

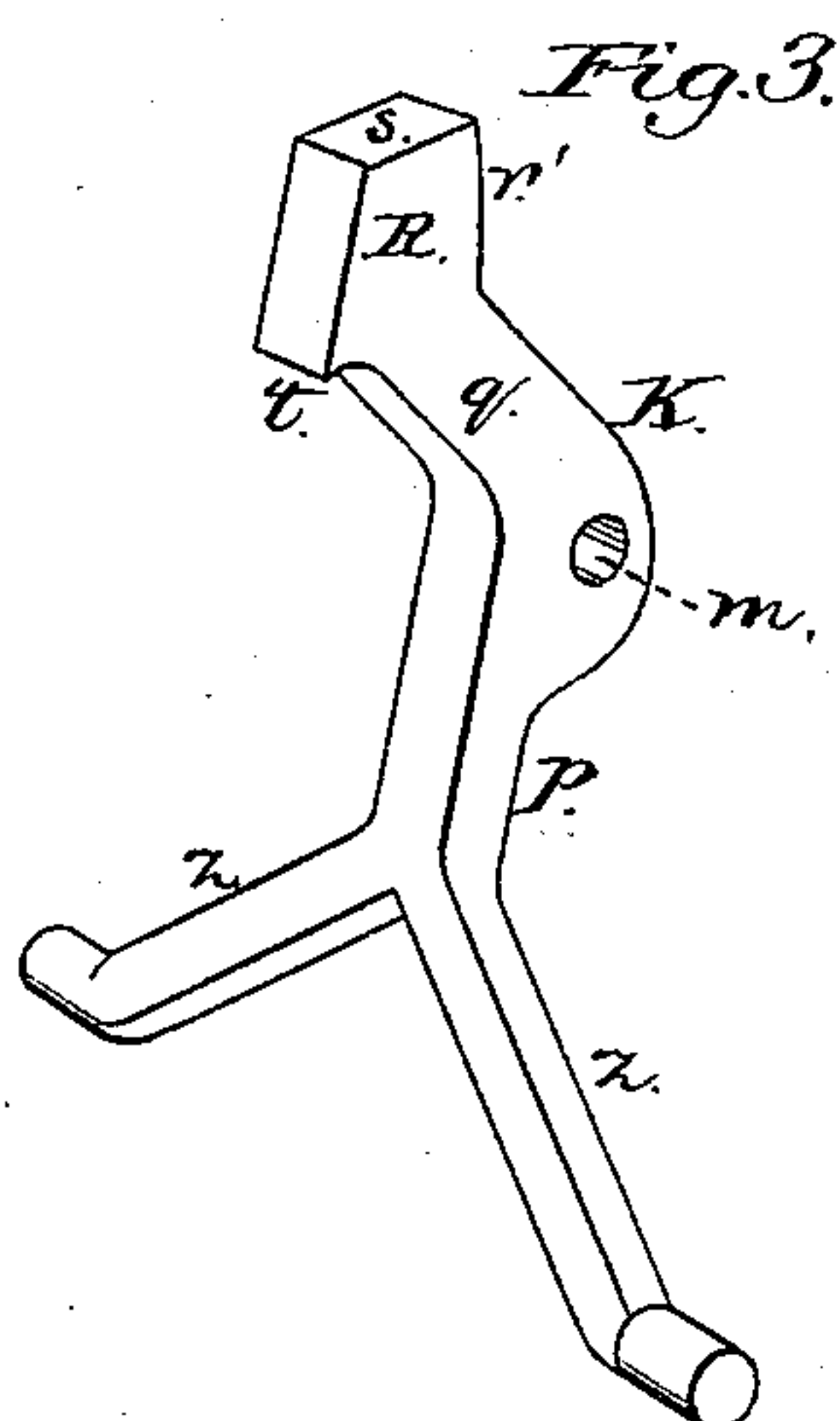
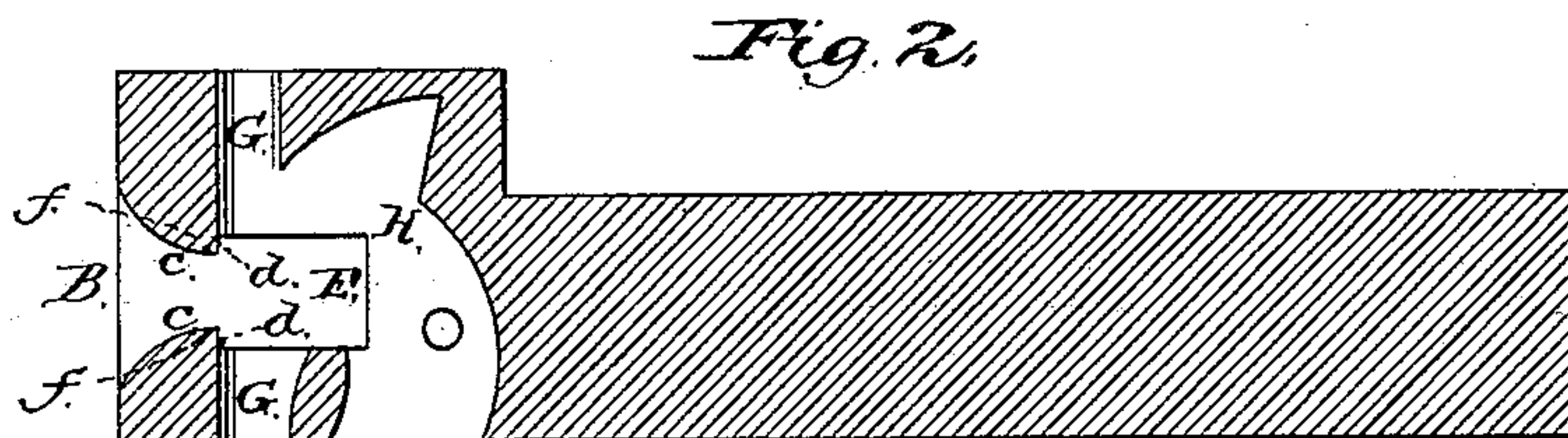
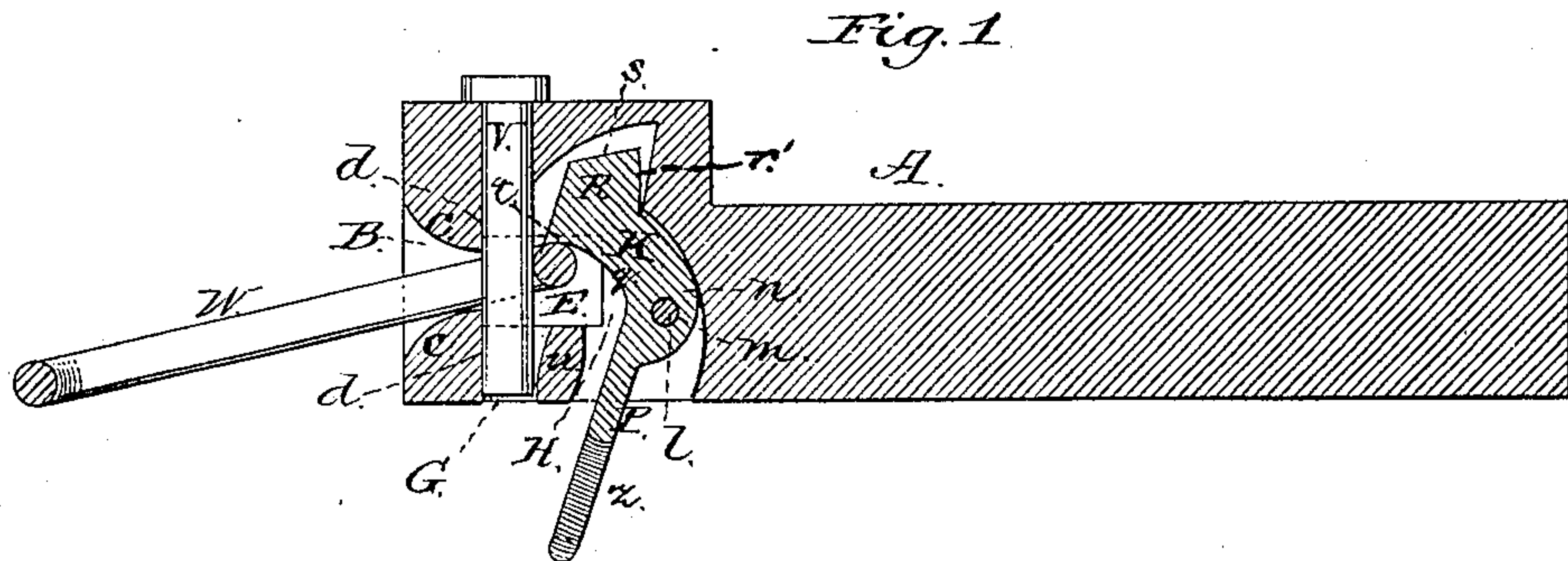
(Model.)

P. M. BRACELIN.

CAR COUPLING.

No. 258,550.

Patented May 30, 1882.



WITNESSES

Villette Anderson.  
Philip C. Massi.

INVENTOR

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his ATTORNEYS



# UNITED STATES PATENT OFFICE.

PATRICK M. BRACELIN, OF DAVENPORT, IOWA.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 258,550, dated May 30, 1882.

Application filed November 26, 1881. (Model.)

*To all whom it may concern:*

Be it known that I, PATRICK M. BRACELIN, a citizen of the United States, and a resident of Davenport, in the county of Scott and State of Iowa, have invented a new and valuable Improvement in Devices for Coupling Cars; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a longitudinal section of my device. Fig. 2 is a similar view of the draw-head, parts being removed; and Fig. 3 is a perspective of the vibrating dog.

This invention has relation to means for coupling cars; and it consists in the construction and novel arrangement of the enlarged link-recess in rear of the fulcrum-lips of the flaring mouth of the draw-head, the vertical pin-passage communicating with said recess and with the recess for the dog, and the pivoted dog having a setting-head for the pin, and a curved lip under said head extending into the upper portion of the link-recess back of the pin-passage, and serving, in connection with the fulcrum-lips of the mouth of the draw-head, to raise or lower the outer end of the link, as hereinafter set forth.

In the accompanying drawings, the letter A designates the draw-head, which is cast with a flaring mouth, B, the upper and lower lips, c, of which have shoulders d in rear, forming the front wall of the link-recess E, which is of greater depth than the mouth B between said lips at the shoulders. The angular rear portions of these lips serve as fulcrums f for the link.

Vertically in line with the front portion of the link-recess is the pin-passage G, extending through the draw-head from top to bottom, and in rear of this pin-passage and communicating with its upper portion and with the link-recess is the broad recess H, in which the vibratory dog K is seated, being pivoted therein by means of a bolt, l, passing transversely through the draw-head and through a perforation, m, in the back portion, n, of the dog, where its handle-stem p forms a junction with

its oblique neck q. At the end of the neck the head R of the dog is formed, having a pin-rest, r', on its upper part, a front or face, s, forming an angle with the top rest, and an under-lip, t, extending into the link-recess.

Between the recess H and the lower portion of the pin-passage a bridge or partition, u, is formed, on which the lip t of the dog rests when it is down or in the set position, which it takes automatically when the pin is drawn out and the link removed. In this position the pin V rests on the top r' of the head, which is inclined backward, and the link W, being inserted against the face s of the dog, which is inclined forward in the link-recess, raises the dog, and passes under its lip t, the pin dropping through the link.

To the stem p of the dog are connected laterally-diverging arms or handles z, which project on each side of the draw-head. By means of these the dog can be vibrated. When the link and pin are in connection the under lip of the dog engages the rear end of the link back of the pin in the link-recess, and the sides of the link resting on the fulcrum-lip, the dog can be manipulated to raise or lower the projecting end of the link to direct it into the mouth of the opposite draw-head. The under lip of the dog is not hooked, being but slightly concave, and its engagement with the link is effectuated by the pin, against which the link moves when actuated by the dog. When the link is withdrawn the dog is set for the pin, automatically, by gravitation. This construction requires the under lip, t, of the dog to be short and to form nearly a right angle with the face s thereof.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. The recessed draw-head having the fulcrum-lips c, enlarged link-recess E, pin-passage G, extending vertically through the front portion of the link-recess, the recess H for the dog in rear, and the bridge or partition u, separating said passage from the lower portion of the latter recess, substantially as specified.

2. The combination, with the draw-head A, having the fulcrum-lips c, enlarged link-recess E, and the bridge or rest u, of the gravitating dog having the rear pivot, l, lateral arms

$z$ , and angular head R, substantially as specified.

3. In a draw-head, the combination, with the fulcrum-lips  $c$ , pin-passage G, and the recesses  
5 for the link and dog, of the pivoted dog, its top rest,  $r'$ , face  $s$ , short under lip,  $t$ , and handles  $z$ , substantially as specified.

4. In a recessed draw-head, the pivoted gravitating dog having the pin-rest  $r'$ , the face  $s$ ,  
10 and the short under lip,  $t$ , at right angles, or nearly so, with said face.

5. The combination, with the fulcrum-lips  $c$  of the draw-head and the dog K, having the short under lip,  $t$ , of the pin V and link W, substantially as specified.

In testimony that I claim the above I have  
hereunto subscribed my name in the presence  
of two witnesses.

PATRICK M. BRACELIN.

Witnesses:

SAMUEL PORTER,

MICHAEL V. GANNON.