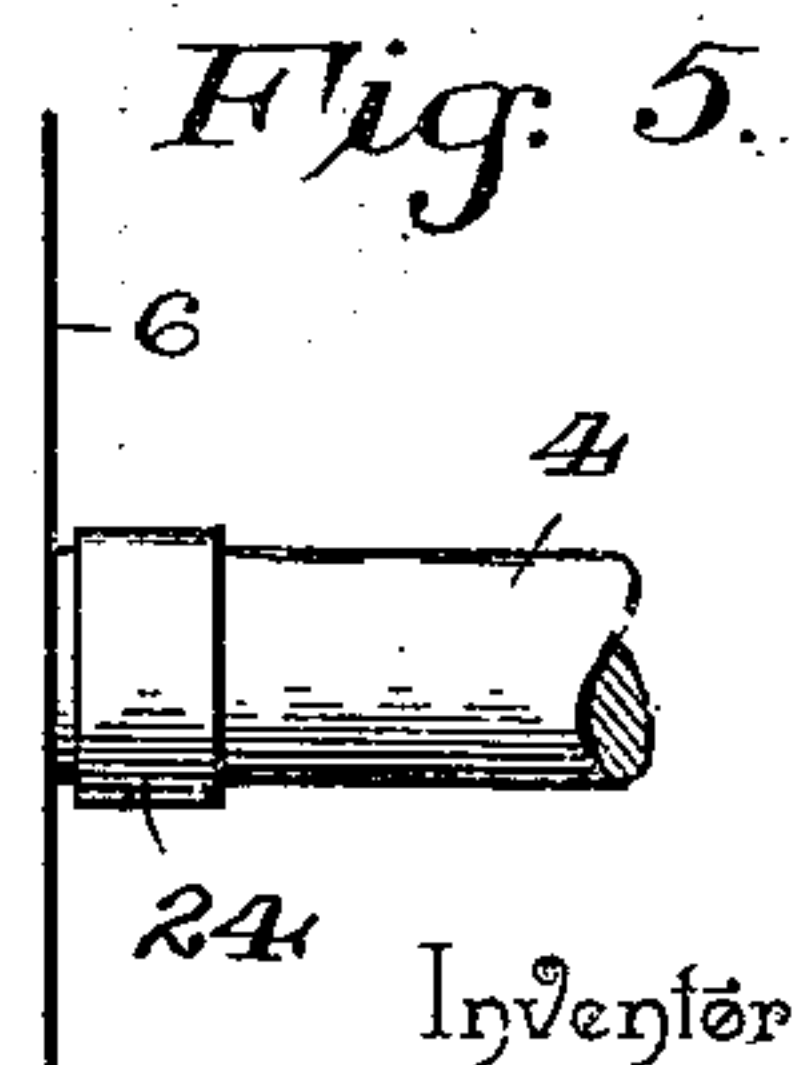
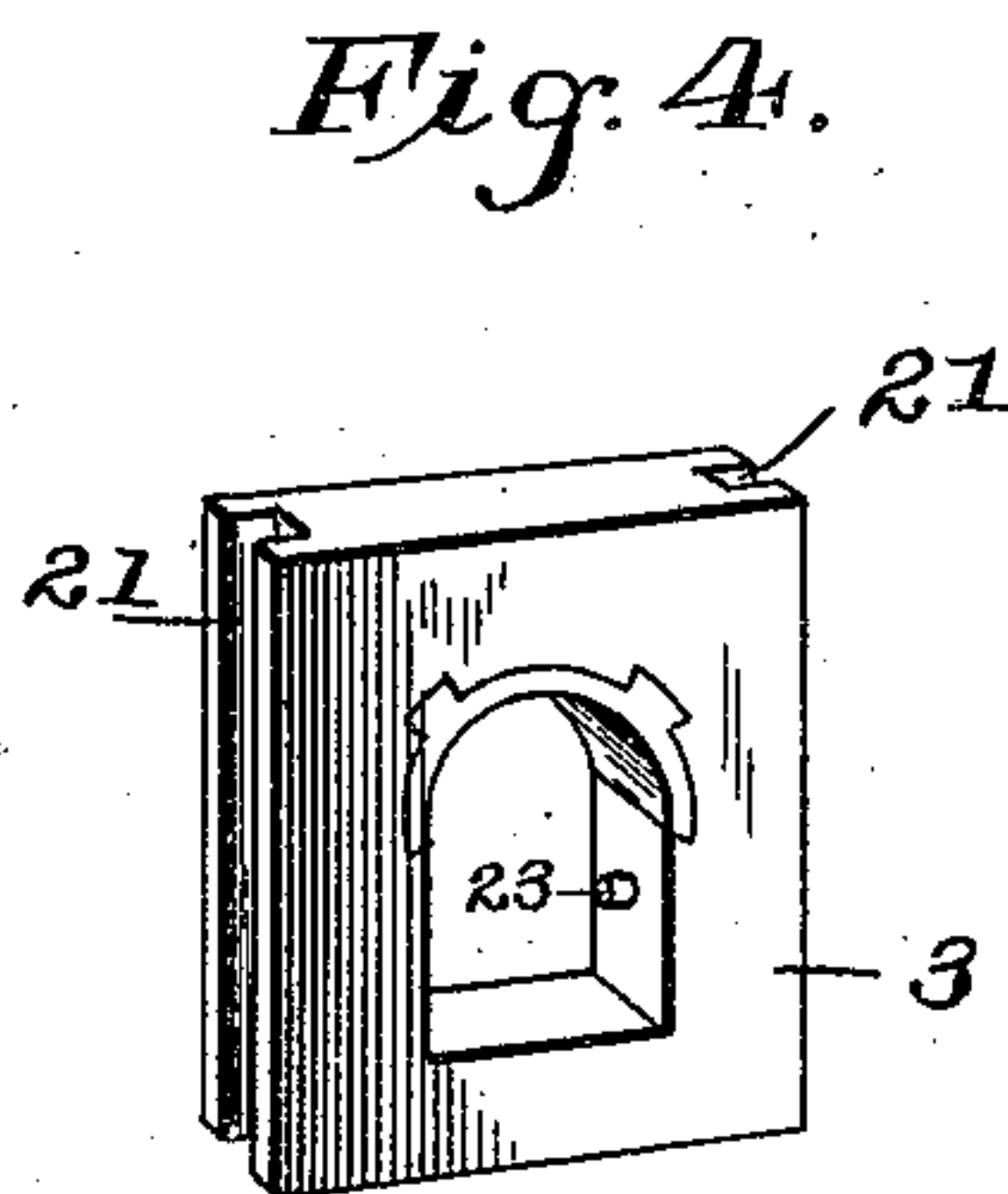
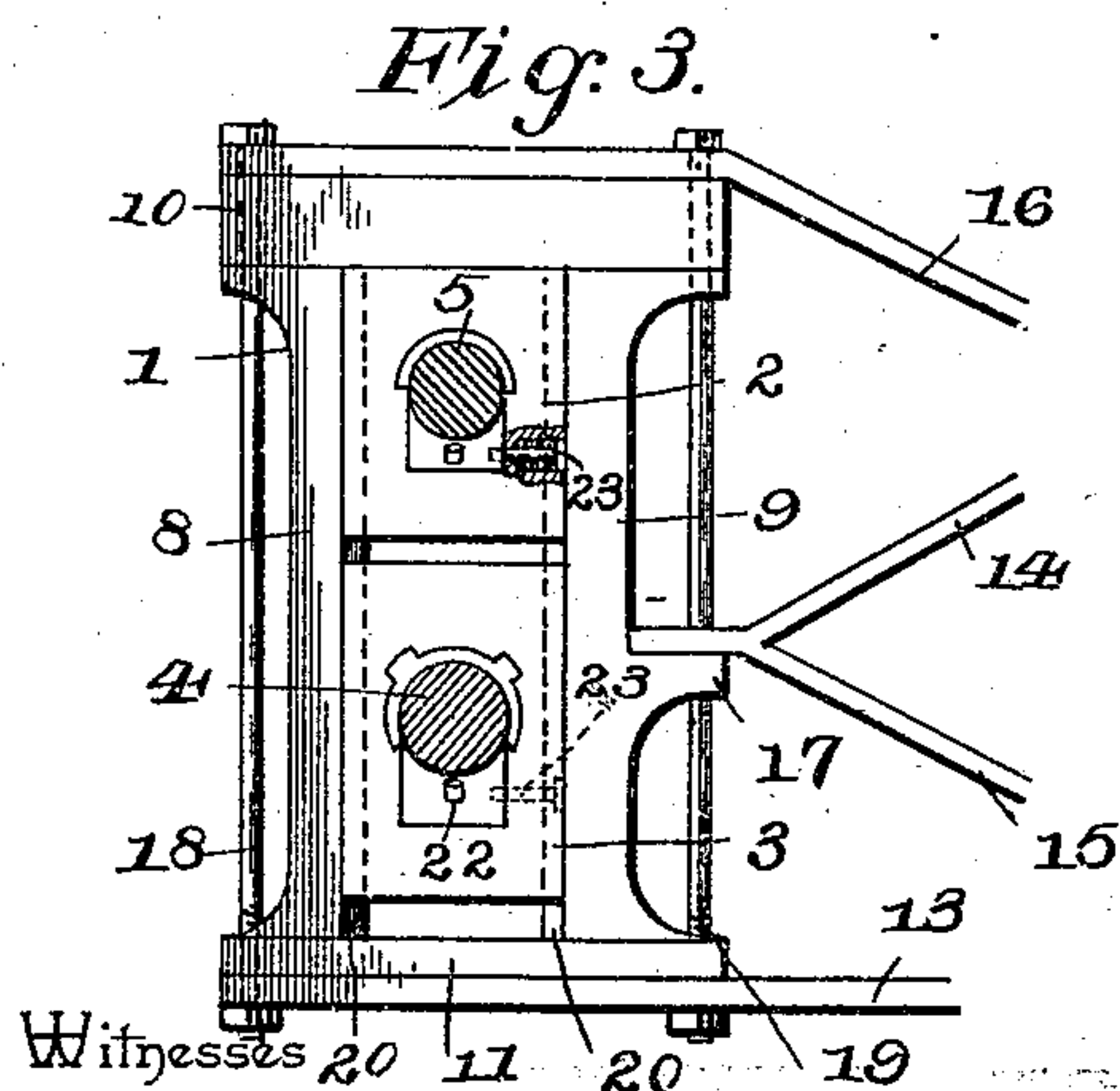
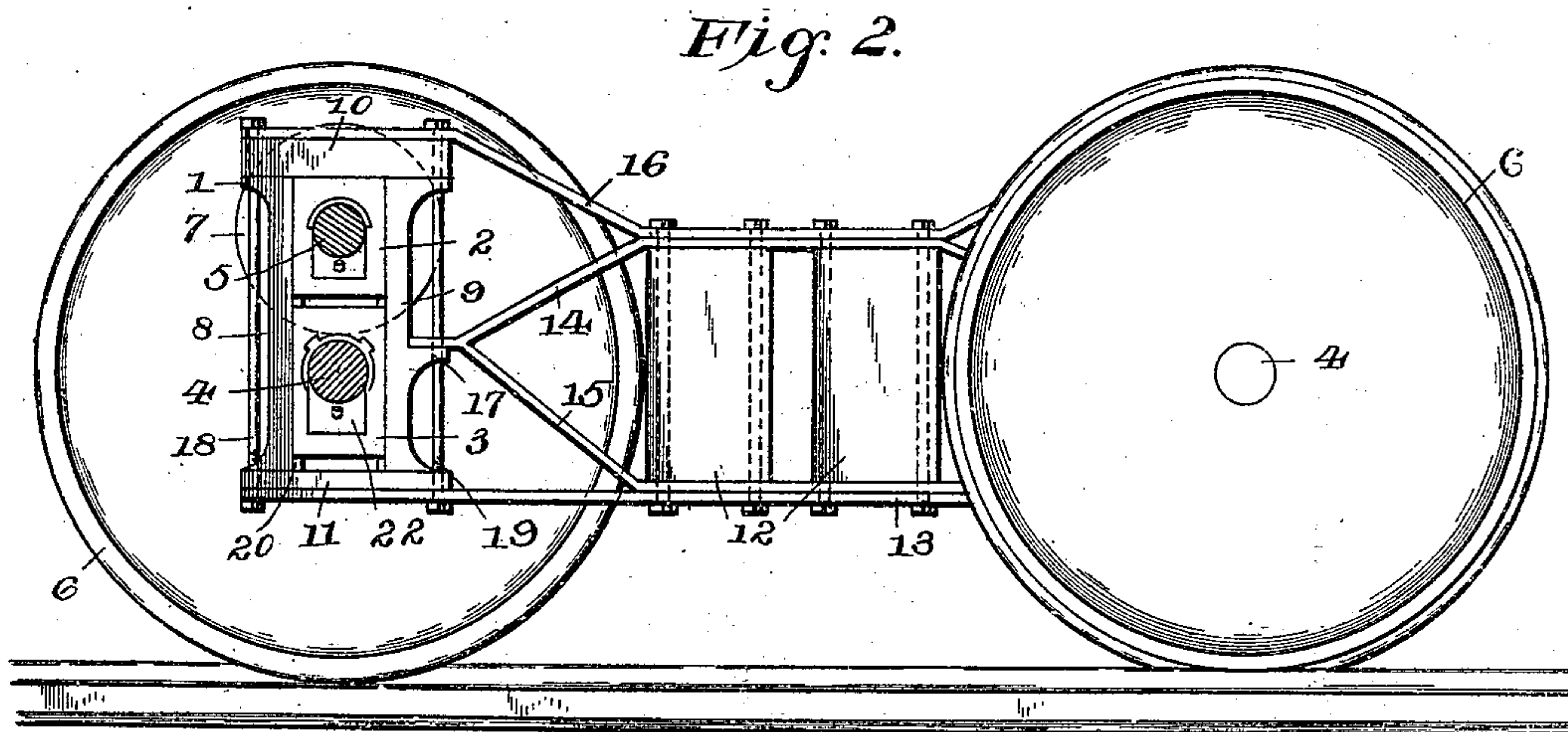
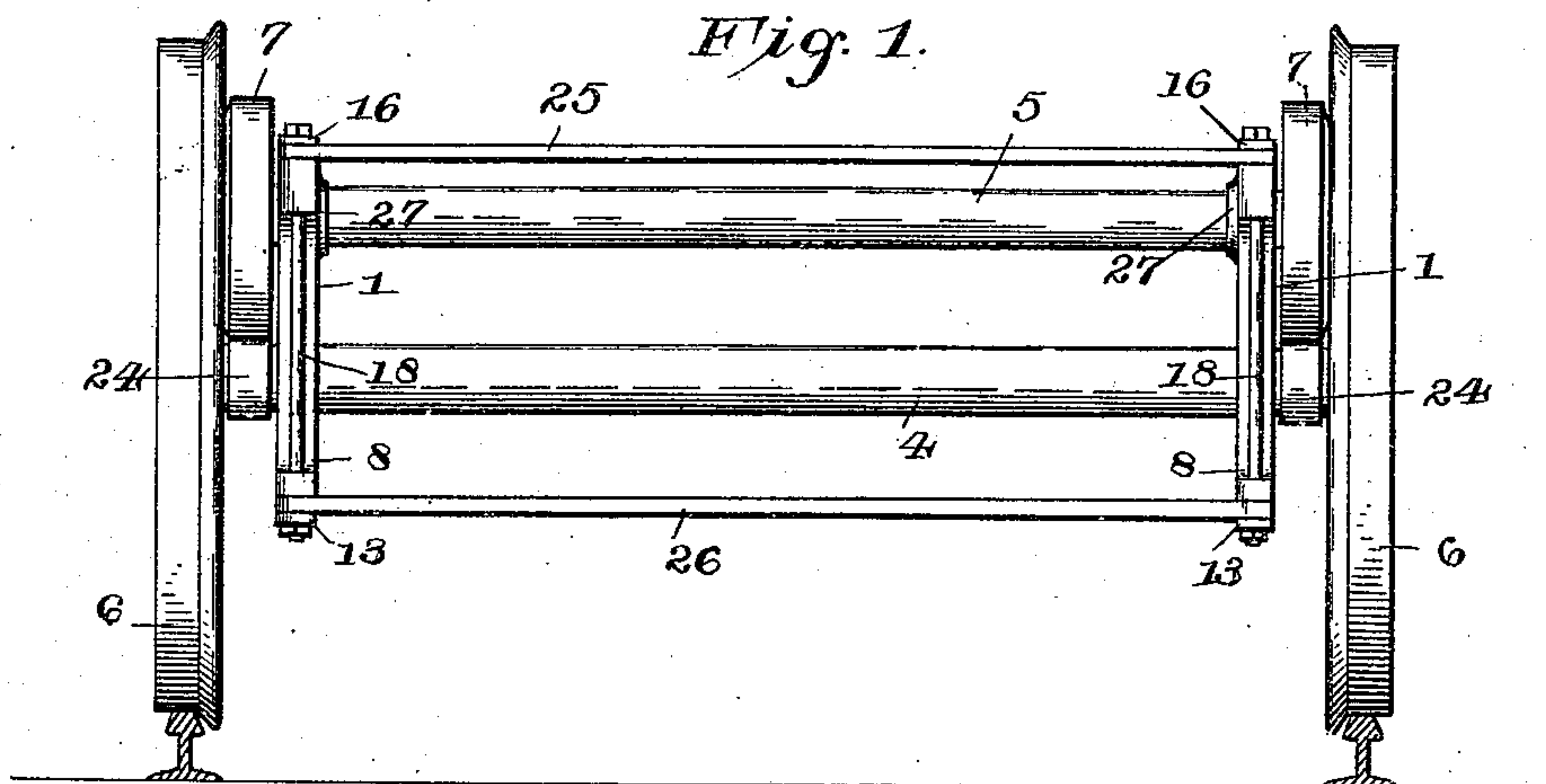


(No Model.)

R. F. MINOR.
RAILWAY CAR TRUCK.

No. 551,683.

Patented Dec. 17, 1895.



Witnesses
Chas. Ford.
J. H. Riley

By his Attorneys,

Robert F. Minor,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

ROBERT FRANKLIN MINOR, OF HEPPNER, OREGON.

RAILWAY-CAR TRUCK.

SPECIFICATION forming part of Letters Patent No. 551,683, dated December 17, 1895.

Application filed October 30, 1894. Serial No. 527,479. (No model.)

To all whom it may concern:

Be it known that I, ROBERT FRANKLIN MINOR, a citizen of the United States, residing at Heppner, in the county of Morrow and State of Oregon, have invented a new and useful Railway-Car Truck, of which the following is a specification.

The invention relates to improvements in railway-car trucks.

10 The object of the present invention is to improve the construction of railway-car trucks, and to take the strain from the centers of the car-axles, and to enable the weight of a car to be supported at the ends of the axle, adjacent
15 to the rails.

The invention consists in the construction and novel combination and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings and pointed
20 out in the claims hereto appended.

In the drawings, Figure 1 is an end elevation of a truck constructed in accordance with this invention. Fig. 2 is a side elevation of the same, partly in section. Fig. 3 is an enlarged detail view illustrating the construction of the pedestal-frame and the journal-boxes. Fig. 4 is a detail view of one of the journal-boxes. Fig. 5 is a detail view of the collar or band of the axle for forming the bearing for the upper or antifriction wheels.
25 30

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a vertically-disposed substantially rectangular pedestal-frame, receiving slidingly-mounted upper and lower journal-boxes 2 and 3, in which are arranged a car-axle 4 and an upper auxiliary axle 5, located directly above the car-axle 4. The car-axle
35 40 4 has secured to its ends, in the ordinary manner, car-wheels 6, and the upper axle 5 has fixed to its ends auxiliary or upper wheels 7, arranged to rotate on the axle 4, adjacent to the car-wheels 6, and adapted to lessen the
45 friction, and to take the strain from the center of the car-axle 4, and to enable the weight of the car-body to be supported at the ends of the car-axles and over the rails, where the said car-axles are capable of sustaining the
50 greatest weight without breakage.

The pedestal-frame is composed of vertical sides 8 and 9 and top and bottom bars 10 and

11, and it is connected with truck-bolsters 12 by a lower pedestal tie-bar 13, and oppositely-disposed arch-bars 14 and 15, and an upper
55 auxiliary arch-bar 16. The terminals of the arch-bar 15 and the inverted arch-bar 14 are supported upon a horizontal shoulder or lug 17 of the side 9 of the pedestal-frame, and the bars 13 and 16 extend across the bottom and the
60 top of the pedestal-frame, and are secured to the latter by vertical rods 18 and 19, arranged in vertical perforations of the sides 8 and 9 and the top and bottom pieces 10 and 11 of the pedestal-frame, and having their lower
65 ends threaded and provided with nuts. The inner rod 19 also passes through registering perforations of the terminals of the arch-bar, and inverted arch-bar, and the lug 17.

The inner opposite edges of the sides 8 and
70 9 of the pedestal-frame are provided with vertical ribs or tongues 20, and the upper and lower journal-boxes 2 and 3 have at their edges vertical grooves 21, which receive the ribs or tongues 20, whereby the journal-boxes
75 are slidingly mounted in the pedestal.

Each journal-box is provided at the top of its axle-opening with a bushing, and it has at the bottom a removable oil-cellar 22, which is detachably secured in the journal-box by a
80 spring-actuated locking-bolt 23. The spring-actuated bolt 23 is disposed horizontally in a perforation of the journal-box, and the inner end of the bolt projects into the axle-opening and fits into a corresponding socket or de-
85 pression of the oil-cellar.

The car-axles 4 are provided adjacent to the car-wheel 6 with bands or collars 24, forming bearing-faces for the upper wheels 7, and adapted to protect the car-axles to prevent
90 crystallization. These collars 24 serve as shoulders or stops for the pedestal-frames, which are connected by upper and lower transverse bars 25 and 26, and the upper axle 5 is provided at the inner sides or faces of the ped-
95 estal-frames with collars 27.

It will be seen that the axles are located vertically one above the other, and that the strain is taken from the center of the far axle, and is supported by the latter adjacent to the
100 wheels and substantially directly over the rails, and that the friction is greatly diminished.

Changes in the form, proportion, and the

minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

5 What I claim is—

1. The combination of a journal box, having an axle opening and provided with a perforation communicating with the same, the oil cellar arranged within the lower portion
10 of the axle opening and provided with a socket corresponding with said perforation, and a spring actuated bolt mounted in the perforation and engaging the socket, and detachably
15 securing the oil cellar in position, substantially as described.

2. The combination of a rectangular pedestal frame composed of the sides 8 and 9, the side 9 having an integral supporting shoulder
20 the sides, the rectangular journal boxes ar-

ranged one above the other and slidingly mounted in the pedestal frame and having their inner and outer faces flush with the same, each journal box having an axle opening, and provided with a perforation communi- 25
cating with the same, the oil cellars arranged within the lower portions of the axle openings and provided with sockets corresponding with said perforations, and spring actuated bolts
30 mounted in the perforations and engaging the sockets and detachably securing the oil cellars in position, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ROBERT FRANKLIN MINOR.

Witnesses:

CHAS. W. INGRAHAM,
FRED J. HALLOCK.