

(No Model.)

O. G. CATES, Jr.
RAILWAY CAR.

No. 517,517.

Patented Apr. 3, 1894.

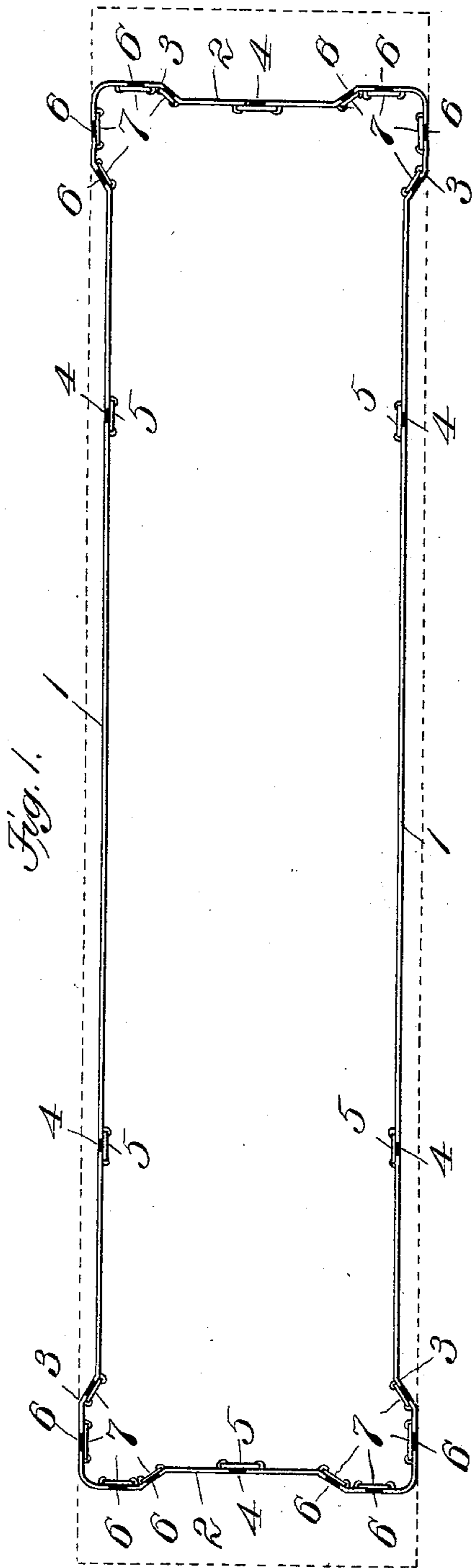
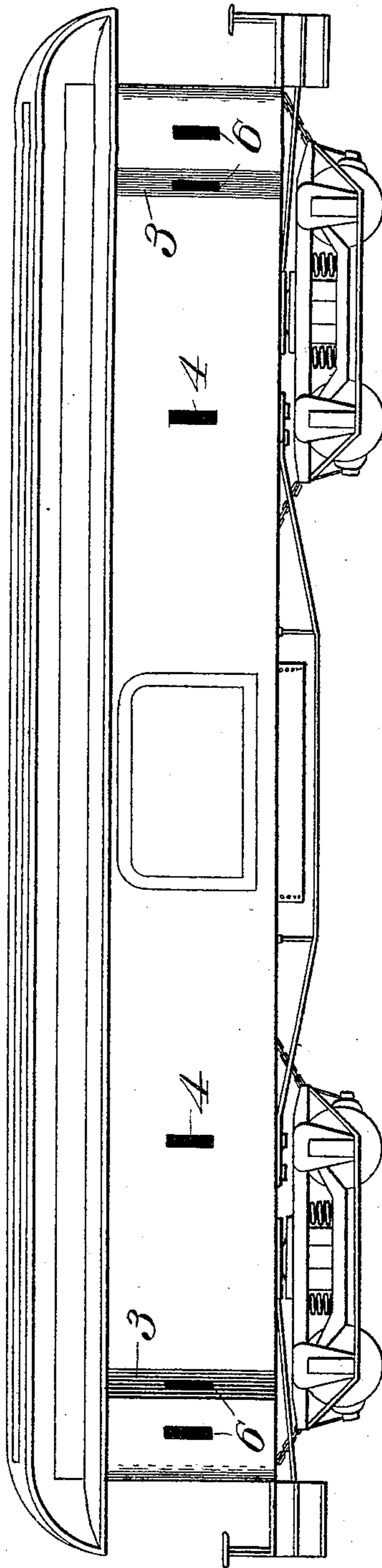


Fig. 2.



Witnesses
J. R. Cornwall
Hugh H. Wagner

Inventor
Owen G. Cates, Jr.
By *Paul Bakewell*
his atty.

UNITED STATES PATENT OFFICE.

OWEN G. CATES, JR., OF ST. LOUIS, MISSOURI.

RAILWAY-CAR.

SPECIFICATION forming part of Letters Patent No. 517,517, dated April 3, 1894.

Application filed December 1, 1893. Serial No. 492,476. (No model.)

To all whom it may concern:

Be it known that I, OWEN G. CATES, Jr., a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented
5 a certain new and useful Improvement in Railway-Cars, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, wherein like sym-
10 bols refer to like parts wherever they occur, and in which—

Figure 1 is a diagrammatical view of my improved car, and Fig. 2 is a side elevational view thereof.

15 My invention relates to a new and useful improvement in railway cars, and consists, generally stated, in the peculiar formation of the side and end walls thereof in such manner as to form bastions in one or more corners of the car, or in other words, forming
20 offsets in the side and end walls of the car, and providing these offsets with port holes, covered by slides on the inside, which can be raised by the occupant and give him com-
25 mand of all sides of the car, thus enabling him to protect the same from intruders in safety.

In the drawings, 1 indicates the side walls of the car, and 2 the end walls thereof. These side and end walls, for the greater part
30 of their length, extend uninterruptedly, but near the corners, are formed with offsets 3 projecting outwardly to a plane beyond, from which the side and end walls of the corners are led, thus forming "faces" of bastions, of
35 which, the offsets 3 form the "flanks."

Arranged at suitable distances apart along the length of the side and end walls 1 and 2 respectively, are port holes 4, of a size suffi-
40 cient for the introduction and passage of the barrel of a firearm, said port holes being covered on the inside, by slides 5, mounted in suitable ways. The offsets 3, or "flanks," and the "faces" of the corners of the car forming the bastions, are similarly provided with port
45 holes 6, covered by suitable slides 7, as in the

instance of the port holes arranged along the side and end walls of the car. By the above arrangement it will be noticed that by the incorporation of the bastions in the car, they do not detract from its symmetry, and the
50 eaves of the car-roof overhanging the same, these bastions offer no obstruction. It is also apparent, that if desired, offsets might also be arranged midway the length of the side walls, but this is hardly necessary in the
55 present construction.

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

1. In combination with a railway car, of a
60 bastion or bastions extending the entire height of the car walls, and arranged in one or more corners thereof, substantially as described.

2. The combination with a railway car, of
65 bastions arranged in its four corners and extending the full height of the car walls, substantially as described.

3. A railway car having its side and end walls formed with offsets which extend the
70 entire height of the walls, and which correspond to the flanks of bastions, substantially as described.

4. A railway car having offsets formed in its end wall, said offsets being provided with
75 port holes, substantially as described.

5. A railway car having its side and end walls formed with offsets near its corners forming bastions which offsets extend the
80 entire height of the walls, said side and end walls and offsets being provided with port holes, and slides arranged on the inside of the car for covering said port holes, substantially as described.

In testimony whereof I hereunto affix my signature, in presence of two witnesses, this
85 15th day of November, 1893.

OWEN G. CATES, JR.

Witnesses:

F. R. CORNWALL,

HUGH K. WAGNER.