L. EMERSON, A. J. CLARK & J. T. RICHMOND.

Former for Bending Carriage-Seat Irons.

No. 168,007. Patented Sept. 21, 1875.

Fig 1

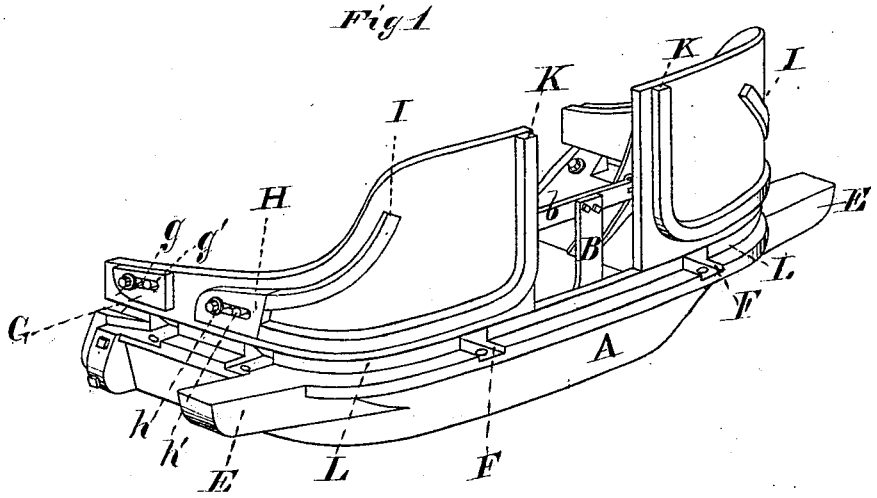
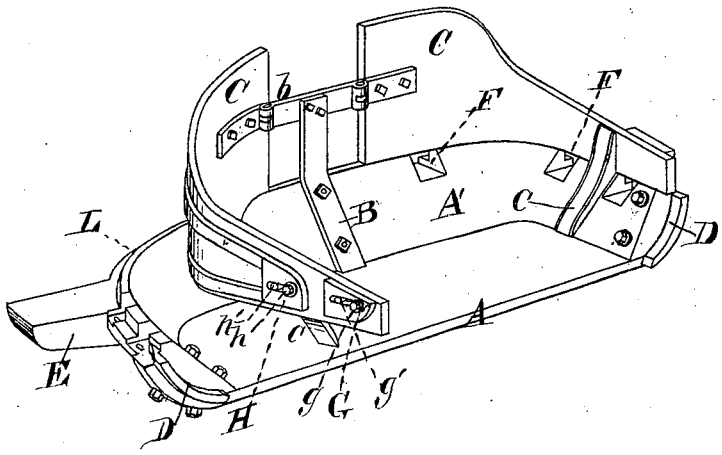


Fig 2



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UNITED STATES PATENT OFFICE.

LOWE EMERSON, ALEXANDER J. CLARK, AND JOHN T. RICHMOND, OF CINCINNATI, OHIO.

IMPROVEMENT IN FORMERS FOR BENDING CARRIAGE-SEAT IRONS.

Specification forming part of Letters Patent No. **168,007**, dated September 21, 1875; application filed August 28, 1875.

To all whom it may concern:

Be it known that we, LOWE EMERSON, ALEXANDER J. CLARK, and JOHN T. RICHMOND, of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Forming-Blocks for Making Carriage-Seat-Shifting Rails and Irons; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification, in which—

Figure 1 is a perspective view from the rear. Fig. 2 is a perspective view from the front.

The object of this invention is to produce a device for making shifting-rails and seat-irons for carriages, whereby the cost of manufacture can be very greatly lessened, and a better article can be afforded to the trade; and to this end it consists in combining and uniting in one device forms for shaping and fashioning the several rails and seat-irons used and applied in carriages, wagons, and the like, substantially as will now be set forth.

In the accompanying drawings, A denotes the base of the former or block, to which is secured and attached in any suitable way, as now shown upon flange or curved part A′, the standard B. To this standard may be hinged directly the arms C, or the hinges may be attached to the ends of the arms of cross-piece *b*, which is fixed to and upon B, as shall be found useful and suitable. In the first method the said arms may be brought close to the said standard, and in the latter they can be set at any desired distance from it. D, on the front edge of the inclined part A′, or on a flange of A, is the form for the seat-handle. This is now represented as adapted for making a circular or curved handle, but it is obvious that we need not limit ourselves to any particular shape. This may be secured in place by means of nuts and bolts. E is the form for the bow-rest; F, the collar or pin rail and guard for the seat-irons to attach the shifting rails to the seat. G is the goose-neck form, which is movable on bolt *g*, playing in slot *g′*, and held at any desired point by a nut. H is the arm-rest form, the end of which is movable on bolt *h*, playing in slot *h′*, and held in position by a nut. I is the arm-rest to the lazy-back; K, the former for the lazy-back standard-rail. L, flanges on which the shifting-rail is formed. To each of the arms C is fixed on the outside a curved projection, *c*, adapted to and resting upon and stayed by the curve of A when either of said arms is turned fully out, so as to have its edge come in line with the top of A.

In using the block or former, we first swage out the goose-neck, and weld it and the lazy-back to the rail straight, and also the rail collars and pins; then we place the rail upon the former or block and hammer it to its position cold. This is done quickly, and thus the result to be attained is very surely and handsomely effected. The arms being hinged, as above described, the shifting-rail can be readily removed after it has been formed.

The advantages to be gained by use of our said invention are many and great. The cost of manufacture is very much lessened, because the work can be more rapidly and more surely and effectively done than by any other method or process now in use for this purpose. The several irons or parts are all made, in every instance, uniform and alike; and thus, when occasion calls, they can be used interchangeably.

Having thus described our invention, what we consider new, and desire to secure by Letters Patent, is—

The former or block, herein described, for shaping and fashioning shifting rails and seat-irons for carriages, substantially as and for the purposes set forth.

In testimony that we claim the foregoing as our own we affix our signatures in presence of two witnesses.

LOWE EMERSON.
ALEXANDER J. CLARK.
JOHN T. RICHMOND.

Witnesses:
JAS. H. HALLADAY,
WM. FISHER.