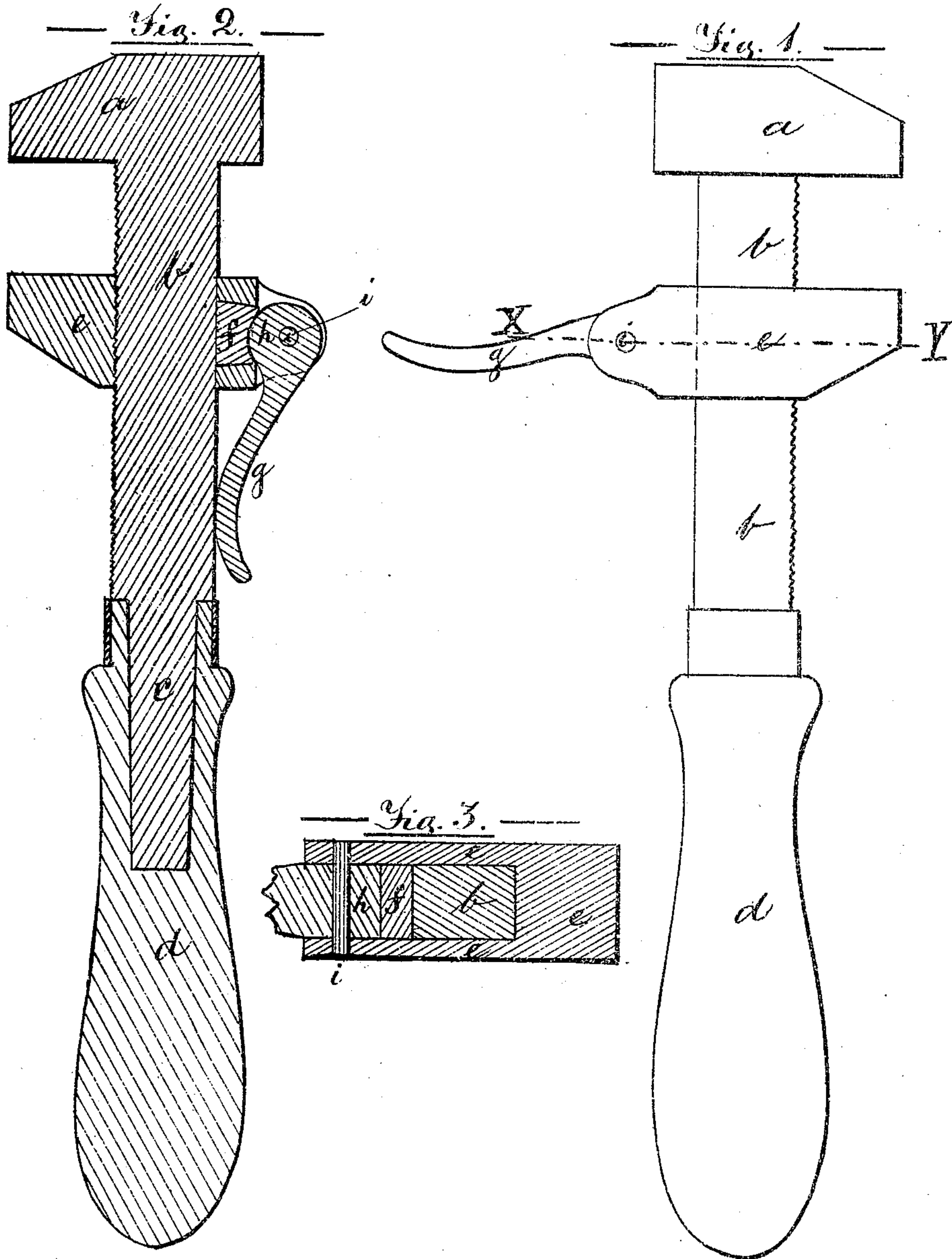


J. F. Nordquist,

Wrench.

No. 102,307.

Patented Apr. 26, 1870.



Witnesses:

John H. Lord

John G. Busfield

Inventor:

Johan Fr^{te}. Nordquist
by Alban Andren his attorney

United States Patent Office.

JOHAN FREDRIK NORDQUIST, OF GOTTENBURG, SWEDEN.

Letters Patent No. 102,307, dated April 26, 1870.

IMPROVEMENT IN WRENCHES.

The Schedule referred to in these Letters Patent and making part of the same

I, JOHAN FREDRIK NORDQUIST, of Gottenburg, in the Kingdom of Sweden, have invented certain Improvements on Wrenches, of which the following is a specification.

Nature and Objects of the Invention.

The nature of my invention consists in providing a strong and durable wrench, that will be easily adjusted from one size nut to another, by simply moving a lever on the rear part of the wrench.

Figure 1 is a side view;

Figure 2 is a longitudinal section; and

Figure 3 is a section over the line *x y*, taken on fig. 1.

a is a solid head made in one piece with the stem *b*; the latter terminates into the shank *c*, that connects with the handle *d*, as usual.

The loose head *e* embraces the stem *b*, and is made to slide up and down over the same.

The front side of the stem *b* is corrugated or grooved, so as to give a better hold for the loose head *e*, whose insides have corresponding grooves to engage with those on the stem.

The head *e* has a recess on its rear side, whereinto fits a small piece, *f*.

An eccentric head, *h*, with the lever *g*, moves round the pin *i*. By means of this eccentric *h* and lever *g* the piece *f* is pressed toward the stem *b*, and, consequently, the hold of the head *e* upon the stem *b* is made firm and rigid.

When the lever *g* is placed in the position as shown on fig. 1, the head *e* may easily be moved up or down on the stem *b*, so as to fit any nut desired, and, when in its proper place, move the lever *g* to the position as marked on fig. 2, when the eccentric *h* will hold the head *e* firmly secured to the stem *b*.

Having thus described the nature and operation of my invention,

I wish to secure by Letters Patent, and claim—

The eccentric *h*, lever *g*, and piece *f*, for the purpose of securing the movable jaw or head *e* to the stem *b* of a wrench.

JOHAN F. NORDQUIST. [L. S.]

Witnesses:

ALBAN AUDRÉN,
H. H. SOUTHWICK.