

P. BAUER.
SPRING PUNCH.

No. 42,064.

Patented Mar. 29, 1864.

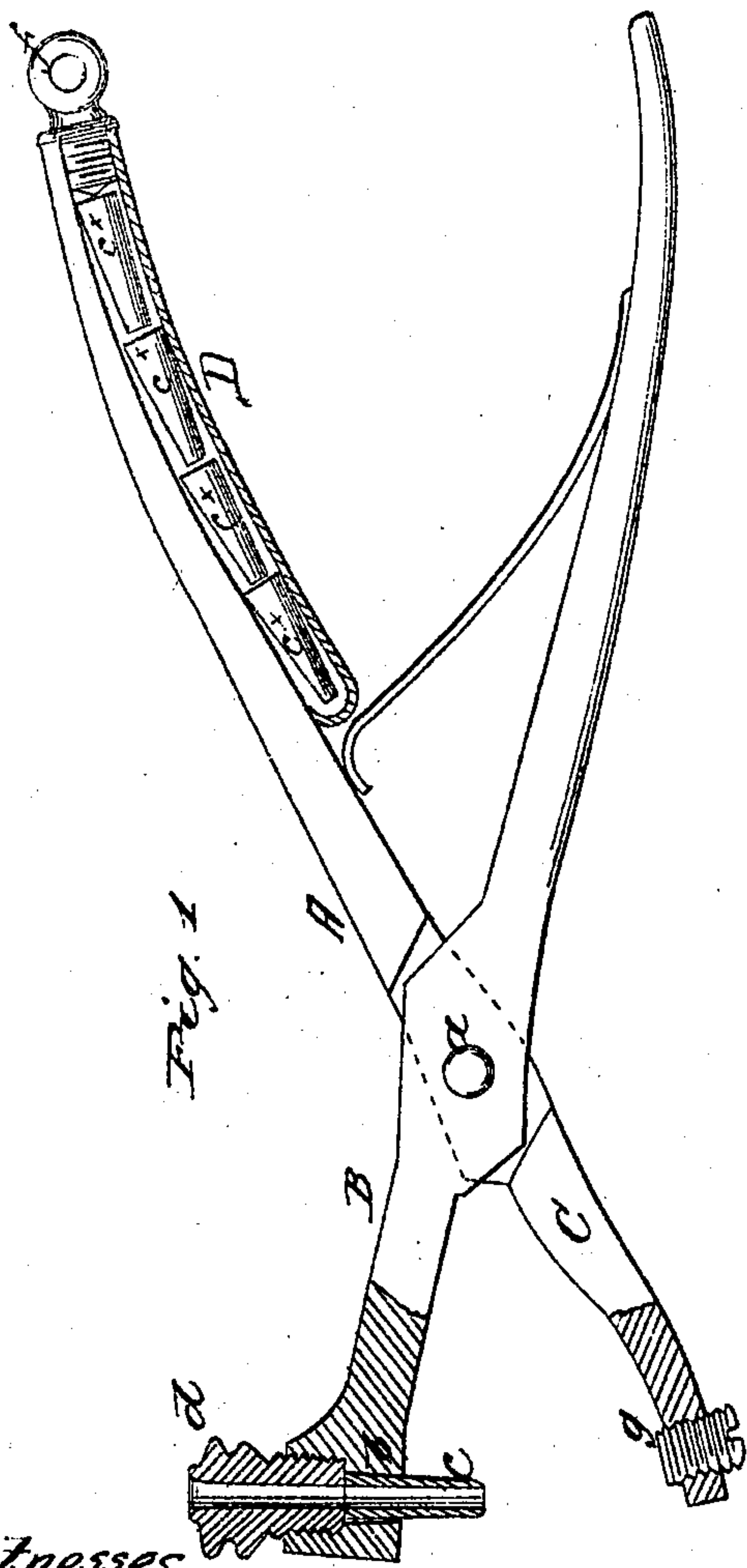
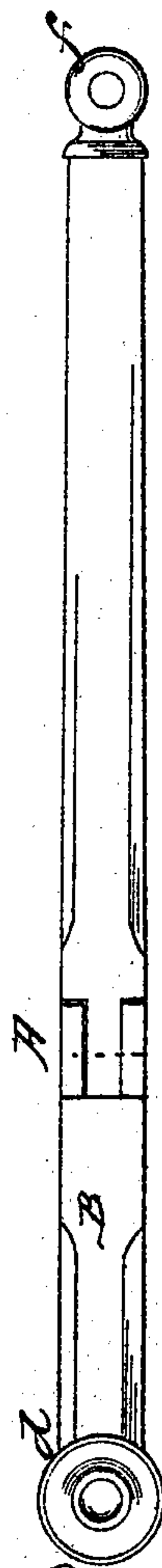


Fig. 1

Witnesses:

J. W. Coombs
Geo W Reed

Fig. 2



Inventor

Peter Bauer
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UNITED STATES PATENT OFFICE.

PETER BAUER, OF NEWARK, NEW JERSEY.

IMPROVED SPRING-PUNCH.

Specification forming part of Letters Patent No. 42,064, dated March 29, 1864.

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 of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a sectional side elevation of my invention. Fig. 2 is a plan or top view of the same.

Similar letters of reference indicate corresponding parts in both figures.

This invention consists in the arrangement of a conical socket in the outer end of the cutter-jaw, fitted to receive tubes or cutters of different size, and provided with a hollow thumb-screw in such a manner that by removing said thumb-screw the tube or cutter can be readily removed and replaced by another of different or of the same size.

The invention consists, also, in the application to the supporting-jaw of a screw-plug of brass, copper, or other soft metal which will not injure the cutting-edge of the cutter, in such a manner that the face of said screw-plug can always be adjusted according to the length of the tube in the cutter-jaw, and when said face is worn out it can be easily filed off and readjusted.

The invention consists, finally, in the arrangement of a tube or receptacle in or under one of the handles, closed by a screw-plug or other suitable device in such a manner that the different tubes can be readily introduced or taken out, and that said tubes are always on hand when they are required.

To enable others skilled in the art to make and use my invention, I will proceed to describe it.

A represents a spring-punch made with the jaws B C, which are united by a pivot, *a*, in the usual manner. The jaw B is provided at its outer end with a conical socket, *b*, bored out to receive its tubes or cutters *c*. The upper half of the socket *b* is tapped to receive the thumb-screw *d*, which bears on the inner end of the tube *c*, and holds it down, as clearly shown in Fig. 1 of the drawings. This thumb-

screw is perforated with a hole through its center equal in diameter to the diameter of the largest tube to be used, so that the blanks or cuttings can pass off without difficulty. If it is desired to remove the tube and to replace it by a new or other one, the thumb-screw is taken out and the tube can now be forced out by closing the punch. A series of tubes, *c**, of the same or of different sizes, can thus be used in the same punch, and in order to have the several tubes always handy I have fitted one of the handles with a receptacle, D, capable of receiving the several tubes. This receptacle may either be soldered to the handle or the handle may be cast hollow, so as to afford room for said tubes. The mouth of this receptacle is closed by a screw-plug, which can be readily taken out whenever it is desired to change the tubes. The jaw C is provided with a screw, *g*, which is inserted just opposite the tube in the jaw B. This screw is made of brass, copper, or other soft metal which will not injure the cutting-edge of the tubes, and it is so arranged that the face can be readily adjusted to meet tubes of different lengths, or that when said face is worn out it can be readily filed off and readjusted.

The great convenience of this punch and its superiority over other punches of a similar nature is apparent. The tubes are always protected and not liable to be injured when the tool is thrown about. They can be readily changed, and the anvil can always be adjusted to meet the cutting-edge of the tube.

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

1. The socket *b* in the jaw B, in combination with the hollow thumb-screw *d* and tubes *c*, constructed and operating substantially as and for the purpose specified.

2. The adjustable screw-anvil *g*, in combination with the jaws B C of a punch A, as and for the purpose set forth.

3. The receptacle D, arranged in combination with one of the handles of a punch, A, substantially as and for the purpose described.

PETER BAUER.

Witnesses:

JOHN POST,

JOHN G. PHELPS.