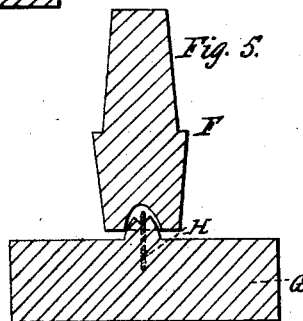
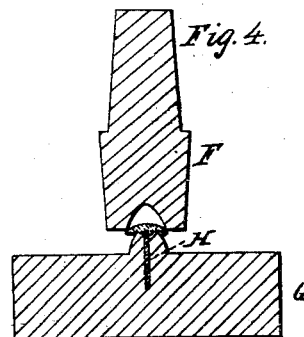
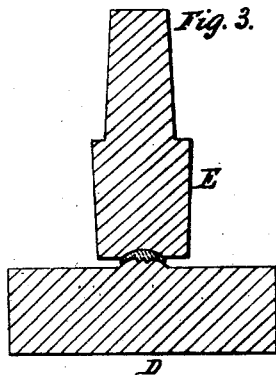
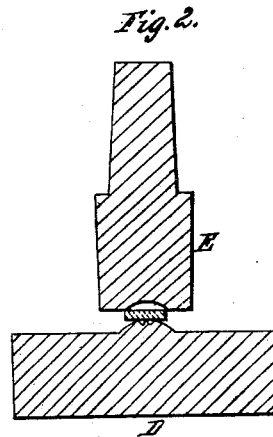
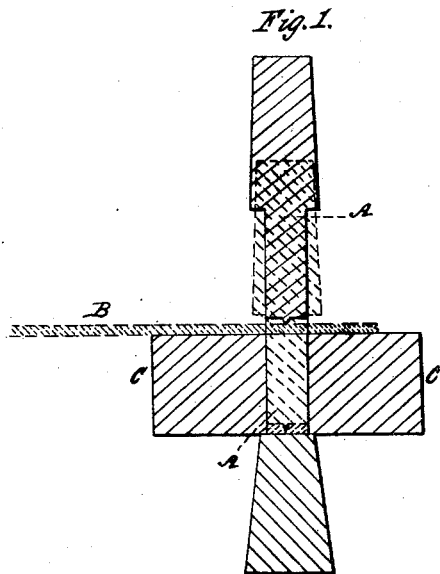


W. H. VAN GIESON.  
Die for Furniture Nails.

No. 49,808.

Patented Sept. 5, 1865.



Witnesses:  
Lucius W. How  
James T. Graham

Inventor:  
W. H. Van Gieson  
By Thos. B. How  
Atty

# UNITED STATES PATENT OFFICE.

WM. H. VAN GIESON, OF WATERBURY, CONNECTICUT.

## DIES FOR FURNITURE-NAILS.

Specification forming part of Letters Patent No. 49,808, dated September 5, 1865.

*To all whom it may concern:*

Beit known that I, WILLIAM H. VAN GIESON, of Waterbury, in the county of New Haven and State of Connecticut, have invented certain Improvements in Dies for the Manufacture of Furniture-Nails, of which the following is a specification.

My invention relates to dies for forming the heads of furniture-nails from bars or sheets of metal and attaching them to the shanks of the nails; and it consists of a set or series of dies for cutting the disks which form the heads from bars or sheets of metal rolled to the proper thickness, making the hole in said disks for the reception of the shank or body of the nail, stamping the disks into the proper shape, and at the same time throwing the stock to the center and forcing it around the upper part of the body or shank of the nail, so as to fasten the said body or shank securely to the disks which form the heads of the nails.

In the drawings, Figure 1 represents the die which cuts the disk from the bar or sheet and at the same time partially opens the hole for the reception of the body or shank of the nail, and showing in blue lines the position of the die when it reaches the bar and in red lines its position when the operation is completed. Figs. 2 and 3 represent the die which completes the opening up of the hole which is to receive the body or shank of the nail and also partially shapes the head of the nail, Fig. 2 showing the position of the die at the commencement of the operation and Fig. 3 its position at its close. Figs. 4 and 5 represent the die which forces up the stock about the body or shank of the nail so as to secure said shank in its place, and at the same time completes the formation of the head, Fig. 4 showing the position of the die at the commencement of the operation and Fig. 5 its position at its close. Fig. 6 represents a completed nail.

A, Fig. 1, is the working part of the die, which is made with a pointed projection in the center of its face, so as to partially form the hole in the disk for the reception of the upper end of the body or shank of the nail at the same time that the disk is cut from the bar B.

C is the bed-plate, through a hole in which the disk is forced after being cut from the bar B by the descent of the die A.

The lower part, D, of the die represented in Figs. 2 and 3 is made with its face partially convex—that is to say, the lower part or base of the projection on the face of the die is convex; but the upper part of said projection terminates in a pin-like projecting part, which completes the formation of the hole for the reception of the upper part or end of the body or shank of the nail, and the projection is hollowed out around the base of the pin-like projection, as represented in Figs. 2 and 3, so as to partially collect the stock around the hole formed by the action of the pin-like projection when the disk is acted upon by the descent of the upper part, E, of the die. The central part of the face of the working part E of the die is hollowed out or made concave, as represented in the drawings, so as to partially form or shape the heads of the nails, as seen in Fig. 3. In Figs. 4 and 5 the concavity in the face of the upper or movable part, F, of the die is still further hollowed out, so as to give the desired shape to the heads of the nails, the lower part, G, being so constructed as to hold the body or shank of the nail in the center of the projection on the face of the die in proper position for receiving and being fastened to the head of the nail when said head is forced down by the part F of the die. The said projection is also made with its upper part hollowed out, as represented in the drawings, so as to collect and force around the upper part of the body or shank of the nail a sufficient quantity of the metal to hold the said shank securely attached to the nail-head. There should be a slight enlargement or head at the upper end of the shank H of the nail, as represented in the drawings, or the said upper part should be corrugated, so as to prevent the said shank of the nail from being drawn away from the metal which has been forced around it by the action of the die.

I claim—

A series or set of dies, A C, E D, and F G, for forming and attaching the heads of furniture-nails to the shanks, substantially as described, and to the effect set forth.

W. H. VAN GIESON.

Witnesses:

JOHN W. WEBSTER,  
JOHN O'NEILL, Jr.