No. 627,401.

W. H. EDWARDS.

Patented June 20, 1899.

ADJUSTABLE NUT CRACKER.

(No Model.)

(Application filed Jan. 30, 1899.)

Fig. 1.

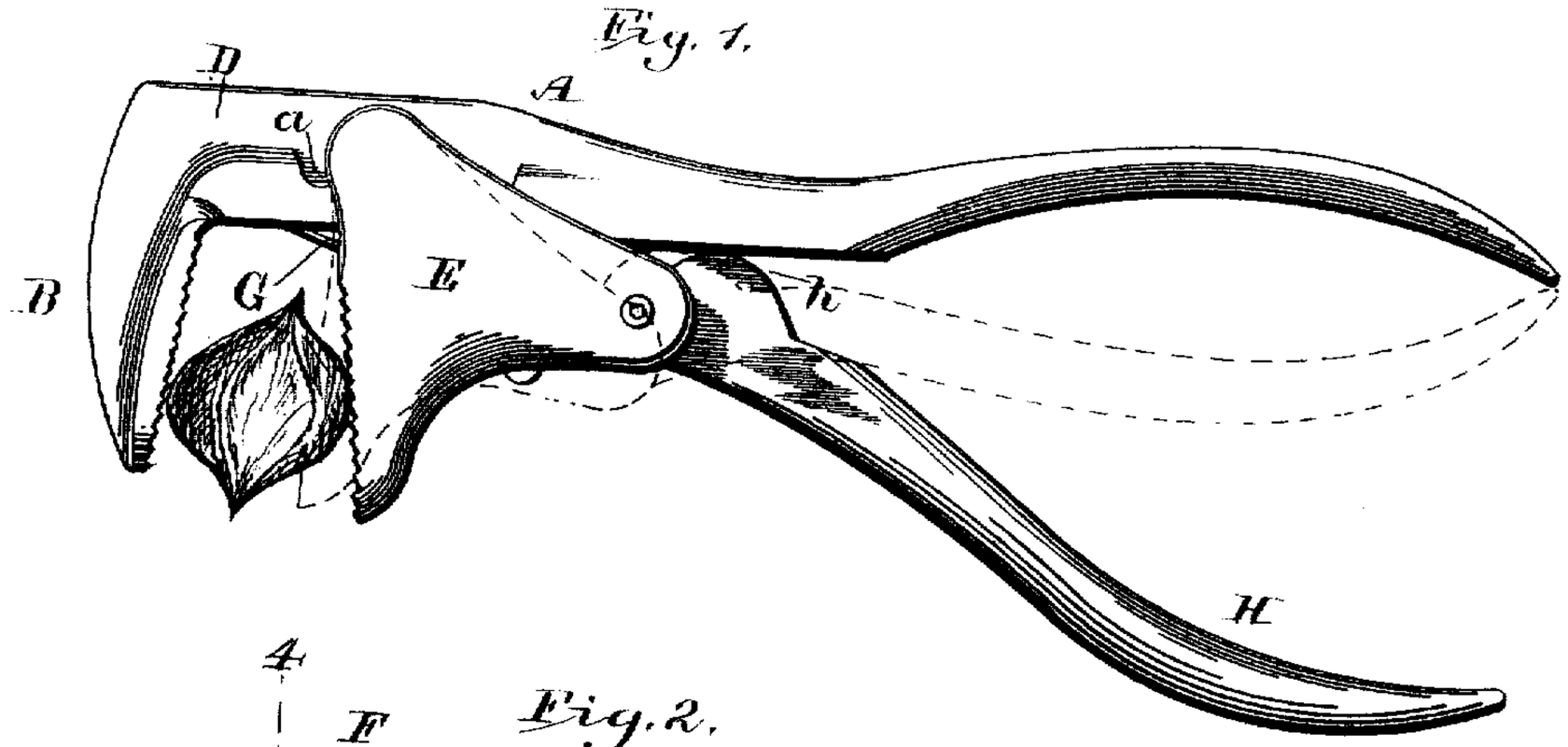


Fig. 2.

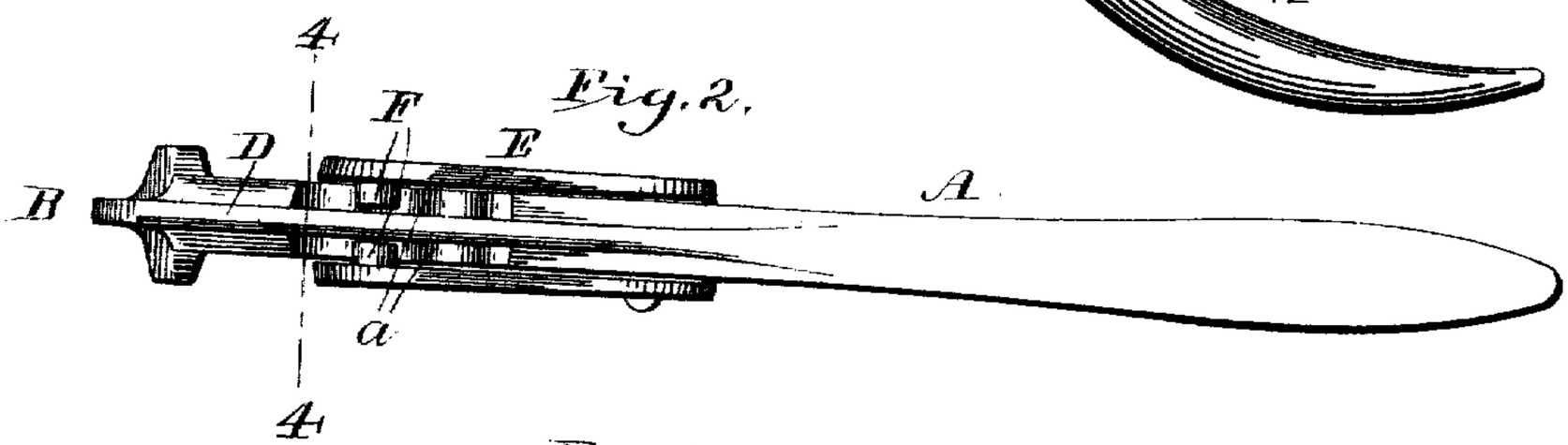


Fig. 3.

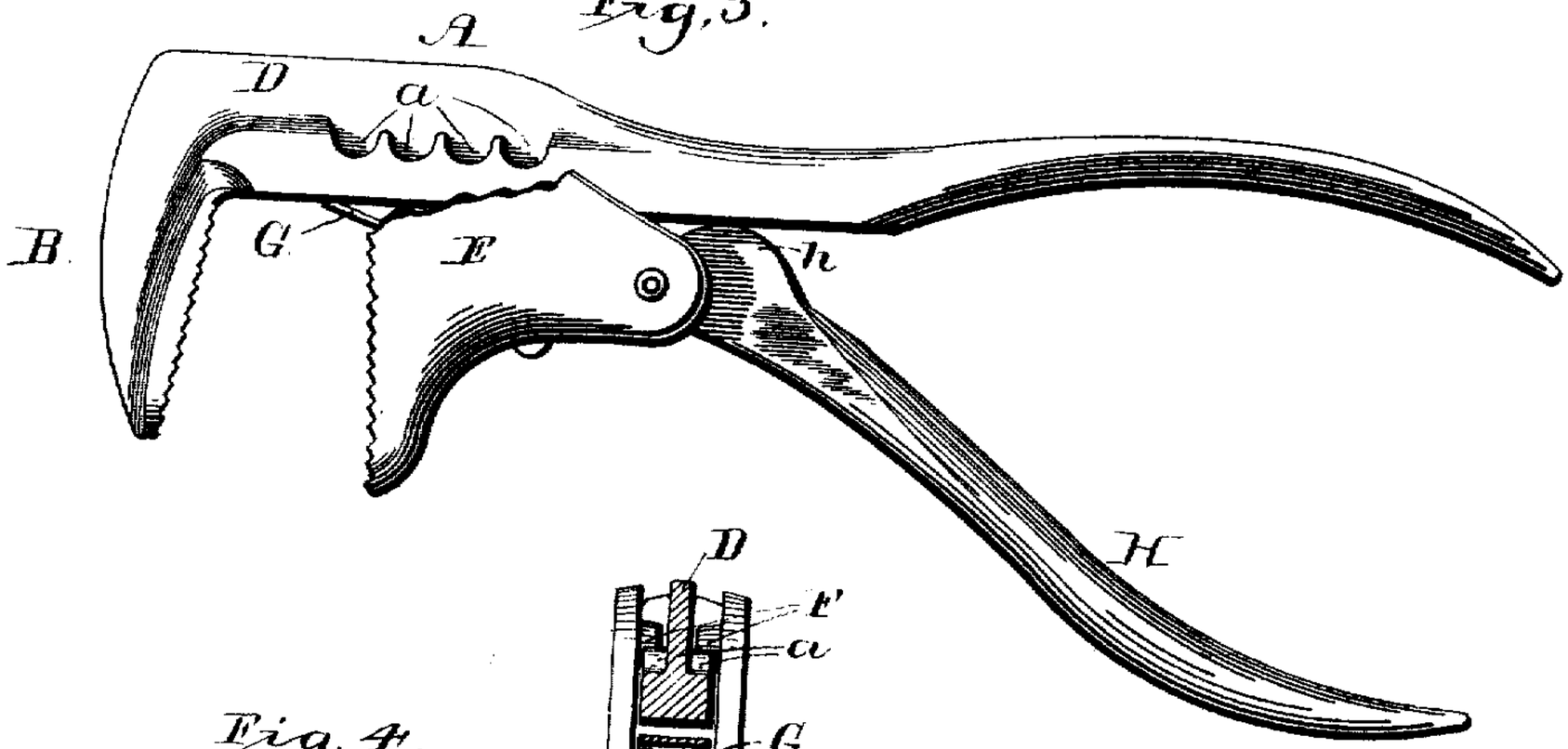
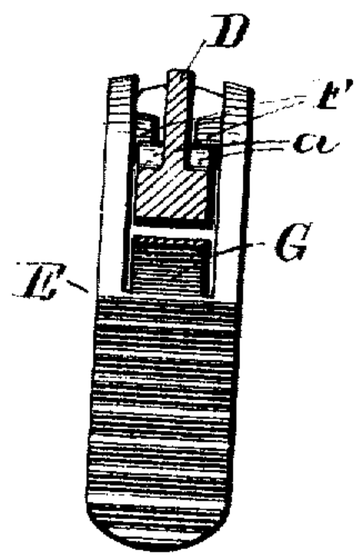


Fig. 4.



Witnesses
Edwin B. H. Tower Jr.
Herbert D. Lawson.

Inventor
William H. Edwards.
By — Edwin B. H. Tower
Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM H. EDWARDS, OF ROCKFORD, ILLINOIS.

ADJUSTABLE NUT-CRACKER.

SPECIFICATION forming part of Letters Patent No. 627,401, dated June 20, 1899.

Application filed January 30, 1899. Serial No. 703,915. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. EDWARDS, a citizen of the United States, residing at Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Adjustable Nut-Crackers; 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 an implement which is specially adapted and designed for use as a nut-cracker.

The object of the invention is to provide an implement which shall be simple and durable in construction and easy of operation and also to provide an implement in which the movable jaw can be readily adjusted bodily toward and from the stationary jaw to vary the size of the opening between said jaws.

With these ends in view the invention consists in the peculiar construction and arrangement of parts, that will be hereinafter pointed out.

In the accompanying drawings, Figure 1 is a side view of my improved implement. Fig. 2 is a back or top plan view of the same. Fig. 3 is a view similar to Fig. 1, with a portion of the movable-jaw body broken away. Fig. 4 is a sectional view on the line 4 4 of Fig. 2.

Like letters of reference designate corresponding parts in the several figures of the drawings, referring to which—

A designates what I will hereinafter term the "body" of the implement, it having formed integral therewith at one end a laterally or forwardly extending jaw B and having its other end shaped to be used as a handle.

By reference to Figs. 1, 2, and 4 it will be seen that the body A is of such shape in cross-section as to form along its back edge adjacent to the stationary jaw B a centrally-arranged longitudinally-extending rib or ridge D, and in the said body A, on opposite sides of said rib D, are formed a series of seats or recesses *a*, there being four of such seats on each side of said rib in the embodiment of the invention herein illustrated, and the seats or recesses on one side of said rib alining transversely with the seats or recesses on the opposite side of the rib.

The movable jaw E has a longitudinally-extending groove or way formed in its rear wall, into or through which the body A is adapted to extend, or, in other words, the said movable jaw is provided with two rearwardly-extending side plates that extend on opposite sides of the body A. Each of these side plates of the movable jaw is provided near its rear end with an inwardly-extending stud or lug F, adapted to fit in one of the aforesaid seats or notches *a* in the body A. The jaw E, it will be seen, is substantially triangular, the same pivoting at its upper forward angle upon the body A and adapted to have the handle or actuating-lever, presently referred to, pivoted or articulated to its lower rear end or angle, whereby said jaw is connected to and adapted to be actuated directly by said lever, and said lever is caused to fulcrum directly upon the body or other lever. The said lugs F are arranged in the same transverse line and fit into alined seats *a* on opposite sides of the rib D and form fulcrums or pivots on which the movable jaw can be moved toward and from the stationary jaw B. The movable jaw is retained in place by the said engagement of the lugs or studs F thereof with the body A and by means of a leaf-spring G, which is secured within the aforesaid slot or groove in said jaw and has its free end riding against the inner or forward face of the body A. The effect of this spring G is to retain the lugs or studs F in the desired seats *a* of the series thereof and also to maintain the movable jaw in a position out of parallelism with the stationary jaw—that is, as shown in Fig. 1, the face of the jaw E is by means of said spring normally held in a position inclined to the face of the stationary jaw and so as to form between said jaws a socket or passage that decreases in width from its forward open end toward the body A.

To rock the lower jaw upon its aforesaid pivot or fulcrum lugs F, use is made of a lever H. This has one end pivotally connected with the movable jaw, it extending into the aforesaid groove or way in the rear side thereof in the embodiment of the invention herein

illustrated, and on said lever, at one side of its said connection with the movable jaw, is formed a cam-surface *h*, which contacts with the inner face of the body A and is the fulcrum about which said lever H is adjusted.

From the above description and the drawings it will be seen that when the free end of the lever H is moved toward the handle portion of the body A the other end thereof and the portion of the movable jaw connected therewith will be moved forward. By this movement the said jaw E will be rocked about its pivot or fulcrum lugs F and its operative face brought into a position approximating parallelism to the operative face or surface of the stationary jaw. As soon as pressure is removed from the free end of the lever H the spring G will cause the movable jaw to move in the opposite direction upon its studs F and return to its normal inactive position.

By pressing the movable jaw rearwardly and overcoming the tension of the spring G sufficiently to force the studs F from their seats *a* the said jaw can be easily adjusted longitudinally and the studs caused to enter the desired seats *a*.

It will be noticed that the movable jaw is arranged between the stationary jaw and the handle connected therewith and that the lever H is connected directly thereto, so that it is always in operative relation to the movable jaw and is adjusted with that jaw longitudinally of the body of the implement.

The lugs F both support the movable jaw and act as pivots about which said jaw can be rocked by the lever H. By this construction and arrangement a minimum amount of strain is placed upon the spring G. The spring is also completely inclosed and protected, the side plates of the movable jaw E extending across the edges thereof and the faces being covered and protected by the body of the implement and the body of the movable jaw.

While I have above stated that my improved implement is particularly adapted for use as an adjustable nut-cracker and in the drawings have illustrated it for that purpose, I am aware that it can be used for other purposes, such as a pipe-wrench, without changing or modifying its construction or in any manner departing from the spirit of my invention.

What I claim is—

The implement of the character described, comprising the body or lever having a fixed jaw, at one end and a series of lateral notches along its longitudinal portion, in proximity to said jaw, and a spring-pressed movable jaw substantially triangular, and adapted to receive said body and having at its upper forward angle, opposite inwardly-projecting studs, or pivots, adapted to engage said series of notches, and the handle or lever pivoted or connected directly to said movable jaw, at its lower rear end or angle, and having, contiguously to the latter angle or end of said movable jaw, a cam projection adapted to fulcrum directly upon said body, substantially as set forth.

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

WILLIAM H. EDWARDS.

Witnesses:
K. E. KNUTSSON,
R. G. BOWMAN.