

J. BIDLAKE.
 GANG PLANK.
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1,000,983.

Patented Aug. 22, 1911.

Fig. 1

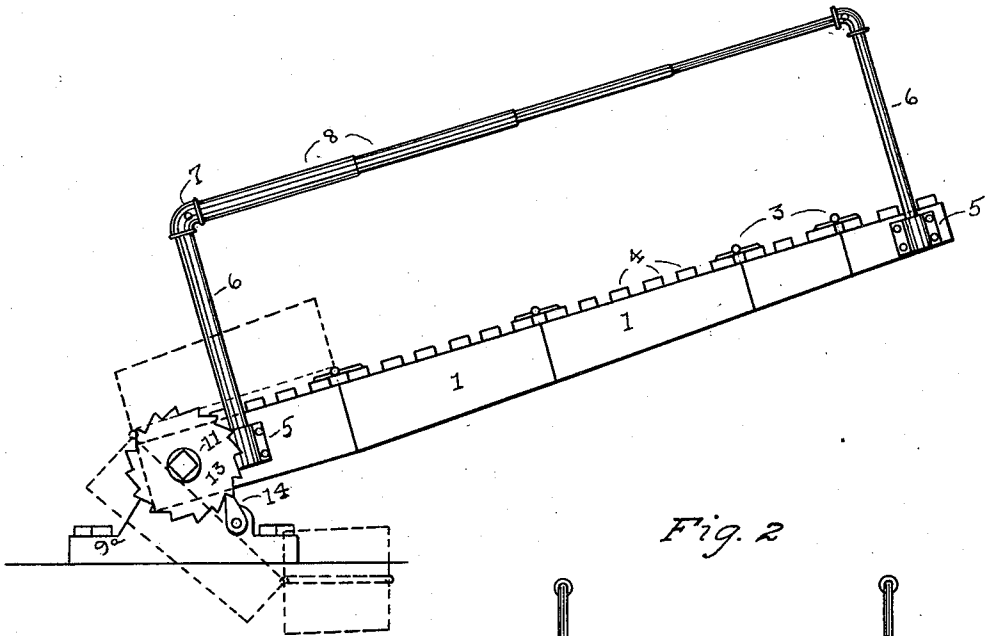


Fig. 2

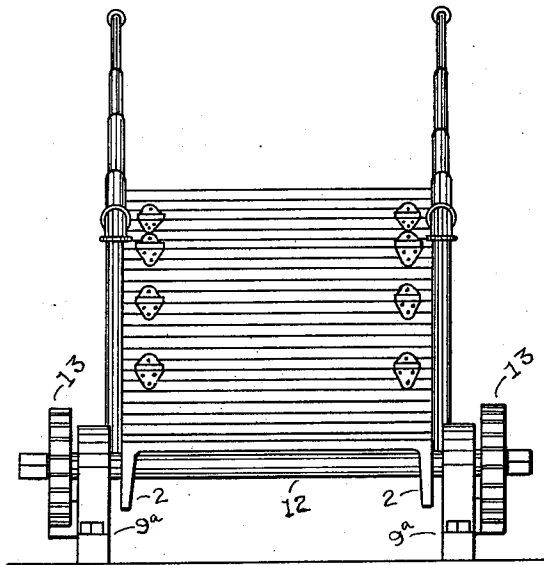


Fig. 3

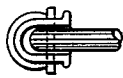


Fig. 4



Witnesses:
M. J. Brewer
S. A. Stuyver

Inventor
Joshua Bidlake
 per *Fred P. Gorin*
 Attorney

UNITED STATES PATENT OFFICE.

JOSHUA BIDLAKE, OF VASHON, WASHINGTON.

GANG-PLANK.

1,000,983.

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Application filed August 1, 1910. Serial No. 574,803.

To all whom it may concern:

Be it known that I, JOSHUA BIDLAKE, a subject of Great Britain, and a resident of Vashon, in the county of King and State of Washington, have invented certain new and useful Improvements in Gang-Planks, of which the following is a full, true, and exact specification, which will enable others skilled in the art to construct the same.

The principal object of my invention is to provide an extensible gang plank, having means for positioning the same at various angles, and means for securing the same in the various positions, the whole being of simple, strong and durable construction.

So far as I am aware, the previous custom has been confined to the use of gang planks adapted to be dragged or wheeled into position so as to form a passageway from the boat or ship to the dock, or from one boat or ship to another. The handling of such gang planks is necessarily awkward and slow, besides the further fact that, when not in use, the same occupies considerable space. The use of gang planks of the usual construction also results in considerable inconvenience and waste of energy from the fact that the deck of the boat or ship and the dock, are not always in the same horizontal plane, particular inconvenience results when it is necessary to issue the gang plank so as to connect a lower to a higher plane. The same is true when conveying passengers from a boat having its exit at one distance from the water, to another boat having its exit at a different distance from the water.

It is the purpose of my present invention to remedy these prominent defects which I have particularly pointed out, as well as others which will readily suggest themselves. I accomplish these results by the novel construction, combination and arrangement of parts as will be fully described in the following specification, and accompanying drawings, in which—

Figure 1 is a side elevation of the device in its extended position, the dotted outline showing the same in its retracted or folded position. Fig. 2 is an end elevation of the same. Fig. 3 a top view of one of the joints in the hand rail standard. Fig. 4 a side view of the same, partly in section.

The reference character 1 designates sections which compose the gang plank, which

are all of the same width, but gradually diminish in weight and thickness as the outer or free end of the plank is approached. These sections are formed of relatively thin material, having their sides bent downwardly at right angles to the floor portion thereof, forming the ribs 2, and are connected to each other by the hinges 3, and have the steps or footholds 4 upon and along their upper surfaces. The sockets 5 receive the lower ends of the tubular standards 6, having the elbows 7 secured to their upper ends, and into which is pivotally mounted the ends of the telescopic hand rail 8, the lower portion 9 of the elbows 7 being cut away so as to allow the tubular hand rail to freely swing downwardly into a parallel plane with the standard 6, when it is desired to fold the gang plank into inoperative position. The castings 9^a are secured to the deck of the ship (or to the dock, as the case may be), the journal bearings 11 in which receive the shaft 12, adjacent the outer ends of which are secured the ratchet wheels 13, with which coöperates the pawl 14, the extreme outer ends of the shaft 12 being angular and to which a suitable crank may be applied, in the usual manner, to cause the shaft 12 to revolve in its bearings 11.

It will be seen from the foregoing that the sections 1 composing the plank readily fold in one direction, but when extended, as shown in Fig. 1, remain rigid, all the sections being in a common inclined plane, forming a substantial gangway or passage; also, that it is not necessary that the extreme outer or free end of the plank be in actual contact with the dock, but that if the same should contact therewith no serious results occur further than that the last or outer section would incline slightly upward in a slightly different inclined plane from the other sections, which, if desired, could be quickly adjusted by a very slight movement of the shaft 12, operable by the crank. In other words, the sections may be rapidly and easily thrown out, the whole adjusted at any desired angle and securely held thereat by means of the ratchet wheel 13 and pawl 14.

I am fully aware that many changes in the details of construction will readily suggest themselves to others skilled in the art, without departing from the spirit and scope of

my invention, and I do not, therefore, desire to be limited to the construction herein shown and described.

What I claim as new and desire to protect
5 by Letters Patent, is—

1. The combination of a gang plank composed of substantially U shaped sections hinged together at their upper edges so that the same fold in one direction, but when
10 extended in the opposite direction remain rigid in a common plane, a crank shaft secured to one of said sections, journal bearings for said shaft, ratchet and pawl means for holding the plank at different angles and
15 a telescopic handrail removably attachable to and along the sides of the sections.

2. The combination of a gang plank composed of substantially U shaped sections hinged together at their upper edges, and having foot holds or steps, means for revolv- 20
ably mounting one of said sections upon the deck of a ship, or the like, and means for securing the same at various angles, and an extensible hand rail removably attachable to and along the sides of the sections, sub- 25
stantially as described and shown, as and for the purpose set forth.

JOSHUA BIDLAKE.

Witnesses:

ALFRED R. SHAVE,
FRED P. GORIN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."