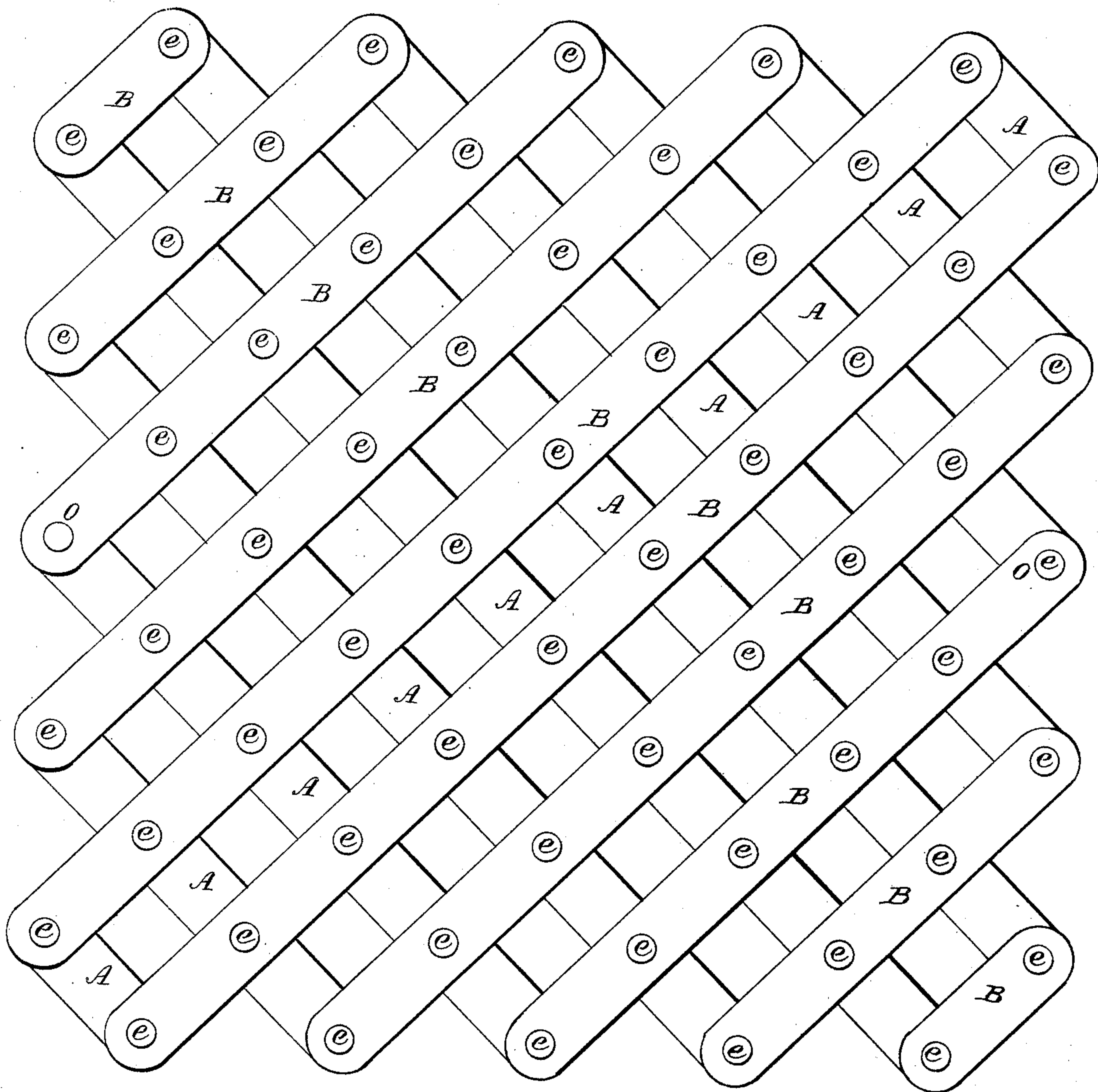


J. NEWMAN.
Car Platform.

No. 24,885.

Patented July 26, 1859.



Witnesses;
Wm H Ballantyne
Ward M. Leim

Inventor;
Joseph Newman

UNITED STATES PATENT OFFICE.

JOSEPH NEWMAN, OF BALTIMORE, MARYLAND.

PLATFORM BETWEEN RAILROAD-CARS.

Specification of Letters Patent No. 24,885, dated July 26, 1859.

To all whom it may concern:

Be it known that I, JOSEPH NEWMAN, of Baltimore, in the State of Maryland, have invented a new and Improved Expansible Bridge to Extend Between Railroad-Cars; and I hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings and to the letters and figures marked therein.

I would premise by saying, that the present application for Letters Patent, is a renewal of the one made by me in February 1854; which former application was rejected, and subsequently withdrawn by my agents without my knowledge or consent. My invention—that for which application for Letters Patent was then made, and which application is now and hereby renewed—was made and perfected prior to February 1854.

The nature of my invention consists in forming the said bridge of net or lattice work of iron or other suitable material, which net or lattice work is so put together, that the same may be expanded or contracted in length, as the car platforms are farther from or nearer to, each other; and so attached at either end as to allow freely for the swaying and surging of the cars or other objects, and for the storage of the bridge when there is a disconnection.

To enable others to make and use my invention I describe its construction and operation:

Figure 1, is a plan view of the apparatus.

In the construction of it I take straps or bands of iron, or other suitable material, of any desired width and thickness (see A, A, A, &c. in the diagram) and lying them down parallel and at uniform distances apart I lie over and across other straps or bands of the same thickness and width (see B, B, B &c. in the diagram) also parallel and at the same uniform distances apart. These straps or bands are then, at all, (or a sufficient number) of their points of intersection riveted or bolted together by loose rivets or bolts (*e, e, e, &c.* Fig. 1.); which bolts or rivets are firmly fastened in, but allow the bands to play freely around them and over each other. These straps may be so cut in regard to length, as that when put

together, they may form a parallelogram or any other figure or shape which is wanted for the bridge.

At each end of the bridge, and (usually) at the middle point of intersection of the upper and lower bands or straps (as at O and O' in Fig. 1,) I make the metal somewhat stronger and thicker than at other places, and instead of passing a rivet through the point of intersection, I leave there simply a hole. By means of this the bridge is to be attached to the platform of the car or other object. A simple bolt or staple can be passed through it into the platform. In practice it would be better to attach it by a staple to one of the platforms, and by a bolt to the other, so that it can be readily detached from one, and thrown back on to the other out of the way, when the cars are separated. It is obvious that if the two points O and O' be pushed toward, or pulled from, each other, the mesh work will close up or pull out with facility; and this can be carried on until the slats or bands lie close together.

The bridge should at each end, lie for some inches on the platform or support, so as to be sustained across the whole end. This prevents sagging if a weight should come upon the side of it.

The device can be used as a gang plank extending from a vessel to the shore, as it allows for the swaying of the former. On railroad cars, besides being a bridge, it serves as a sort of safety connection, in case the cars should be otherwise separated.

I do not claim broadly and separately, the expanding mesh or lattice work described, as that has often been used before, and for a great variety of purposes; but

What I do claim as my invention and desire to secure by Letters Patent, is—

The expanding mesh or lattice work described, when attached by a single point at each end, substantially in the manner set forth, to be used as a bridge or gangway between railroad cars.

JOSEPH NEWMAN.

Witnesses:

WM. H. BALLANTYNE,
WARD MCLEAN.