

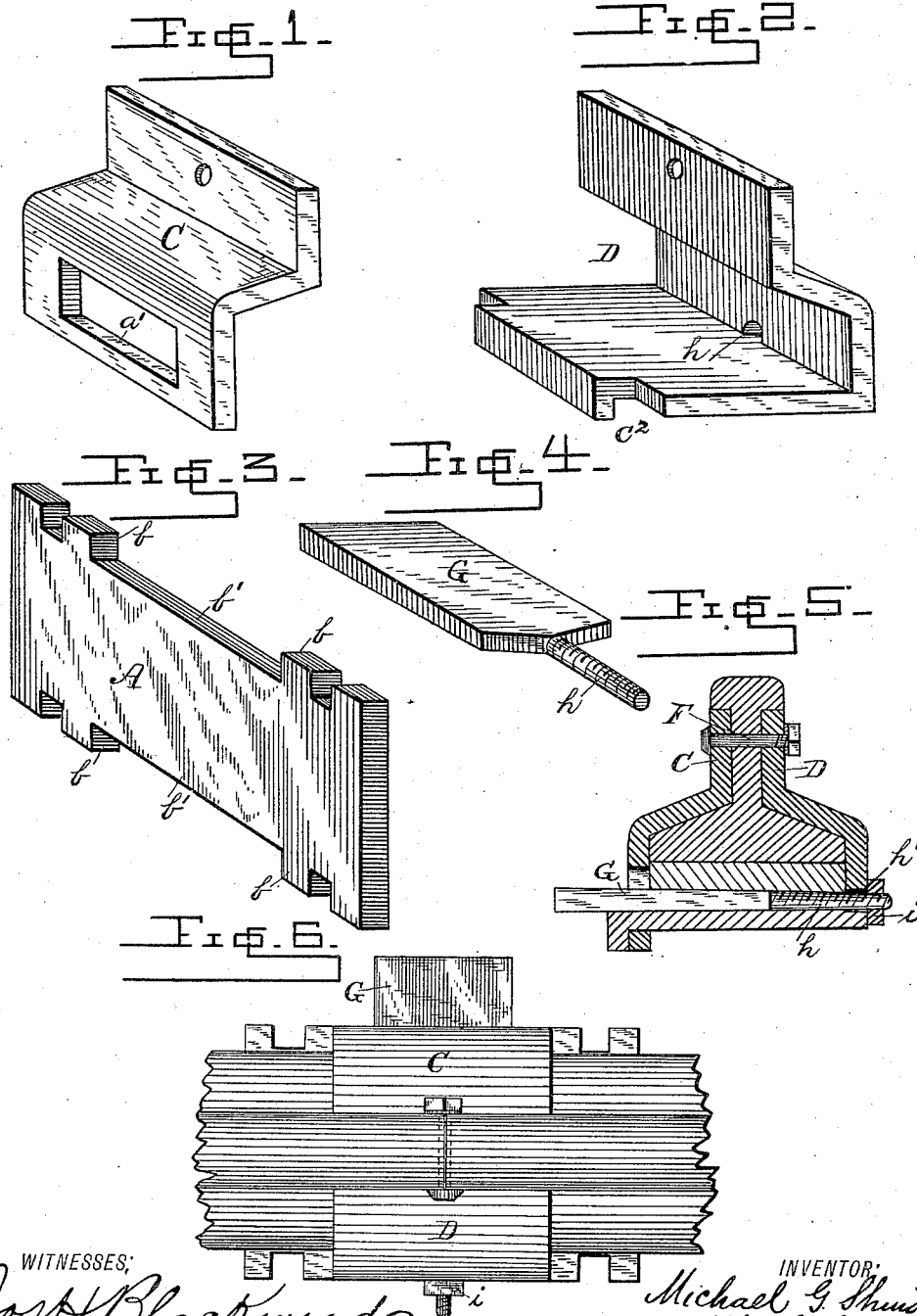
(No Model.)

M. G. SHINDLE.

RAIL JOINT.

No. 344,924.

Patented July 6, 1886.



WITNESSES:
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UNITED STATES PATENT OFFICE.

MICHAEL G. SHINDLE, OF MOUNTVILLE, PENNSYLVANIA.

RAIL-JOINT.

SPECIFICATION forming part of Letters Patent No. 344,924, dated July 6, 1886.

Application filed March 16, 1886. Serial No. 195,384. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL G. SHINDLE, a citizen of the United States, residing at Mountville, in the county of Lancaster and State of Pennsylvania, have invented certain new and useful Improvements in Rail-Joints; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to rail-joints, and it has for its object to improve the means for preventing undue wear of the ends of the rails at the joint, undue springing and vibration of the rails when subjected to the pressure of the passing trains, and lateral and endwise displacement of the rails, while admitting of their expansion and contraction.

To these ends it consists of a combination, with the rails, of a bed-plate, two clamping-plates, and a wedge-key bolt, constructed and arranged as hereinafter described and claimed.

My invention is illustrated in the accompanying drawings, in which Figures 1, 2, 3, and 4 are perspective views, respectively, of each of the locking-plates, the bed-plate, and the wedge-key; Fig. 5, a transverse sectional view of the invention as a whole, and Fig. 6, a plan.

Referring to the drawings, A is a bed-plate to support the rails, and its opposite ends rest on the ties to which it is spiked. It is provided with shoulders *b*, which form recesses *b'* *b'* at the center of each side of the plate, to receive the clamping-plates C and D. The plates C and D are designed to take the place of the ordinary fish-plates. The plate C has its upper portion formed to fit snugly under the head of the rail, against the web and over the foot, and its lower portion extends below the bed-plate A, and is provided with a central opening *a'*, to receive a wedge and another clamping-plate, as now to be described. The opposite clamping-plate, D, corresponds in form and position with plate C, except as to the bottom portion, which is extended across beneath the bed-plate and is provided with a hooked end, *c'*, which is passed through the opening *a'* in plate C, the hook engaging with the side of plate C, below the opening. The two plates at their upper portion are secured to the web of the rail by a screw-bolt,

F, passed through the rails at the joint, the ends of both rails being recessed to receive it.

G is a wedge-key, provided at one end with a screw-threaded projection, *h*, which is passed through a hole, *h'*, in the plate D, and receives a nut, *i*. When the wedge and bed-plate are in position the plates C and D are placed thereon and into the recesses *b'*, and are held by the shoulders *b* of the bed-plate against endwise movement. The hooked plate D having been put through the plate C, the wedge G is put through the opening *a'* in plate C, resting on the bottom portion of plate D and against the upper surface of the bed-plate, and driven in until the screw-threaded end *h* passes through the hole in the plate D, where it is supplied with a nut, and further tightened by turning the nut. A structure is thus formed which is simple, strong, and efficient in every respect. The ends of the rails are always held level, and any tendency to looseness or displacement of the parts can be at once corrected by tightening the screw-bolt passing through the plates and rails, and also by tightening, if necessary, the wedge-key.

What I claim is—

1. A rail-joint composed, in combination with the rails, of a bed-plate on which the rails rest, two clamping-plates, said bed-plate recessed to receive the clamping-plates, and one of which plates passes beneath the bed-plate and engages with the opposite clamping-plate, and a wedge adapted to pass through the clamping-plates and directly beneath the bed-plate, and to be tightened from the outside of one of the clamping-plates, substantially as described.

2. A rail-joint comprising, in combination, the rails, the clamping-plates C and D, the plate D being provided with a hooked end to engage with plate C, the screw-bolt uniting the rails and said plates at the joint, the bed-plate, and the wedge provided with a screw-threaded projection inserted through the said plates between the bed-plate and one of the clamping-plates, substantially as described.

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

MICHAEL G. SHINDLE.

Witnesses:

WILLIAM WAITZ,
CHAS. R. KLINE.