

No. 673,558.

Patented May 7, 1901.

D. R. KLINE.
BOARD WALK.

(Application filed Nov. 22, 1900.)

(No Model.)

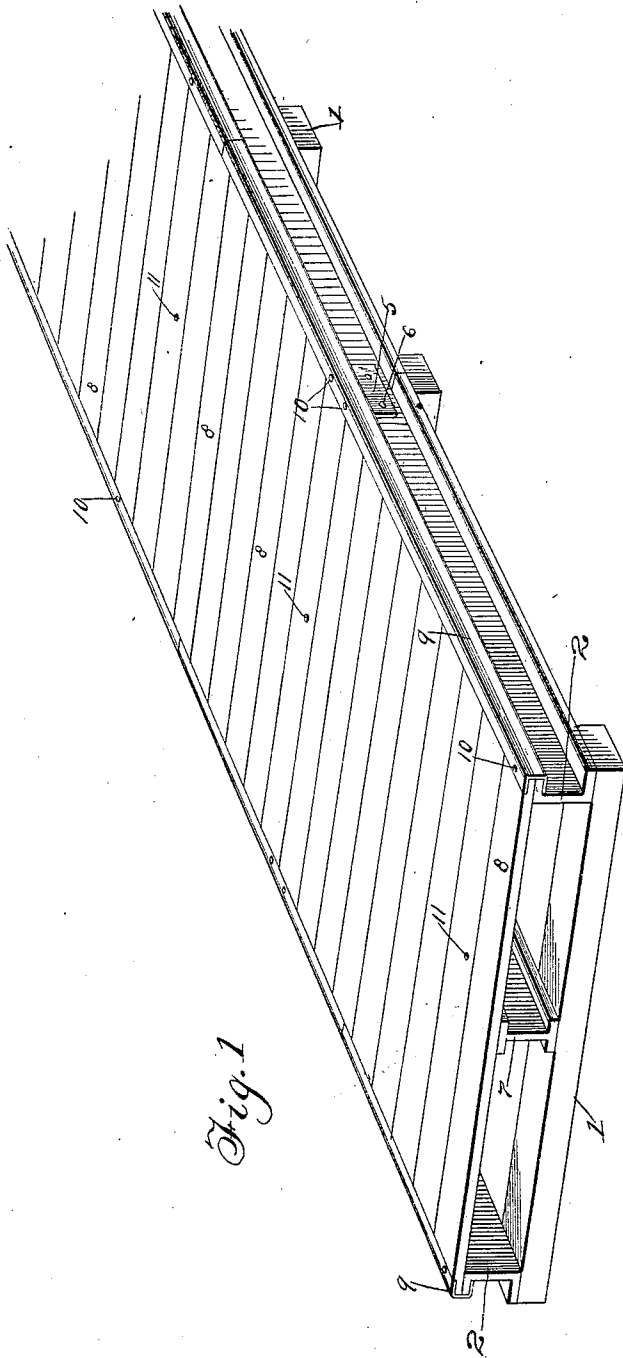


Fig. 1

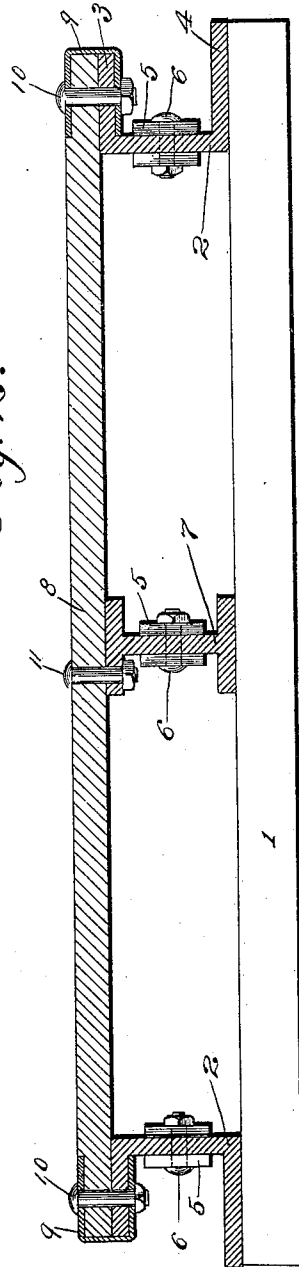


Fig. 2.

Witnesses
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DAVID R. KLINE, OF DAVENPORT, IOWA.

BOARD WALK.

SPECIFICATION forming part of Letters Patent No. 673,558, dated May 7, 1901.

Application filed November 22, 1900. Serial No. 37,387. (No model.)

To all whom it may concern:

Be it known that I, DAVID R. KLINE, a citizen of the United States, residing at Davenport, in the county of Scott and State of Iowa, have invented a new and useful Board Walk, of which the following is a specification.

This invention relates to board walks and similar platform structures for bridges and the like, and has for its object to facilitate the fastening of the flooring to the frame structure, so as to prevent warping thereof and to obviate the use of nails, which soon project above the flooring, to the annoyance and danger of people and animals passing over the device. It is furthermore designed to protect the outer ends of the floor-planks, so as to prevent the same from being broken and chipped, and also to protect said ends of the planks from the damaging effects of the weather.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of a section of a board walk, bridge-platform, or the like constructed in accordance with the present invention. Fig. 2 is an enlarged transverse sectional view thereof.

Like characters of reference designate corresponding parts in both figures of the drawings.

Referring to the drawings, 1 designates suitable cross-sills, of wood or other material, which form a suitable foundation for the support of a board walk. The opposite longitudinal frame-beams 2, of metal, having the top and bottom laterally-projecting and longitudinally-extending flanges 3 and 4, are placed transversely across the ends of the foundation-sills and may be connected thereto by any suitable fastenings passing through the foot-flanges of the beams. Although I have shown beams with flanges at one side only, ordinary I-beams may be used whenever de-

sired. The adjacent ends of opposite beam-sections are connected by means of opposite fish-plates 5, which extend across the joints and are secured to the webs of the beams by means of suitable bolts 6. It will be understood that a plurality of these frame-beams are placed end to end, according to the length of the platform. In the event of a wide platform one or more intermediate beams 7 may be employed, the opposite ends of the beam-sections being connected as described for the outer beam-sections.

The flooring-planks 8 are placed transversely across the frame-beams and have their outer ends flush with the outer edges of the outer beams. The upper face of each plank is rabbeted at its outer ends for the reception of the upper side of a substantially U-shaped metallic marginal edge strip 9 and in order that said strip may be flush with the upper face of the flooring. It will be understood that each edge of the flooring is provided with such a strip, and the latter is made in sections with their ends abutted, so as to extend for the entire length of the platform. Each strip snugly embraces the adjacent ends of the planks and the upper flange portion of the adjacent frame-beam and is secured thereto by means of bolts 10, which extend through the planks, the flange of the beam, and the opposite sides of the U-shaped strip. The sides of each strip are preferably of the same width, and the free edge of the lower side abuts snugly against the web portion of the frame-beam. The intermediate portions of some of the planks may be secured to the intermediate beam by means of suitable bolts 11. It is preferable to employ bolts secured to metallic beams, as the former cannot be drawn outwardly by expansion and contraction of the planks, and thereby do not present dangerous projections. Moreover, it is designed to employ bolts having convex heads, which latter do not afford the same objections as do angular heads.

From the foregoing description it will be apparent that no nails are employed in the construction of the present form of walk or platform, and the planks are conveniently and effectively held in place and prevented from warping by means of the strips embracing the opposite ends thereof; also, compara-

tively few fastenings are employed to secure the planks to the beams, as it does not require a fastening for each plank, the fastenings being distributed at suitable intervals to
5 properly secure the binding-strips. Any of the planks may be conveniently replaced by removing the opposite binding-strips that secure the plank, and the entire structure may be quickly set up without requiring the em-
10 ployment of skilled labor and especially-constructed tools.

What is claimed is--

1. In a board walk or similar platform
15 structure, the combination with oppositely-flanged frame-beams, of planks supported transversely thereon, and opposite binding-strips embracing the respective ends of the planks and the flanges of the beams, and also securing the planks to the beams.

2. In a board walk or similar platform
20 structure, the combination with oppositely-flanged longitudinal frame-beams, of floor-planks supported transversely thereon and having their opposite ends flush with the
25 outer edges of the respective beam-flanges, opposite substantially U-shaped metallic strips snugly embracing the respective ends of the planks and the beam-flanges, and bolts passing through the opposite sides of the strip,
30 the planks and the beam-flanges.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

DAVID R. KLINE.

Witnesses:

J. F. CHEEK,
M. T. CHEEK.