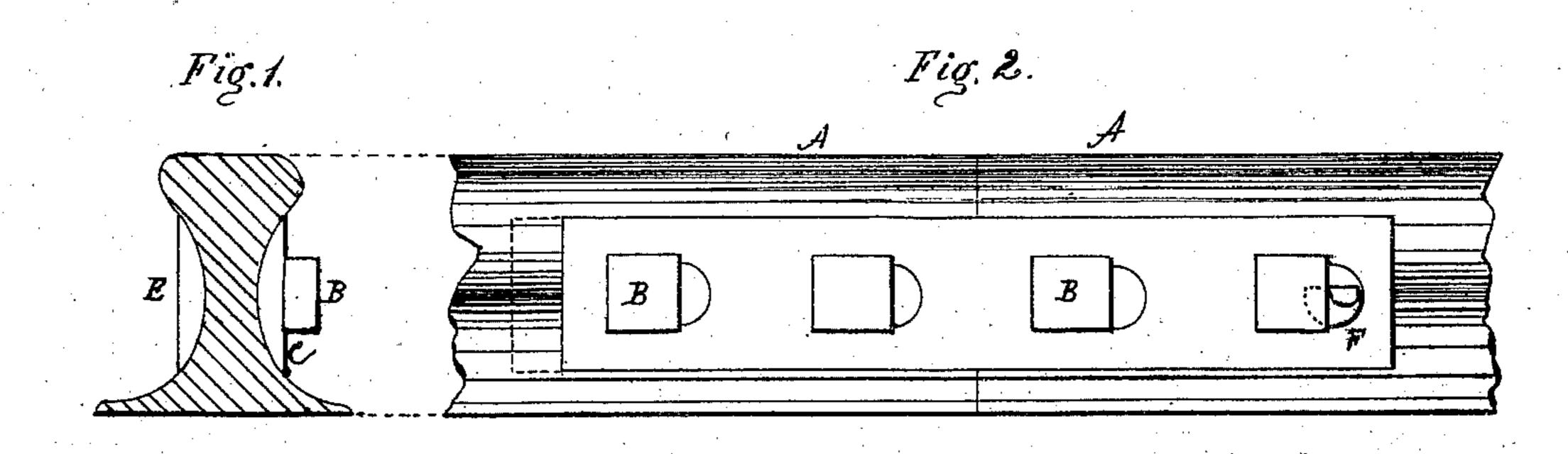
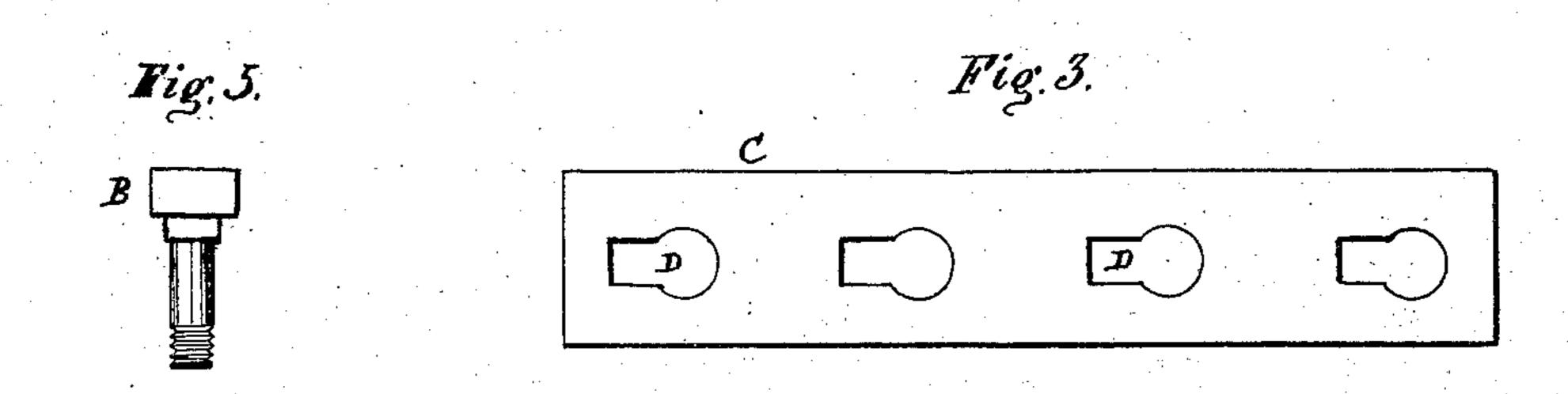
## G. W. WRIGHT.

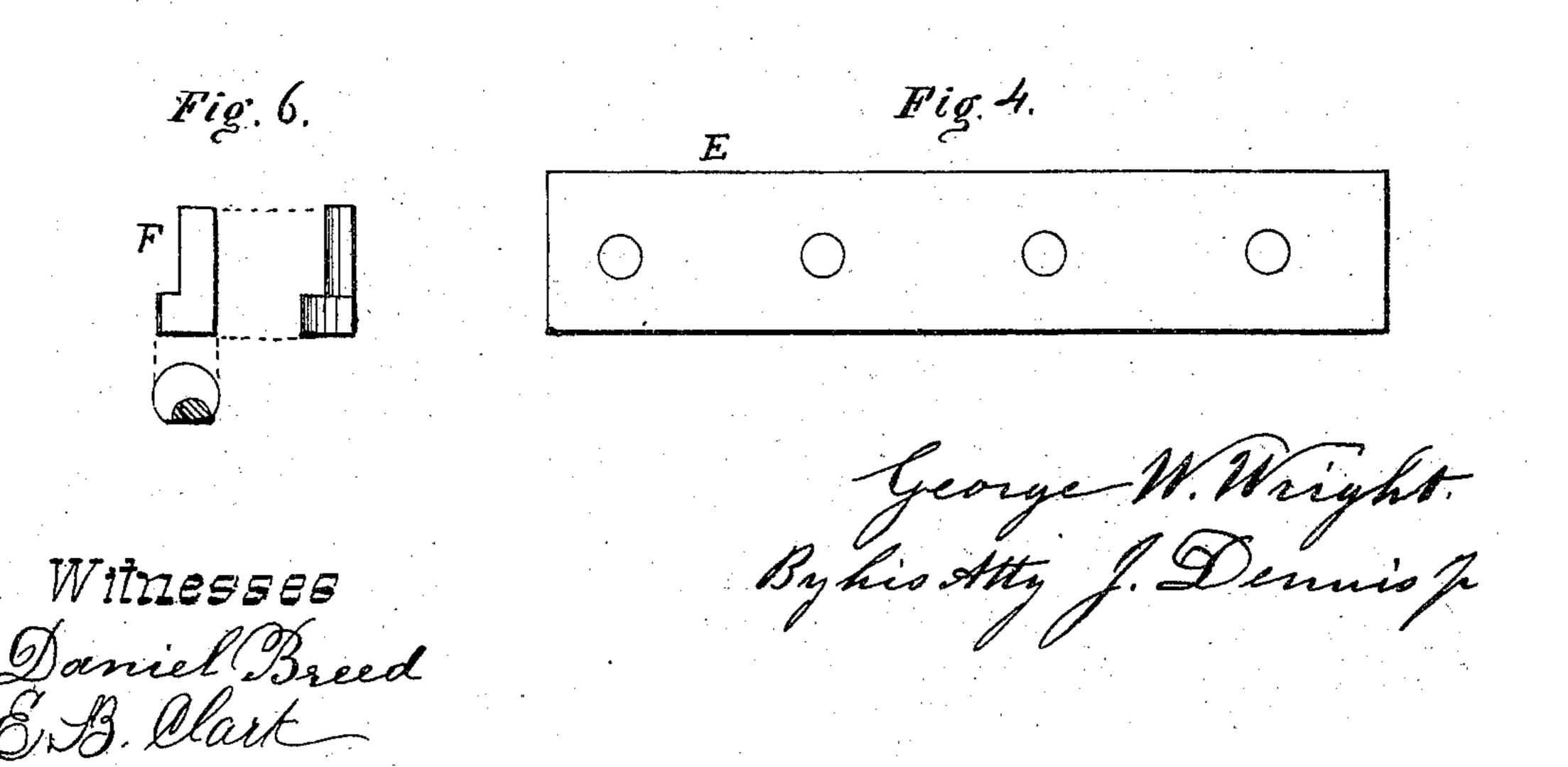
Improvement in Fastenings for Railway-Rails.

No. 133,283.

Patented Nov. 19, 1872.







## UNITED STATES PATENT OFFICE.

GEORGE W. WRIGHT, OF SALEM, OHIO.

## IMPROVEMENT IN FASTENINGS FOR RAILWAY RAILS.

Specification forming part of Letters Patent No. 133,283, dated November 19, 1872.

To all whom it may concern:

Be it known that I, George W. Wright, of Salem, Columbiana county, in the State of Ohio, have invented certain new and useful Improvements in Fish-Bars for the Joints of Railroad Rails; and I hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawing forming part of this specification.

The nature or essence of my invention consists in the particular construction, combination, and arrangement of devices forming the improvements described in the following specification and represented in the drawing.

In the above-mentioned drawing, Figure 1 is a cross-section of a railroad rail, with my improvements. Fig. 2 is a side elevation of the same, and Figs 3 and 4 are elevations of the fish-bars.

In this drawing, A A are the two ends of the rails to be joined, which should be slotted for the bolts B B to pass through the rails and allow for the expansion and contraction of the rails. C, Fig. 3, is a fish-bar, flat on one side and rounded on the other, with slots D D, of the form shown in the drawing, being rounded at one end and square and parallel at the other, so that the bolts B, which are made square under the head, will turn in the rounded end of the slot, and when screwed tight the bar C is slipped so as to bring the narrow and parallel part of the slot onto the bolt to prevent the bolt from turning back

while the bar is in that position. But whenever the bolts are to be unscrewed the bar must be slipped, so as to carry the round part of the slot to the bolt, when it may be unscrewed. The fish-bar E, Fig. 4, is also flat on one side and rounded on the other, and is perforated, and female screws cut in the perforations to fit the male screws on the ends of the bolts B, so that when the fish-bars are applied on each side of the ends of the rails the bolts B may be put through the bar C and the ends of the rails and screwed into the bar E to clamp the ends of the rails and hold them firmly together. B, Fig. 5, is an elevation of a bolt, made square under the head. F, Fig. 6, is a key; the large cam-shaped end is fitted to the rounded end of the slot D, so that it can be put into the rounded end of the slot and turned to bring a portion of the camshaped end under the head of the bolt, and left there to prevent the bar from slipping on the bolts until the key is removed.

I claim—

In combination with the rails A A, the perforated bar E provided with female screws, the bar C provided with slots, as described, and the bolts B made square under the head, to be locked by the slots in the bar C, fastened by the key F, substantially as described.

GEORGE W. WRIGHT.

Witnesses:

SAMUEL HARDMAN, ISAAC G. WILSON.