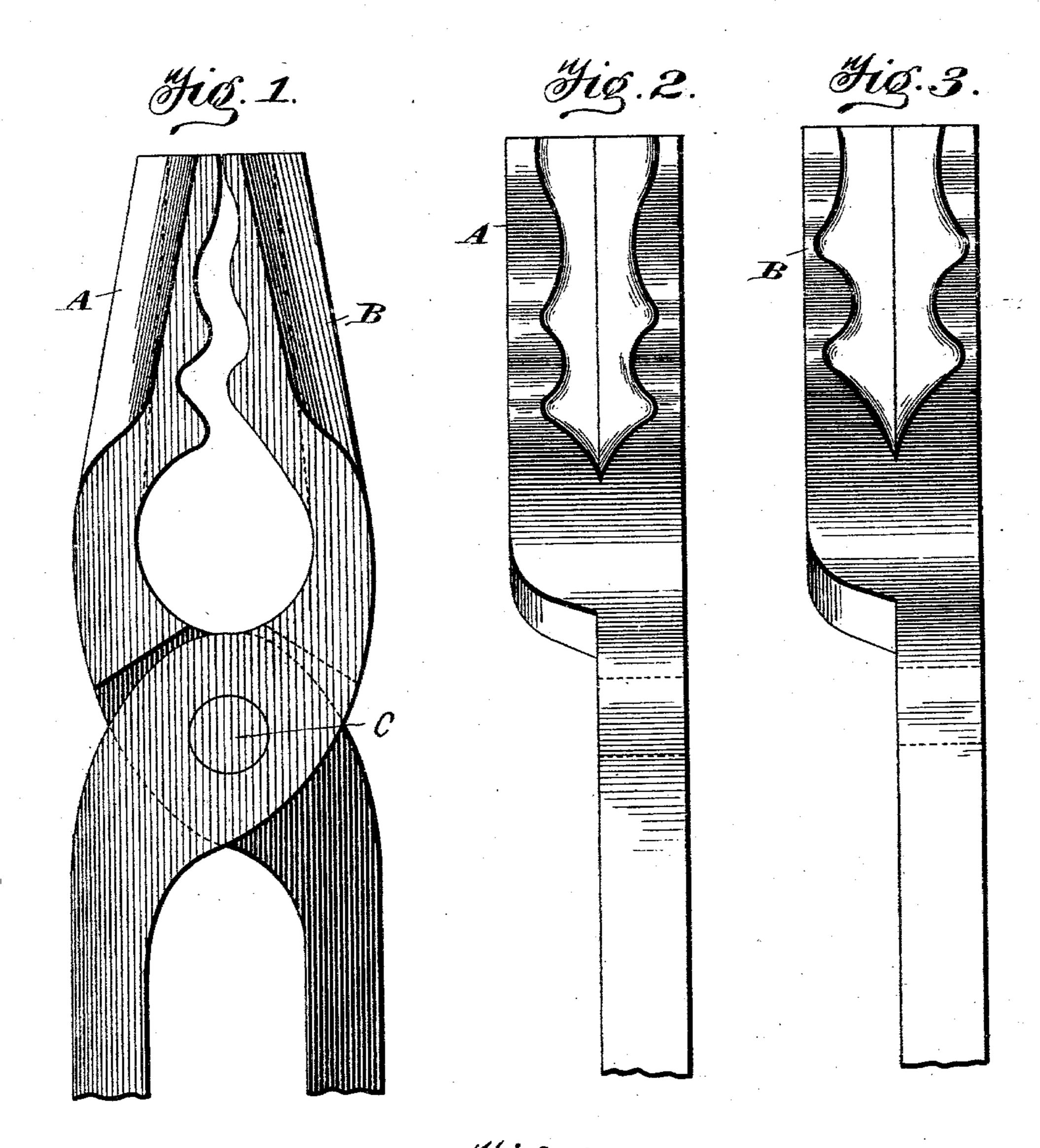
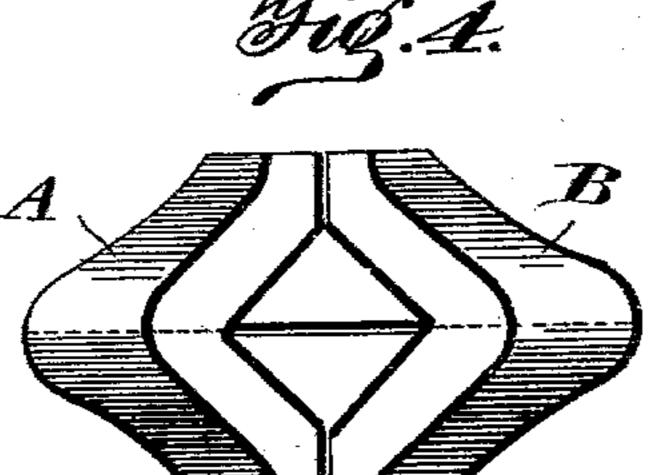
## G. F. BUDACH. SMITH'S PLIERS OR TONGS.

(Application filed Oct. 20, 1900.)

(No Model.)





Inventor

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## UNITED STATES PATENT OFFICE.

GUSTAV FRIEDRICH BUDACH, OF FLENSBURG, GERMANY.

## SMITH'S PLIERS OR TONGS.

SPECIFICATION forming part of Letters Patent No. 694,828, dated March 4, 1902.

Application filed October 20, 1900. Serial No. 33,717. (No model.)

To all whom it may concern:

Be it known that I, GUSTAV FRIEDRICH BU-DACH, a subject of the Emperor of Germany, residing at Flensburg, Germany, have invented certain new and useful Improvements in Smiths' Pliers or Tongs, of which the follow-

ing is a specification.

This invention relates to smiths' tongs, and has for its object to provide tongs having the to advantage over the ordinary smiths' tongs with smooth jaws as hither to employed in that the jaws have a form which is found to be the most useful both theoretically and practically. With these tongs it is possible to hold any 15 smiths' work with security and without the danger of the same springing out of the tongs. While hitherto it has been necessary to have in use a large number of so-called "shaped" tongs the present pair of tongs combine in 20 themselves this number of tongs, as they can hold both round and rectangular bars, flatiron sheets, tools, angle-irons, and any sections of iron which are employed.

The invention is shown in the accompany-

25 ing drawings, in which—

Figure 1 is a side elevation of the tongs; Fig. 2, a view of one half, and Fig. 3 a view of the other half, of the tongs, while Fig. 4 is

a plan view of Fig. 1.

section widening toward the inside, so that the jaws can only stand parallel when in a somewhat opened position. They are held together by a rivet or pin C in the usual manner. The faces of the jaws are trough-shaped, so that the corrugations facing one another will engage with one another. The two or three corrugations deepen from the front to the inside and are extended at the rear into a round opening between the jaws. The appearance of the jaws is very similar to those of a beast of prey. While the rear and stronger corrugations serve more particularly for grip-

ping and holding fast, the forward ones are developed into comparatively thin lips. These 45 latter are especially suitable for lifting out of the fire small pieces lying therein; but these lips can also be very well employed for holding fast pieces of small size when being forged. Even the tapered head of a chisel or the bent 50 end of a turning-tool is easily handled with these tongs, and cross-lying pieces of any section may be gripped with certainty by them.

I declare that what I claim is—

1. A smith's tongs having jaws with faces 55 of angular cross-section and so shaped and pivoted as to stand parallel one to the other when in a somewhat opened position, the said jaws having corrugated lateral edges, parallel when partly opened and adapted to come 60 into terminal engagement with each other, and a rounded interior part at the rear adapted to form a rounded opening when the jaws are closed, substantially as described.

2. A smith's tongs having jaws with faces 65 of angular cross-section and so shaped and pivoted as to stand parallel one to the other only when in a somewhat opened position, the said jaws having corrugated lateral edges, parallel when partly opened and adapted to 70 come into engagement at their extremities, when closed, the forward ends of the jaws having the form of comparatively thin lips with the corrugations extending deeper toward the rear and then ending in a rounded interior 75 part adapted to form a rounded opening at the rear when the jaws are closed, substantially as described.

In witness whereof I have hereunto signed my name in the presence of two subscribing 80

GUSTAV FRIEDRICH BUDACH.

Witnesses:

GUSTAV HERMES, CHRISTIAN ANDRESON.