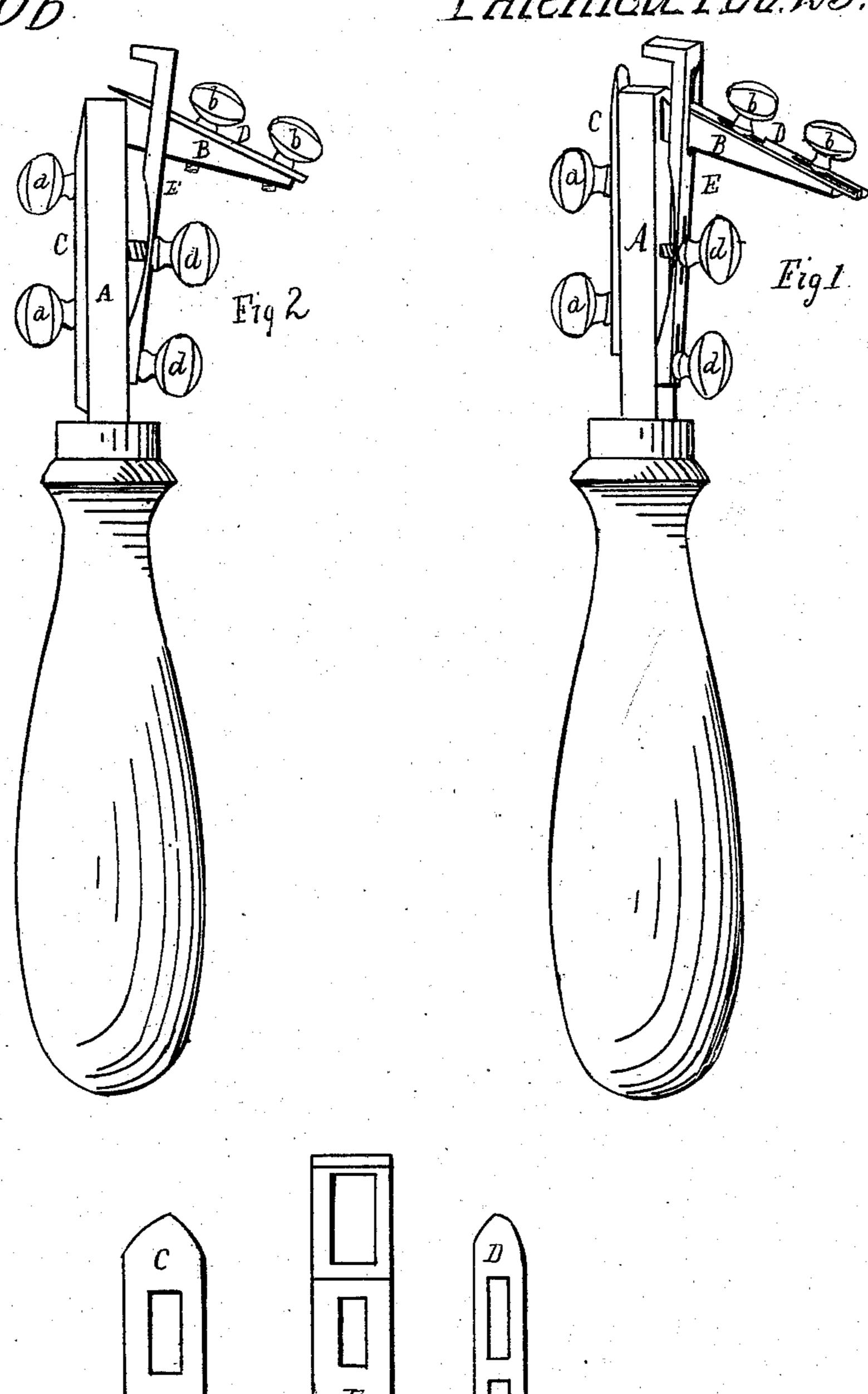
F. E. MZaZZ

Channelling Tool

No. 14806
Patented Feb. 25.1868



Henry & Dane allower for Inventor

Anited States Patent Pffice.

FRANCIS E. DROLL, OF ST. CHARLES, MISSOURI.

Letters Patent No. 74,806, dated February 25, 1868.

IMPROVED CHANNELLING-TOOL,

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

Be it known that I, Francis E. Droll, of the town of St. Charles, county of St. Charles, State of Missouri, have invented a new and useful Double-Channelling Machine, for channelling leather for sewing either on boots and shoes, or on harness; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making part of these specifications, in which—

Figure I is two perspective views, No. 1 showing my machine adjusted for harness work; No. 2 showing my machine adjusted for boot and shoe work, both being full-sized.

Figure II representing the several parts of my machine detached, all full size.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I make a main bar or shank, of brass, which is secured in a wooden handle, as shown by A in Fig. I. To this main bar, at the end, is attached a side bar, of brass, set at an angle, as shown by B in Fig. I. On the side of the main bar A, opposite the side bar B, I attach a large knife or cutter, C, securing it by thumb-screws a a, which pass through slots in the knife, which enables me to move the knife up or down on the shank. On the side bar B, I fasten a smaller knife, D, securing it in like manner with thumb-screws b b. In this knife, also, are three slots, as is shown in Fig. II. Opposite the large knife C, on the main bar, is a steel spring, E, which passes over the side bar, and is secured as are the knives by thumb-screws d d, having like slots as the knives, as shown in Fig. II, that they may be gauged.

When I use my machine on harness, or where the channel is to be made on the top of the leather, I adjust it as follows: I push back the small knife D, so that its point is out of reach of the leather, and secure it there. Then move down the large knife C, so that it will cut as deep as I desire the channel, the end of the main bar or shank being the gauge of depth, and secure it firmly by turning down the thumb-screws. Then adjust the spring E by means of the thumb-screws, so that it will gauge the distance the channel is to be from the edge of the leather, all of which is clearly shown by No. 1 in Fig. I. Then, holding the machine upright, move it from the person, and the channel is easily cut.

For boot and shoe work, I adjust it in the following manner: Move back the large knife C, and secure it; loosen the spring E and smaller knife D, push out the smaller knife until it will cut to the required depth; then secure it. Push back the spring E until the end of it rests against the small knife, so that it will act as a gauge, as will also the end of the main bar A, when it is ready for use. Hold and use as in case of harness. No. 2, in Fig. I, shows the machine set for boot and shoe work.

The great advantages of my machine are, first, that the knives are all straight, and are easily sharpened; second, they are easily adjusted and can be set to cut to any depth; third, the spring is of great value, as by it I gauge the depth and width of my channel; and, generally, my machine possesses every advantage over every other machine, and especially over those having crooked or sickle-shaped knives.

Having thus fully explained my machine and its operations, what I claim as new, and desire to secure by Letters Patent, is—

- 1. The side bar B, as united with main bar A, for the use and purpose as specified and herein set forth.
- 2. Adjusting my smaller knife D to the small or side bar B, by means of the screws, independently of any other part of my machine, for the use and purpose as specified, and hereinbefore set forth.
- 3. My spring E, as constructed, so that it may be moved up or down in main bar as a guide, for the use and purpose as specified and herein set forth.
- 4. The entire combination of my knives, spring, and bars, with my mode of adjusting my knives and spring, for the use and purpose as specified and herein set forth.

 FRANCIS E. DROLL.

Witnesses:

EDWARD GUT, HENRY LONG.