(No Model.)

J. A. GOEB.

GAGE FOR COUNTERSINKS.

No. 455,199. Patented June 30, 1891.

Fig. 1.

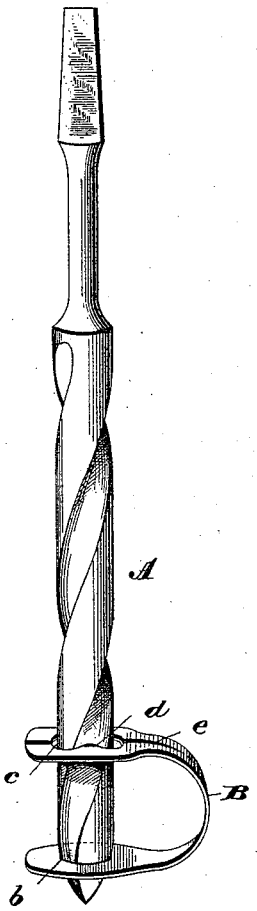


Fig. 2.

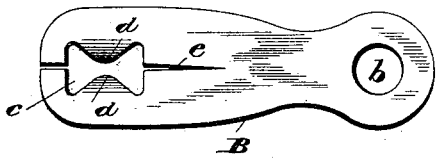


Fig. 3.

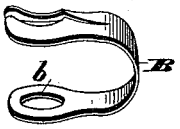
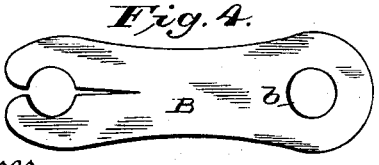


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

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GAGE FOR COUNTERSINKS.

SPECIFICATION forming part of Letters Patent No. 455,199, dated June 30, 1891.

Application filed July 31, 1890. Serial No. 360,504. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. GOEB, a citizen of the United States of America, residing at St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Gages for Countersinks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in gage attachments for boring-tools.

The object of the invention is to provide a simple, cheap, and useful device which can be readily attached to a boring-tool or drill, so that said tool or drill may be utilized as a countersink, the device also being applicable to countersinking-tools as a gage therefor.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view showing the device applied to a countersinking-tool or drill. Fig. 2 is a plan view of the blank from which the gage is made. Fig. 3 is a detail perspective view of a modification, and Fig. 4 is a plan view of a blank from which the construction shown in Fig. 3 is made.

A refers to a suitable boring or countersinking tool, and B the gage, which is struck up from a single piece of sheet metal, as shown in Fig. 2, which is then bent upon itself, so that the openings therein will be on a line with each other.

The device B is provided with a circular opening *b* adjacent to which is a flat surface, which serves as the gage-face, the body portion thereof being curved or bent, as shown, so that the opening *c* in the upper part thereof will be on a line with the opening *b*, the inwardly-projecting portions *d* being adapted to enter the spiral recesses in the point of the tool. The upper portion of the gage is split or bifurcated, as shown at *e*. This device is preferably made up of spring metal, and the grasping-edges, instead of being provided with inwardly-projecting portions *d d*, may be circular and the split end struck up at its center, as shown in Fig. 3. The device is applied to a boring-tool, as shown in Fig. 1, wherein the tool is passed through both openings of the device, the closed opening being lowermost and the upper split portion retaining the device in position. When applied to a drill, the lower portion would embrace the usual conical point, so that the point of the tool would not enter beyond the lower member of the gage. Owing to the upper portion being bifurcated, it will exert a spring-pressure upon the tool to which it is applied, and it will be readily retained in place.

I claim—

1. In combination with a boring implement, a device B, made up of a single piece of metal bent, as shown, so that the ends will be substantially on a line with each other, one end forming clamping-jaws for retaining the device upon the implement and the other having an aperture through which the lower end of the implement passes, so as to present a gage-face, substantially as shown, and for the purpose set forth.

2. In combination with a boring implement, a device B, made up of a single piece of flat spring metal and provided adjacent to one end with a circular aperture *b*, the opposite end being split or bifurcated and apertured, as shown, to provide clamping-jaws for retaining the device upon the implement, the device being bent so as to bring the apertures on a line with each other, for the purpose set forth.

3. As an improved article of manufacture, a device B, adapted to be used in connection with a boring-tool, made up of a single flat piece of metal and provided adjacent to each end with apertures, the metal being bent to bring the apertures on a line with each other, the body portion adjacent to the upper aperture being split to provide clamping-jaws, for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN A. GOEB.

Witnesses:

JACOB GACK,

FRANCIS P. BECKER.