

(No Model.)

H. BEZER.
SHACKLE OR SLIP HOOK.

No. 245,695.

Patented Aug. 16, 1881.

Fig. 1.

Fig. 2.

Fig. 3.

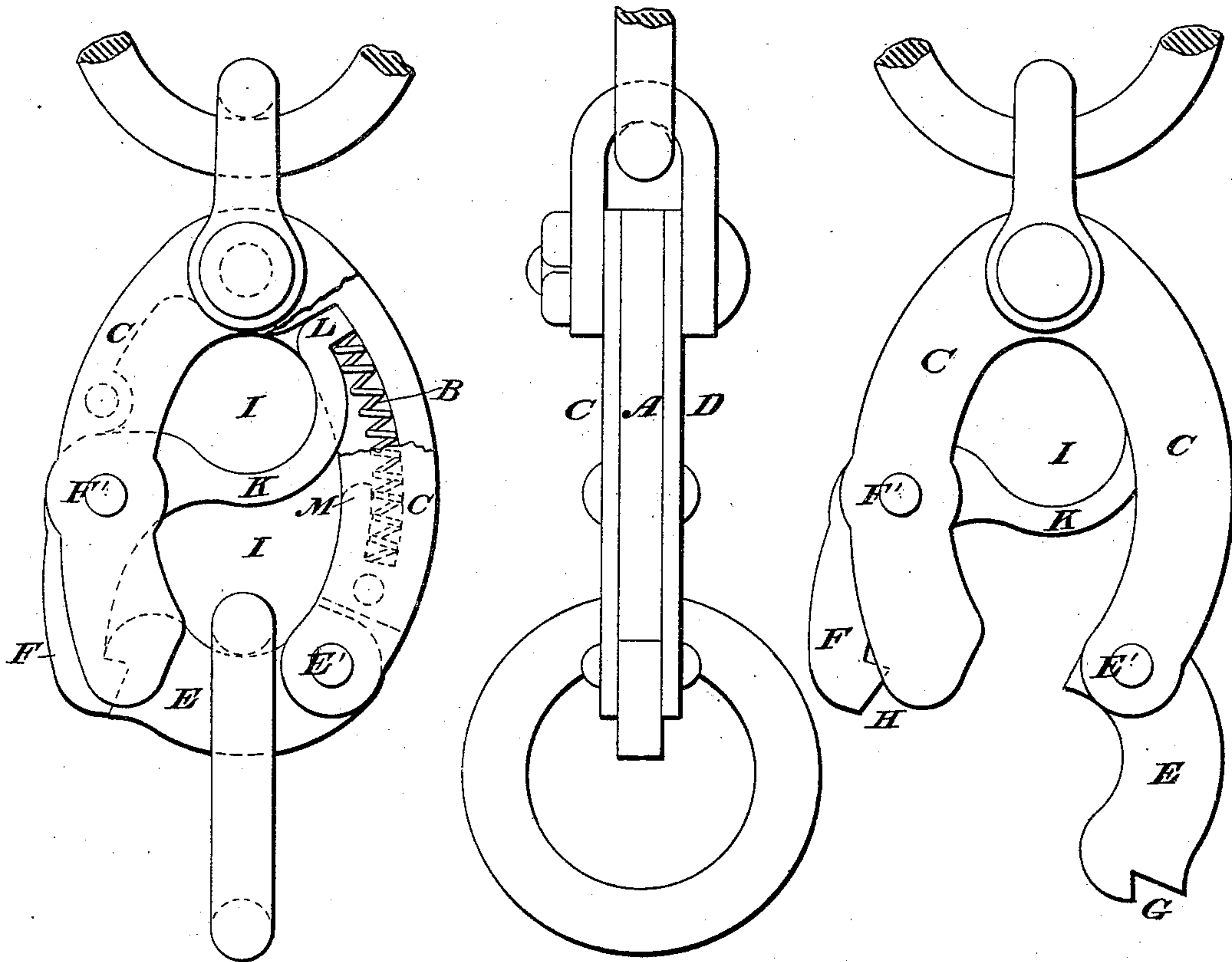
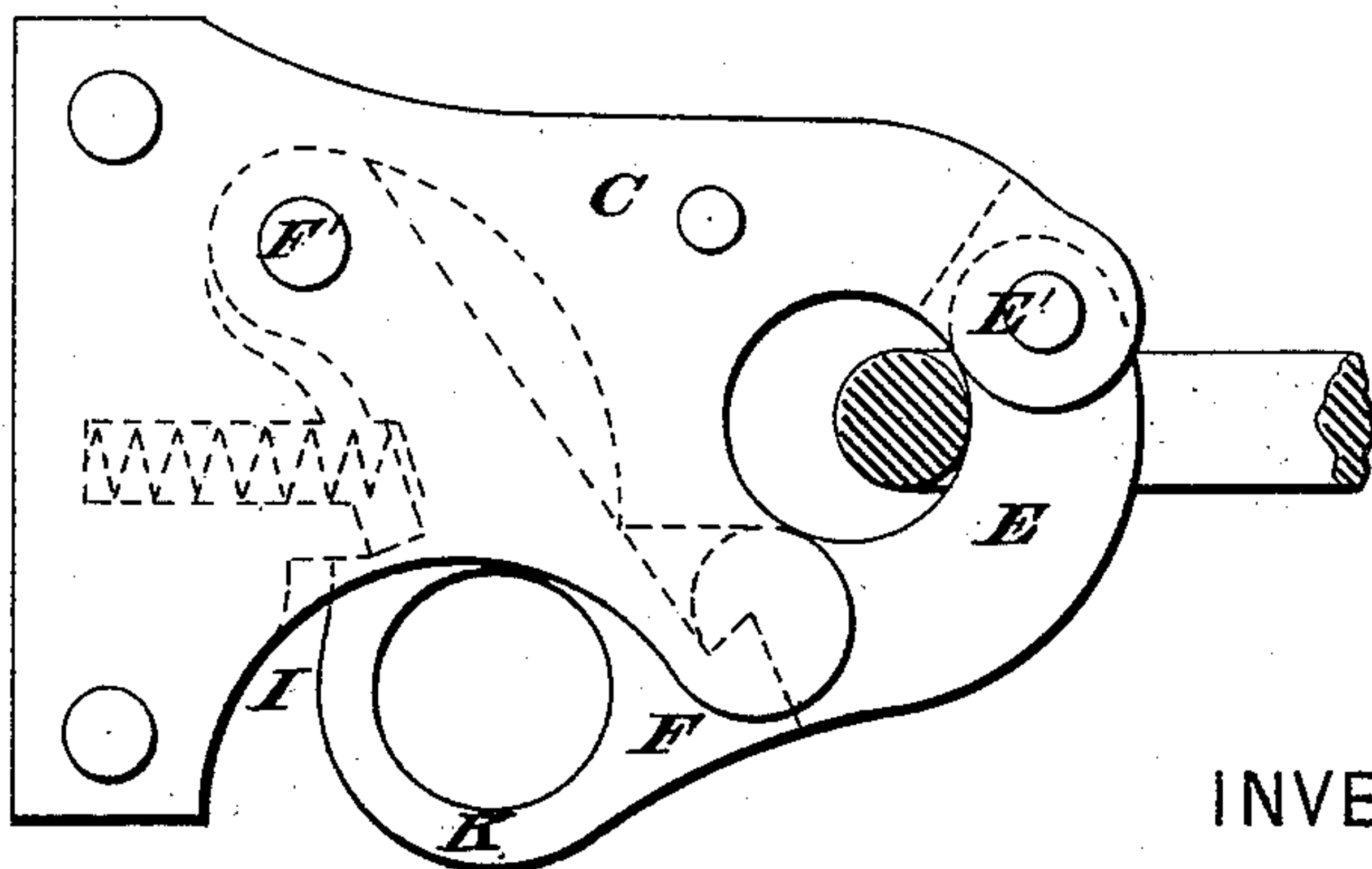


Fig. 4.



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HENRY BEZER, OF LONDON, ENGLAND, ASSIGNOR OF ONE-HALF TO PHILIP ALEXANDER THOMAS, OF SAME PLACE.

SHACKLE OR SLIP-HOOK.

SPECIFICATION forming part of Letters Patent No. 245,695, dated August 16, 1881.

Application filed June 30, 1881. (No model.)

To all whom it may concern:

Be it known that I, HENRY BEZER, of London, England, have invented certain Improvements in Shackles or Slip-Hooks for Pole-Chains or other Purposes, of which the following is a specification.

The invention has reference to shackles or slip-hooks in which there is hinged or pivoted to the body part or frame an arm or link whose other end is engaged by a catch at the end of a spring latch or lever, also pivoted to the body part, the latch being fitted with a ring or device by which it can be pulled free or released from the link when required. These shackles are more particularly used for securing the pole-chains and harness-traces of two-horse vehicles, although they are also applicable to other purposes. As hitherto made they possess several defects. One defect is that the edges of the body or frame of the shackle in which the latch works are liable to become burred through frequent knocking against other parts, so that the latch cannot be moved without great difficulty. Another defect, when applied to pole-chains, is that the ring by which the latch is pulled out and disengaged from the link, being outside the body of the shackle, is liable to catch in projecting parts, such as a hook on the hames. A third defect is that as there is no limit to the outward movement of the latch its spring or other portions are apt by undue pressure to get overstrained or broken.

Now, the object of this invention is to overcome these defects; and the improvements consist, first, in so fitting the latch in the body that that portion of it which has to move inward lies within projecting parts of the body and that that portion of it which has to move outward projects beyond the body; thus no burring can interfere with the proper working of the latch; secondly, in so placing the device by means of which the latch is released that it is not liable to catch in extraneous objects; and, thirdly, in so limiting the movement of the latch that it cannot be moved far enough to overstrain the spring.

Figure 1 of the annexed drawings is a face view, and Fig. 2 an edge view, of one of the improved shackles suitable for a pole-chain. Fig. 3 illustrates the same shackle when open.

The body of the shackle may either be cast in one piece or be made, as shown, in three pieces—viz., an inner piece, A, stamped or cast to receive the spring B, and at the same time to form a strengthening and distance piece between the two outer pieces, C D, and a guard for the catches at their point of junction. The two pieces C D are wrought-iron, steel, or other plates, and form jaws to receive the link and the latch, and are held together by rivets passed through them and through the piece A.

E is the link, hinged or pivoted at E', and F is the latch, hinged or pivoted at F'. The link is formed at its end with a catch, G, and the latch with a corresponding catch, H, to engage it, as seen in Fig. 1. These catches are so formed that any strain brought upon the link E will have no tendency to pull them free from each other, as will be readily understood by reference to the drawings.

The body of the shackle has an opening, I, in which the tail K of the latch F lies, so that it is not liable to catch in extraneous objects. The end of the tail has a projection, L, against which the spring B bears, and there is a stop at M to limit the movement of the tail when the latch is being released.

It will be seen that the latch F and the body of the shackle are so shaped relatively to each other that the portion of the latch from the pivot F' to its head, which portion has to move outward, projects beyond the body, as shown, and that the portion from the pivot F' to the tail, which portion has to move within the body, has the body projecting beyond it. By this arrangement any burring of the exposed parts, either of the latch or of the body, will not interfere with the proper movement of the latch.

In order to release the latch and open the shackle, it is only necessary to push the tail K with the thumb or finger until it reaches or nearly reaches the stop M.

Fig. 4 represents the improved shackle as it is preferred to make it for harness-traces. Letters of reference the same as those in Figs. 1, 2, and 3 indicate corresponding parts.

The improved shackles are applicable to various purposes. In applying them to cases

where two or more catches have to be released simultaneously—such, for instance, as slip-hooks for boat-lowering purposes—I connect the latches of the several shackles together by
5 any suitable arrangement by which they can be operated and released simultaneously.

What I claim, and desire to secure by Letters Patent, is—

1. In a shackle comprising a body or frame,
10 a link pivoted therein, and a spring-latch pivoted in said frame and arranged to engage said link, the combination, with the body and link, of the latch arranged to play in the hollow of the frame, and its back edge arranged
15 to project normally beyond the margin of the said frame, substantially as and for the purpose set forth.

2. In a shackle comprising a body or frame, a link pivoted to said frame, and a spring-
20 latch pivoted to said frame and arranged to engage said link, the combination, with the said frame and link, of the latch having its tail or releasing-handle situated or housed within a recess or opening in the frame, whereby it will be prevented from catching on ex-
25 traneous objects, substantially as set forth.

3. A shackle comprising a frame or body of curved or ring-like form, a link pivoted in said frame, and a spring-latch pivoted in said frame

and arranged to engage said link, and having
30 a tail or releasing-handle arranged to extend across the opening through or within the frame and to engage the latch-spring, all substantially as and for the purposes set forth.

4. A shackle comprising the curved and
35 partly-hollow frame, the link E, pivoted at one end of the said frame, the latch F, pivoted in the frame and arranged to engage said link, and provided with a tail or handle arranged to extend across the opening in the frame and
40 to rest upon the incased spring B, and the said spring, all arranged to operate substantially as set forth.

5. The combination, with the curved frame, of the spring B, incased in the frame, the stop M
45 on the frame, the link E, the latch F, its lock arranged to project normally from the frame, and the tail or handle K, fixed to or forming one with the latch, all arranged to operate
50 substantially as and for the purposes set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

HENRY BEZER.

Witnesses:

JOHN C. MEWBURN,
GEORGE C. BACON.