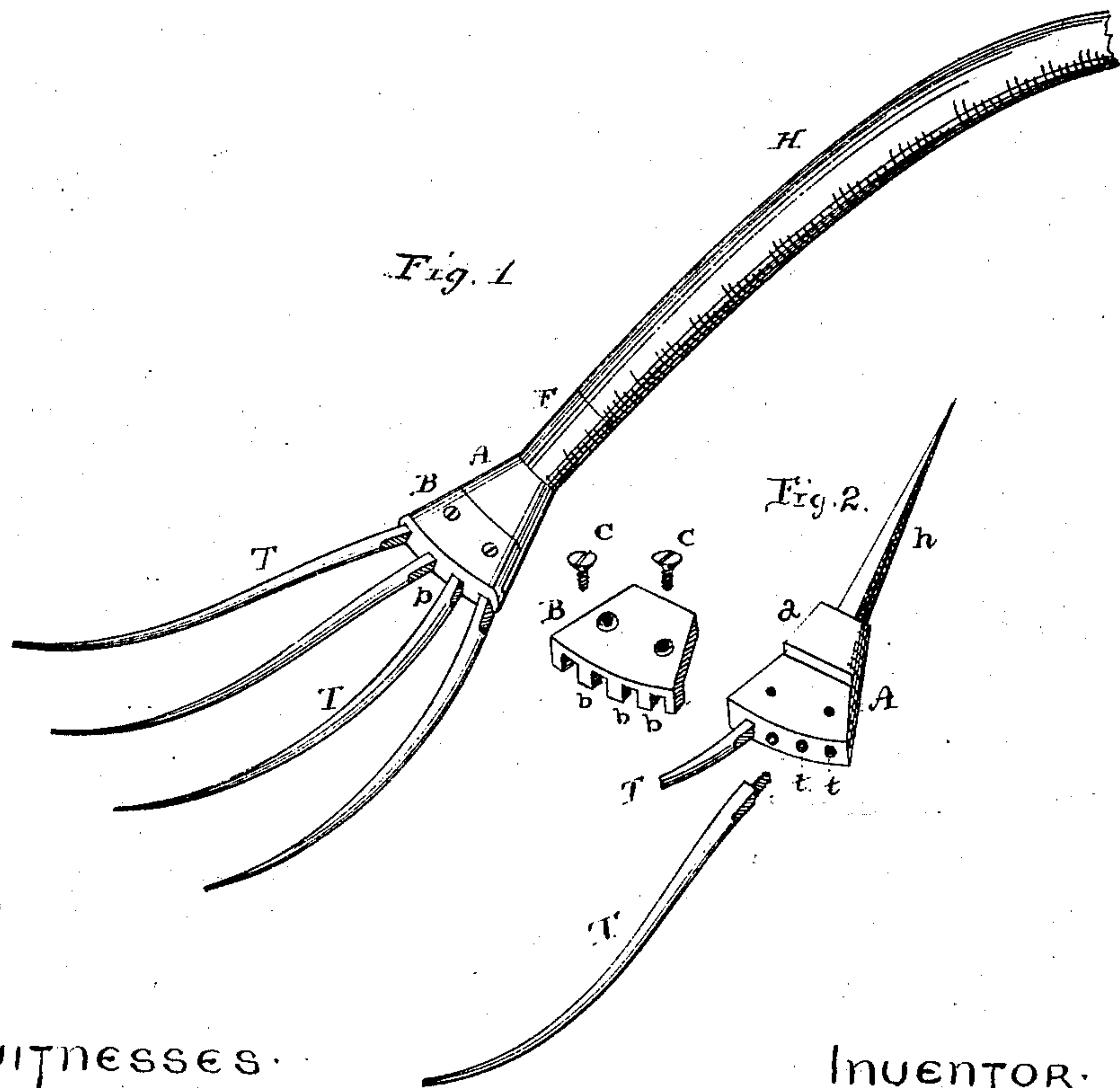


F. GERFEN.
Grain-Fork.

No. 166,201.

Patented Aug. 3, 1875.



Witnesses.

W. B. Niley
Jacob Stauffer

INVENTOR.

Frederick Gerfen

UNITED STATES PATENT OFFICE.

FREDERICK GERFEN, OF LOCUST GROVE, PENNSYLVANIA.

IMPROVEMENT IN GRAIN-FORKS.

Specification forming part of Letters Patent No. **166,201**, dated August 3, 1875; application filed February 25, 1875.

To all whom it may concern:

Be it known that I, FREDERICK GERFEN, of Locust Grove, West Hempfield township, Lancaster county, and State of Pennsylvania, have invented certain Improvements in Grain or Shaking Forks, of which the following is a specification:

The object of this invention is to provide a grain-fork having an iron head, into which the prongs are inserted with a screw end, and prevented from turning by a lock-plate, so arranged that if a prong breaks it can be readily replaced by another, constituting a new article of manufacture, cheap, durable, and efficient.

The accompanying drawing, with letters of reference marked thereon, and a brief description will enable those skilled in the art to make and use the same, in which—

Figure 1 shows a four-pronged grain-fork as improved. Fig. 2 shows the several parts detached.

The fork-head A has slightly-rounded sides, tapering from the slightly convex, wide, and vertical front to a raised portion or shoulder, *a*, and the bevel or taper continued to complete the head. This is centrally prolonged into a shank, *h*, for inserting into a handle, H, with its ferrule or thimble F. A socket may also be formed, but it is more expensive. The outer vertical face of the head A is perforated at proper intervals, *t*, and cut with a screw-thread for the reception of the tines or prongs T of the fork, which have a screw on the square shouldered end. To prevent the prongs from turning, and to give them greater support at

their insertion, I provide a lock-plate, B, to fit the forward portion of the head A, butting against the shoulder *a*, and provided with a vertical flange having square notches cut out to embrace the square ends of the prongs, so that the standing portion *b* fits tightly against the top and vertical sides of said prongs, and not only firmly locks them to prevent their turning, but affords side and top support, to strengthen them and relieve the strain on the screw ends. This plate B is secured to the head A by screws C. Rivets might be used, but would defeat the object had in view, namely, the ready removal of said lock-plate for replacing a broken prong when required.

I am aware that iron-headed and steel-pronged forks have been used as grain, hay, and pitch forks, having two, three, four, or more prongs; but I am not aware that any have ever before been known or used constructed substantially as herein shown and specified. I, however, do not limit my invention to four-pronged forks only.

What I consider novel as well as useful in iron-headed forks, and desire to claim, is—

The fork-head A, with its shoulder *a* and screw-holes *t*, in combination with the prongs T, provided with shouldered screw ends, and lock-plate B, provided with a notched flange, *b*, substantially as and for the purpose specified.

FREDERICK GERFEN.

Witnesses:

J. W. YOCUM,
JOHN HAAG.