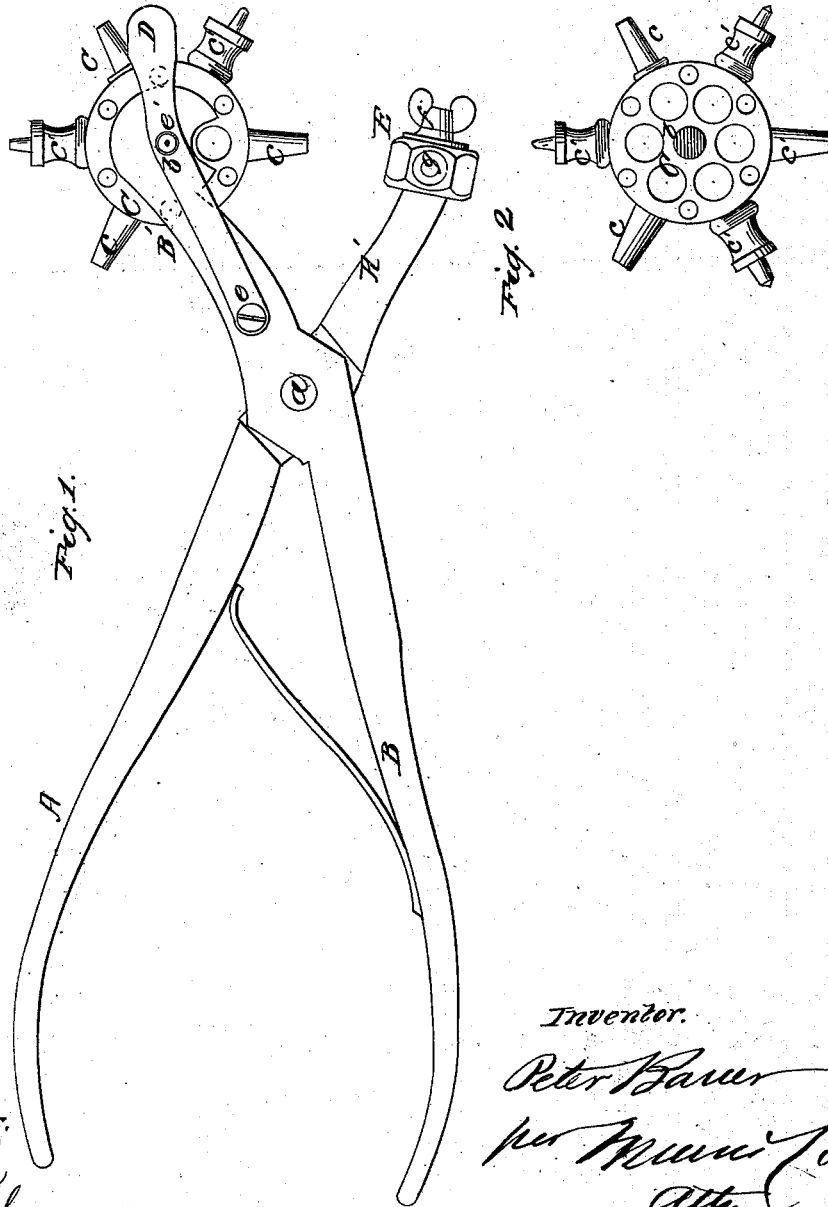


P. Bauer,
Spring Punch,
No. 49,364, *Patented Aug. 15, 1865.*



Witnesses.
Theo. Lusch
C. L. Popliff

Inventor.
Peter Bauer
per Munn & Co
Attys.

UNITED STATES PATENT OFFICE.

PETER BAUER, OF NEWARK, NEW JERSEY.

IMPROVED SPRING-PUNCH.

Specification forming part of Letters Patent No. 49,364, dated August 15, 1865.

To all whom it may concern:

Be it known that I, PETER BAUER, of Newark, in the county of Essex and State of New Jersey, have invented a new and Improved Spring-Punch; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of this invention. Fig. 2 is a detached face view of a revolving head carrying the punches and heading-tools.

Similar letters of reference indicate like parts.

This invention relates to a tool for punching holes of different sizes into leather, paper, or any other substance or material of a similar nature, and for inserting and heading eyelets. The punches are secured in a head which revolves between the two arms or prongs of one of the jaws of a pair of nippers on a pivot which has a firm bearing on both sides of the punch-head, and which at the same time forms a guide for the spring-catch, which serves to retain said head in the desired position. The other jaw carries a block or anvil, which is secured to it by a thumb-screw, so that it can be revolved and set in any desired position. It is provided with several faces, one of which is covered with sheet-brass or other soft metal, to be used for punching, while the other faces are provided with holes and recesses to correspond to the pins and faces of the heading-tools.

My tool consists of a pair of handles or shanks, A B, which are connected by a pivot, *a*, where they cross each other like nippers or shears. That portion of the shank B which extends beyond the pivot forms the arm B', that supports the head C. The arm B' is forked, and its two prongs or jaws straddle the head and form the bearings for the center pin, *b*. This pin, being supported on both sides of the head, is capable to resist all the pressure to which it may be exposed, and it is not liable to work loose, whereas if the pin projects from one side of the head it is liable to work loose or to bend and break.

The head C carries three (more or less) punches, *c*, of different sizes, and an unequal number of heading-tools, *c'*, of corresponding size, and these punches and heading-tools are

firmly secured in the circumference of the head, as clearly shown in the drawings. By turning the head on the center pin either of the punches or heading-tools can be brought in operation, and the head is held in the desired position by a spring-catch, D, which drops into a series of cavities, *d*, on the side of the head. This spring-catch is secured to the arm by means of a screw, *e*, and it is provided with a socket, *e'*, which drops over the end of the center pin. By this arrangement said spring-catch is prevented from shifting, and it is enabled to retain the head C in the proper position for either of the tools connected therewith.

E is the anvil against which the punches act when in operation. This anvil is secured to the jaw A' by means of a thumb-screw, *f*, so that it can be turned and that either of its faces can be brought in a working position. That face on which the punches act is covered with a plate of sheet-brass or other soft metal, so as to save the cutting-edges of the punches from injury when they come in contact therewith, and some of the other faces of the anvil are provided with sockets *g* to correspond in number and size to the heading-tools on the revolving head C.

In punching, the anvil is turned so that the face with the soft-metal plates stands opposite the punch, and after the requisite number of holes have been punched the anvil and the head C are turned and the appropriate heading-tool is brought in operation. The punching of holes and the insertion and heading of eyelets can thus be effected in a simple manner with little loss of time.

This tool is durable in its construction. The revolving head C is secured on its center pin, so that the latter is not liable to work loose, bend, or break, and by making both the head and the anvil adjustable different tools can be brought in operation with little loss of time.

I claim as new and desire to secure by Letters Patent—

The revolving anvil E, provided with one or more faces for the punches in the head C, and with sockets corresponding to the heading-tools in said head, substantially as and for the purpose described.

PETER BAUER.

Witnesses:

EDWARD LOCHER,
FRANK M. FREDERICK.