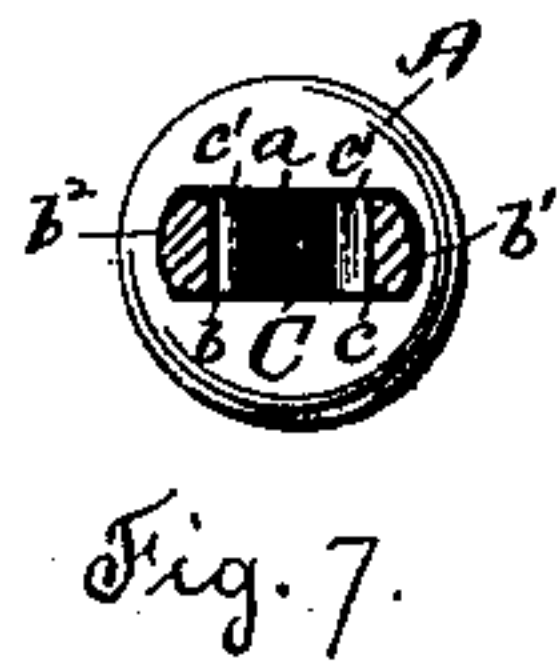
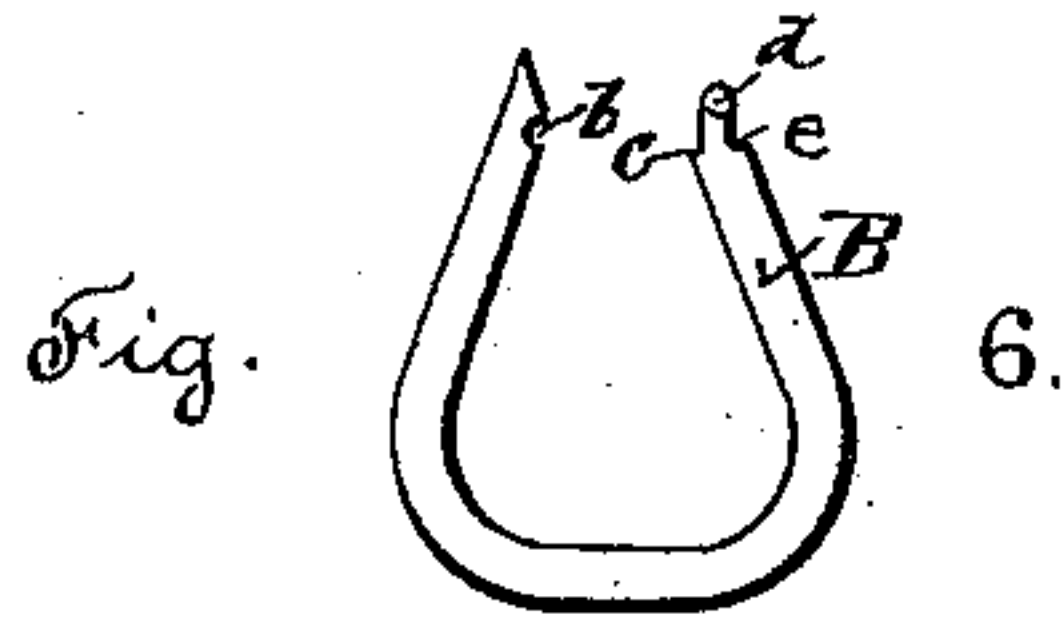
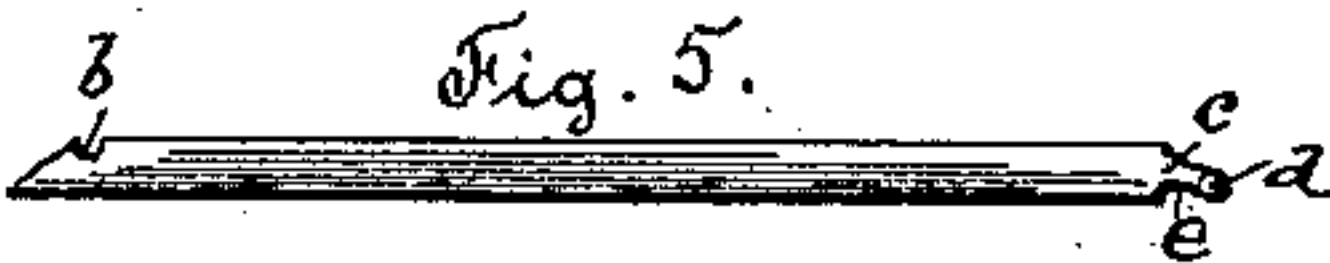
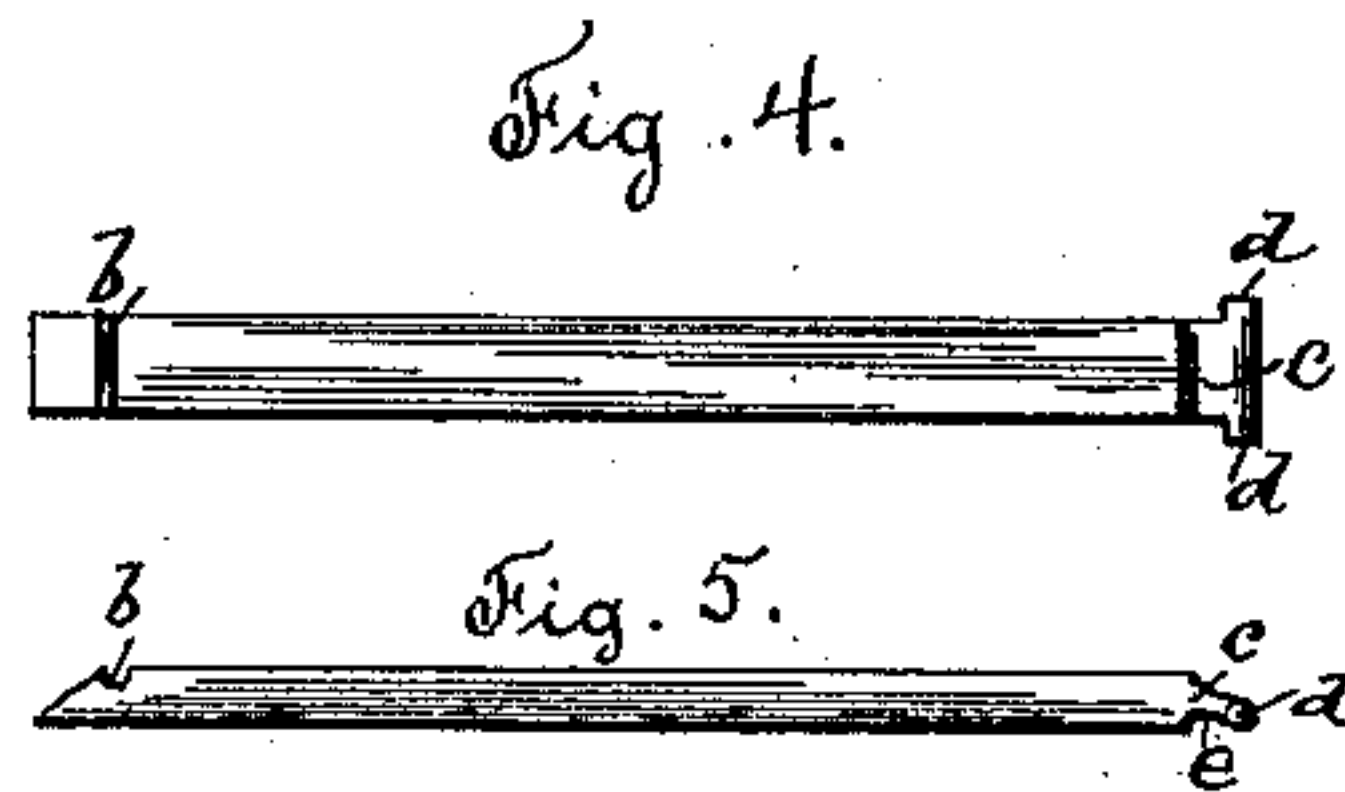
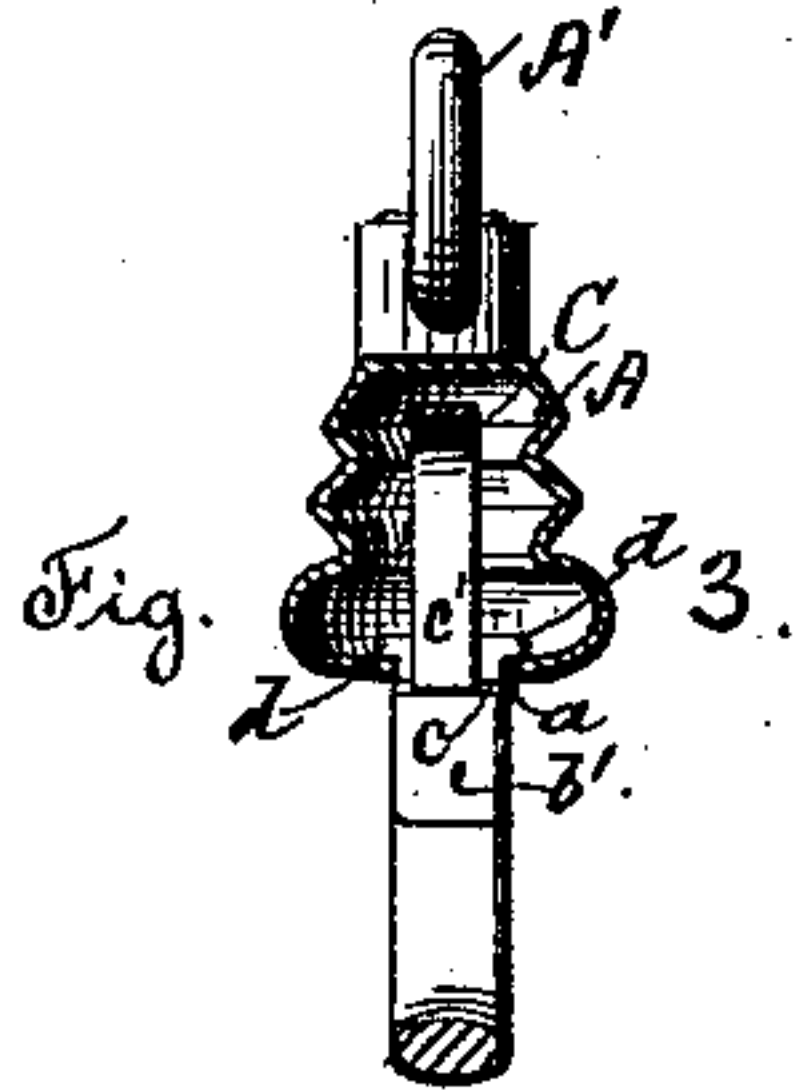
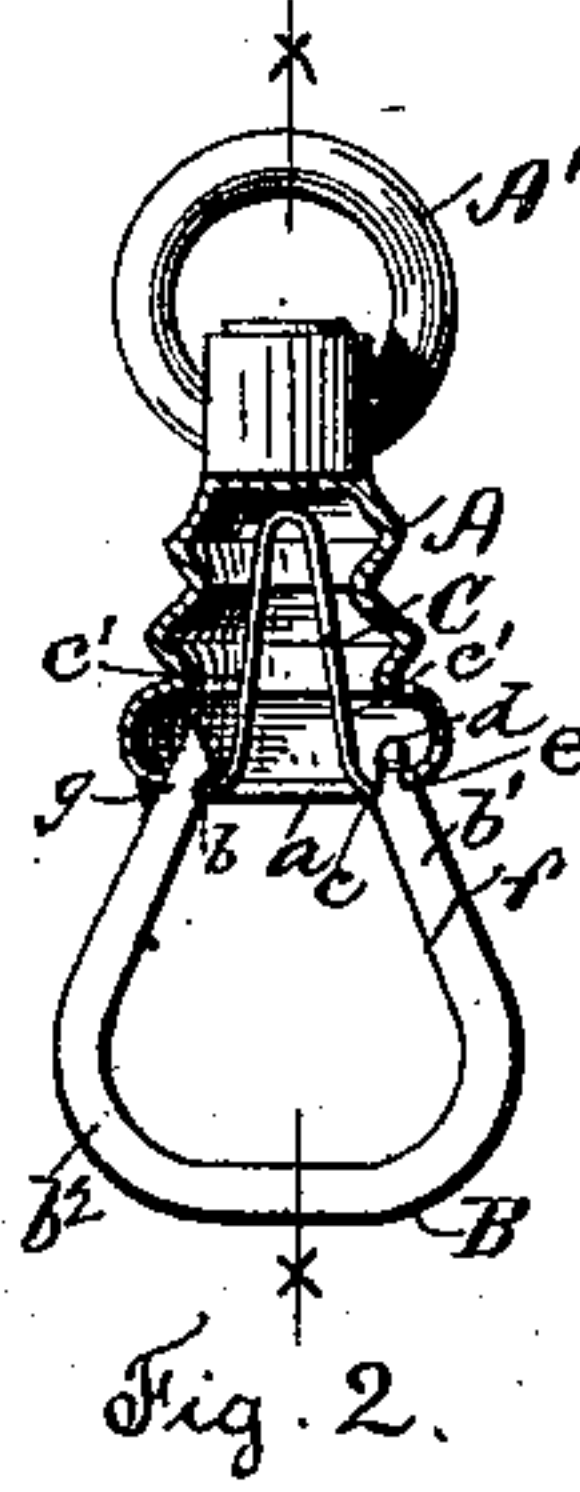
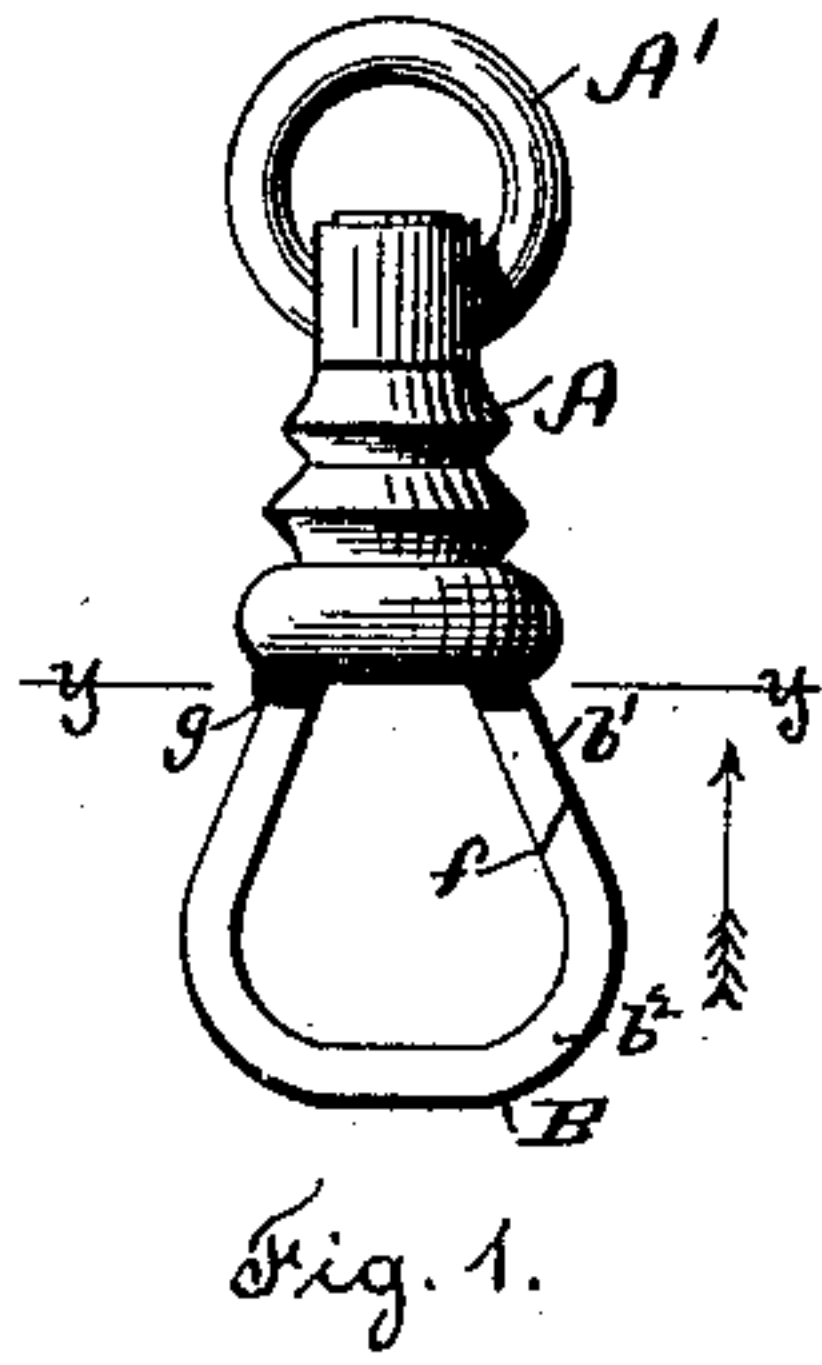


(No Model.)

E. L. ROBINSON.
SWIVEL HOOK.

No. 452,320.

Patented May 12, 1891.



Witnesses
Chas. F. Schmeltz.
Mark A. Heath

Inventor
Edwin Leroy Robinson,
By his Attorney
S. Scholfield

UNITED STATES PATENT OFFICE.

EDWIN LEROY ROBINSON, OF NORTH ATTLEBOROUGH, ASSIGNOR TO HARLAND G. BACON, OF WRENTHAM, MASSACHUSETTS.

SWIVEL-HOOK.

SPECIFICATION forming part of Letters Patent No. 452,320, dated May 12, 1891.

Application filed August 28, 1890. Serial No. 363,358. (No model.)

To all whom it may concern:

Be it known that I, EDWIN LEROY ROBINSON, a citizen of the United States, residing at North Attleborough, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Swivel-Hooks, of which the following, in connection with the accompanying drawings, is a specification.

My invention has for its object to provide a swivel-hook which may be readily put together, and which will combine simplicity of construction with durability and cheapness; and it consists in the improved construction of the hook and tongue and in the improved combination of a spring therewith, as herein-after fully set forth.

Figure 1 represents a side view of my improved swivel-hook. Fig. 2 is a central longitudinal section of the same. Fig. 3 is a section taken in the line $x x$ of Fig. 2. Fig. 4 is a top view of a struck-up bar to form the hook and tongue. Fig. 5 represents an edge view of the same. Fig. 6 shows the same bar when bent into its proper shape to form the hook and tongue. Fig. 7 is a section taken in the line $y y$ of Fig. 1.

In the accompanying drawings, A is the hollow-formed swivel-head, supporting at its upper end the ring A', which is constructed in the usual manner. The lower end of the swivel-head A is provided with the slot a , into which is placed the bent bar B, one end of the said bar being provided with a groove or shoulder b , while the other end has a groove or shoulder c and also having the projections $d d$, which are adapted to rest against the inside of the slotted end of the head, as shown in Fig. 3, thus serving to prevent the tongue b' , which is formed from the bent bar B, from passing to the outside through the slot a . The groove or indentation e , provided on that side of the bar which forms the tongue b' and in close proximity to the projections $d d$, receives the edge of the thin metal of the head A, which forms one end of the slot a and which serves as a fulcrum for the tongue b' , the latter being made independent from the hook portion b^2 of the bent bar B by a saw-cut at f .

The end g of the shank of the hook b^2 is

soldered into the head in the usual manner, and the spring C, provided with the two arms $c' c'$, is placed inside of the head A and caused to rest with the end of one arm at the above-mentioned groove or shoulder b , while the end of the other arm rests at the groove or shoulder c of the tongue, thus tending to throw the tongue outward against the end of the hook to close the hook-opening. It will also be seen that the spring C not only moves the tongue to close the opening of the hook, but that it also holds the tongue against its pivot at the edge of the slot a , and by virtue of the groove or indentation e prevents the same from sliding into the cavity of the swivel-head.

The projections $d d$ are formed by swaging the end of the bar B, so as to spread the same to a greater width than the width of the slot a , and the laterally-thickened end of the tongue b' , formed from the said bar B, serves to prevent the accidental removal of the tongue b' from the slot-opening a when in use.

I claim as my invention—

1. The combination, with the swivel-head provided with the slot, the rigidly-attached hook, and the spring, of the tongue provided with a groove or indentation adapted to form a pivoting-point with the edge of the slot, and with an opposite groove or shoulder adapted to receive the end of the spring, and with the laterally-projecting end which serves to prevent the accidental removal of the tongue from the slot, substantially as described.

2. The combination, with the swivel-head provided with the slot, the rigidly-attached hook provided with a groove or shoulder at the end of the shank, and the tongue provided with the laterally-projecting end adapted to hold the tongue within the slot of the head and with an inner groove or shoulder, of the spring having two arms, one of which is adapted to engage with the shoulder of the hook and the other with the inner groove or shoulder of the tongue, substantially as described.

EDWIN LEROY ROBINSON.

Witnesses:

JOHN S. LYNCH,

SOCRATES SCHOLFIELD.