(No Model.)

A. ZAGELMEYER.

WALK AND BRIDGE PLANK.

No. 482,536. Patented Sept. 13, 1892.

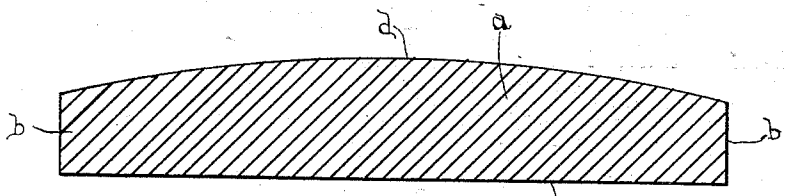

Fig. 1.

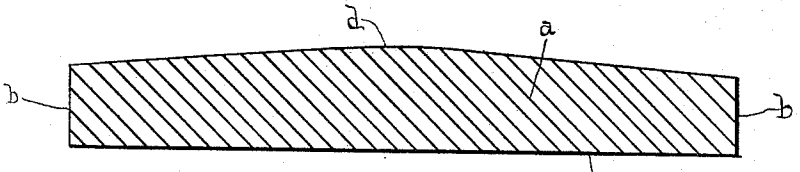

Fig. 2.

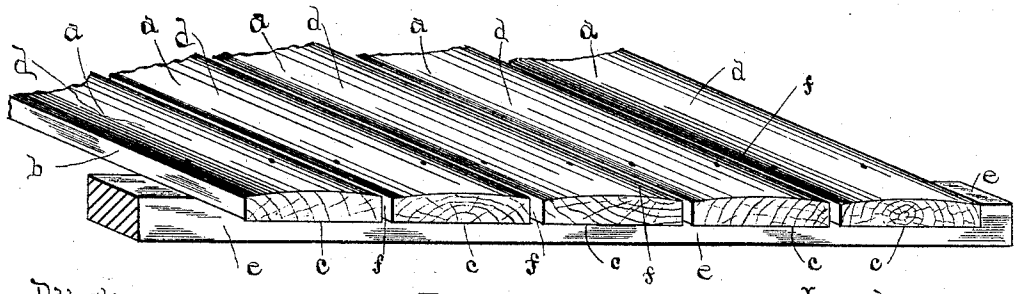

Fig. 3.

Attest:
Geo. P. Thomas.
J. F. Brecklissinger.

Inventor:
Alexander Zagelmeyer.
By Jas. E. Thomas.
Atty.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ALEXANDER ZAGELMEYER, OF WEST BAY CITY, MICHIGAN.

WALK AND BRIDGE PLANK.

SPECIFICATION forming part of Letters Patent No. 482,536, dated September 13, 1892.

Application filed November 16, 1891. Serial No. 412,025. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER ZAGELMEYER, a citizen of the United States, residing at West Bay City, in the county of Bay and State of Michigan, have invented certain new and useful Improvements in Walk and Bridge Planks, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to improvements in plank for sidewalks, bridges, &c., and pertains particularly to the form and contour of the upper surface of the plank. It is well known that the planks used for bridges, sidewalks, &c., are usually laid upon and secured to stringers, and are necessarily supported in close proximity to the ground, so that the under side of the planks are continually exposed to dampness and confined atmosphere beneath, while the upper opposite sides thereof are exposed to a continual drying influence of the sun's rays and wind, so that each plank in a short time after laying becomes warped or curved transversely, so that its lateral edges are turned slightly upward and a shallow trough in each plank is formed, which in every shower provides a receptacle for holding water, and this, while being of great annoyance and inconvenience to pedestrians, also causes a continual soaking and drying action to obtain in the wood fiber and cells, with the result of quickly destroying the plank by rot; and the object is to so construct a plank for the purpose mentioned as to allow the water caught upon the surface to quickly run off, whereby only the outer and exposed wood fiber is liable to become saturated and whereby the plank is quickly and easily dried and hardened and the period of wear of the plank is prolonged and a walk clear of waterpools and dampness is provided.

My invention consists in a plank for sidewalks, bridges, &c., having its upper surface of a convex form transversely; and the invention also consists in a walk formed of stringers or sills covered with a series of planks having the transverse middle portion of their upper surfaces higher than the lateral edges thereof.

My invention is illustrated in the accompanying drawings, in the several views of which the letters of reference used in the following description will be found indicating the same elements or parts.

Figure 1 is a transverse section of a plank having my improved construction. Fig. 2 is the same in a modified form. Fig. 3 is an isometrical view of a section of walk containing my improvement.

a represents a plank, and *b* are its lateral edges. *c* is the under side, having a plane surface, and *d* is the upper side, provided with a convex form transversely, as shown in Fig. 3. The planks *a* are laid in series upon stringers or sills *e* with a narrow space *f* between their adjacent edges, and each plank is secured to the stringers by nails or otherwise in the usual manner. The water falling upon the upper convex of the plank at once runs off at the side edges thereof and drips through the spaces between, so that in a short time after the rain has ceased to fall all water has run off and the surfaces of the planks are entirely dry and clean. The convexity of the upper surface of the plank is of a degree to allow the usual amount of warping to obtain and still have sufficient crown in the upper surface to allow the water to readily run off, the lower surface of the plank being capable of absorbing only moisture sufficient to cause a certain degree expansion of the wood fiber to cause the warping, so that when this limit has been reached the wood cells then remain expanded, and the transverse curvature of the plank remains the same should the moisture be entirely evaporated and removed. It will be seen that this construction is of great benefit as to prolonging the period of wearing of the plank, as the planks are quickly dried off and so cannot be thoroughly saturated from above, whereby a hard and solid upper surface is retained, while the center of the plank, being thicker than the edges thereof, provides a bracing property which operates to reduce the warping capacity and places the wear from use upon the transverse middle portion instead of upon the upraised edges of the planks commonly used for this purpose. This form of surface is of great advantage when it is necessary to clean the walk from snow, as a scraper can be run over the walk without catching upon the upturned edges of the planks and thereby obstructing the work or mutilating the walk, while the shovel can be

used with greater facility and ease, as by moving the shovel slightly diagonal to the planks perfect freedom of the shovel is obtained and the work is done with greater ease and perfection.

I wish it understood, however, that I do not limit my improvement to any particular form of convexity for the upper side of the plank, as it may be arranged with two plane surfaces inclined upwardly from the edges and meeting in the middle or in proximity to the middle, as shown in Fig. 2.

What I claim as my invention is—

1. A plank for walks and bridges, having a plane surface on its under side and having the middle portion of its width of a greater thickness than the thickness of its lateral edges, substantially as set forth.

2. The combination, in a walk, of the stringers or sleepers and a series of planks, each plank provided on its under side with a plane surface resting upon the stringers and having on its upper side a surface of convex form transversely, substantially as set forth.

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

ALEXANDER ZAGELMEYER.

Witnesses:

JAS. E. THOMAS,

T. FLUES.