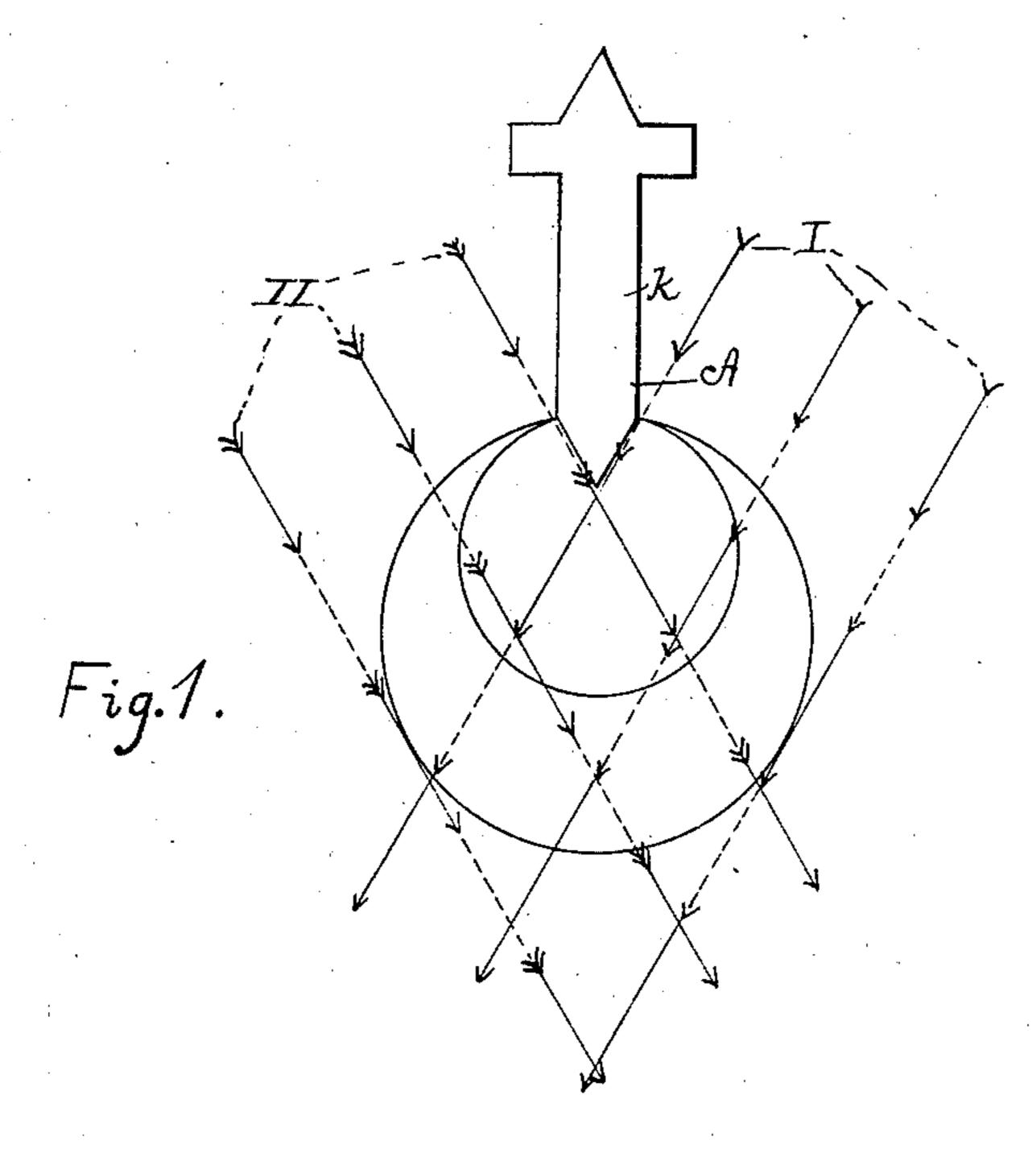
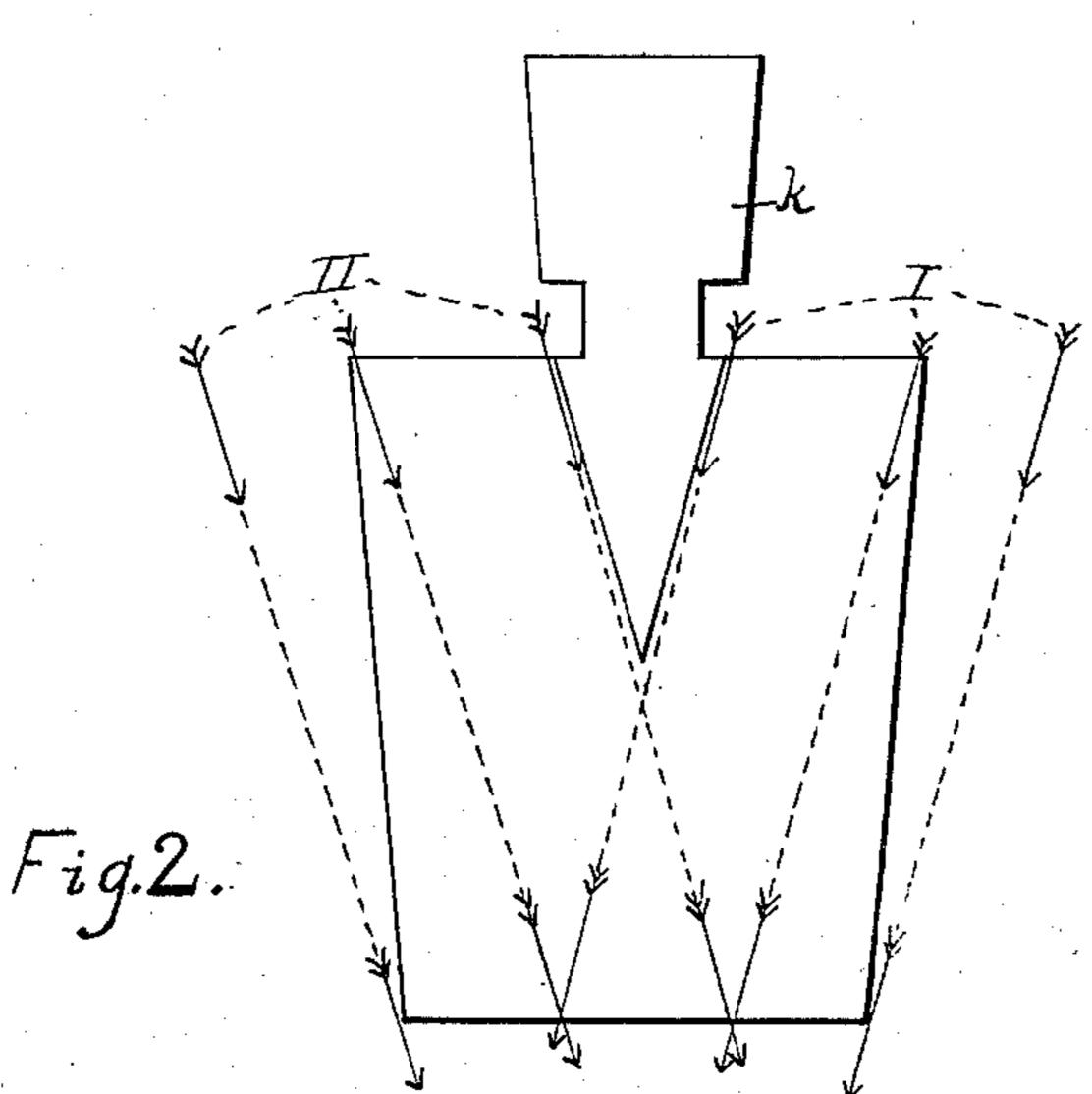
R. EICKWORTH.

METHOD OF FORMING SHEET METAL TOOLS, SUCH AS SPADES, PANS, OR THE LIKE.

(Application filed Oct. 24, 1900.)

(No Model.)





Witnesses

S. Brasheans

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United States Patent Office.

REGNIER EICKWORTH, OF LINTORF, GERMANY.

METHOD OF FORMING SHEET-METAL TOOLS, SUCH AS SPADES, PANS, OR THE LIKE.

SPECIFICATION forming part of Letters Patent No. 686,040, dated November 5, 1901.

Application filed October 24, 1900. Serial No. 34,202. (No specimens.)

To all whom it may concern:

Be it known that I, REGNIER EICKWORTH, a citizen of the German Empire, residing at Lintorf, Rhenish Prussia, Germany, have invented certain new and useful Improvements in Methods of Forming Sheet-Metal Ware, as Spades, Pans, or the Like; 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 ap-

This invention relates to a method of forming sheet-metal ware, the object being to provide a blank for implements such as spades, shovels, pans, and the like, which is formed by rolling the same in a suitable manner, so as to leave their wearing portions relatively thicker than their less exposed portions and to provide the blank with a tang, as a handle, or with a socket for the insertion of a wood handle or the like without resorting to forging and hammering, as has been necessary heretofore.

In carrying out my invention I take a blank corresponding in size to the article to be produced and roll the same to the desired shape or configuration and thickness.

I have illustrated the improved method of forming sheet-metal ware in the accompany30 ing drawings, forming a part of this specification, wherein—

Figure 1 is a plan view of a scoop-blank, the arrows illustrating the direction of rolling. Fig. 2 is a similar view of a spade-blank, showing the direction of rolling.

Referring to Fig. 1, A represents a blank for a pan or scoop in an advanced state of rolling.

The sheet-metal is alternately introduced between a suitable pair of rolls in the directions indicated by the respective sets of ar-

rows, thereby rolling out the principal part of the blank, leaving the part intended for the handle in its original thickness.

The arrows I and II in the drawings indicate, respectively, the directions of rolling. In alternately changing these directions of feeding the blanks between the rolls the article is rolled out to the desired degree of thickness and size. When the main part is rolled 50 out sufficiently, the edges are smoothed or cut away, bent, or similarly treated by well-known processes in order to finish the article. Then the socket to receive the handle is bent or otherwise formed in the usual manner.

The great advantage offered by the new method of rolling is that a part k for the handle of the implement remains strong and heavy, the thickness of which considerably enhances the durability and strength of the 60 implement.

I claim as my invention—

The herein-described process for the manufacture of metal implements, which consists in forming a suitable blank, with a handle 65 portion, and afterward rolling the blade or wearing portions diagonally in lines at inclinations from and across, the longitudinal center, in the manner described leaving the handle portion and the portion of the blank which 70 forms the connection of, or continuation of the handle into the blank of its original thickness and beveling off the blade portion of the body from said thick portion diagonally toward the front corners, substantially as set 75 forth.

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

REGNIER EICKWORTH.

Witnesses:

OSKAR KÜNZELL, WM. ESSENWEIN.