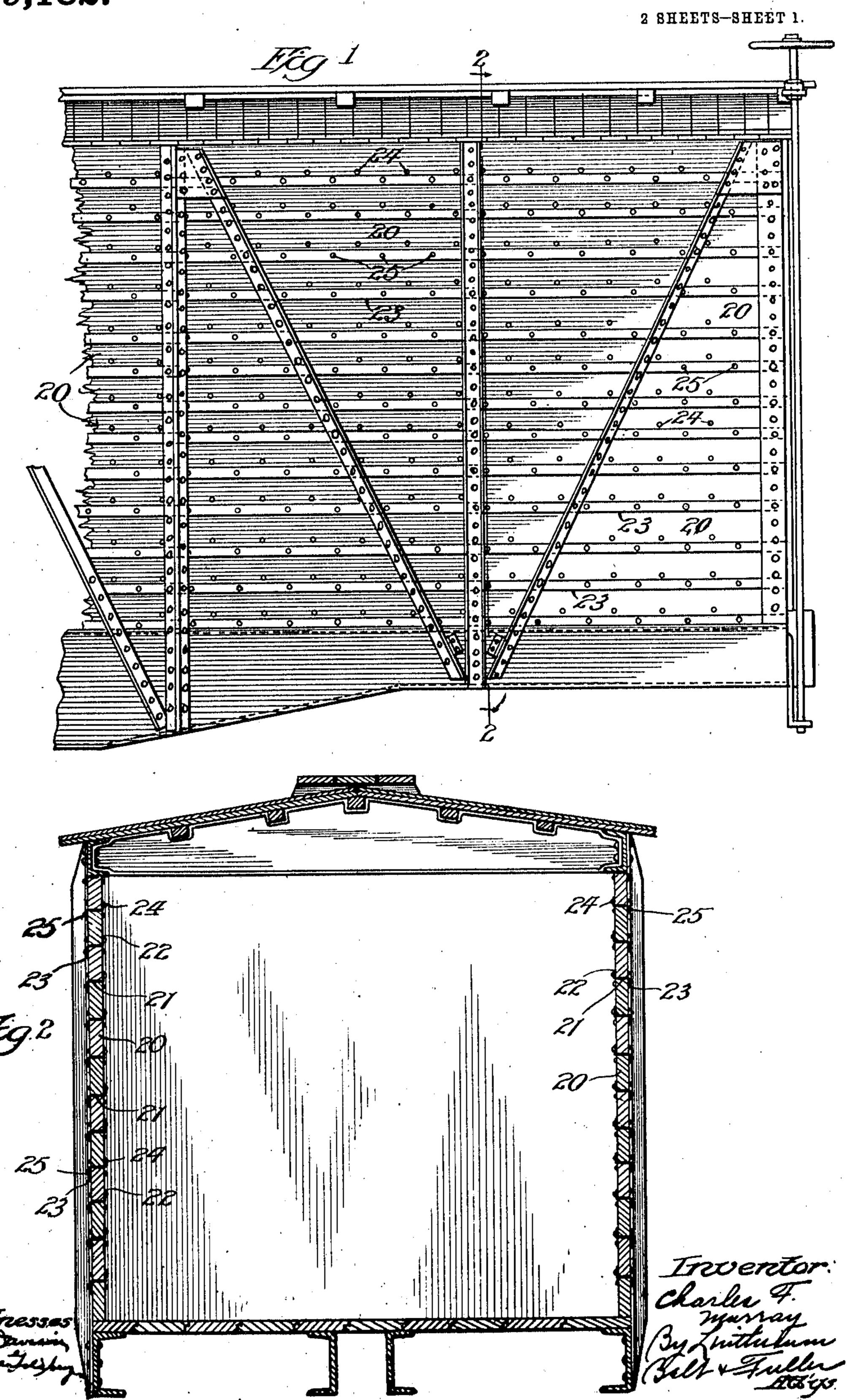
C. F. MURRAY.

APPLICATION FILED DEC. 11, 1909.

CAR SIDE.

989,182.

## Patented Apr. 11, 1911.



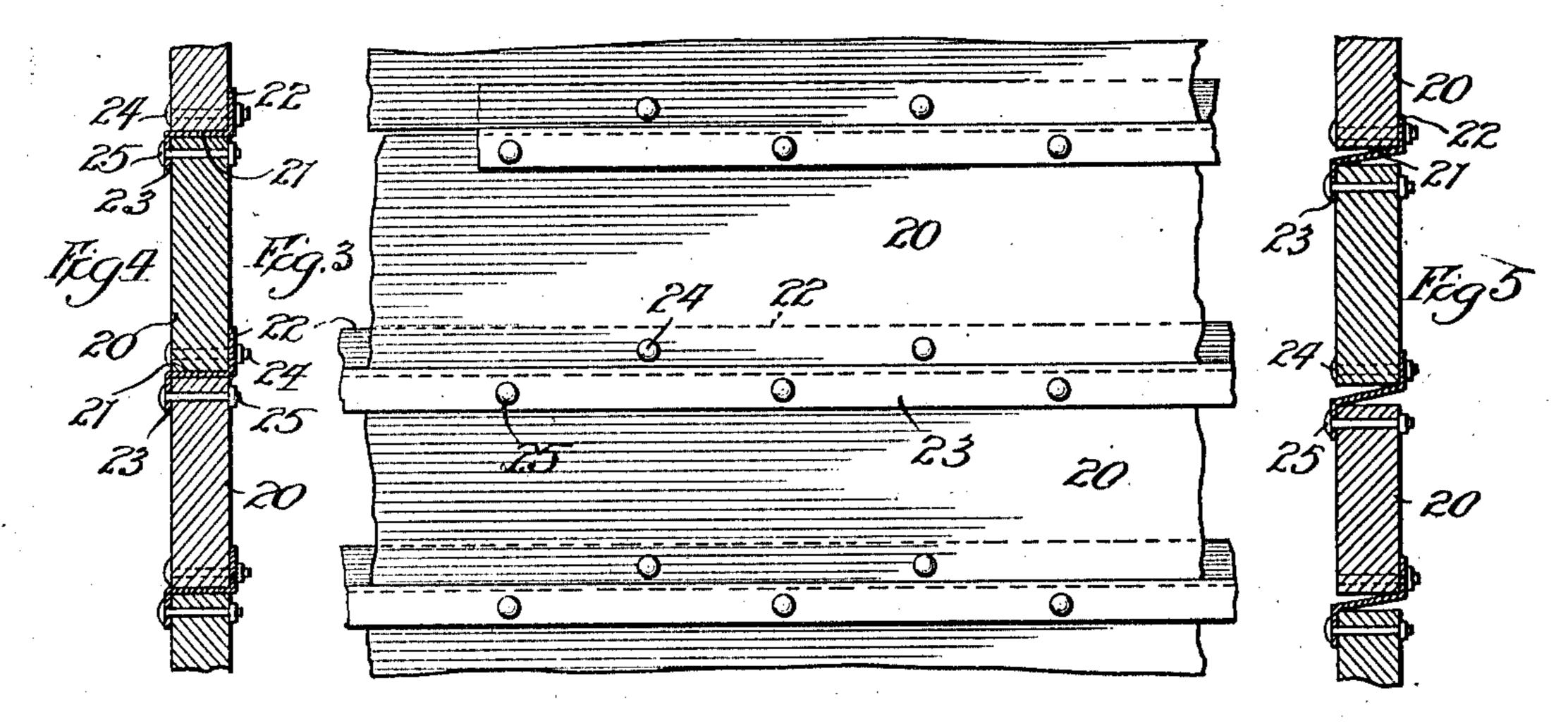
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2 SHEETS-SHEET 2.



Witnesses: Fer Favier. Maurice Loldbergel.

Incentor: Charles I. Murray By Lutticum Bell & Fuller. Attless.

## UNITED STATES PATENT OFFICE.

CHARLES F. MURRAY, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-THIRD TO WILLIAM V. KELLEY AND ONE-THIRD TO ROBERT P. LAMONT, BOTH OF CHICAGO, ILLINOIS, AND ONE-THIRD TO WILSON W. BUTLER, OF NEW YORK, N. Y.

## CAR SIDE.

989,182.

Specification of Letters Patent. Patented Apr. 11, 1911.

Application filed December 11, 1909. Serial No. 532,605.

To all whom it may concern:

Be it known that I, CHARLES F. MURRAY, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Car Sides, of which

the following is a specification.

My present invention contemplates the provision of simple means for maintaining 10 closed the joints or seams between the boards or planks of the wall of a railway-car against the shrinkage of the wooden parts thereof. In other co-pending applications I have indicated means for squeezing or tightening 15 the boards together after the shrinkage has occurred, but in the present instance I prefer to employ means to bridge any cracks or openings thus occurring.

In the accompanying drawings, which 20 form a part of this specification, I have shown a preferred embodiment in which this invention may be employed for accomplishing the purpose specified, and in these drawings,—Figure 1 is a fragmentary side ele-25 vation of a car having a wall composed of a single thickness of boards or planks, the joints between which are supplied with one form or style of my improved means for maintaining them closed even though the 30 boards contract because of shrinkage; Fig. 2 is a vertical cross-section on line 2-2 of Fig. 1; Fig. 3 is a fragmentary side elevation, on an enlarged scale, of a portion of the car-bod, wall shown in Figs. 1 and 2; 35 Fig. 4 is a vertical section through the same before the shrinkage has taken place, and Fig. 5 is a similar cross-section after the

Referring to Figs. 1 to 5, inclusive, it
will be noticed that the car-body wall is
composed or built up of a single thickness of
boards 20 disposed edge to edge, and having
positioned between their edges the central
portions 21 of metallic joint-closing strips of
substantially Z-form, and provided along
their opposite edges with oppositely extended
flanges 22 and 23 adapted, respectively, to
overlie the inner and outer faces of the wall.
As is clearly shown in Fig. 4, these closing
strips are of substantially the same transverse dimension as the wall itself, and the

flanges 22 and 23 are bolted or riveted at

24 and 25 to the boards of the wall. The flanges 22 are therefore rigidly and fixedly secured to the lower portions of the boards, 55 while the flanges 23 are in a similar manner fastened to the top portions of the adjacent boards. When these boards or planks shrink or contract, as shown in Fig. 5, there is sufficient give in the metallic fillers so that 60 they may be distorted as indicated without opening up the seams or joints. In other words, the central part 21 of these fillers, when they are first applied to the car-wall, is at right angles to the flanges 22 and 23, 65 but when the shrinkage has occurred this part is disposed at somewhat of an oblique angle, as is clearly illustrated in Fig. 5, which figure shows that the joints are maintained closed by the interposed metal. This 70 invention also prevents the necessity of employing matched lumber for car walls, and in addition to maintaining the joints or seams between the boards of the wall, closed, also assists in preventing lateral displace- 75 ment of the individual boards of the wall. The joint closers may be made from quite heavy stock if preferred, and as will be obvious, will materially strengthen and lend rigidity to the wall as a whole.

It will be obvious that the preferred embodiment of my invention which I have chosen for illustration, is capable of various changes in the size, proportion and material from which it may be made, without desparting from the spirit of the invention or sacrificing any of the advantages thereof; and therefore, I do not wish to be understood as limiting myself to the exact em-

bodiment disclosed.

I claim:

1. In a railway car-body wall, the combination of a pair of beards disposed edge to edge, a metallic joint-closer disposed between such boards and having flanges over- 95 lapping one side of one board and the opposite side of the adjacent board, and means to secure said flanges to their respective boards whereby shrinkage of the boards may occur without opening the joints between 100 them, substantially as described.

2. In a railway car-body wall, the combination of a pair of boards disposed edge to edge, a substantially Z-shaped metallic

joint-closer disposed between such boards and having one flange thereof overlapping one side of one board and the other flange overlapping the opposite side of the other board, and means for securing said flanges to their respective boards whereby shrinkage of the boards may occur without open-

ing the joints between them, substantially as described.

CHARLES F. MURRAY.

Witnesses:
CLARE L. ROSENOW,
M. A. KIDDIE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents.

Washington, D. C."