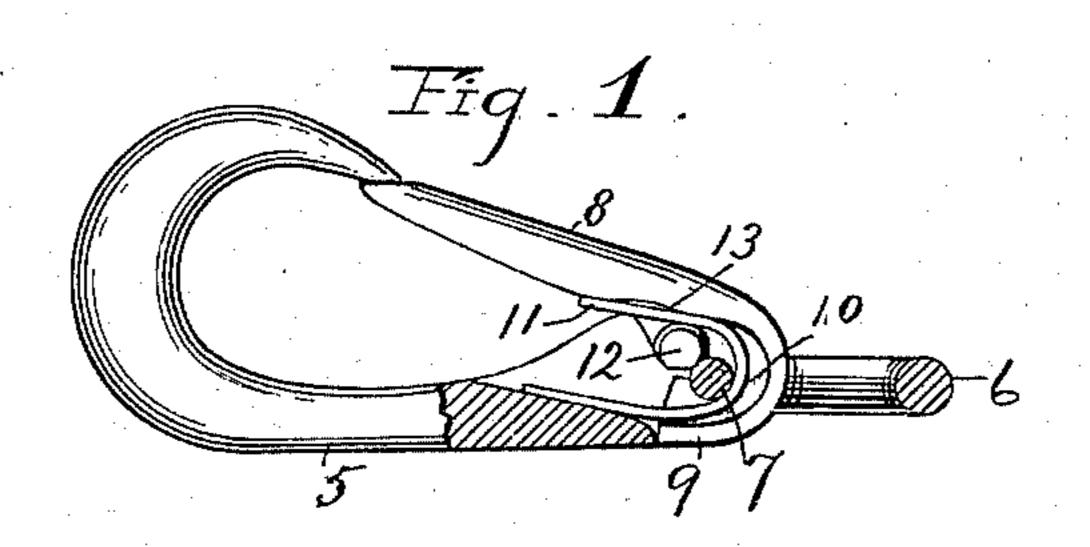
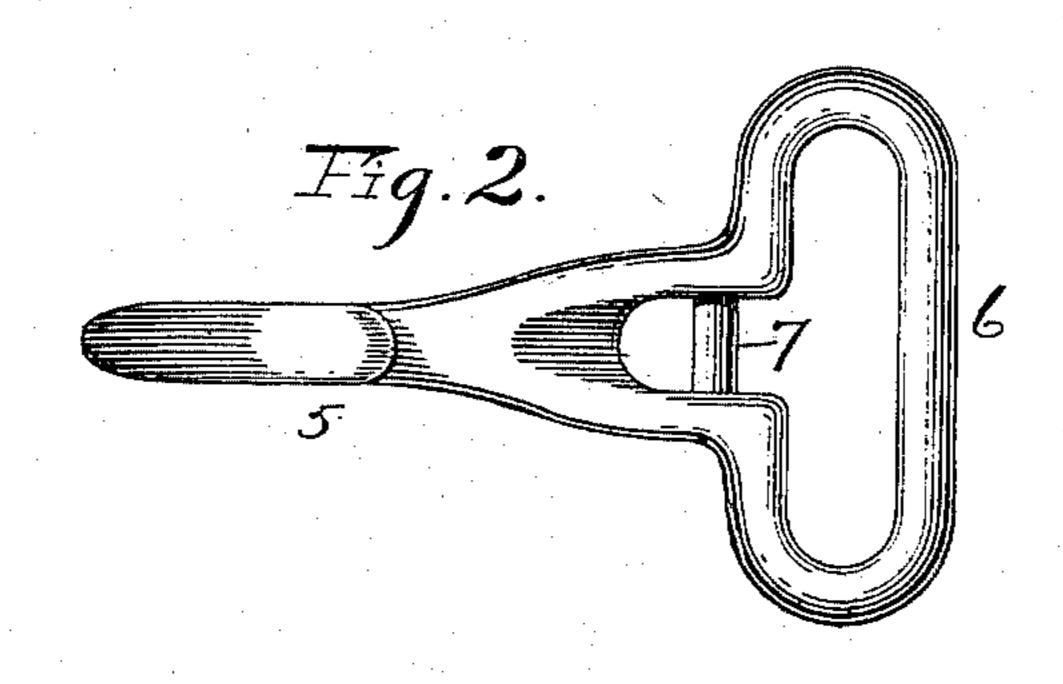
(No Model.)

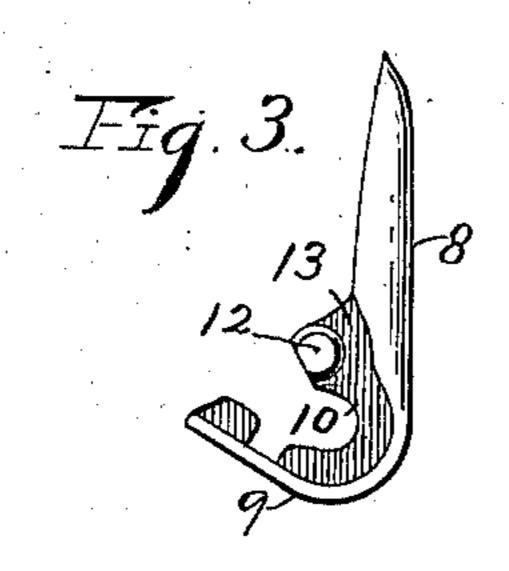
M. N. JUDD.
SNAP HOOK.

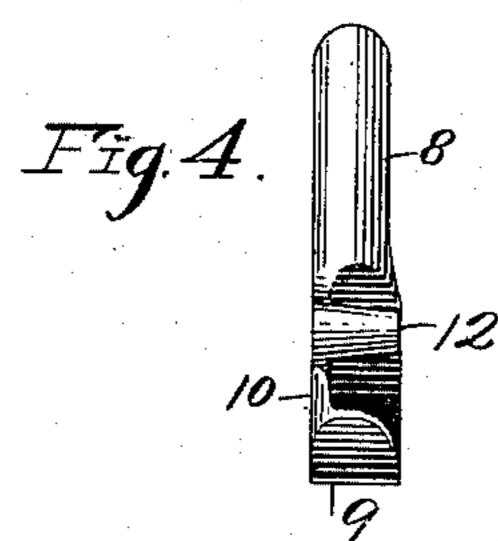
No. 527,498.

Patented Oct. 16, 1894.









Witnesses A. M. Stiper F. H. Grimold.

Mortimer M. Juda By James Shepard-Attif.

## United States Patent Office.

MORTIMER NELSON JUDD, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE NORTH & JUDD MANUFACTURING COMPANY, OF SAME PLACE.

## SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 527,498, dated October 16, 1894.

Application filed July 21, 1894. Serial No. 518,268. (No model.)

To all whom it may concern:

Beitknown that I, MORTIMER NELSON JUDD, a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Snap-Hooks, of which the following is a specification.

My invention relates to improvements in snap hooks, and the objects of my improvement on ment are simplicity and cheapness of construction and at the same time to produce a firm and efficient bearing for the tongue.

In the accompanying drawings, Figure 1 is a sectional elevation of my snap hook. Fig. 2 is a plan view of the body of the same. Fig. 3 is a side elevation of the tongue before insertion, and Fig. 4 is an edge view of the same. The body 5 of the hook and its loop or eye

6 may be of any ordinary form. At the junction of the body and loop I form the tongue recess, and between the cheeks of the same is the integral pivot pin or bar 7, cast in, and connected at both ends. The tongue 8 is in the main of an ordinary form and its heel is provided with a narrow or thin rim 9 having on its inner side a flange 10, thereby forming a

its inner side a flange 10, thereby forming a recess for the reception of the U-shaped sheet metal spring 11. This tongue is cast with its rim 9 left open, as shown in Figs. 3 and 4, 30 for convenience in assembling the parts. The flange 10 of the tongue is provided with a

bearing stud 12, as shown in Fig. 4. Between this bearing stud and the under side of the tongue a space 13 is left for the passage of one arm of the U-shaped spring. In assembling the parts, the tongue is placed in position between the cheeks of the body and over the pivot pin or bar 7 with the U-shaped spring extending around the back of said bar,

40 as shown in Fig. 1, and the heek of the tongue is then closed, changing its form from that in Fig. 3 to that shown in Fig. 1. In thus bending in the heel of the tongue, the snap should be supported upon the horn of a 45 proper anvil, or other support that bears

upon the bearing pin 12, so that bending in the heel of the tongue will at the same time bend the bearing pin toward the pivotal bar 7 sufficiently to compensate for the tapering form which would ordinary be given it in 50 casting, thereby bringing said bearing pin fairly and squarely against the front of the pivot bar so as to furnish a bearing on the front of the pivot bar for its whole length and for the whole width of the tongue and firmly 55 support it in its position and not only hold it from working backwardly, but hold it from working laterally and practically as firm as if the heel of the tongue bore upon the pivot bar upon all sides.

I am aware that it is not new to cast the heel of the tongue open and bend it into place when the parts are assembled, but in one prior construction the tongue had no bearing upon the pivot pin excepting through the narrow 65 flange at one edge and in another construction, as shown in a prior patent, there was no recess in the tongue that would permit the spring to extend around the back side of the pivot pin.

By my improvement I adapt this structure to a U shaped spring which extends around the back side of the pivotal bar and I secure a firm bearing to support the tongue laterally for the whole length of the pivotal bar.

I claim as my invention— 1. The herein described snap hook consisting of the body having a pivotal bar cast therein, the U shaped spring extending around the back side of said pivotal bar and the 80 tongue 8 having at its heel a thin outer rim 9 with the flange 10 on its inner side adapted to be bent around said bar, said flange being provided with the bearing stud 12 projecting laterally therefrom and arranged to bear upon 85 the front side of said pivotal bar and support the tongue laterally for its whole width, while the space 13 is left between one side of said stud and the under side of said tongue, one arm of said spring extending through 90 said space 13 while the other arm lies between the rim 9 and opposite side of said stud and extends forwardly therefrom, substantially as described and for the purpose specified.

2. In a snap hook having a body, spring and tongue, the pivotal bar cast in one piece with said body, and the tongue 8, having at

its heel the thin outer rim 9 with the flange 10 on its inner side adapted to be bent around said pivotal bar and provided with the laterally projecting bearing stud 12 arranged to bear upon the front side of said pivotal bar and support the tongue laterally for the whole length of said bar, while at the same

time a spring recess surrounds said bar and stud, substantially as described and for the purpose specified.

MORTIMER NELSON JUDD.

Witnesses:

A. W. STIPEK, JAMES SHEPARD.