(No Model.)

C. T. FORD.

BRIDGE FOR SIDEWALKS.

No. 599,037. Patented Feb. 15, 1898.

Fig. 1

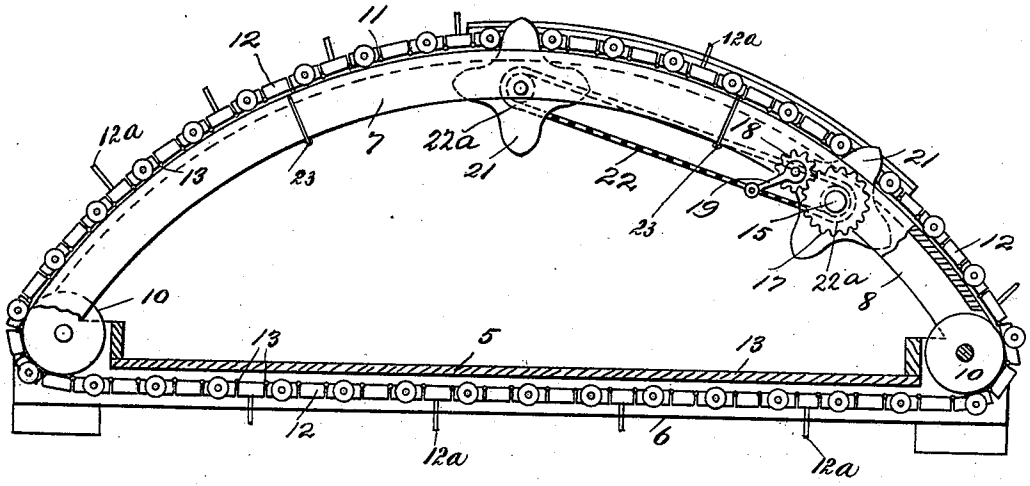


Fig. 2

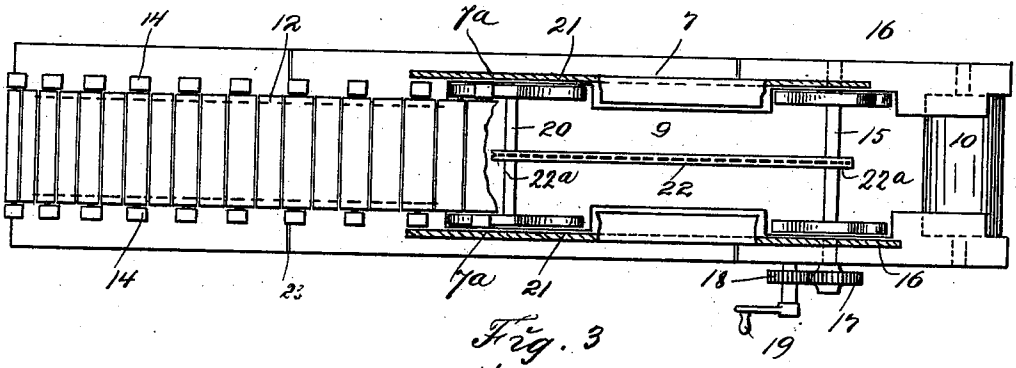
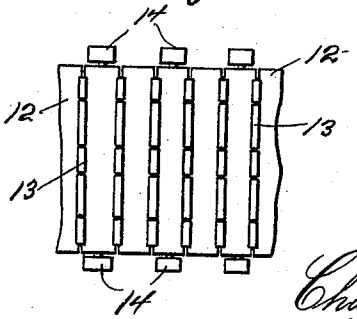


Fig. 3



WITNESSES:

C. Fordford

C. Gerst.

INVENTOR

Charles T. Ford.

BY

Edgar Tate & Co

ATTORNEYS.

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

UNITED STATES PATENT OFFICE.

CHARLES T. FORD, OF CENTRAL VALLEY, NEW YORK.

BRIDGE FOR SIDEWALKS.

SPECIFICATION forming part of Letters Patent No. 599,037, dated February 15, 1898.

Application filed April 29, 1897. Serial No. 634,369. (No model.)

To all whom it may concern:

Be it known that I, CHARLES T. FORD, a citizen of the United States, residing at Central Valley, in the county of Orange and State of New York, have invented certain new and useful Improvements in Bridges for Sidewalks, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to bridges for sidewalks and streets; and the object thereof is to provide an improved device of this class which is adapted for use in cities and towns and by means of which heavy packages of freight and other material may be moved over the sidewalk or street without interfering with the use thereof.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by the same numerals of reference in each of the views, and in which—

Figure 1 is a sectional side view of my improvement; Fig. 2, a plan view with part of the construction broken away, and Fig. 3 a bottom plan view of a detail of the construction.

In the practice of my invention I provide a horizontal base 5, which is adapted to rest upon the pavement or street, transversely thereof, and which consists of a top plate provided with downwardly-directed sides or flanges 6, and secured to the opposite ends thereof in any desired manner is an arch 7, which is also provided with downwardly-directed side plates or flanges 8, and the main portion of the arch 7 is cut away centrally or provided with a longitudinal slot or opening 9.

Mounted at each end of the horizontal base 5 is a roller 10, and passing around the entire structure, consisting of the base 5, the arch 7, and the rollers 10, is an endless chain 11.

The endless chain 11 consists of separate links 12, which are hinged together on their under sides, as shown at 13, or connected in any desired manner, and the alternate links of this chain are provided at each end with rollers 14, and these rollers 14 move on the opposite side walls of the longitudinal slot or opening in the arch 7, and I may also provide guides 7^a to hold the chain 11 in position, and I may also provide the links 12 with projecting pins 12^a to hold the packages from slipping.

Mounted in the arch 7, near one end thereof, is a shaft 15, which is provided with two sprocket-wheels 16 and at one end thereof with a gear-wheel 17, and supported adjacent to said gear-wheel 17 is a pinion 18, the shaft of which is provided with a crank 19, and mounted centrally of the arch 7 is a supplemental shaft 20, which is provided at its opposite ends with sprocket-wheels 21, and the shafts 15 and 20 are geared in connection by means of a drive-chain 22, in combination with sprocket-wheels 22^a, mounted on said shafts.

The sprocket-wheels 16 and 21 are adapted to operate in connection with the rollers 14 at the opposite sides of the endless chain 11, and said rollers 14 form supports for said endless chain, and the operation will be readily understood from the foregoing description when taken in connection with the accompanying drawings and the following statement thereof.

The packages to be moved over the bridge or arch are rolled onto one end thereof and rest upon the endless chain 11, and the crank 19 is then operated to carry the said endless chain around the structure, and in this operation the said packages will be carried over the bridge, as will be readily understood.

It will be understood that the shaft 15 may be provided at each end with a crank or crank mechanism, if desired, and also that an ordinary idler may be used between the gear-wheel 17 and pinion 18 in order to enable the operator to face in the opposite direction, and the separate parts of the bridge, including the base 5 and the arch 7, may be constructed in any desired manner and may be composed of separate parts, if preferred, and it will thus be seen that changes in and modifications of the construction herein described may be made without departing from the spirit of my invention or sacrificing its advantages.

The base 5 and arch 7 may be divided transversely, if desired, and the separate parts thereof hinged together, and the connection between the ends of the arch 7 and the base 5 may be pivotal connections, and in practice the chain is made wide enough to permit the

packages to be moved to be placed between the rollers 14 at the sides of the chain, and I have also shown the arch 7 as composed of separate parts hinged together at 23.

Having fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A bridge for sidewalks and streets, comprising a base, and an arch connected therewith, said base and said arch being provided with rollers at their opposite ends, an endless chain which passes around said base, said arch and said rollers, said chain being composed of separate transverse links hinged together at their under sides, and each alternate link being provided at its opposite ends with rollers, and means for moving said chain, substantially as shown and described.

2. A bridge for sidewalks and streets, comprising a base, and an arch connected therewith, said base and said arch being provided with rollers at their opposite ends, an endless chain which passes around said base, said arch and said rollers, said chain being composed of separate transverse links hinged together at their under sides, and each alternate link being provided at its opposite ends with rollers, and means for moving said chain, consisting of two sprocket-wheels which are geared in connection, and one of which is mounted in the central upper portion of the arch, and the other in said arch adjacent to one end thereof, substantially as shown and described.

3. The herein-described bridge for sidewalks, comprising a horizontal base 5, consisting of a top plate provided with downwardly-directed sides or flanges 6, an arch 7, secured to the opposite ends thereof and which is also provided with downwardly-directed side plates or flanges 8, the main portion of the arch 7 being cut away centrally whereby an opening 9 is formed, a roller 10 mounted at each end of the horizontal base 5, and an endless chain 11 mounted thereon, the endless chain 11, consisting of separate links 12, hinged together on their under sides at 13, and the alternate links being provided with rollers 14, adapted to move on the opposite side walls of the longitudinal slot and a guide 7^a, whereby the said chain is held in position, said links being provided with projecting pins 12^a, and means for operating said chain, substantially as and for the purpose described.

4. The herein-described bridge for sidewalks, comprising a horizontal base 5, consisting of a top plate provided with downwardly-directed sides or flanges 6, an arch 7, secured to the opposite ends thereof and which is also provided with downwardly-directed side plates or flanges 8, the main portion of the arch 7 being cut away centrally whereby an opening 9 is formed, a roller 10, mounted at each end of the horizontal base 5 and an endless chain 11 mounted thereon, the endless chain 11, consisting of separate links 12, hinged together on their under sides at 13, and the alternate links being provided with rollers 14, adapted to move on the opposite side walls of the longitudinal slot and a guide 7^a, whereby the said chain is held in position, said links being provided with projecting pins 12^a, and means for operating said chain, consisting of a shaft 15 mounted upon said arch and provided with two sprocket-wheels 16, and the gear-wheel 17, a pinion 18 supported adjacent to said gear-wheel on a suitable shaft which is provided with a crank 19, a supplemental shaft 20, mounted centrally of said arch 7, and provided at its opposite ends with sprocket-wheels 21, and the shafts 15 and 20, being connected by a drive-chain 22, in combination with sprocket-wheels 22^a, which are mounted thereon, substantially as and for the purpose described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 26th day of April, 1897.

CHAS. T. FORD.

Witnesses:
C. GERST,
A. C. VAN BLARCOM.