

(No Model.)

W. H. & E. L. BAKER.

METHOD OF MAKING FIFTH WHEEL BLOCKS.

No. 373,263.

Patented Nov. 15, 1887.



Fig. 1



Fig. 2



Fig. 4



Fig. 3

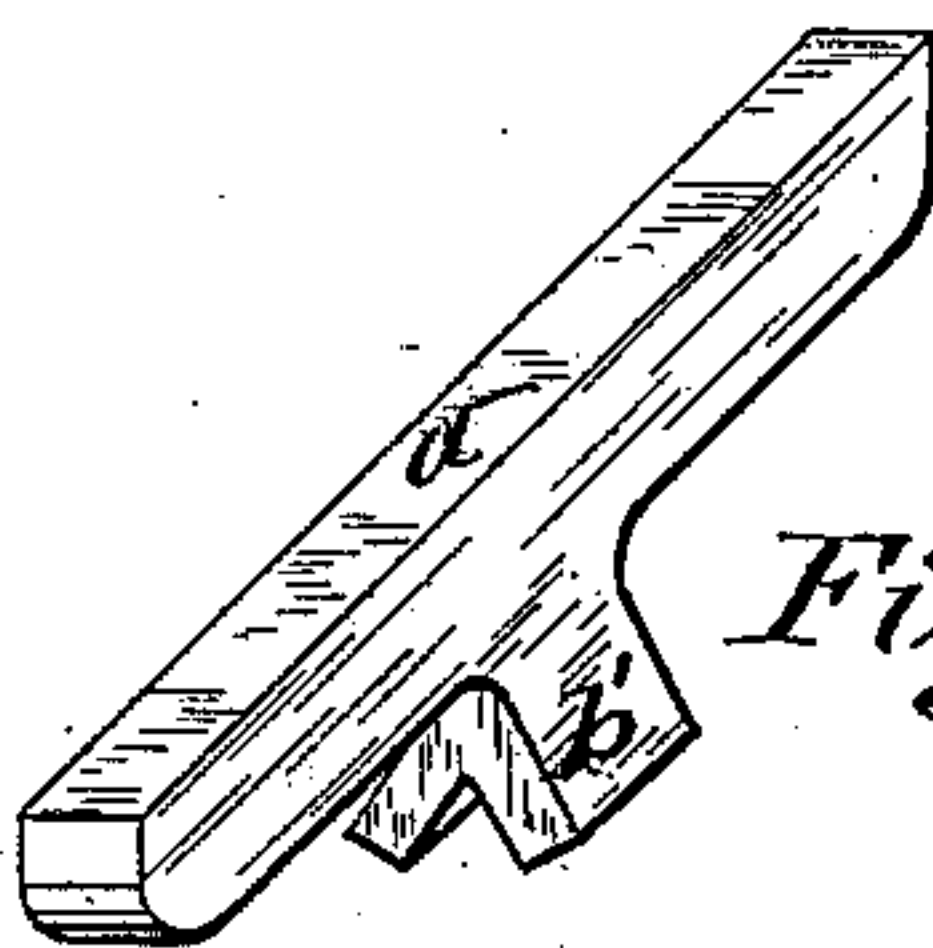


Fig. 5

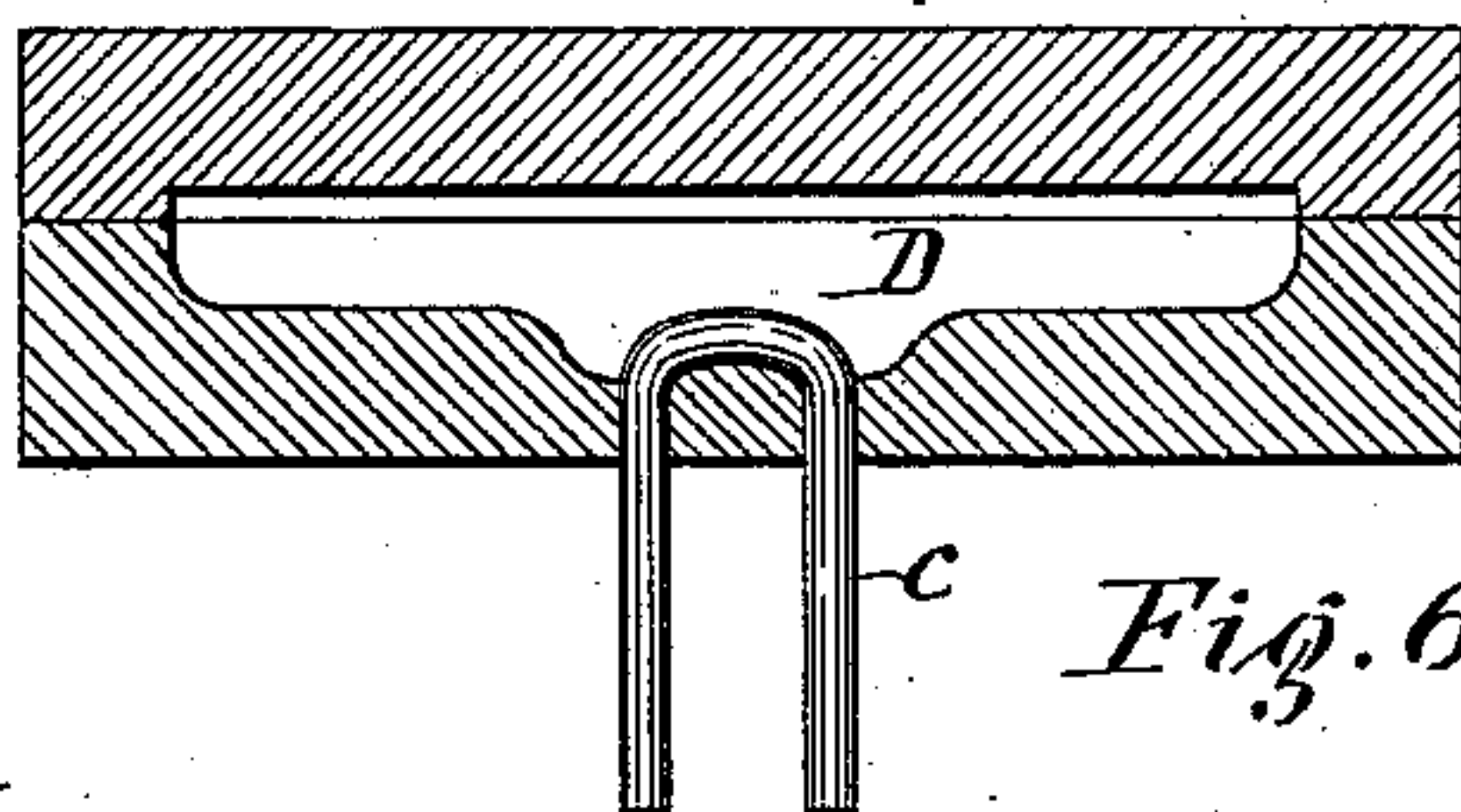


Fig. 6

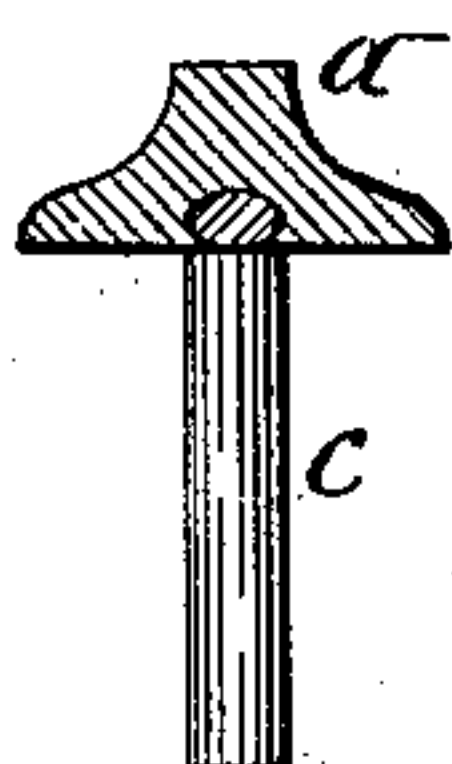


Fig. 7

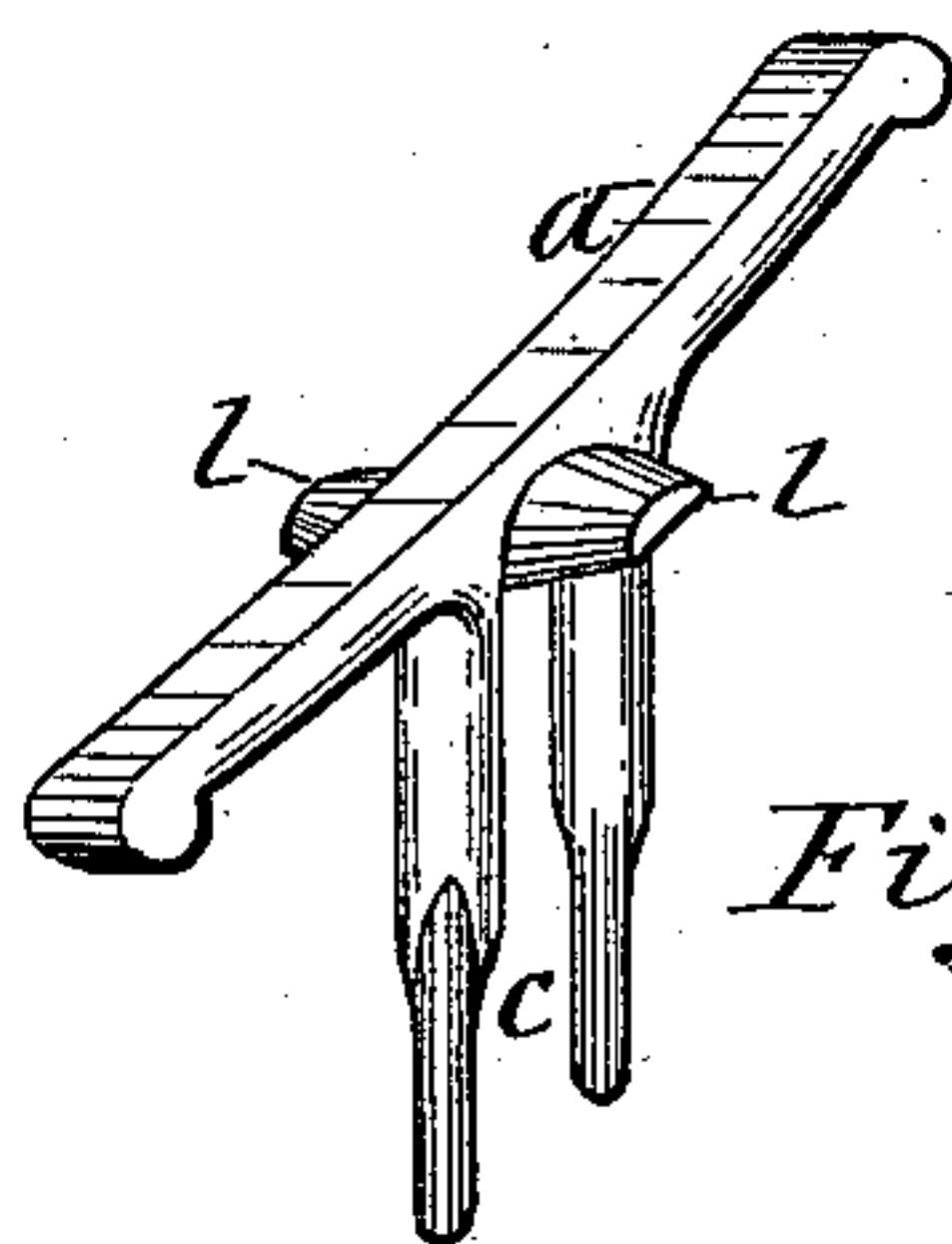


Fig. 8

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UNITED STATES PATENT OFFICE.

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METHOD OF MAKING FIFTH-WHEEL BLOCKS.

SPECIFICATION forming part of Letters Patent No. 373,263, dated November 15, 1887.

Application filed February 12, 1887. Serial No. 227,354. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM H. BAKER, of Ithaca, Tompkins county, State of New York, and ELLIS L. BAKER, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Fifth-Wheel Blocks, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to the manufacture of the so-called "fifth-wheels" or "fifth-wheel blocks" having integral with them the clips by which they are attached to the axle and head-block.

The invention consists in an improved process of manufacturing the aforesaid devices from wrought metal, at a reduced cost, in a more expeditious manner and in perfect form.

The annexed drawings illustrate the successive steps of our improved process and the effects of the same, as will be referred to in the following description of the process.

Figure 1 represents a blank from which the clip of the fifth-wheel section or block is formed. This blank we form by simply bending a bar of wrought-iron of the requisite length and size into approximately U shape, as shown. We prefer to use for said purpose merchant iron of oval shape in cross-section and bend it in a plane at right angles to the greater diameter thereof.

Fig. 2 represents a blank from which the fifth-wheel section is formed. This blank we prefer to cut by means of suitable dies out of a bar of wrought-iron of rectangular form in cross-section, in the manner illustrated in Fig. 3 of the drawings, in which *a a a* represent the blanks. This blank is formed, with the enlargement *b* at its center, for the purpose of obtaining sufficient metal at that point to produce the usual laterally-projecting lips, *l*, by which the fifth-wheel section receives additional bearings on the axle or head-block. When said lips are not required, we form the blank *a* of a plain square bar without the enlargement *b*, as shown in Fig. 4 of the drawings.

The central portion of the blank *a* we spread laterally, and preferably do this by first slitting said portion of the bar or its enlargement

b longitudinally, and then spreading apart the slitted portion, as illustrated in Fig. 5 of the drawings. We then heat the blank *a* to a suitable heat and place it with its slitted and distended central portion astride the convex side of the bent portion of the clip-blank *c* and clinch it onto the latter. This we prefer to accomplish by placing the bent portion of the clip-blank *c* cold into a suitable swaging-die, *D*, as represented in Fig. 6 of the drawings, said die being of the requisite shape to receive the blank *a* and partially impart to it the shape of the fifth-wheel section. While holding the clip-blank *c* in the aforesaid die we place over it the blank *a*, in the manner before described, and then, by means of a drop-press holding the die, we subject the inclosed blank *a* to the requisite pressure to clinch the slitted and distended central portion, *b'*, of the blank *a* onto the inclosed bent portion of the clip-blank *c*, and in doing this the two sides of the portion *b'* are pressed into the shape of the lips *l l*, hereinbefore referred to, the combined blanks being then in the shape illustrated in Fig. 7 of the drawings, which is a transverse section taken through the center. We then heat the united blanks to a welding heat and place the same between proper swaging-dies held in a drop-press, by means of which we subject the united blanks to the requisite pressure to impart to them the shape of the fifth-wheel block shown in Fig. 8 of the drawings.

The surplus material is usually pressed out into the shape of fins projecting from the block after it leaves the last dies, and these fins we subsequently cut off and the surfaces are smoothed and finished in the usual and well-known manner.

Having described our invention, what we claim is—

1. In the process of manufacturing fifth-wheel blocks, the auxiliary steps consisting in forming the clip-blank by bending a bar into approximately U shape, forming the blank for the fifth-wheel section of another bar and heating the same to a suitable heat, and then clinching the central portion thereof onto the bent portion of the cold clip-blank, substantially as set forth.

2. In the process of manufacturing fifth-

wheel blocks, the auxiliary steps consisting in forming the clip-blank by bending a bar into approximately U shape, forming the blank for the fifth-wheel section of another bar, then slitting and spreading the central portion of the latter bar, and clinching the spread portion onto the bent portion of the clip-blank; substantially as set forth.

3. In the process of manufacturing fifth-wheel blocks, the auxiliary steps consisting in forming the clip-blank by bending a bar into approximately U shape, forming the blank for the fifth-wheel section of another bar, slitting longitudinally the central portion thereof, spreading laterally the slitted portion, and clinching the latter onto the bent portion of the clip-blank, substantially as described.

4. In the process of manufacturing fifth-wheel blocks, the auxiliary steps consisting in forming the clip-blank by bending a bar into approximately U shape, forming the blank for the fifth-wheel section of another bar with an enlargement intermediate its length, slitting said enlargement, spreading laterally the slitted portion, and clinching the latter onto the bent portion of the clip-blank, substantially as set forth.

5. The process of manufacturing fifth-wheel blocks, consisting in forming the clip-blank by bending a bar into approximately U shape, forming the blank for the fifth-wheel section of another bar with an enlargement intermediate its length, slitting said enlargement lengthwise the bar, spreading laterally the slitted portion, clinching the latter onto the convex side of the bent portion of the clip-blank, then heating the blanks in their said connected condition to a welding heat and welding them together and imparting thereto the shape of the fifth-wheel block, and then removing the pins therefrom and finishing the surfaces thereof, substantially as described.

In testimony whereof we have hereunto signed our names and affixed our seal, in the presence of two attesting witnesses, at Syracuse, in the county of Onondaga, in the State of New York, this 1st day of February, 1887.

WILLIAM H. BAKER. [L. S.]
ELLIS L. BAKER. [L. S.]

Witnesses:

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H. P. DENISON.