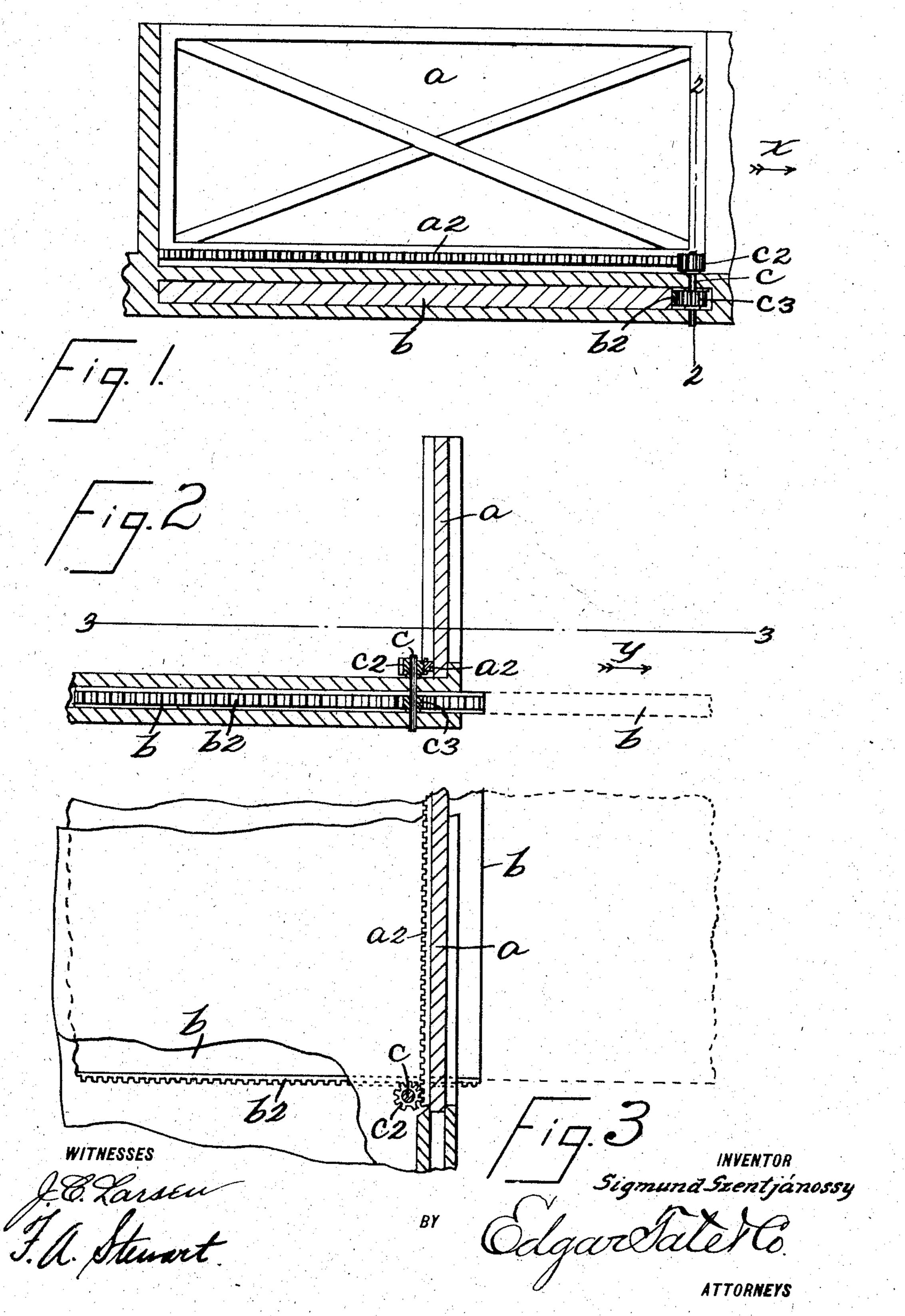
S. SZENTJÁNOSSY.

BRIDGE.

APPLICATION FILED MAR. 31, 1905.



United States Patent Office.

SIGMUND SZENTJÁNOSSY, OF NEW YORK, N. Y.

BRIDGE.

SPECIFICATION forming part of Letters Patent No. 791,659, dated June 6, 1905.

Application filed March 31, 1905. Serial No. 253,038.

To all whom it may concern:

Be it known that I, Sigmund Szentjánossy, a citizen of Austria-Hungary, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Bridges, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to bridges for use in connection with gates on elevated railways, tunnel, or subway railways for closing the space between the doors or gates of a car or cars and the platform at the side of a train or 15 at the side of a railway-track; and the object of the invention is to provide a gate of this class which is operated by a sliding door or gate at the end or ends of the cars, a further object being to provide a device of this class 20 which may be used in connection with gates on public highways and other roads in which the opening of a gate would project a bridge across a narrow chasm, stream, or the like; and with these and other objects in view the 25 invention consists in a device or apparatus of the class specified constructed as hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by suitable reference characters in each of the views, and in which—

Figure 1 is a side view of a gate and cross-35 sectional view of a bridge involving my invention; Fig. 2, a section on the line 2 2 of Fig. 1, and Fig. 3 a section on the line 3 3 of Fig. 2.

In the drawings forming part of this specification I have shown at a an ordinary gate, the bottom of which is provided with a rackbar a^2 , and said gate is mounted so as to slide in the direction of the arrow x in Fig. 1.

Beneath the gate and in suitable guideways or holders is mounted a bridge b, and the bridge b is provided with a rack-bar b^2 .

Mounted in a vertical position adjacent to one corner of the gate a at the lower right-hand corner, as shown in the drawings, is a

vertical shaft c, provided with an upper pin- 50 ion or gear c^2 , which operates in connection with the rack-bar a^2 on the gate a and with a lower pinion or gear c^3 , which operates in connection with the rack-bar b^2 on the bridge b. With this construction it will be apparent that when the gate is moved in the direction of the arrow a the bridge b will be projected in the direction of the arrow a of Fig. 2, the line of the movement of the gate being at right angles to the line of the movement 60 of the bridge a all times.

It is a well-known fact that in elevated-railway constructions and also in underground or subway railway constructions there is frequently considerable space between the cars 65 and the platforms from which the cars are entered, and this frequently results in serious and sometimes fatal accidents by reason of persons on leaving or entering the cars stepping into the spaces between the cars and the 70 platform; but with my improvement these spaces may always be closed by the gates themselves in opening said gates, and in closing said gates the bridge or bridges will be drawn back beneath the platform of the cars. It will 75 also be evident that the extent of the movement of the bridge may be regulated by the gearing by which the bridge is operated, and this movement of the bridge may also be regulated in various ways.

My improvement also is not limited to any particular construction of the bridge or bridges, and collapsible or other bridges may be employed.

It will be apparent also that my improved 85 bridge construction may be used on ordinary roads, highways, tramways, or other railways, all that is necessary in this connection being to make the bridge of suitable dimensions and strength and to regulate the gearing by which 90 it is operated and in accordance with the requirements of the particular case.

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

1. The combination of a sliding gate and a sliding bridge movable at an angle to the line of the movement of the gate, said gate and bridge

being geared in connection whereby the movement of the gate will also move the bridge, substantially as shown and described.

2. A sliding gate mounted in suitable sup-5 ports, and a sliding bridge mounted thereunder and movable at an angle to the line of the movement of the gate, said gate and said bridge being geared in connection, substantially as shown and described.

3. A sliding gate provided with a rack-bar, a sliding bridge mounted beneath the gate and also provided with a rack-bar, the line of the movement of the gate being at an angle to the

line of the movement of the bridge, and intermediate gearing whereby the movement of the 15 gate will also move the bridge, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 30th day 20 of March, 1905.

SIGMUND SZENTJÁNOSSY.

Witnesses:

F. A. Stewart,

C. E. MULREANY.