J. KING & R. E. CAMPBELL.

Irons for Wagon-Boxes.

No. 211,514. Patented Jan. 21, 1879.

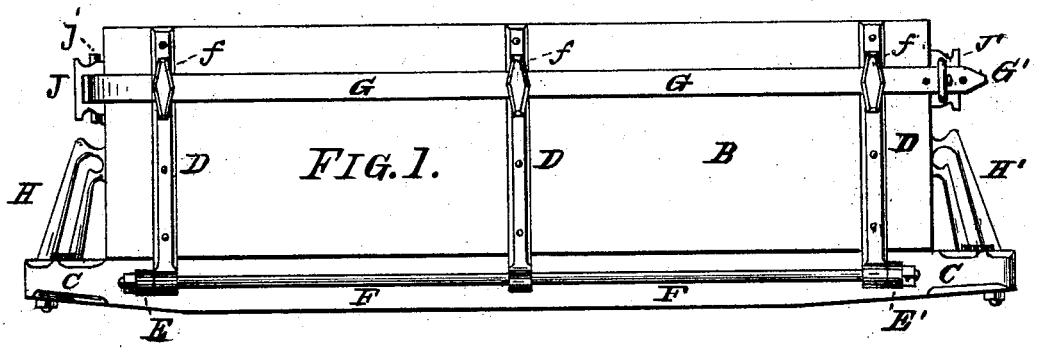

FIG. 1.

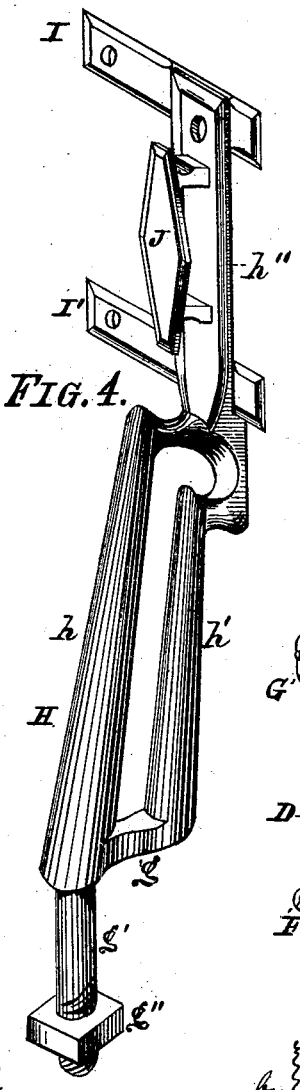

FIG. 4.

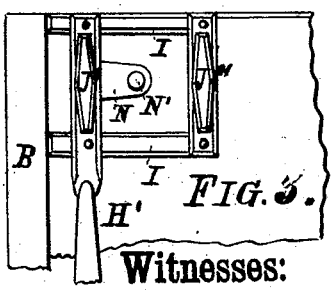

FIG. 3.

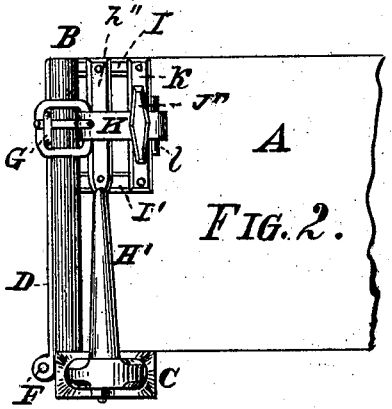

FIG. 2.

Witnesses:

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UNITED STATES PATENT OFFICE.

JOB KING AND ROBERT E. CAMPBELL, OF BUFFALO, NEW YORK.

IMPROVEMENT IN IRONS FOR WAGON-BOXES.

Specification forming part of Letters Patent No. **211,514**, dated January 21, 1879; application filed October 15, 1878.

To all whom it may concern:

Be it known that we, JOB KING and ROBERT E. CAMPBELL, both of Buffalo, Erie county, New York, have jointly invented certain new and useful Improvements in Irons for Wagon-Boxes; and we do hereby declare that the following description of our said invention, taken in connection with the accompanying sheet of drawings, forms a full, clear, and exact specification, which will enable others skilled in the art to which it appertains to make and use the same.

This invention has special reference to trimmings for wagon-boxes; and it consists in the peculiar arrangement of parts and details of construction, as hereinafter first fully set forth and described, and then pointed out in the claims.

In the drawings heretofore mentioned, Figure 1 is an end view of a wagon-box provided with our improved trimmings. Figs. 2 and 3 are side views. Fig. 4 is a perspective view of one of the side braces.

Like letters of reference indicate corresponding or similar parts in all the figures.

A is a wagon-box of the usual construction, having the end-gate B arranged in the customary manner. This gate is hinged to the back cross-piece C by means of a number of hinge-plates, D, and the eyebolts E E′, said hinge-plates having eyes for the passage of a bolt, F, around which the said end-gate swings. Near the upper extremity of these hinge-plates D are provided loops *f* for the passage of the strap G. H H′ are the double braces. They are produced in the process of casting and annealing, and consist each of the double members *h h′* and the upper shank, *h″*, which latter part is provided with a loop, J, for the reception of one end of the strap G, which said strap is held in said loop by means of a pin, *j*, Fig. 1, on one end, and a pin, N′, fixed to a projection, N, on said shank *h″*, on the other end, as illustrated in Fig. 3. The members *h h′* are joined on their lower ends by a cross-piece, *g*, and they have a projecting pin, *g′*, provided with a nut, *g″*, by means of which said braces are secured to the back as well as the front cross-pieces C. Two of these braces (the rear ones) only are provided with the loops J, while the other two are made without them; so is one of the rear ones provided with the projection N and the tongue N′.

Instead of passing the strap G through the loops J and hooking it onto the tongue N, we may provide the rear loop, J″, Fig. 2, with a buckle-piece, K, fastened behind said loop by a pin, *l*, and secure the strap G to said buckle-piece. This arrangement, however, has the disadvantage that, unless the loop J″ is set far back, the strap G will not hold the door close up to the wagon-box, which objection is entirely overcome by the fastening illustrated in Fig. 3.

To enable the braces H H′ to be secured to the box A without indenting the wood, we provide them with bearers I I, upon which the rear loop, J″, is fastened.

It will be observed that one of the essential features of our invention consists in the production of the various parts described by casting and subsequent annealing in the so-called malleable iron in the peculiar shape described, whereby we are enabled to produce said trimmings at a trifling expense as compared with those now produced in the process of forging, the irons so produced being much stronger and neater, while there are no doubtful welds or burned iron in any of these parts, which so frequently happens in trimmings produced by the method of forging mentioned.

To lock the end-gate B to the box A, the strap G is first passed through the front loop, J′, and then hooked onto the tongue N′, after which the remaining end is passed through the rear loop, J″, which securely holds the strap upon said tongue N′.

Having thus fully described our invention, we claim as new and desire to secure to us by Letters Patent of the United States—

1. As an improved article of manufacture, a double brace having the loop J for the passage of the gate-strap G in one piece of metal, as and for the object specified.

2. A double brace having the obliquely-arranged members *h h′* joined at their base by a cross-bar, *g*, and at their upper end, to a shank, *h″*, said shank being provided with a loop, J, and the whole produced entire in the process of casting and subsequent annealing, as and for the purpose mentioned.

3. A double brace having the shank *h″*, with

the loop J′, and the projection N, with the tongue N′, as and for the purpose stated.

4. The combination, with the shank *h″*, having the loop J′, and the projection N, with the tongue N′, of the bearers I and the loop J″, as and for the purpose stated.

5. A double brace having the shank *h″*, with the loop J′, and the projection N, with the tongue N′, the bearers I, and the loop J″, in combination, as specified.

6. In a wagon-box, the combination, with the double brace H, having the loop J, and the strap G, secured to said loop by the pin *j*, of the brace H′, having the loop J′, and the projection N, with the tongue N′, as stated, the said strap being passed through the loops *f* on the hinge-plates D, as specified, and secured to the tongue N′, as stated.

7. The combination, with the box A, having the hinged end-gate B, of the loop J′ on the base *h″*, having the projection N, with the stationary tongue N′, and the strap G, as and for the use and purpose indicated.

In testimony that we claim the foregoing as our invention we have hereto set our hands and affixed our seals in the presence of two subscribing witnesses.

JOB KING. [L. S.]
R. E. CAMPBELL. [L. S.]

Attest:
MICHAEL J. STARK,
FRANK HIRSCH.