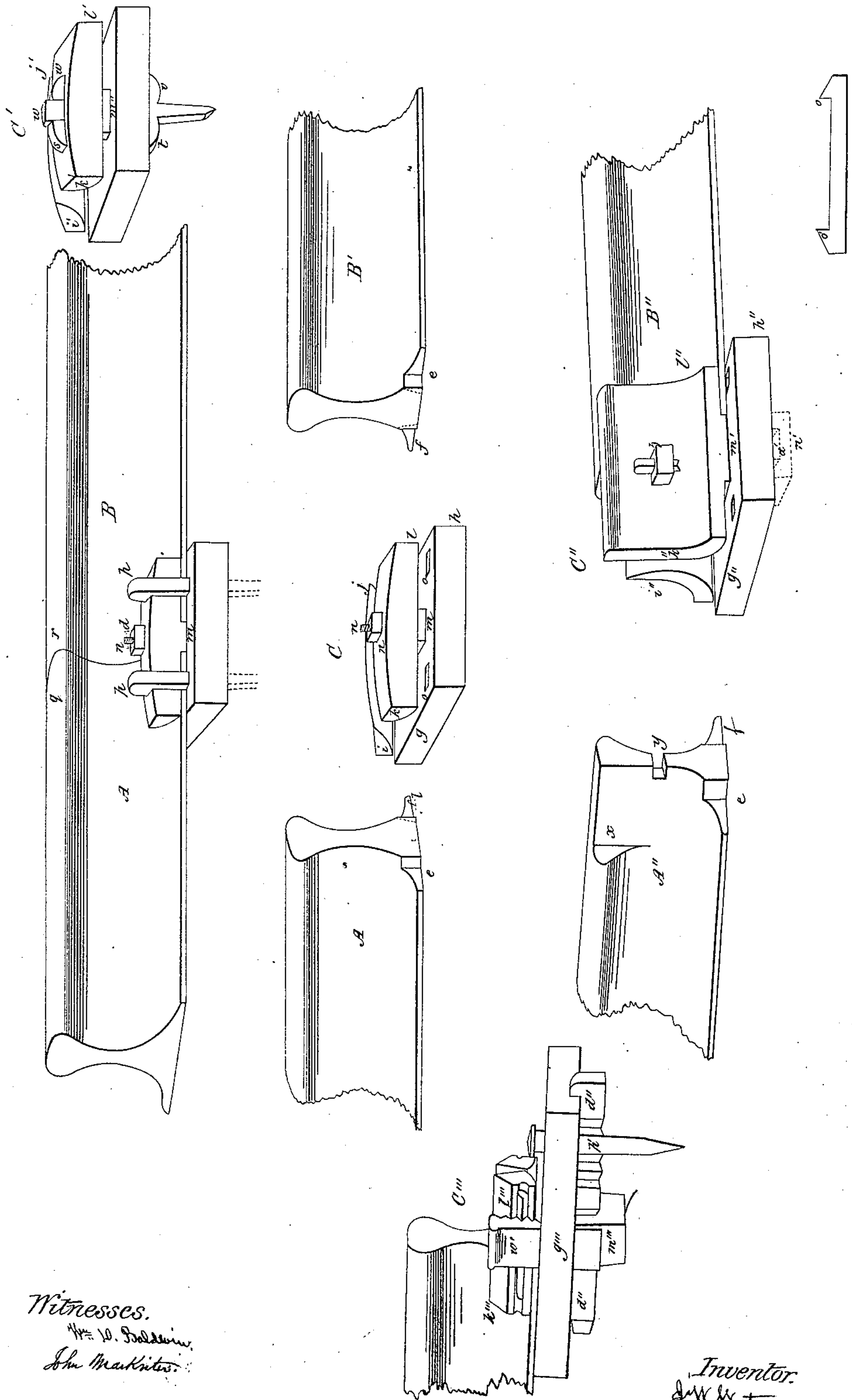


J.W. Wetmore.

Railroad Chair.

N^o 25,228.

Patented Aug. 23, 1856



Witnesses.
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John Markriter.

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UNITED STATES PATENT OFFICE.

J. W. WETMORE, OF ERIE, PENNSYLVANIA.

RAILROAD-CHAIR.

Specification of Letters Patent No. 25,228, dated August 23, 1859.

To all whom it may concern:

Be it known that I, J. W. WETMORE, of Erie, in the county of Erie and State of Pennsylvania, have invented a new and Improved Railroad-Chair; and I do hereby declare that the following is a full and exact description, to wit:

The nature of my invention is as follows,—In most of the railroad chairs now in use the jaws on the web of the rail do not hold the rail close and being along the outer edge of the web, the weight on one rail operates to disadvantage in carrying the next rail down.

The object of my invention is to have the pressing surfaces which bear the end of the next forward rail down, larger and firmer and have them bear more on the end of that rail and on the thicker part of the web. The means of accomplishing this object are, to have the web of the ends of the rails notched, and have the jaws of the chair rise through these notches and close down over the ends of the rails. From the shape of the side of the chair, I call it the T chair.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A, B, A', B', &c., are the ends of the rails; C, C', &c., the chair; *e, e, f, f*, notches about $\frac{1}{2}$ an inch by $1\frac{1}{4}$ inches cut out of each corner of the web of the rail. These may slant as represented by the dotted lines; *i, j, k, l*, the upper lips or jaws of the chair about 4 inches long and one inch thick made of wrought iron; *g, h*, the base of the chair about 5 inches long and 6 wide of cast or wrought iron; *m* or *m'*, one of the connections by which the jaws *i, j*, &c., are welded, twisted, keyed or bolted to the base; *k, l*, and *m* or any corresponding jaw and rivet, are made of one piece of wrought iron and then riveted into the base on a former.—In case both jaws are riveted to the base, the ends at *i, k, l*, and *g*, &c., would be beveled so the rail could be wedged into the chair. To provide against irregularity of the rails, for repairing &c., at least every other chair will be of a different form from this. The inner jaw would be riveted as stated. The outer arm will be bolted or keyed. *m*, will then be a bolt about an inch in diameter; *n*, a heavy nut; *d*, a wedge key through the

bolt over the top of the nut, the nut being grooved diagonally for the key and the end of the key bent down to hold it in its place: *m*, has a heavy head under the base and slants outward so that the rail will be pressed under the inside jaw: The spikes *p, p*, may have their heads turned out and rest not on *k, l*, but on *g, h*, and thus form a better brace to *k, l*. The inside is spiked in this or any other way.

The third means of fastening the outer jaw is represented by C'. *s, t, w, v*, are jibs or clevises and *w'*, a wedge spike that will press the rail firmly under *i, j* while it wedges the clevises over the ends of the rails; a single clevis may be used with its hooks turning inward and the spike on the outside of it wedging the clevis and rail in the same direction. The jaw *k'' l''*, may be extended upward to form part of the bearing surface as in C'', the outside of the cap of the rail being notched out as at *x*. The jaw *i''* &c. extends higher than *i, j*, and the bolt *z* passes through *y* and is held by a key or nut *z*.

The inside of the base may have a ridge or shoulder *o*, raised about $\frac{3}{8}$ of an inch. When the chair is of the first form and both jaws are riveted or welded onto the base, this shoulder may also be on the inside of the base of the chair *o'*.

n' represents the foot of the T jaw *k'' l'' m''* extending through the base and *d'* a hole for a wedge key. This key may extend through the foot of the jaw *i''* also, or *i''* can be riveted under the base. The key will be held in its place by a spike at its head; it may pass above a light wedge in the bottom of *i''* driven from the opposite side to accommodate the irregularity of the rails.

In Fig. C''', *k''' l''' m'''* is the T jaw. The key *d''* passes across the tie and is held to its place by the diagonal position of the spike *p'* in its notches. *w'* is a wedge to force the rails under the inside, riveted jaw and *s'* is a key to hold *w'* to its place. The small end of *s'* is bent outward to prevent its jarring out of its grooves. *m'''* may be broader and the key *d''* pass through under *g'''* dividing the key *w'* at the lower part.

The tie is grooved and mortised under the rail and the grooves continued about six inches outside of the rail, to admit and hold

the bottom of the jaw and the wedge keys. A hole is bored through the tie at the deepest mortise for the purpose of drawing the water from the groove and mortises.

- 5 When the weight is on A, it will press on *g* and through *m*, draw down *y'*, *k l* onto the web of B and carry it down so that its bearing surface *r* will be even or very nearly so with the surface *q*; *k'' l''* forms part of
10 the bearing surface and will pass the wheel over the joint (when used) with still less injury to the ends of the rails.

What I claim as my invention and desire to secure by Letters Patent is—

The T lip or jaw (as at *k l m* or *k''' l''' m'''*) ; notching the web of the rail as at *e e*; and, through these notches, having the bottom of the jaw pass down and riveted or keyed under the base *g h*. 15

J. W. WETMORE.

Witnesses:

WM. D. BALDWIN,
JOHN MARKINTER.