(No Model.)

B. F. RIX.

MACHINE FOR FORMING VEHICLE SEAT BARS.

No. 366,880. Patented July 19, 1887.

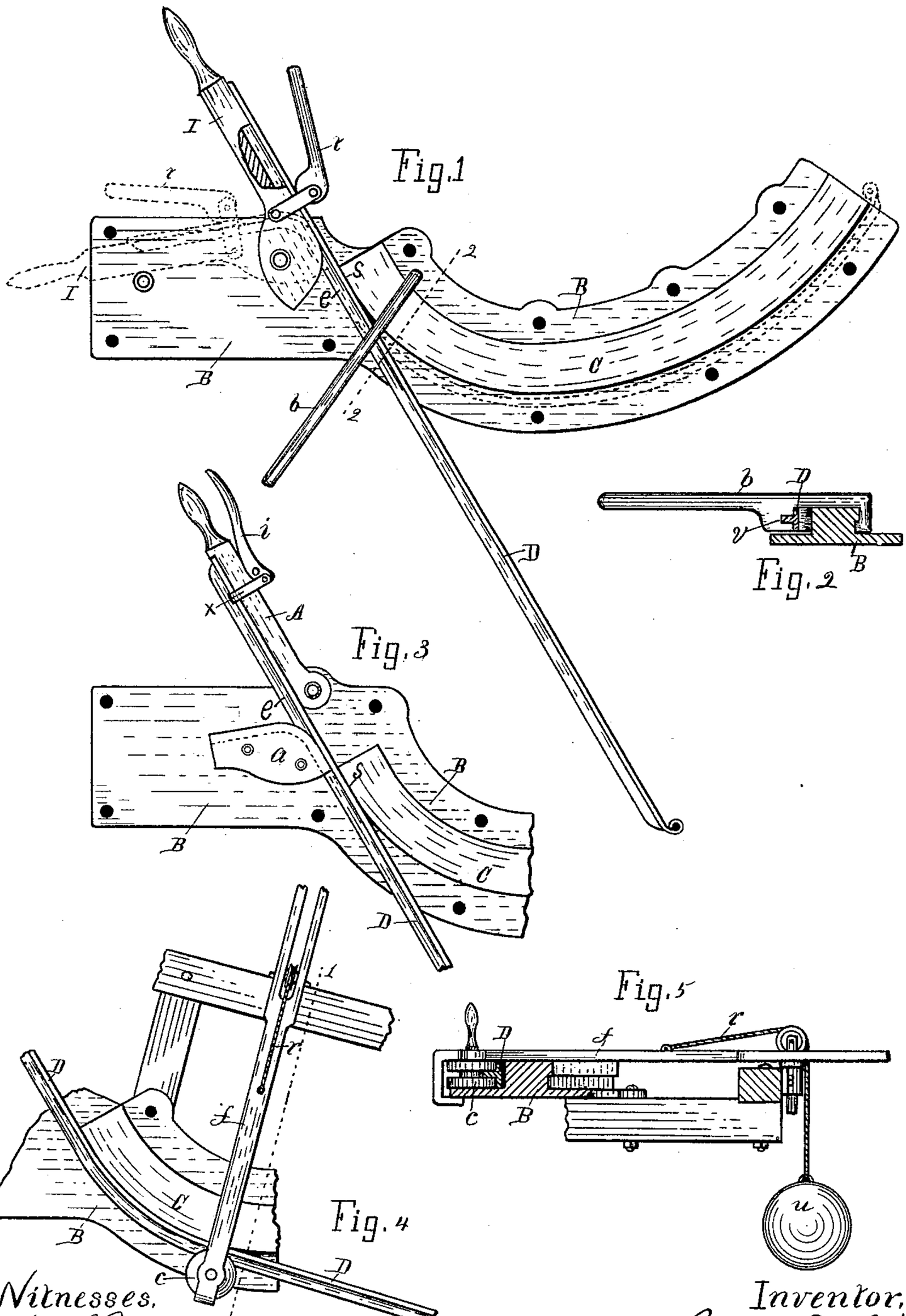

Fig. 1

Fig. 2

Fig. 3

Fig. 4

Fig. 5

Witnesses.
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UNITED STATES PATENT OFFICE.

BENJAMIN F. RIX, OF KALAMAZOO, MICHIGAN, ASSIGNOR TO R. ARTHUR STONE, OF SAME PLACE.

MACHINE FOR FORMING VEHICLE-SEAT BARS.

SPECIFICATION forming part of Letters Patent No. 366,880, dated July 19, 1887.

Application filed April 26, 1887. Serial No. 236,164. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. RIX, a citizen of the United States, residing at Kalamazoo, county of Kalamazoo, State of Michigan, have invented a new and useful Machine for Forming Vehicle-Seat Bars, of which the following is a specification.

This invention has for its object the construction of a machine for forming the seat-bars, from T-metal, of two-wheeled vehicles.

It also more especially has for its object to produce a device or machine for bending a bar of T-metal toward the single flange (sometimes called the "stem") of the T bar or rail.

In the drawings forming a part of this specification, Figure 1 is a plan view; Fig. 2, a section on lines 2 2 in Fig. 1; Fig. 3, a broken plan showing an equivalent to Fig. 1; Fig. 4, a broken plan of parts in Fig. 1, and also showing parts below described; and Fig. 5 is a section on line 1 1 in Fig. 4.

In Fig. 1, D is a T-rail, and the dotted position of this rail in said figure shows it bent into the ordinary shape of a seat-bar for vehicles. The part to which this invention more particularly relates is illustrated at the left-hand portion of Figs. 1 and 2, one being intended as an equivalent to the other. It is a difficult matter to bend the T-rail toward its single flange *e* without a proper tool, form, or machine for the purpose, for the reason that the single flange would bulge when trying to bend it upon itself.

At B is shown a bed-plate, to which the lever I, Fig. 1, is pivoted. This pivoted end is rounded on one side, and the lever is grooved from below the handle end of said lever to the lower end of said rounded portion, said groove being a channel to receive the single flange *e* of the T-rail. An eccentric lever, *t*, is pivoted to the forming-lever I, to hold the end of the T-rail clamped firmly to said lever I, as in Fig. 1. A raised portion of the former at *s* serves as a shoulder to contact the upper face of the T-rail. Now, by swinging the lever I to the position shown in dotted lines in Fig. 1 this end of the T-rail is bent or shown to form the seat-support at the rear end.

During the operation of bending it will be observed that that portion of the single flange *e* which is bent upon itself is in a groove just large enough to receive it, and hence it is prevented from bulging laterally. As an equivalent to this, I employ in lieu of the grooved lever I a fixed block, *a*, grooved, and corresponding in shape to the lower end of lever I, and a lever, A, pivoted so as to be clamped by the clamp and lever *x i* to the upper face of the T-rail. By swinging the lever A down the T-rail will be bent as in Fig. 1, and during the operation that portion of the single flange *e* which is bent upon itself will be in the grooves of the block *a*, and hence cannot bulge laterally, thus the results in both instances are the same.

The raised curved portion C of the bed-plate B conforms to the desired curvature of the body portion of the seat-bar D. It will be observed that this portion is bent away from the single flange *e*, as shown by the dotted rail in Fig. 1. This part of the bar may be bent by any suitable means. At *b* is a pinch-lever catching over the edge of the raised part of the former C, and recessed, as at V, Fig. 2, to fit the shape of the T-rail. With this lever the rail can be bent a little at a time around the form C.

The lever *f*, bearing the grooved wheel *c*, Figs. 4 and 5, may be used in lieu of the lever *b*. A rope, *r*, is attached to the lever *f*, and is passed over a pulley and weighted at U. The pulley has a pivoted bearing, and the lever *f* is slotted or forked and straddles said bearing below the pulley, and is thus fulcrumed to swing laterally. In the operation of swinging the lever *f* the wheel *c* traverses the T-rail flange, and the weight keeps the wheel in close contact around the entire curve of the portion C of the bed-plate B.

Having thus described my invention, what I claim is—

1. A machine for bending the seat-bars of vehicles, which bars consist in T-rails, toward the single flange of the rail a bed-plate or suitable support, the fulcrumed lever having the groove to receive the single flange of the rail, or the described equivalents to said grooved

lever, means for clamping the rail to the lever, and a shoulder or stop adapted to contact the flat face of the rail near the point of bending, substantially as set forth.

2. A machine for forming vehicle-seat bars from T-metal, comprising a bed-plate, the fulcrumed lever having the groove to receive the single flange of the T-rail, or the described equivalent to said grooved lever, means for clamping the T-rail to the lever, a raised portion constituting a form for shaping the body part of the T-rail, and serving at the end as a stop to contact the flat face of the T-rail while bending the single flange upon itself, and suitable means for bending the body portion of the T-rail around its form, substantially as set forth.

In testimony of the foregoing I have hereunto subscribed my name in presence of two witnesses.

BENJAMIN F. RIX.

Witnesses
R. ARTHUR STONE,
GEO. D. B. HALL.