

(No Model.)

C. H. BURCKETT.

MANUFACTURE OF HORSESHOE NAILS.

No. 343,295.

Patented June 8, 1886.

Fig. 1.

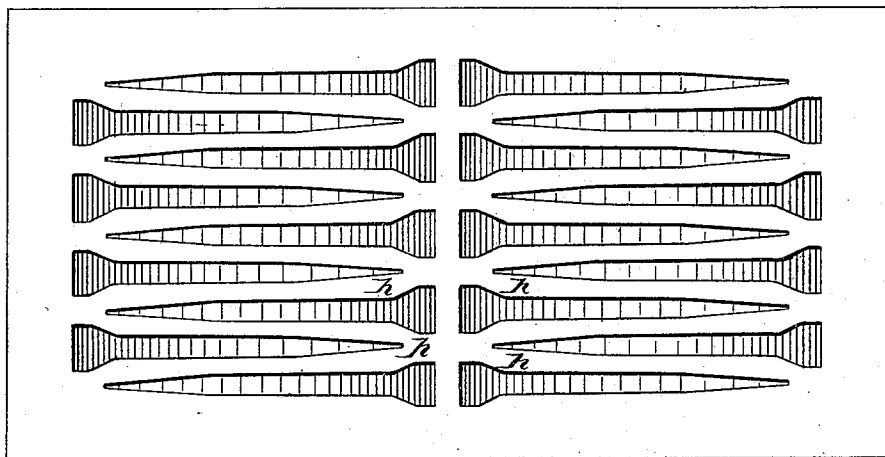


Fig. 2.

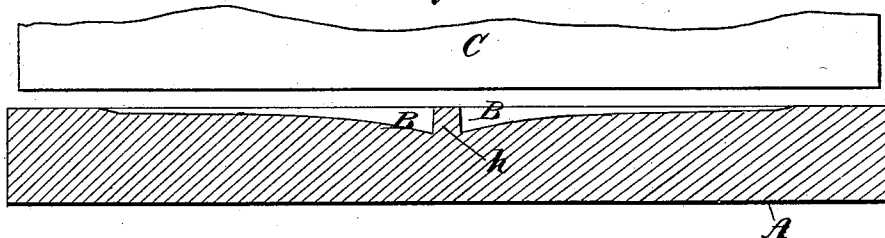


Fig. 3.



Fig. 5.

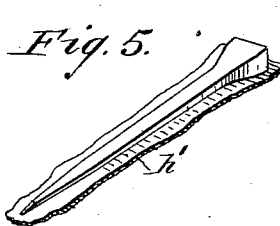


Fig. 4.

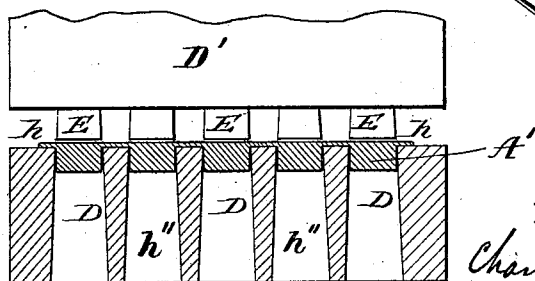
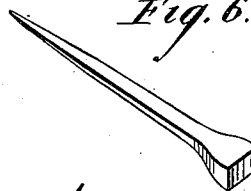


Fig. 6.



WITNESSES:

E. Laue.
N. H. H. H. H. H.

INVENTOR:

Charles H. Burckett,
BY *W. W. Howard,*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

CHARLES H. BURCKETT, OF BROOKLYN, NEW YORK.

MANUFACTURE OF HORSESHOE-NAILS.

SPECIFICATION forming part of Letters Patent No. 343,295, dated June 8, 1886.

Application filed October 28, 1885. Serial No. 181,137. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. BURCKETT, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in the Manufacture of Horseshoe-Nails, of which the following is a specification, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to an improved method of stamping out or producing horseshoe-nails, whereby a nail of improved quality and increased density is made, and whereby, further, a series of nails stamped out or produced shall exhibit a perfect uniformity in compactness or density.

In the accompanying drawings, Figure 1 is a top view of a die used in one stage of the manufacture of the nail. Fig. 2 shows at the lower part thereof a longitudinal section of the die, Fig. 1, and at its upper part a side view of the upper die used in connection therewith. Fig. 3 is a longitudinal section of a nail-plate after having been operated upon by the dies shown in Figs. 1 and 2. Fig. 4 shows at its lower part in vertical transverse section and at its upper part in end view the dies used in the second state of the method, together with a transverse section of the nail-plate placed between the dies. Fig. 5 is a perspective view of a portion of the nail-plate after having been operated upon by the dies shown in Figs. 1 and 2. Fig. 6 is a perspective view of the completed nail after having been operated upon by the dies shown in Fig. 4.

Similar letters of reference indicate similar parts in the respective figures.

In carrying out my invention I take a sheet of suitable metal of the required thickness and place it in a heated condition upon the die A, Fig. 2, in which are formed the depressions B, which are of the shape of the nails to be produced. The depressions B are entirely separated or isolated from each other by partitions *h*. The upper die, C, the under surface of which is perfectly plain, is then forced down upon the sheet (represented by A') preferably by hydraulic force, and the metal forced into the depressions B. A thin film of metal,

h', is left, as shown, wherever the partitions *h* occur. Therefore, at the completion of the operation performed by the dies shown in Figs. 1 and 2 the nail-plate A' is left in the condition shown in Figs. 3, 4, and 5.

The first part of the method above described having been performed, the nail-plate is placed cold upon the lower die, D, (shown in transverse section in Fig. 4,) in which are formed openings *h''*, each of the shape in plan of the nail to be produced, and the upper die, C, which has projections E, corresponding also with the shape of the nail and with that of the openings *h''*, is forced down upon the nail-plate A', cutting the nails separately from the film *h'*. It will be seen that the film *h'* rests upon the top of the die D, and that the bodies of the nails enter the openings *h''*. The nail-plate is thus firmly held against lateral displacement during the downward action of the cutting-die D, and the nails accurately and cleanly cut, an exact uniformity being maintained. Therefore, it will be seen that by the first stage of my improved method a series of nails of perfect uniformity with regard to compactness or density are produced in the nail-plate, while by the second stage the nails are cut out cleanly and accurately from the waste.

I do not in the present application make any claim to the hydraulic machinery used in carrying out my improved method, or to the dies used, but may in the future file applications for such.

Having described my invention, I claim—

The within-described method of stamping or producing horseshoe-nails, consisting, first, in forming by pressure a nail-plate with a series of incomplete or uncut nails in relief thereon separated by a thin film of metal, and, secondly, supporting the nail-plate by means of said film and uncut nails upon a lower die, and separating the nails by cutting them from the film, substantially as set forth.

In testimony whereof I hereunto set my hand and seal.

CHARLES H. BURCKETT. [L. S.]

Witnesses:

E. CRUSE,

GEO. H. HOWARD.