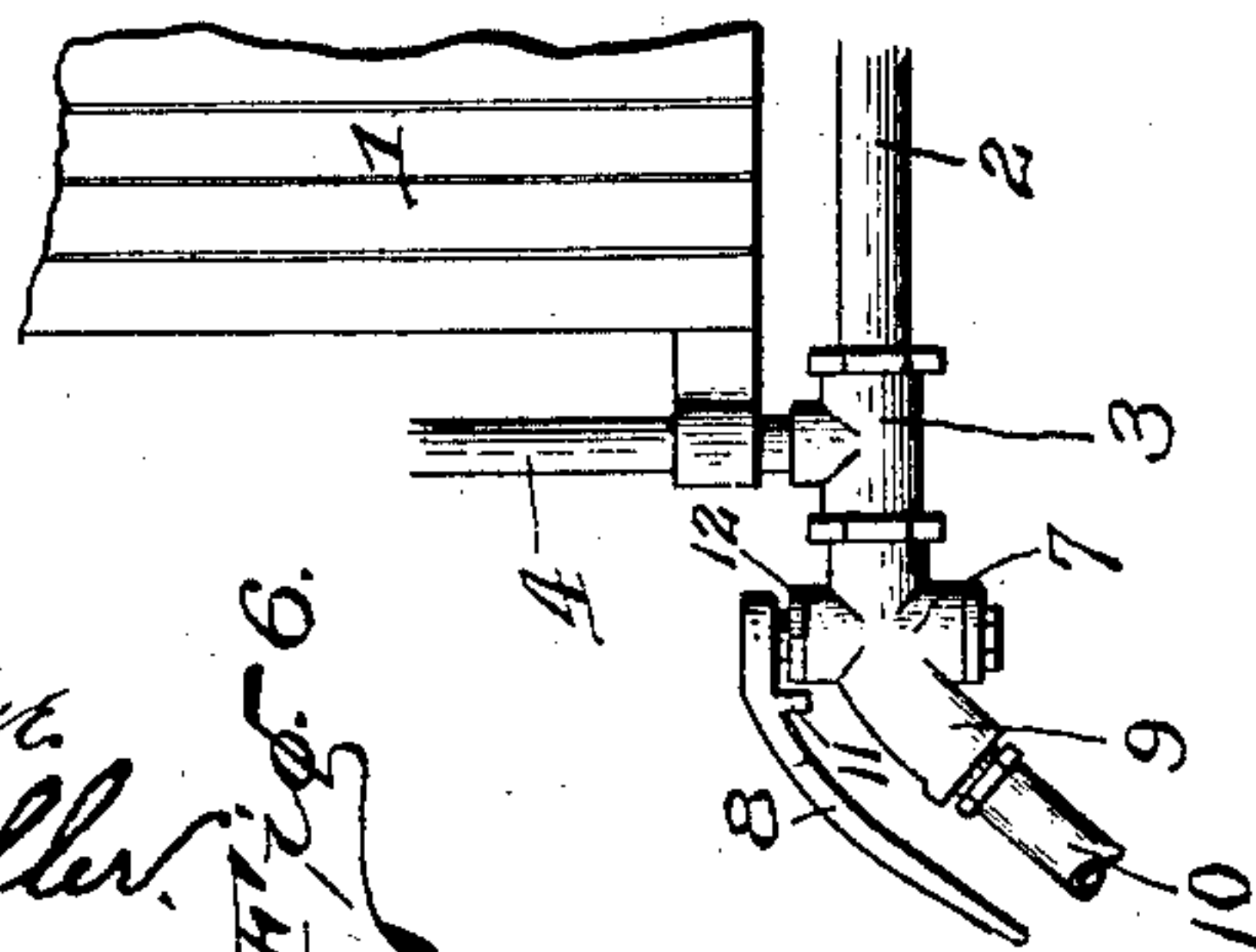


Fig. 6.

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RAILWAY-BRAKE.

SPECIFICATION forming part of Letters Patent No. 729,034, dated May 26, 1903.

Application filed July 14, 1902. Serial No. 115,478. (No model.)

To all whom it may concern:

Be it known that I, LEANDER R. BATTLE, a citizen of the United States, residing at Lakeland, in the county of Polk and State of Florida, have invented certain new and useful Improvements in Railway-Brakes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to safety appliances for railway-trains, which will be found more especially applicable for use upon freight-cars whereby the attendant may be enabled to instantly set the emergency air-brakes from his position upon the top of the car.

The object of my invention is to provide a simple though reliably efficient appliance of the character specified more especially adapted for use upon the top of freight-cars and by the use of which the brakeman while on top of the car may at any time promptly set the brakes upon the wheels, inasmuch as it is often highly important to act without a moment's delay in order to prevent the loss of life and property, as will be readily understood.

Other objects and advantages will be made clearly apparent from the following specification, considered in connection with the accompanying drawings, which are made a part of this application, and in which—

Figure 1 shows my invention complete as applied to use upon an ordinary freight-car. Fig. 2 is a detail view showing an ordinary valve or stop-cock provided with an outlet-pipe extending to the top of the car. Fig. 3 is an end view of Fig. 2 as viewed from the right. Figs. 4 and 5 are detail views of my preferred form of valve ready for use on the upper part of the car. Fig. 6 shows how an ordinary valve may be readily placed in operative relation with the pipe extending upward to the top of the car.

In order to conveniently designate the various elements of my invention and cooperating accessories, numerals will be employed, of which 1 indicates an ordinary freight-car provided with the system of air-brakes 2, as is common, adapted to supply the brakes to the car-wheels when desired. The outer end

of the pipe 2 may in some instances be provided with the union 3, as shown in Fig. 6, adapted to connect with the vertically-disposed branch pipe 4, extending to the top of the car, said pipe 4 being provided near its extreme upper end with the escape-valve 5, having the controlling-lever 6, whereby said valve may be instantly closed or opened to permit the escape of air, and thus set the brakes. I also provide the valve 7, having the controlling lever or handle 8 and the nozzle 9, the latter being adapted to be connected to the adjacent car or engine by a suitable flexible coupling 10, of rubber or the like, as is usual. The controlling-handle 8 is provided with the integral lug 11, which is adapted to ride against the shoulder 12, located in the path of said lug and carried by a contiguous part of the stop-cock 7, and thereby determine or circumscribe the scope of the movement of the lever 8, and thus indicate that such limit of movement has been reached even when operated in the dark.

If desired, the union 3 may be dispensed with and the vertical pipe 4, of proper size, properly connected to the valve, as by entering a suitably-threaded aperture in the body of the valve, when said pipe 4 may be extended upward to the desired height near the top of the car and preferably below the plane occupied by the running-board 13, whereby the attendant may readily operate the handle or lever 6, disposed at the upper end of said pipe, thereby enabling the air-brakes to be instantly set or released, as may be desired, and promptly stop the car.

In the drawings I have also illustrated in detail the lug 11, connected to the controlling-handle of the valve, and the shoulder 12, carried by the valve-body and adapted to engage said lug, thereby determining the proper extent of the movement of said handle, as it will be readily understood that such limit has been reached when the lug contacts with the shoulder, thereby disposing the handle substantially at right angles to the pipe 4 and releasing the air-pressure and thereby disturbing the equilibrium and setting the brakes.

It will be found desirable to provide suitable means to promptly restore the handle 6 of the valve to the initial point or substan-

tially parallel with the feed-pipe, and with this object in view I provide the controlling-spring 14, one end of which is properly seated in a suitable aperture in a contiguous part of the valve-body or in the shoulder 12, while the other end is seated in a suitable aperture provided in the handle 8 or 6, as the case may be, as indicated by the numeral 15. Other means equivalent to said spring 14 may also be employed, the object being to restore the controlling-handle of the valve to the initial point when released, though I reserve the right to entirely omit said controlling-spring in some instances, if I so desire, either to employ it in practice or omit it, according to the requirements of each individual case.

It will be seen by reference to Figs. 2 and 3 that the vertically-disposed pipe 4 may be very efficiently seated directly in the body of the valve itself, though in some instances a T-coupling 3, as shown in Fig. 6, may be employed, if desired. I prefer in some instances also to provide the elbow 16 for the pipe extending above the valve 5 in order to direct the air laterally that it will not come in contact with the person operating the handle 6.

While I have described the preferred combination and construction of parts deemed necessary in carrying out my invention, I wish to comprehend such substantial equivalents and substitutes as may be considered as falling fairly within the scope of my invention.

Believing that the manner of using my improved safety appliance and the details of construction have been made clearly apparent from the foregoing specification considered

in connection with the accompanying drawings, further reference to the details is deemed unnecessary.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The herein-described brake appliance consisting of the combination with the main line and brake-setting appliances, in coöperation therewith, of a branch pipe extending to the top of the freight-car and a valve operatively secured to the upper end of said pipe, the lower end of said vertically-disposed pipe being operatively connected with the controlling-valve carried by the supply-pipe, and suitable means for automatically restoring the discharge-valve to the initial point, all combined substantially as specified and for the purpose set forth.

2. The herein-described brake appliance consisting of the combination with the main line and brake-setting appliances in coöperation therewith, of a branch pipe extending to the top of the freight-car and a valve operatively secured to the upper end of said pipe, the lower end of said vertically-disposed pipe being connected with the controlling-valve carried by the supply-pipe, a shoulder carried by the valve-body, a lug connected to the controlling-handle and a controlling-spring having one end fixed to the valve-body and the other to the said handle.

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

LEANDER R. BATTLE.

Witnesses:

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