

(No Model.)

L. H. WILBUR.
BRIDGE.

No. 587,540.

Patented Aug. 3, 1897.

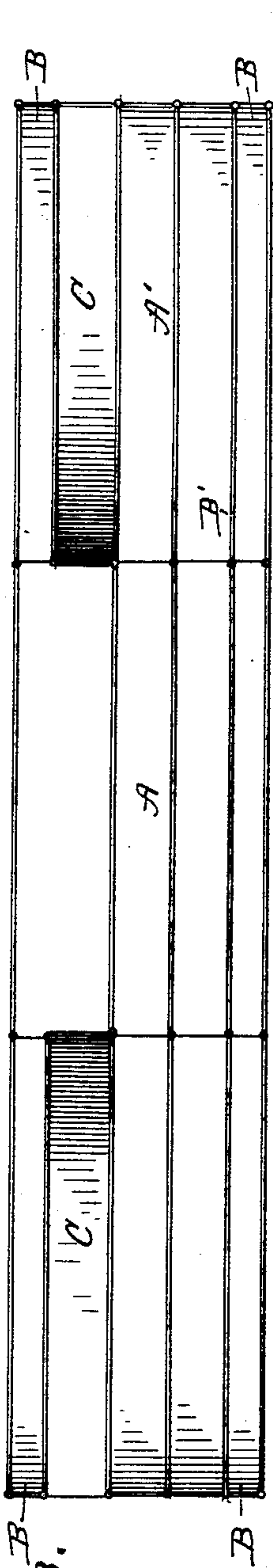


Fig. 3.

Witnesses
G. H. Walmsley.
G. A. Lamson

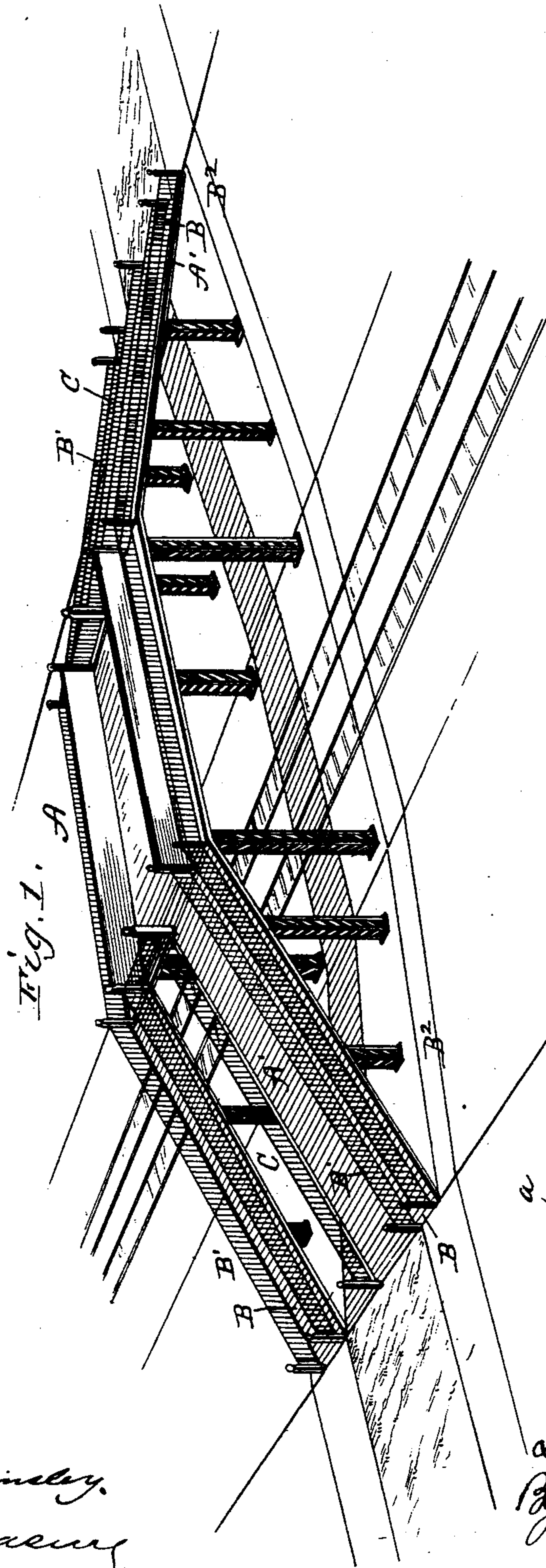


Fig. 1.

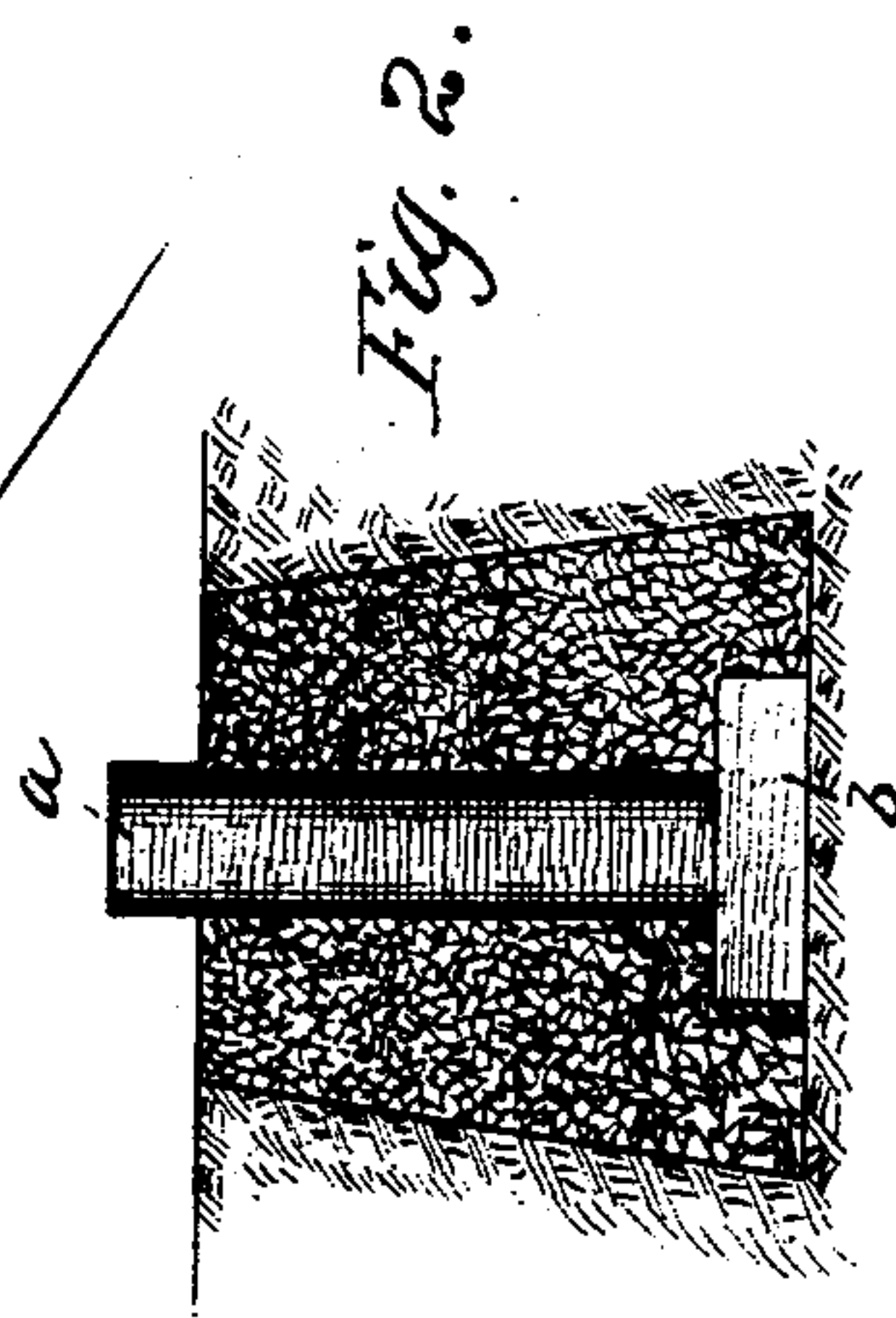


Fig. 2.

Inventor.
L. H. Wilbur
By Alexander Davis
Attorneys

UNITED STATES PATENT OFFICE.

LEBBEUS H. WILBUR, OF OWEGO, NEW YORK.

BRIDGE.

SPECIFICATION forming part of Letters Patent No. 587,540, dated August 3, 1897.

Application filed March 20, 1897. Serial No. 628,482. (No model.)

To all whom it may concern:

Be it known that I, LEBBEUS H. WILBUR, a citizen of the United States, residing at Owego, in the county of Tioga and State of New York, have invented certain new and useful Improvements in Bridges, of which the following is a full, clear, and exact description, reference being had to the drawings hereto annexed.

In the drawings, Figure 1 is a perspective view; Fig. 2, a detail view of one of the pillar-foundations, and Fig. 3 a small plan of the bridge having a double driveway over it.

The essential object of this invention is to provide an improved bridge for use especially at street-railway crossings, the construction being such that vehicle-drivers have the option of either passing up over the bridge and thus keeping entirely away from the railway-tracks or passing down to the under driveway and driving straight across the tracks or turning either to the right or left and along the street or driveway containing the railway-tracks, as more fully hereinafter set forth.

Referring to the drawings by letters, A designates the main structure of the bridge, which is supported upon pillars of the usual construction and which is connected to the usual downwardly-inclined approaches A' A' at the ends of the bridge.

A suitable pathway B for pedestrians runs up over the bridge along each side thereof, these pathways being guarded on each side by suitable fences or railings B', and a pathway B² may be provided on the ground along each side of the bridge to permit pedestrians to pass down to the railroad-tracks. At one side of each of the inclined approaches A' is formed an opening C, which is sufficiently large to permit vehicles to pass therethrough and which is surrounded by a suitable guard fence or railing.

The two openings lie in between the pedestrian-pathways B and extend practically the full length of the inclined approaches, and both are on the same side of the bridge, as shown, thereby leaving the entire upper surface of the bridge between the openings, excepting the space taken up by the pedestrian-pathways, free for the use of vehicles passing over the bridge, enabling them to readily

turn out to pass each other should oppositely-going vehicles meet thereon. The inclined approaches are of course reduced to single driveways by the openings C; but this will not cause serious inconvenience unless the traffic at this point is unusually heavy, as the turnout portion permits vehicles to pass each other on the main part of the bridge; but should the driver be in great haste he can pass down through the opening and cross under the bridge.

A bridge of this plan will be of particular advantage at railroad-crossings where the railway-tracks are laid on one of the intersecting streets. In these cases it is very necessary not only to have a bridge to carry the vehicles over without crossing the tracks at the surface, but also necessary to permit the vehicles to have access to the intersecting street containing the tracks.

There are, as is well known, many railway-crossings where an overhead bridge would be built were it not for the fact that a bridge of the ordinary construction, by reason of the narrowness of the street, would entirely cut off the public from access to the street or driveway containing the tracks, and this would be seriously inconvenient in all cases, but especially in those cases where it is necessary for vehicles to pass onto the tracks or driveway alongside the same in order to get to the passenger or freight depots. By my present construction I adapt the bridge to crossings of this nature, the dividing of the approaches into under and overhead entrances and providing a turnout on top of the bridge being the essential features.

In Fig. 3 is shown a bridge having a double driveway over it and a single driveway under it, this construction being preferred where the street is wide enough to permit it to be used. In this construction the turnout is of course not required, and the space between the openings may be fenced off and included in the adjacent pathway for pedestrians and provided with seats or benches, &c., for their use.

I prefer supporting the pillars upon a foundation of my own design. (Shown in Fig. 3.) The pillar rests on a central vertical stone *a*, resting endwise upon a foundation stone or slab *b*, buried in the earth at a sufficient depth

to permit the upper end of stone *a* to project above the earth, preferably, about twelve inches. The stone *a* is set upright in a circular excavation, and the space around the stone is filled in with loose stones and cement, which composition is allowed to set firmly, thereby closely hugging and supporting the stone. The circular depression or excavation, it will be observed, tapers upwardly, its narrowest portion being at the surface of the ground. The object of this construction is to prevent damage to the foundation by frost, the tapering form permitting the surrounding earth to rise or move independently of the foundation. In this manner a very strong foundation is secured that will endure almost indefinitely, and which of course may be used in other structures than bridges, if I so desire.

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

1. A highway-bridge spanning a street having a railway laid therein, said bridge having

each of its approaches divided longitudinally into an upper and under driveway, leaving the top surface of the bridge between the approaches full width, to be utilized as a turnout or for other purposes, substantially as described.

2. A highway-bridge spanning a street having a railway-track laid therein, said bridge having a pathway for foot-passengers across either side and each of its inclined approaches divided longitudinally into an upper and under driveway, the two openings leading to the under driveway being opposite each other, thereby leaving the surface of the bridge between the openings free to be used as a turnout, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

LEBBEUS H. WILBUR.

Witnesses:

C. D. DAVIS,

G. M. LAMASURE.