

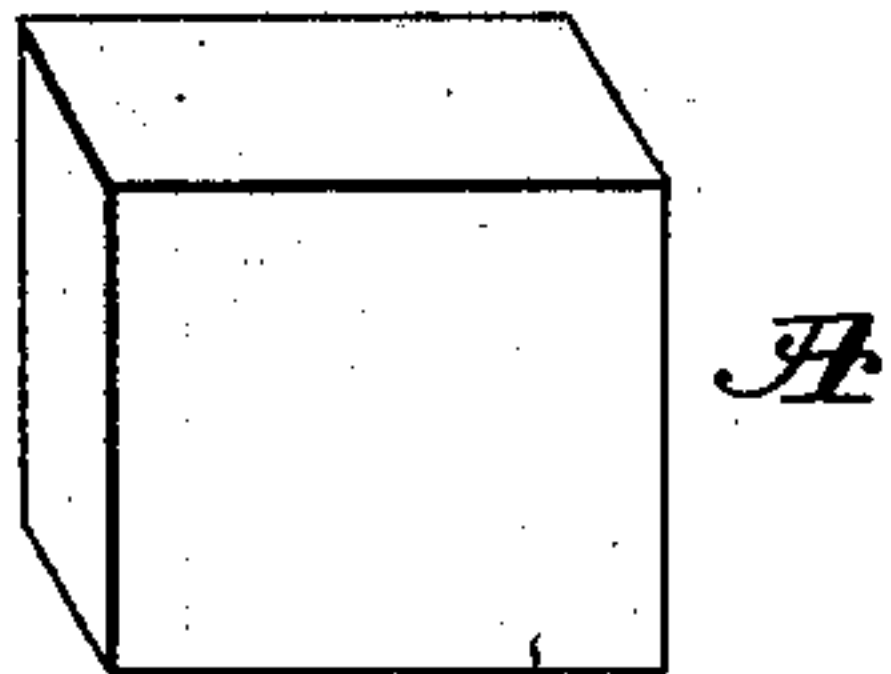
(No Model.)

H. W. WYMAN & L. F. GORDON.  
METHOD OF MAKING CAR COUPLING HOOK BLANKS.

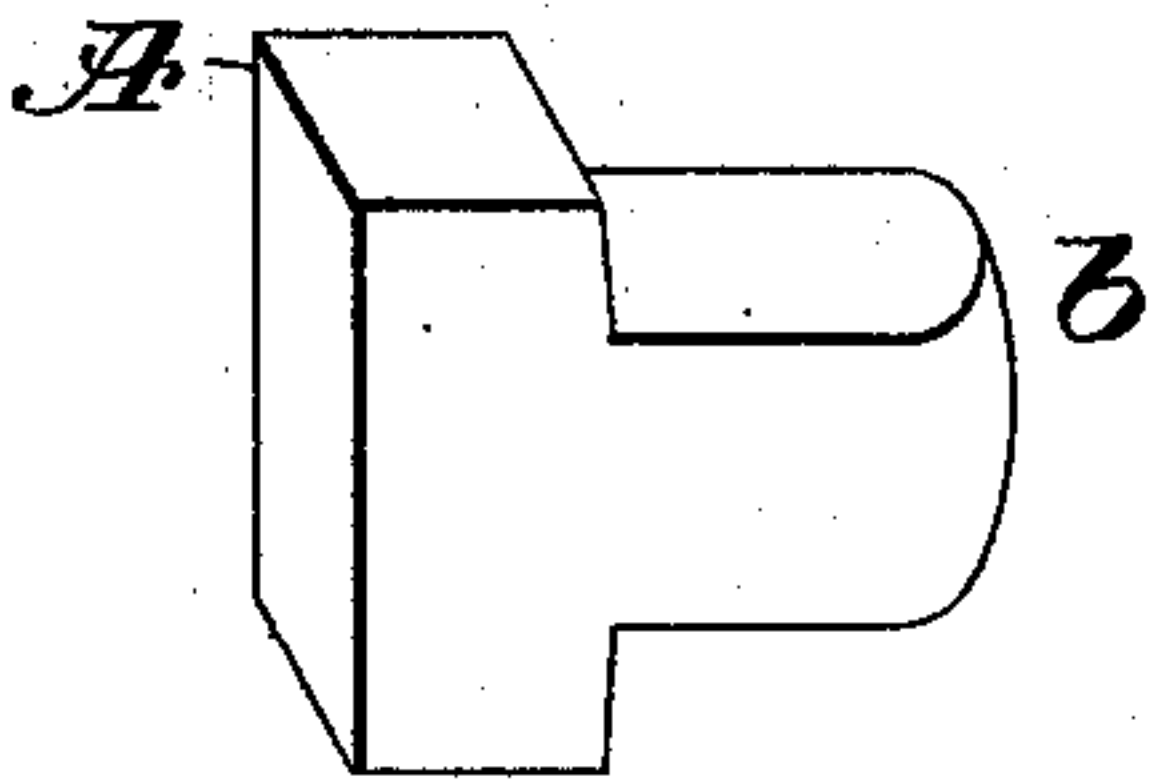
No. 524,879.

Patented Aug. 21, 1894.

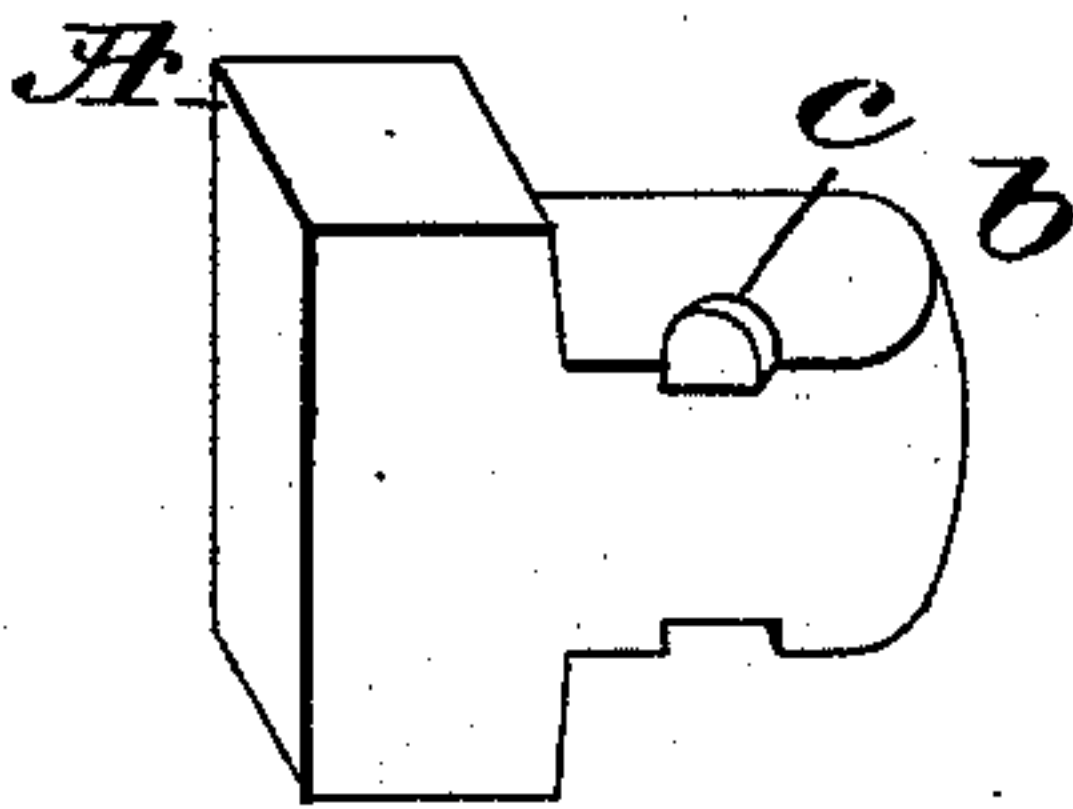
*Fig:1.*



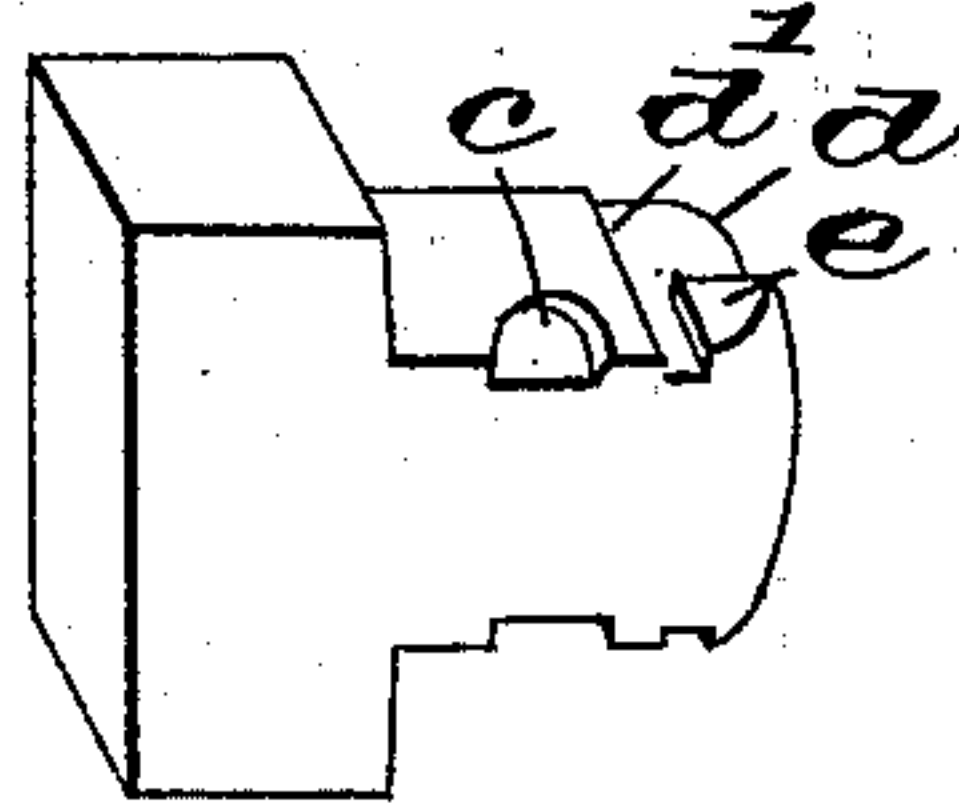
*Fig:2.*



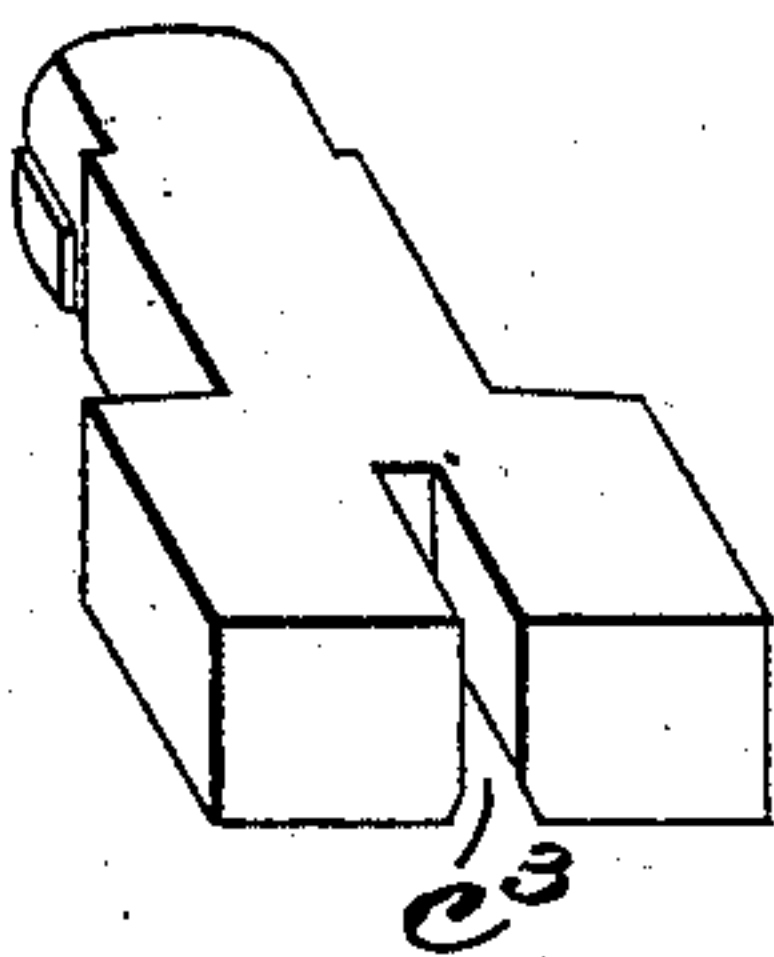
*Fig:3.*



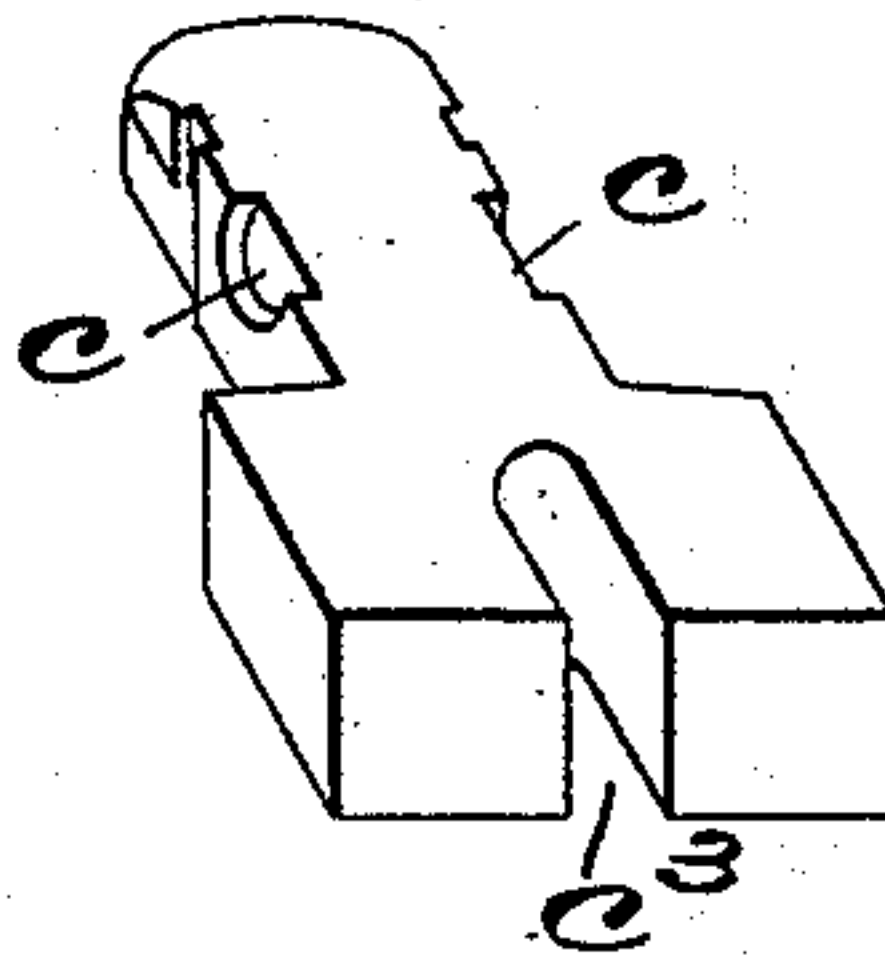
*Fig:4.*



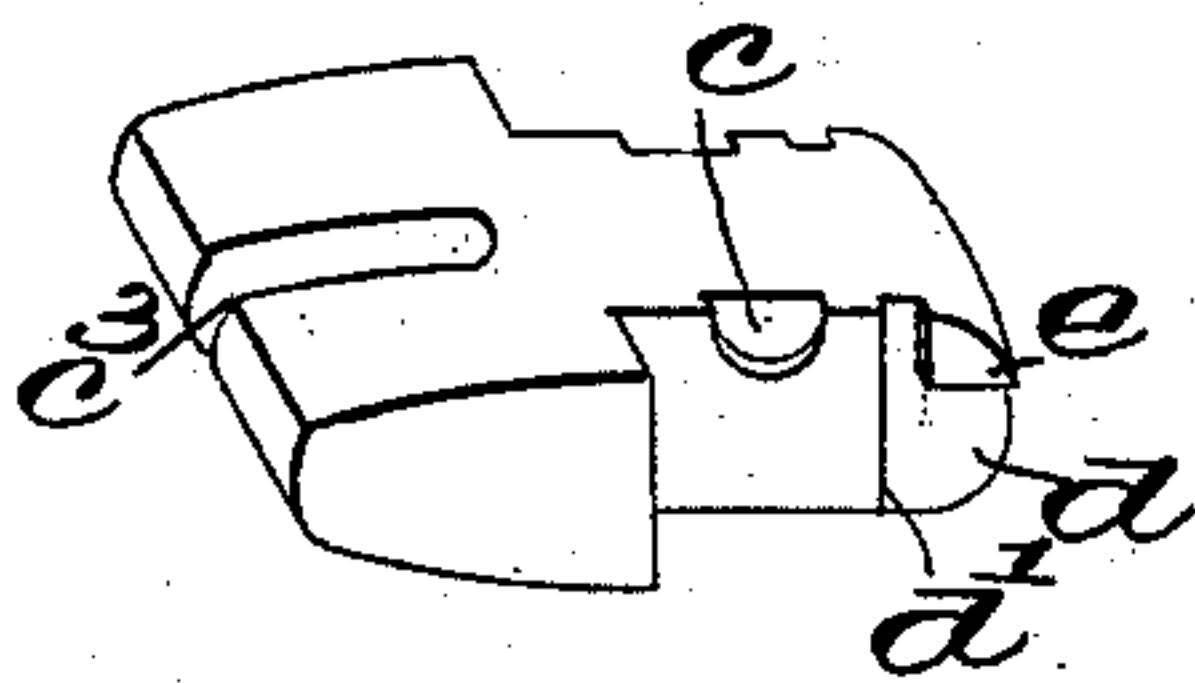
*Fig:5.*



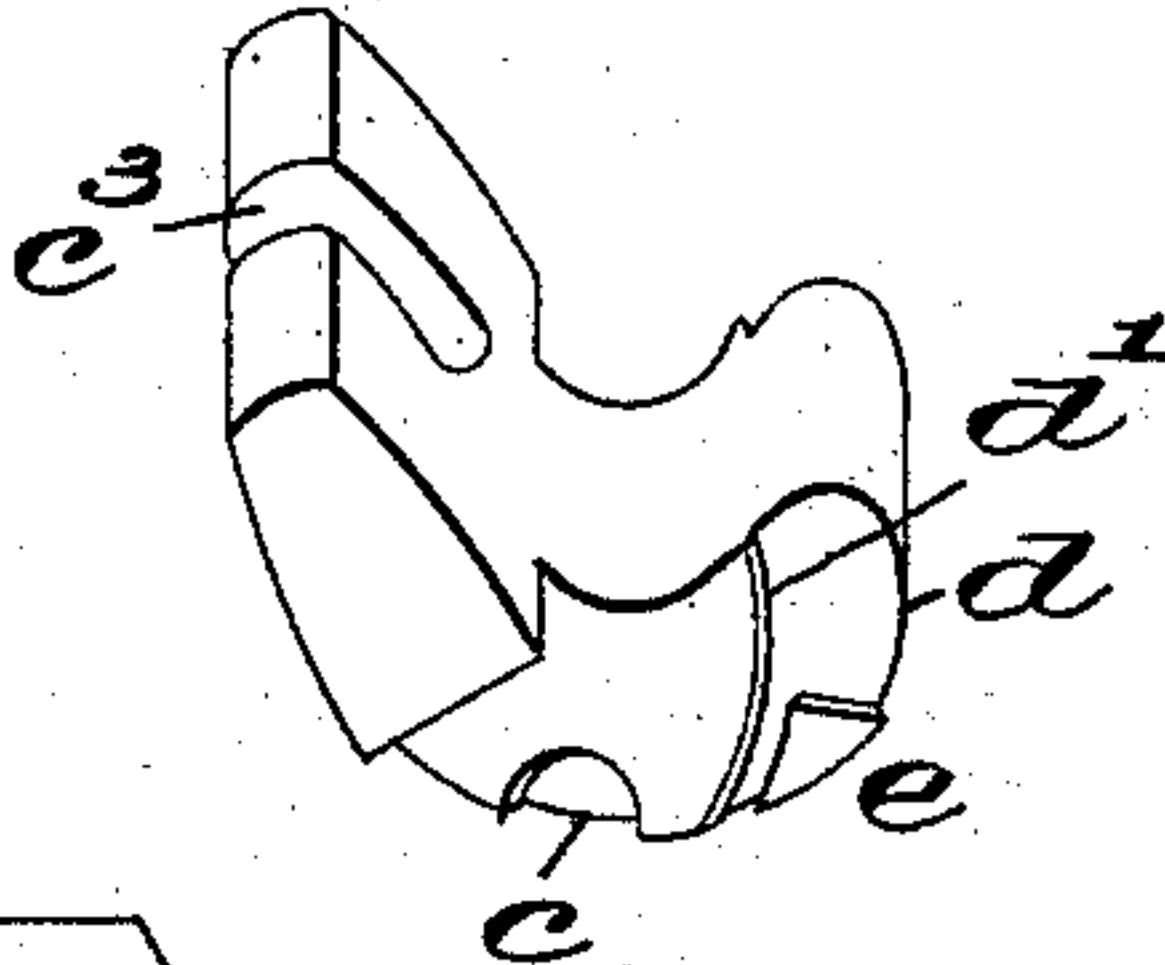
*Fig:6.*



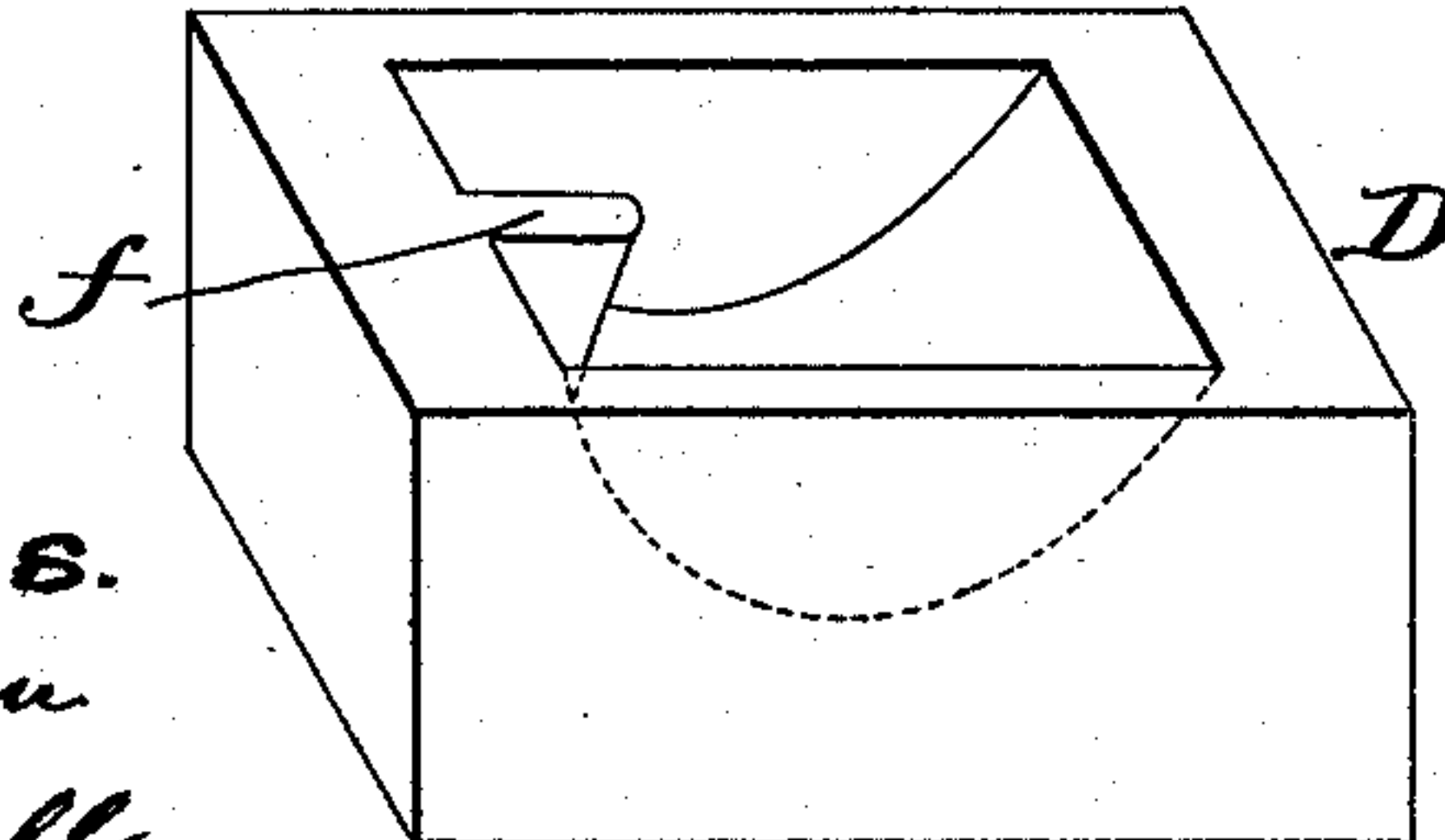
*Fig:7.*



*Fig:8.*



*Fig:9.*



Witnesses.  
Edward F. Allen  
Louise M. Howell

Inventors.  
Horace W. Wyman  
Lyman F. Gordon  
by Crosby Gregory, attys



# UNITED STATES PATENT OFFICE.

HORACE W. WYMAN AND LYMAN F. GORDON, OF WORCESTER, MASSACHUSETTS.

## METHOD OF MAKING CAR-COUPLING-HOOK BLANKS.

SPECIFICATION forming part of Letters Patent No. 524,879, dated August 21, 1894.

Application filed May 2, 1893. Serial No. 472,707. (No model.)

*To all whom it may concern:*

Be it known that we, HORACE W. WYMAN and LYMAN F. GORDON, of Worcester, county of Worcester, State of Massachusetts, have invented an Improvement in Methods of Making Car-Coupling-Hook Blanks, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

Car coupling hooks for the best results should be made by forging, but hooks of this class are quite heavy and difficult to handle during such operation.

Our invention is comprehended in the following specification.

Figure 1 shows a metal block or pile from which to produce a coupling hook blank. Figs. 2 to 7 show various steps of the method pursued in practicing my invention. Fig. 8 shows a completed blank, and Fig. 9, a form of die.

Our invention in its preferred form is practiced as follows: The metal block or pile A, Fig. 1, shown as a quadrilateral block, is first heated and while hot is forged to form, of substantially one-half, a tongue *b*, which tongue is shaped by suitable blows to leave pockets *c*, depressions *d*, and lugs *e*, the concaved edges of *c* and the edge *d'* being so placed as to be thereafter forced into a die, such as described in our application Serial No. 473,589, and forged into a larger segmental projection, one at each side of the tongue. The part from which said tongue is made to project, is slit, as at *c'*, from the face to back of the blank, as in Fig. 5, said slit being spread and prepared, as in Fig. 6, for the reception of the usual coupling link, in case it should be desired to couple a car having that sort of a coupling with a car having a standard coupling. The slotted part referred to is subsequently shaped to form the hook part of the blank. The split end of the blank is then further forged so as to slightly taper the slotted portion in the direction of the length of the slot, see Fig. 7. After this, the partially shaped blank will be bent or curved at right angles to the slot *c'*, and the tongue, as shown in Fig. 8, this being effected prefer-

ably by laying the partially worked blank, Fig. 7, on a die D, such for instance as shown in Fig. 9, and forcing said blank into the die leaving it bent, as in Fig. 8, the said die preferably having co-operating with it a slot-former *f*, represented as attached to the die.

The blank shown in Fig. 8 is ready to be put into the dies shown in our application Serial No. 473,589.

Where it is felt that the blank will never be used with an ordinary coupling link, the step of making the slit *c'* may be omitted.

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

1. A forged blank for the manufacture of car coupling hooks of the vertical plane variety and master car builders' standard, which consists of a flat piece of metal of T shape, having its stem or tongue drawn out and formed with the appropriate pockets *c*, depressions *d* and lugs *e*, and its cross-head tapered, substantially as described.

2. A forged blank for the manufacture of car coupling hooks of the vertical plane variety and master car builders' standard, which consists of a flat piece of metal of T shape, having its stem or tongue drawn out and formed with the appropriate pockets *c*, depressions *d* and lugs *e*, and its crosshead slit in the direction of the length of the tongue, and tapered, substantially as described.

3. A forged blank for the manufacture of car coupling hooks of the vertical plane variety and master car builders' standard, which consists of a flat piece of metal of T shape, having its stem or tongue drawn out and formed with the appropriate pockets *c*, depressions *d* and lugs *e*, and its crosshead slit in the direction of the length of the tongue and tapered, and the tongue and crosshead bent at substantially right angles to one another, substantially as described.

4. The method of forging car coupling hooks of the vertical plane variety and master car builders' standard, which consists in taking a block of metal, heating it, drawing out a tongue from one side thereof thereby producing a T-shaped blank, providing in suitable way the said tongue with the pock-

ets, depressions and lugs necessary to fit the  
hook for insertion in and co-operation with  
the drawhead, bending the tongue and cross-  
head at substantially right angles to one an-  
5 other, and die-finishing the blank, substan-  
tially as described.

In testimony whereof we have signed our

names to this specification in the presence of  
two subscribing witnesses.

HORACE W. WYMAN.  
LYMAN F. GORDON.

Witnesses:

GEO. S. TAFT,  
HENRY BACON.