O. FREENY.

BRIDGE.

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1,098,243.

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Fig. 1.

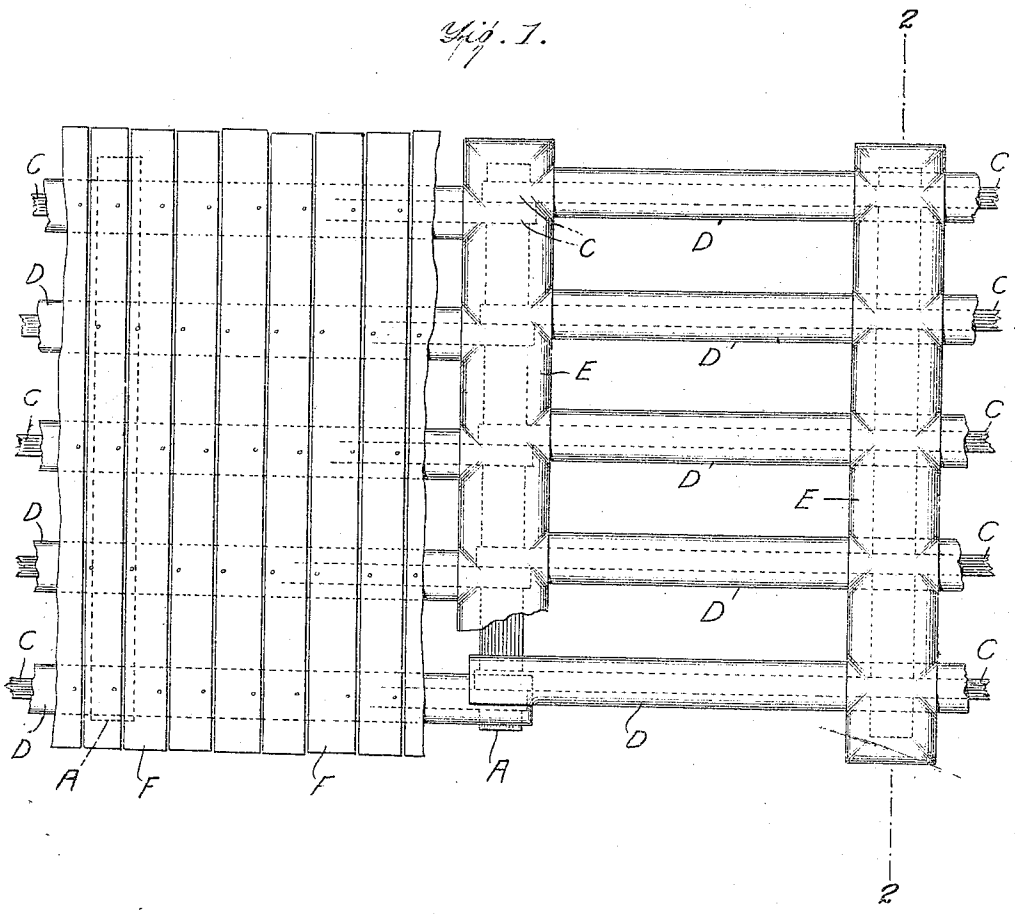
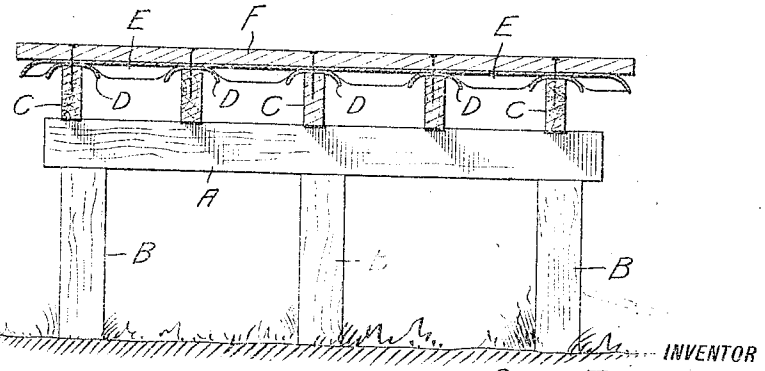


Fig. 2.



WITNESSES

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BRIDGE.

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To all whom it may concern:

Be it known that I, OLIN FREENY, a citizen of the United States, and a resident of Carthage, in the county of Leake and State of Mississippi, have invented a new and useful Improvement in Bridges, of which the following is a specification.

My present invention relates to bridges, and more particularly to simple and effective means for protecting and prolonging the life of the cap sills and sleepers, adaptable to the various types of bridges, including railway bridges and trestles, and the ordinary bridges.

In the accompanying drawings which illustrate the means I employ to this end, Figure 1 is a plan view of a portion of a bridge, from which the transverse flooring strips have been partly removed, and illustrating one of the cap sill protecting shields partly broken away, and Fig. 2 is a transverse vertical section taken therethrough substantially on the line 2—2 of Fig. 1.

Referring now to these figures, the cap sills are indicated by A and may be supported in any suitable manner by uprights, piers, piles and the like B, the under structure of the bridge being unimportant in so far as the present invention is concerned. Along the cap sills A which are arranged transversely as usual, are extended the longitudinal sleepers C, the ends of which are as usual lapped above certain of the cap sills A as indicated in dotted lines in Fig. 1.

In accordance with my invention, I provide protecting shields which extend longitudinally and transversely above the sleepers C, to cover and protect the same and the cap sills, these shields being in the form of transversely curved strips of sheet metal and the longitudinal shields D being extended along and directly upon the upper edges of the sleepers with their meeting ends lapped above certain of the cap sills A and preferably above the lapped ends of the sleepers, and the transverse shields E being disposed upon the shields D, to cover the cap sills A and certain of these transverse shields E being therefore utilized to cover the lapped ends of the longitudinal shields, before mentioned.

It will be noted that the shields D and E being in the form described and being of substantially greater width than the sleepers and cap sills above which they extend, will effectually protect the cap sills and sleepers from water dripping through the cracks between the transverse flooring strips F. It will be noted that these flooring strips are placed and held in position by fastening members which extend therethrough and through the protecting shields into the sleepers. Thus in order to properly keep up the bridge, it would only be necessary from time to time to replace the flooring in as much as by the use of shields such as proposed, the usual life of the cap sills and sleepers will be greatly prolonged.

In the drawing I have shown flooring strips as used upon a pedestrian bridge, but it is to be understood that the shields are equally adapted to railroad bridges in which suitably spaced cross ties are substituted in lieu of the flooring strips F.

I claim:—

1. In a bridge structure of the character described, the combination of cap sills and sleepers, and curved shields extended over and along the sleepers and having lapped ends over the cap sills, and similar curved shields extending over and along the cap sills and over the said lapped ends of the first-named shields.

2. In a bridge structure of the character described, the combination of cap sills and sleepers, curved shields extended over and longitudinally along the sleepers and having lapped ends at points over certain of the cap sills, and similar curved shields extending transversely across the sleepers above the cap sills and certain of which cover the said lapped ends of the longitudinal shields.

3. In a bridge structure of the character described, the combination of cap sills and sleepers, and shields extended longitudinally and transversely above the sleepers and covering and protecting the same and the cap sills, said shields being each formed of a strip of sheet metal transversely curved, for the purpose described.

4. In a bridge structure of the character described, the combination of cap sills and sleepers, and shields extended longitudinally and transversely above the sleepers to cover and protect the same and the cap sills.

OLIN FREENY.

Witnesses:
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