

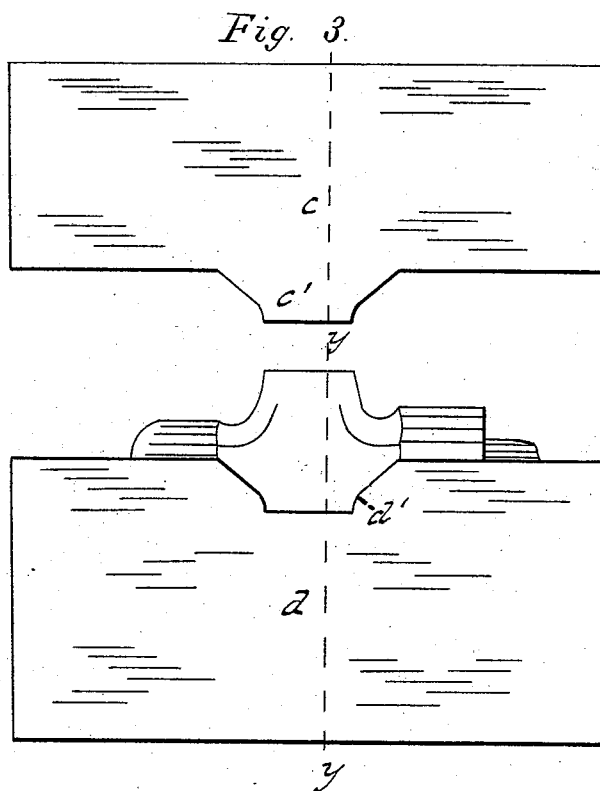
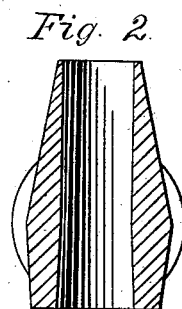
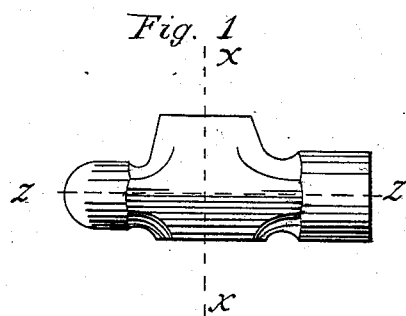
(No Model.)

2 Sheets—Sheet 1.

C. J. STANNARD.
DIE FOR FORMING HAMMERS.

No. 261,489.

Patented July 18, 1882.



Witnesses.
L. H. Gager
Chas. L. Burdett

Inventor.
Carlton J. Stannard.
By W. E. Simonds, Atty.

(No Model.)

2 Sheets—Sheet 2.

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Fig. 4.

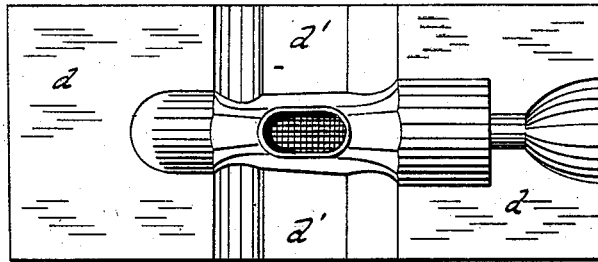


Fig. 5.

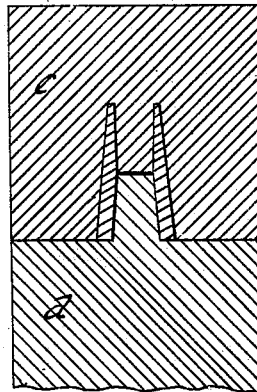
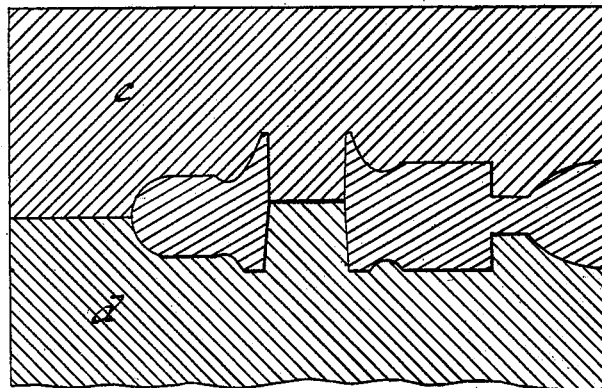


Fig. 6.



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UNITED STATES PATENT OFFICE.

CARLTON J. STANNARD, OF HARTFORD, CONNECTICUT, ASSIGNOR TO THE
HARTFORD HAMMER COMPANY, OF SAME PLACE.

DIE FOR FORMING HAMMERS.

SPECIFICATION forming part of Letters Patent No. 261,489, dated July 18, 1882.

Application filed February 23, 1882. (No model.)

To all whom it may concern:

Be it known that I, CARLTON J. STANNARD, of Hartford, in the county of Hartford and State of Connecticut, have invented a certain new and useful Improvement in Dies for Forging Hammers and Cognate Articles, of which the following is a description, reference being had to the accompanying drawings, where—

Figure 1 is a side view of a hammer-forging as made by the dies of the prior art, upon which my dies are an improvement. Fig. 2 is a view of said hammer-forging in cross-sections on the plane *x x*. Fig. 3 is a side view of my improved dies, the upper die raised off the lower and the forging represented as lying in or on the lower die. Fig. 4 is a face view of said lower die bearing said hammer-forging. Fig. 5 is a view of the two dies closed together, with the forging inside represented as cut in section on the plane *y y*, Fig. 3. Fig. 6 is a view of the parts, same as in last figure, in central longitudinal section.

Prior to the making of this improvement hammers like that shown in Figs. 1 and 2 were made in dies, two sets thereof being used, the latter set being practically the "finishing-dies," and being known by that designation in the arts. Each of said finishing-dies of the prior art formed substantially half the hammer-forging, the line of parting being on the plane denoted by the dotted line *z z*, Fig. 1, leaving the hammer-forging necessarily (in order to give the dies "draw") with the greatest diametric thickness along the plane *z z*, which necessitated the subsequent grinding off of the sides in the vicinity of the handle-orifice in order to give the tool the usual marketable shape and contour.

My improved dies are so constructed as to give the hammer-forging a taper (in cross-section)

from point *a* to rear *b*, thus avoiding the necessity of such subsequent grinding off of the sides in the vicinity of the handle-orifice.

The letter *c* denotes the improved upper die, and *d* denotes the improved lower die. The forging, which is operated upon by these dies, is more or less formed by a prior set of dies or the like. The peculiarity of these dies is that, while their line of parting is such that at and near the ends of the matrix substantially one-half the forging is formed on each die, in the vicinity of the handle-orifice (their longitudinally central part) the upper die has side projections, *c'*, reaching entirely vertically across the forging, and the lower die has corresponding recesses, *d'*, to receive said projections on the upper die, this central portion of the sides (of the matrix) of the upper die being converging from bottom to top, as seen in Fig. 5, giving a draw the whole vertical width of the forging, and giving the shape and contour which the marketable article should have without grinding off, as in the prior art. I have called one die the "upper" and the other the "lower." They can be used with either die uppermost, and the improvement, with adaptive changes, is applicable to dies for forming other shapes.

I claim as my invention—

The dies *c* and *d*, parting at and near the ends on substantially the vertical center of the forging, but provided at the central part, the former with the projections *c'* reaching across the forging and the latter with the corresponding recesses, *d'*, all substantially as described, and for the purpose set forth.

CARLTON J. STANNARD.

Witnesses:

CHAS. L. BURDETT,
WM. H. MARSH.