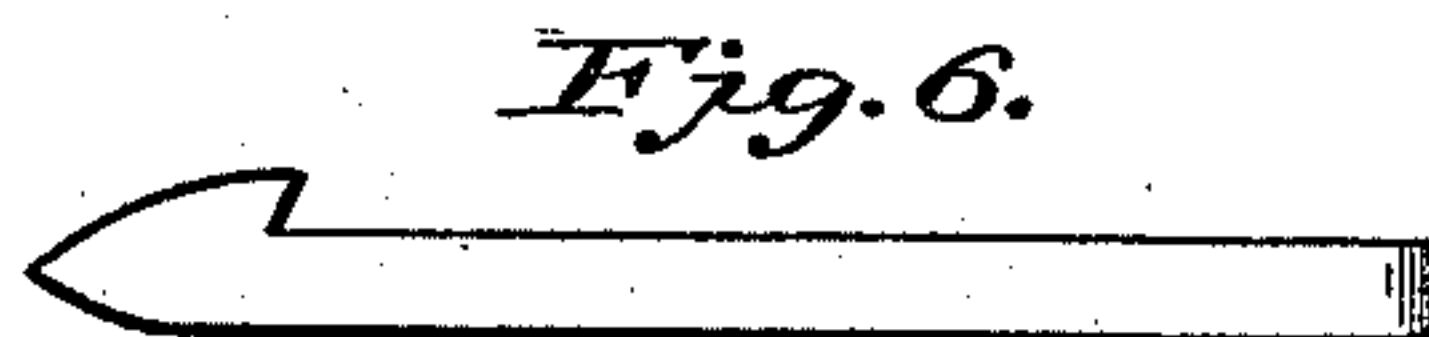
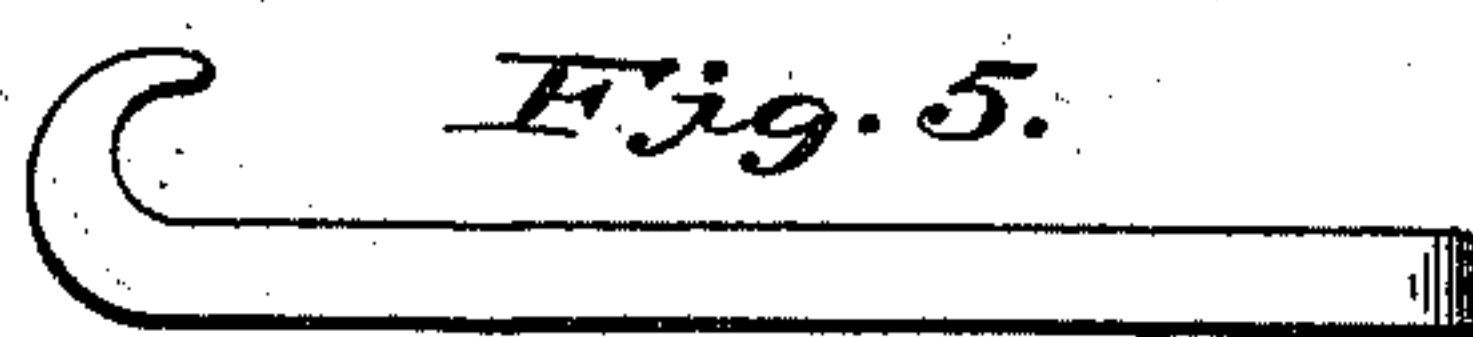
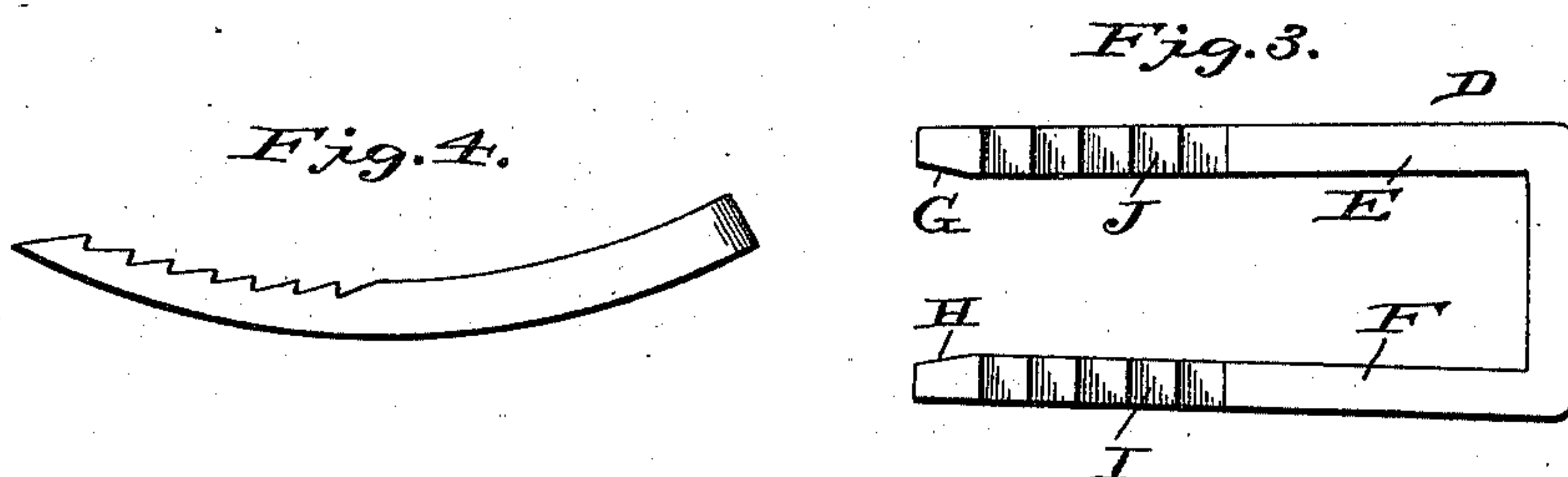
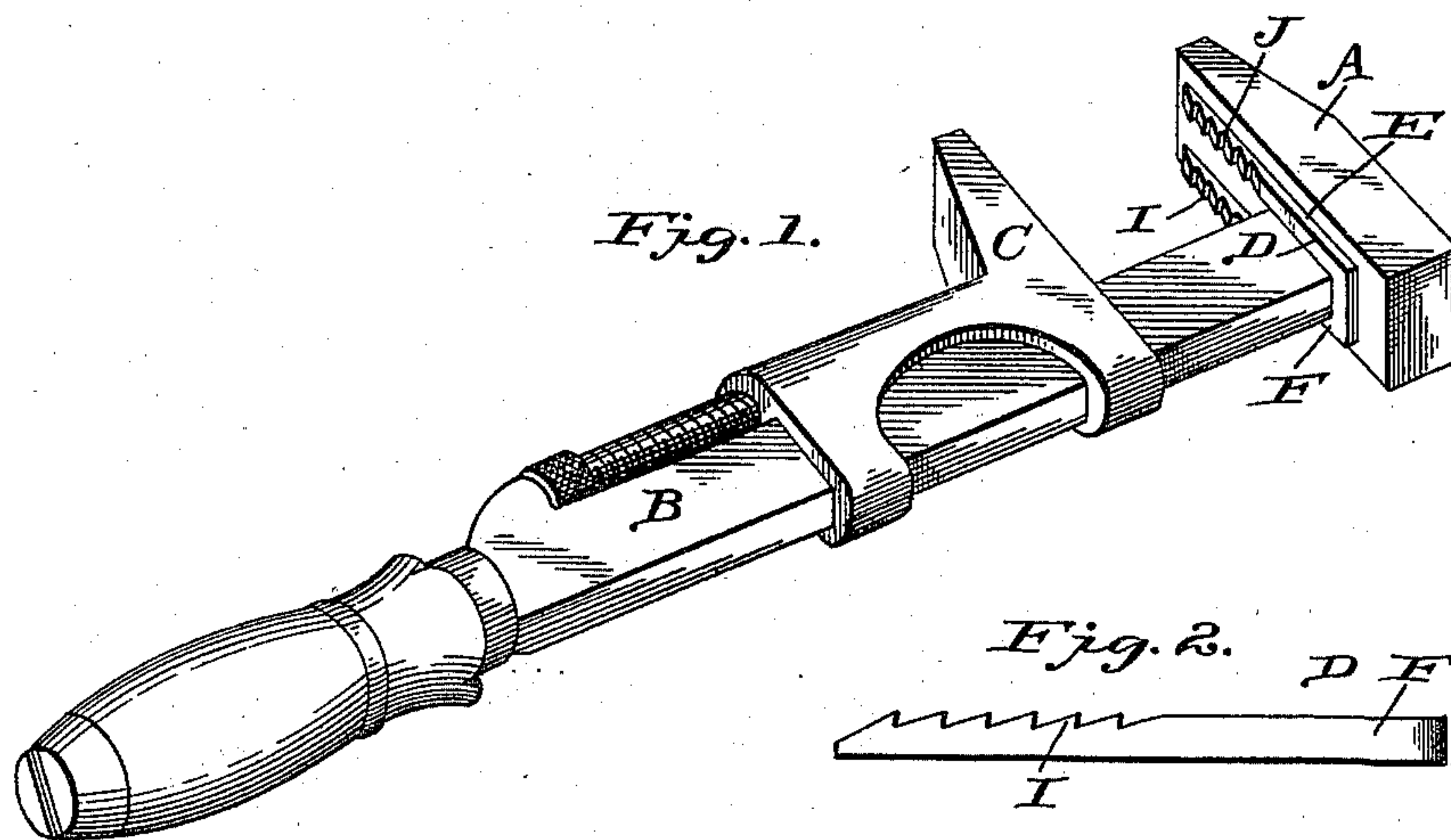


(No Model.)

B. E. KEEN.
WRENCH ATTACHMENT.

No. 568,087.

Patented Sept. 22, 1896.



Witnesses.
E. G. McKee
K. A. Nau

Inventor
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Attorney

UNITED STATES PATENT OFFICE.

BALTIS E. KEEN, OF LOS ANGELES, CALIFORNIA.

WRENCH ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 568,087, dated September 22, 1896.

Application filed June 3, 1896. Serial No. 594,068. (No model.)

To all whom it may concern:

Be it known that I, BALTIS E. KEEN, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented certain new and useful Improvements in Wrench Attachments; 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.

My invention relates to wrench attachments.

My object is to provide a simple and cheap attachment which can be used in connection with nut-and-bolt wrenches, so that they may serve for all the purposes of a pipe-wrench. This object is accomplished by the employment of a peculiarly-shaped device having teeth and adapted to be used as a facing for one of the jaws.

In the accompanying drawings, Figure 1 is a perspective view showing the invention in use on an ordinary nut-and-bolt wrench; Fig. 2, a detail edge view of the attachment; Fig. 3, a top detail view, and Figs. 4, 5, and 6 detail views of modifications.

A designates the fixed jaw, which is carried on the upper end of the shank B of an ordinary nut-and-bolt wrench, and C is the sliding jaw of said wrench.

My improved attachment is constructed of a single piece of steel D, which is bent into substantial U shape. It will be observed, however, that the shanks E and F of the attachment converge somewhat toward their free ends, which are beveled at G and H. The shanks are provided with series of teeth I and J, which slant toward the bend of the

attachment. The object in converging the shanks is that with this construction the attachment is firmly held in position, as when in use on the wrench the shanks of the attachment straddle the shank of said wrench, as shown in Fig. 1. When in this position the bend of the attachment and portions of the shanks thereof tightly hug the shank of the wrench, while the backs of the shanks lie flat against the face of the fixed jaw A, and the teeth point downward.

When equipped with my attachment, the wrench can be used for handling pipes, round articles, &c. If desirable, the attachment can be reversed, so that the shanks will point in an opposite direction.

Figs. 4, 5, and 6 disclose modifications which I sometimes find it preferable to employ, and they are secured to the wrench in the manner previously described.

It is to be understood that I do not limit myself to the precise constructions herein shown and described, but consider myself entitled to all such variations as come within the spirit and scope of the invention.

Having thus described the invention, what is claimed as new is—

The herein - described attachment for wrenches consisting of a substantially U-shaped jaw made from a single piece of metal and having converging arms or shanks each of which is provided with gripping-teeth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

BALTIS E. KEEN.

Witnesses:

JAMES H. FINNEY,
C. W. PLIMMER.