

(No Model.)

A. P. THAYER.

DIE FOR MAKING BARBED METALLIC FENCING.

No. 307,351.

Patented Oct. 28, 1884.

Fig 1



Fig 2.

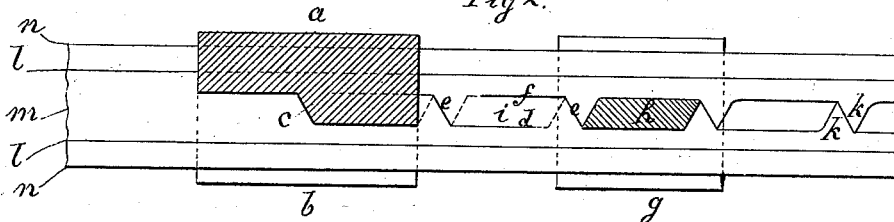


Fig 3.

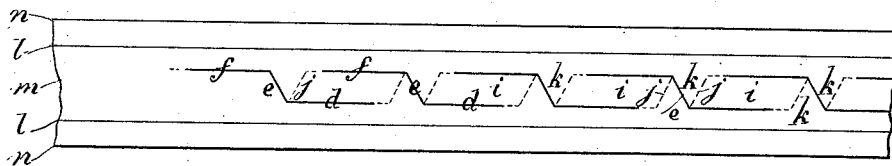
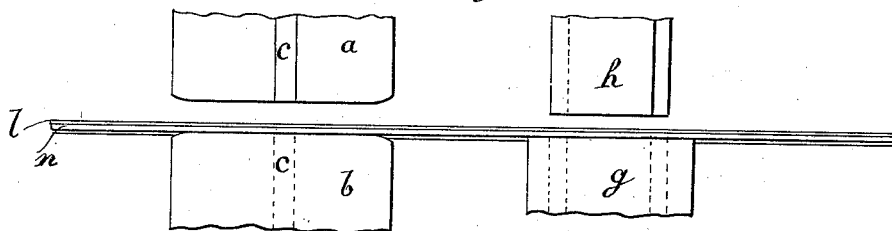


Fig 4.



WITNESSES

W. Morgan
W. Morgan

INVENTOR

Amos P. Thayer

UNITED STATES PATENT OFFICE.

ANSON P. THAYER, OF BROOKLYN, N. Y., ASSIGNOR TO THOMAS W. HALL,
OF SAME PLACE.

DIE FOR MAKING BARBED METALLIC FENCING.

SPECIFICATION forming part of Letters Patent No. 307,351, dated October 28, 1884.

Application filed November 30, 1883. (No model.)

To all whom it may concern:

Be it known that I, ANSON P. THAYER, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Dies for Making Barbed Metallic Fencing, of which the following is a specification.

This invention relates to dies for shearing a double blank strip apart and forming two barbed rods therefrom; and it consists of shearing-dies for making slits at intervals along the strip and partly forming the barbs, and a punch for removing the waste material and completing the form of the barbs, and also completing the separating of the two rods from the one strip, said dies and punch being constructed and arranged as hereinafter fully described, reference being made to the accompanying drawings, in which—

Figure 1 is a cross-section of the blank strip to be sheared and barbed. Fig. 2 is a plan view of the bed-die and horizontal section of the movable die for making slits at intervals along the strip, also a plan of the bed-die and horizontal section of the punch for completing the barbs and the separating of the rods, with a portion of the blank strip as when being slitted and barbed by the dies. Fig. 3 is a plan view of a portion of the blank strip to be separated and barbed, with lines showing the manner of the operation of the shearing-dies on it. Fig. 4 is a side elevation of the dies represented in Fig. 2 and the blank strip between them.

I make a pair of shearing-dies, *a b*, having an oblique offset, *c*, at the middle of the cutting-edges, said offset being as long as the barbs that are to be made, and the inclination is the same as the bevel edges of the barbs. The faces of these dies are a little convex, as represented in Fig. 4, to enable them to cut through the metal at each side of the dies to make short slits *d e f* through the uncut metal at intervals along the strips, the said slits being partly along the base-line *d* of the barbs and between two barbs of one rod; thence diagonally at *e* across between two barbs, one to each rod, and thence along the base-line *f* be-

tween the barbs of the other rod, and from one barb to another, or nearly so, and by the side of these dies, and a suitable distance from them, either in the same bed and movable stock or separately, I arrange a bed-die, *g*, and a punch, *h*, to act successively to the shearing-dies, and punch out the waste pieces *i* between the barbs by cutting along the diagonal lines *j* conversely to the lines *c* cut by the shearing-dies *a b*, and also finishing the portions left uncut along the lines *d f*, the said punch *h* and die *g* having parallel oblique edges corresponding to the lines *j* between two barbs, *k*, and parallel sides corresponding to the parallel lines *d f* cut by the shearing-dies. The blank strip is to be fed along dies *a b*, and thence to the punch *g h* a distance equal to the distance of the barbs apart at each movement. The punch *g h* may be located in such proximity to the dies *a b* that the waste pieces *i* will be punched out in their first position at rest after passing from said dies *a b*, or the second, as here shown or farther on. The blank strip consists of the two cores or rods *l*, middle web, *m*, and outer flanges, *n*. The convex faces of the dies *a b* enable the metal to bend over the corners of the dies at the ends of the slits when punched apart, so as to prevent the cracking and tearing of the metal that would be caused at the ends of the slits if the faces of the dies and the cutting-edges were formed on a straight line from side to side.

What I claim, and desire to secure by Letters Patent, is—

The combination of a pair of shearing-dies, *a b*, having the oblique offset *c*, located midway between the extremities of the cutting-edges, and a punch and die, *g h*, having parallel sides, and also having oblique parallel edges converse to the oblique offset *c* of the dies *a b*, substantially as described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

ANSON P. THAYER.

Witnesses:

F. A. THAYER,
L. H. MORGAN.