

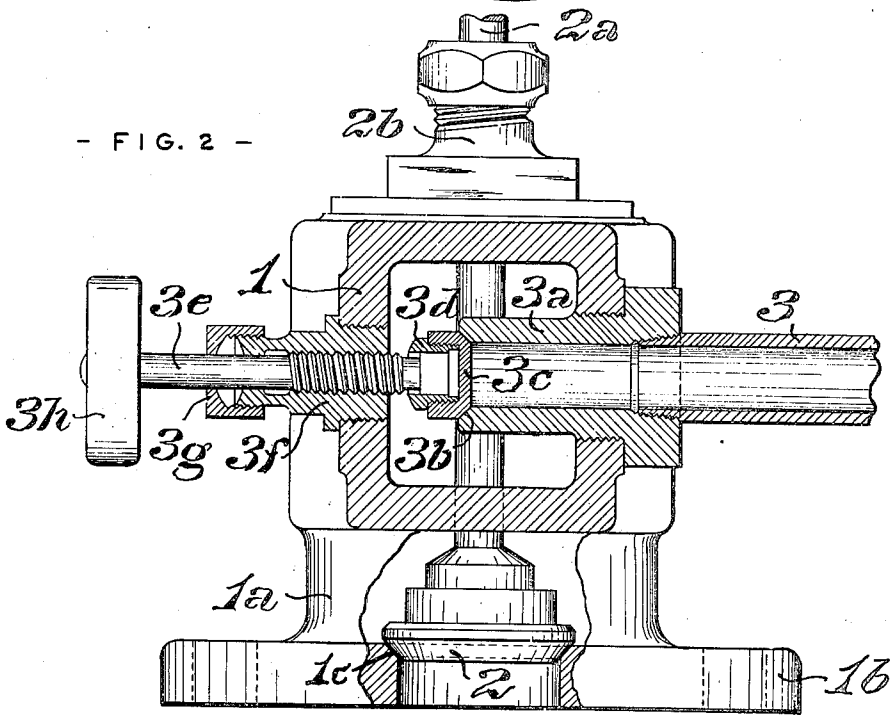
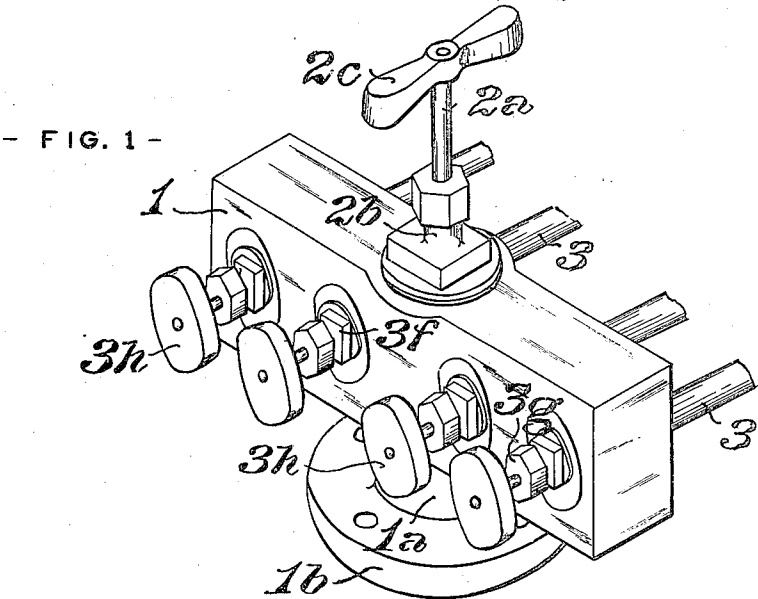
Oct. 30, 1923.

1,472,265

C. M. BELL

CAB TURRET

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WITNESSES

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INVENTOR

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UNITED STATES PATENT OFFICE.

CHARLES M. BELL, OF SCHENECTADY, NEW YORK.

CAB TURRET.

Application filed November 29, 1922. Serial No. 603,930.

To all whom it may concern:

Be it known that I, CHARLES M. BELL, of Schenectady, in the county of Schenectady and State of New York, have invented a certain new and useful Improvement in Cab Turrets, of which improvement the following is a specification.

My invention relates to manifolds serving for the connection of steam supply pipes for auxiliaries, to a steam boiler, and is more particularly designed for application in the cab turrets of locomotive engines. The object of the invention is to effect a structural simplification and economization of appliances of the character stated.

The improvement claimed is hereinafter fully set forth.

In the accompanying drawing: Figure 1 is a view, in perspective, of a cab turret, embodying my invention; and, Fig. 2, a view, partly in end elevation, and partly in vertical transverse section, and on an enlarged scale, of the same, the lower sectioned portion being on a central plane, and the upper, in a plane at one side of the central plane.

In ordinary present practice, a steam turret or casing is connected to a locomotive boiler, in a location convenient for access by the engineman, for the purpose of receiving steam for the supply of auxiliary devices of the boiler and engine, such as a blower, injectors, air brake pumps, etc. The supply of steam to the turret is controlled by a manually operated stop valve, by which the supply may be regulated in quantity or entirely cut off, as required. A plurality of delivery pipes, each serving one of the several auxiliary devices, is connected to the turret, said pipes being independently controlled by a corresponding number of globe or angle valves, of the construction ordinarily manufactured for the trade, the casing of each of said valves being interposed between, and connected to, its delivery pipe and the turret.

In the practice of my invention, referring descriptively to the specific embodiment thereof which is herein exemplified, the exterior valve casings and intermediate connections of prior and present practice, are dispensed with, and the control valve casings of the auxiliary delivery pipes are located in the inside of the turret.

The turret, 1, is a chest or casing, of substantially rectangular section, having a

downwardly projecting extension or steam supply nozzle, 1^a, at the middle of its lower side, on which there is formed a flange, 1^b, through which it is adapted to be secured to a steam boiler sheet. The admission of steam to the turret is controlled by a stop valve, 2, of the lift or poppet type, seating on a valve face, 1^c, in the turret, and secured on a stem, 2^a, passing through a stuffing box, 2^b, and manually operable by a handle or hand wheel, 2^c.

Steam from the turret is supplied to any desired one or more of a plurality of delivery pipes, 3, leading to auxiliary devices, each of said pipes being connected to one of a corresponding number of sleeves, 3^a, screwed into one of the walls of the turret, and projecting thereinto, and having a valve face, 3^b, machined on its inner end. The admission of steam to the several delivery pipes, 3, is independently controlled by regulating valves, 3^c, each seating on one of the valve faces, 3^b, and connected by a nut, 3^d, to a stem, 3^e. The stems, 3^e, have a threaded engagement with stuffing boxes, 3^f, through which they pass to the exterior of the turret, and which are made steam tight by packing nuts, 3^g. Each of the valves, 3^c, is manually seated or unseated, as desired, by rotation of its stem, 3^e, in the proper direction, through a hand wheel, 3^h, on its outer end.

The practical advantages of my invention, in the particulars of simplification of construction and economization of structural cost and space occupied, are substantial, and will be readily recognized by those skilled in the art of locomotive construction.

I claim as my invention and desire to secure by Letters Patent:

1. In a locomotive cab turret, the combination of a chest or casing, adapted for connection to a boiler sheet; a plurality of integral valve seats and auxiliary delivery pipe connections, each fitted in a wall of said chest and projecting thereinto; a plurality of valves, each fitted to seat on one of said valve faces; and means for manually actuating said valves.

2. In a locomotive cab turret; the combination of a chest or casing, adapted for connection to a boiler sheet; a plurality of sleeves, fixed in a wall thereof and projecting thereinto, each of said sleeves having a valve face on its inner end and adapted for connection to an auxiliary delivery pipe

on its outer end; a plurality of valves, each fitted to seat on one of said valve faces; and means for manually actuating said valves.

5 3. In a locomotive cab turret, the combination of a chest or casing, adapted for connection to a boiler sheet; a plurality of sleeves, fixed in a wall thereof and projecting thereinto, each of said sleeves having a
10 valve face on its inner end and adapted for connection to an auxiliary delivery pipe on its outer end; a plurality of valves, each fitted to seat on one of said valve faces; threaded stems, on which said valves are
15 secured; stuffing boxes, fixed in the casing and internally threaded to engage the stems; and hand wheels, for rotating the stems.

4. In a locomotive cab turret, the com-

bination of a chest or casing, having a 20 nozzle adapted for connection to a boiler sheet and a valve seat in said nozzle; a manually operable valve, controlling said nozzle; a plurality of sleeves, fixed in a wall of the casing and projecting there- 25 into, each of said sleeves having a valve face on its inner end and adapted for connection to an auxiliary delivery pipe on its outer end; a plurality of valves, each fitted to seat on one of said valve faces; threaded stems, 30 on which said valves are secured; stuffing boxes, fixed in the casing and internally threaded to engage the stems; and hand wheels, for rotating the stems.

CHARLES M. BELL.

Witnesses:

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