

T. C. CLARKE.
Elevated Railways.

No. 153,806.

Patented Aug. 4, 1874.

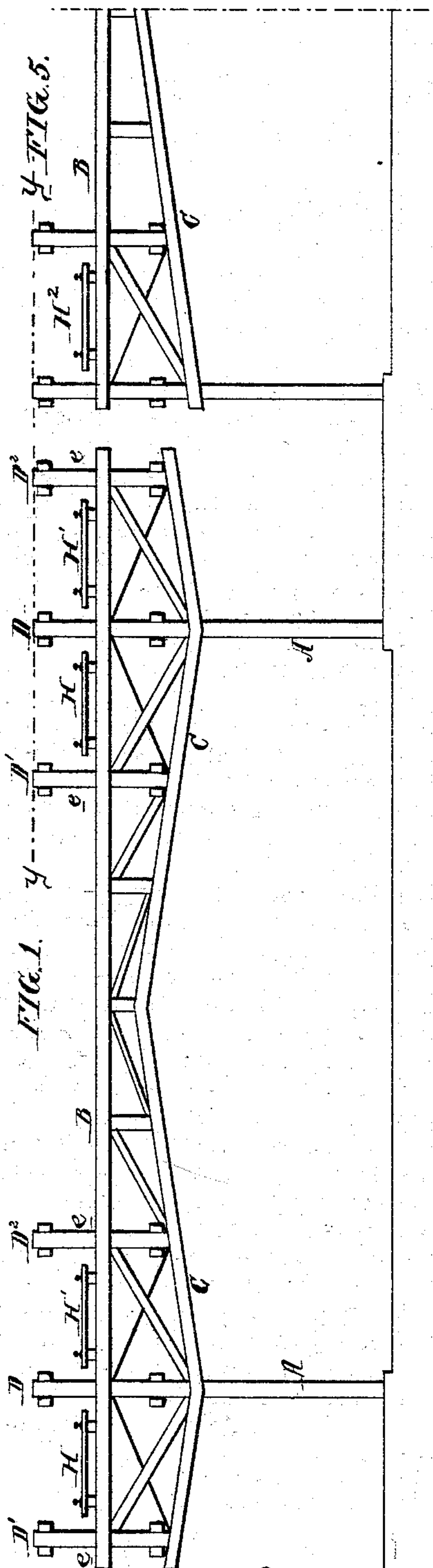


FIG. 1.

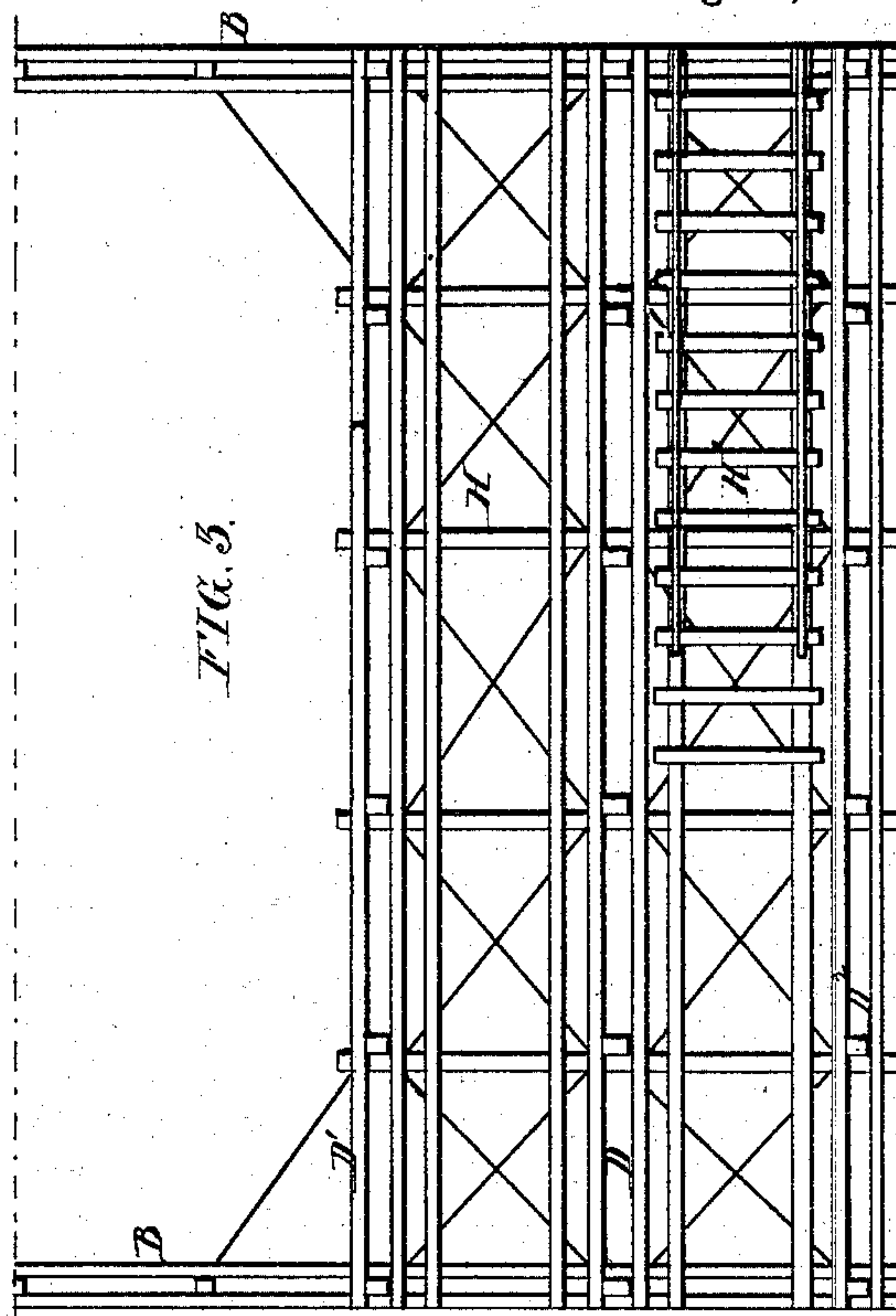


FIG. 2.

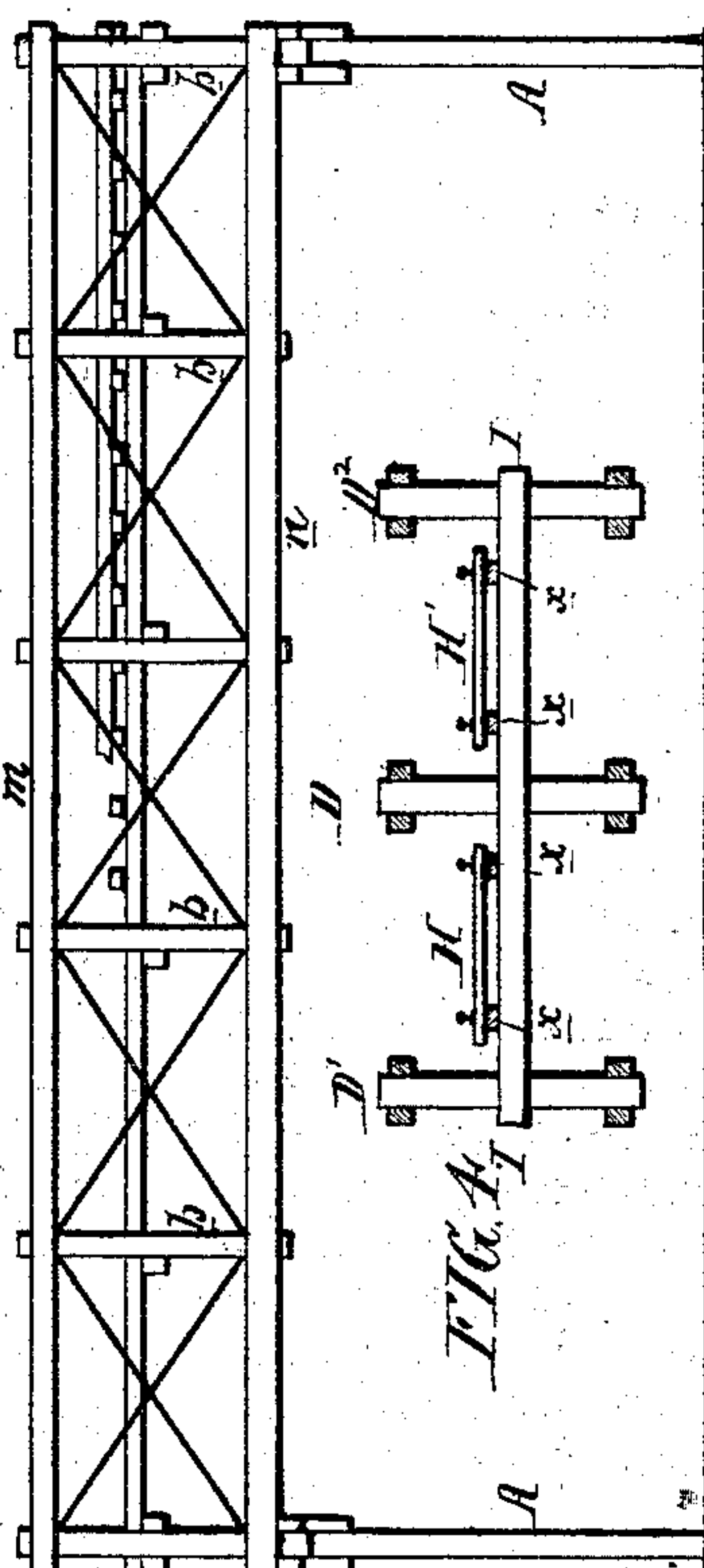


FIG. 3.

Witnesses *Harry Smith*
Hubert Howson

Thomas C. Clarke
by his Attys.
Howson and Son

UNITED STATES PATENT OFFICE.

THOMAS C. CLARKE, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
CLARKE, REEVES & CO., OF SAME PLACE.

IMPROVEMENT IN ELEVATED RAILWAYS.

Specification forming part of Letters Patent No. **153,806**, dated August 4, 1874; application filed
March 19, 1873.

To all whom it may concern:

Be it known that I, THOMAS C. CLARKE, of Philadelphia, Pennsylvania, have invented an Elevated Railway, of which the following is a specification:

My invention relates to that class of elevated railways the supports of which span the street; and the object of my invention is to so construct such a railway that the supporting structure shall be comparatively light and inexpensive, an object which I attain by supporting the roadway by and between longitudinal truss-frames, one of which is directly above the supporting-column, as explained hereafter, and as shown in the accompanying drawing.

The railway consists of a series of self-contained structures placed across the street at intervals, and connected together between these intervals by guides, so as to form supports for continuous roadways.

Each structure, an end view of which is shown in Figure 1, a side view in Fig. 2, and plan view in Fig. 3, is supported on four pillars, A, two of which rest on suitable foundations on one sidewalk of a street, and two on the opposite sidewalk, as shown in Fig. 1.

The end frame of each structure consists of two opposite posts, A A, Fig. 1, connected together by the upper chord B and lower chord C, which span the street, and which, with the braces and tie-rods shown in the drawing, form a transverse truss-frame. These two end frames of the structure are connected together by two sets of three longitudinal truss-frames, D, D', and D'', of the character shown in Fig. 2, two of the pillars A A forming the end posts of one of the frames D, this being the special feature of my invention, and these posts and a series of intermediate posts *b b* being con-

nected together by an upper chord, *m*, and lower chord *n*, and the diagonals and counter-diagonals common to other truss-frames. On each side of the central longitudinal truss-frame D of each set is another truss-frame of precisely similar character, having end posts secured to the upper and lower chords B and C of the transverse frames, and forming part of the same. In the spaces H H' between these three longitudinal truss-frames are the two roadways H H', the longitudinal beams *xx* of which are supported by the upper chords B B of the opposite end frames, and by intermediate transverse beams I I secured to the posts of the three longitudinal truss-frames D, D', and D'', as shown in the transverse section, Fig. 4.

By the plan described above four roadways are formed, two on each side of the street, so that there may be two lines of rails for freight-cars and two for passenger-cars. This arrangement may be adopted in localities where the rapid transportation of merchandise is a matter of importance; but I prefer to make one roadway only on each side of the street by adopting the plan illustrated in Fig. 5, where there is no roadway to overhang the sidewalk, as in Fig. 1, the single roadway H'' on each side being above the street.

I claim as my invention—

The roadway supported by and between longitudinal truss-frames, one of which is directly above the supporting-pillars, as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THOMAS C. CLARKE.

Witnesses:

WM. A. STEEL,
HUBERT HOWSON.