

(No Model.)

W. D. HERSCHEL.

TRAMMEL.

No. 272,047.

Patented Feb. 13. 1883.

Fig. 1.

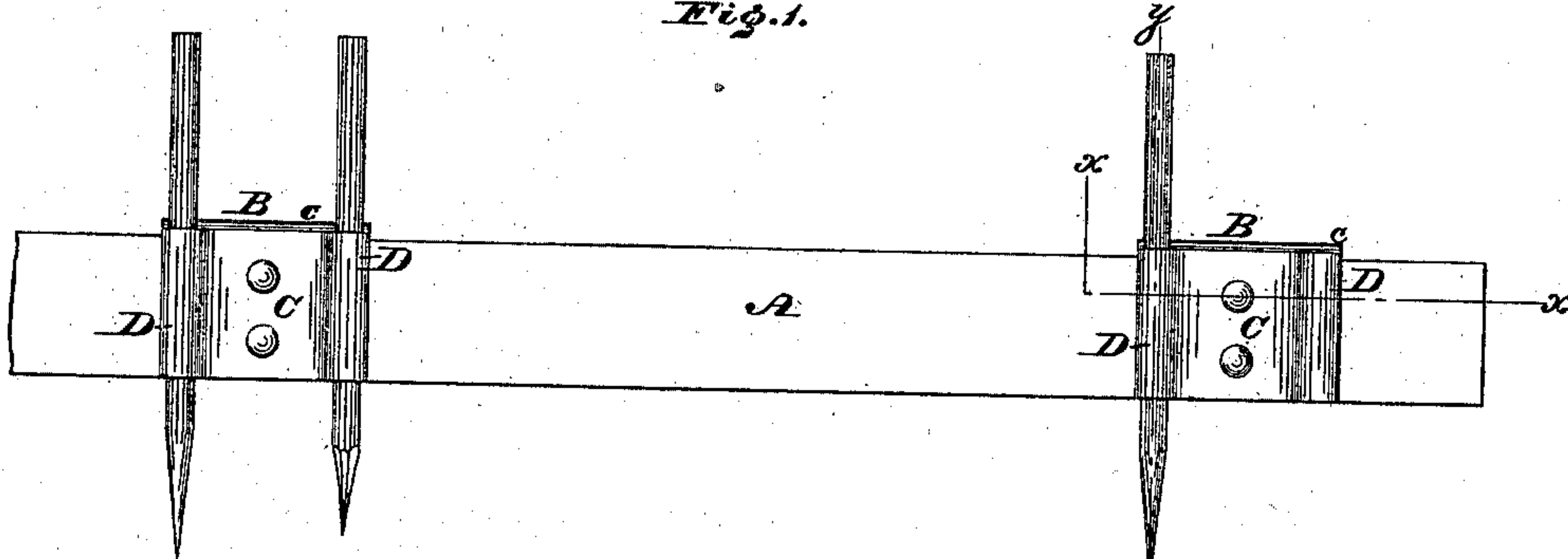


Fig. 2.

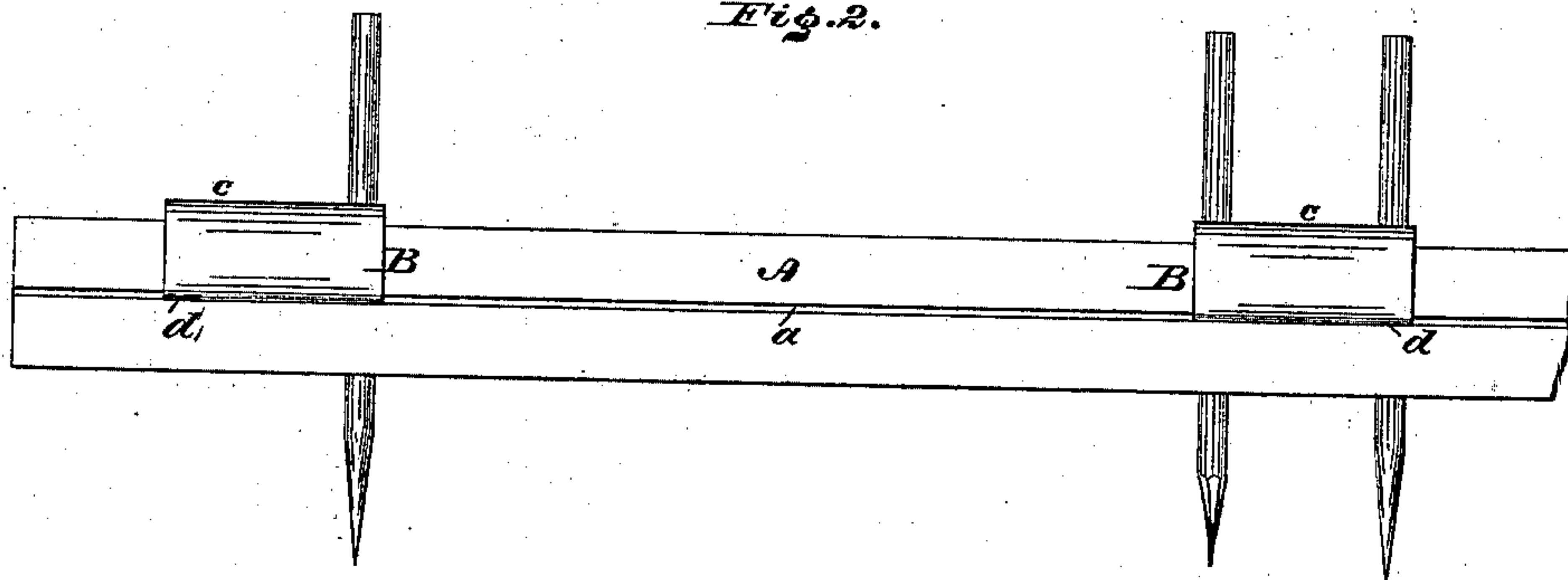


Fig. 3.

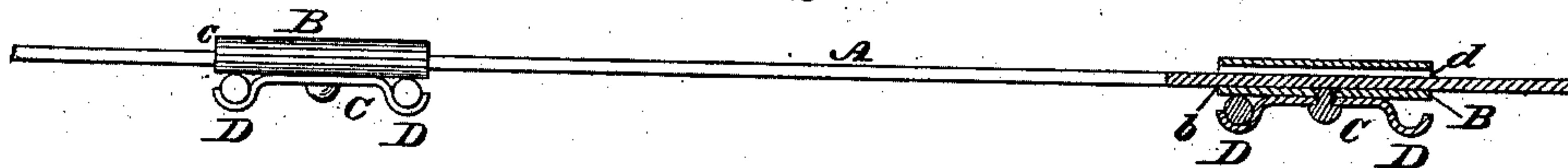
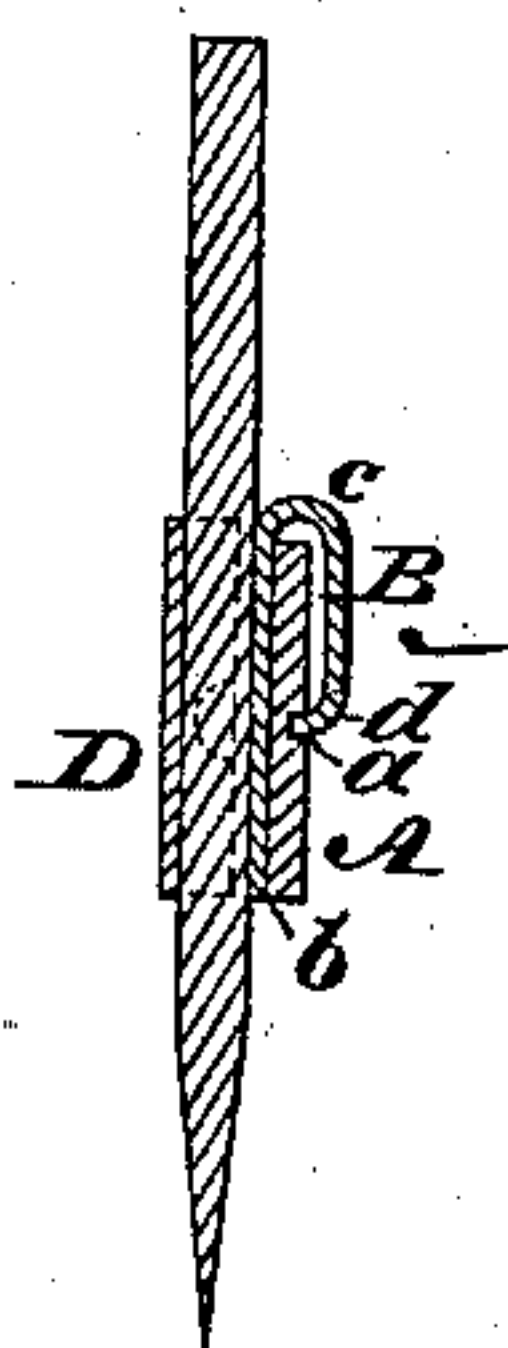


Fig. 4.



WITNESSES:

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TRAMMEL.

SPECIFICATION forming part of Letters Patent No. 272,047, dated February 13, 1883.

Application filed May 16, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM D. HERSCHEL, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Trammels, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figures 1 and 2 are views of opposite sides of the trammel embodying my invention. Fig. 3 is an edge view thereof, partly sectional in line *x x*, Fig. 1. Fig. 4 is a vertical section thereof in line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of a trammel having a double holder formed by a slide and an attached plate which is provided at each end with a jaw, substantially as and for the purpose hereinafter set forth.

It also consists in a trammel having a bar provided with a groove, in combination with a holder and a slide to which said holder is attached, said slide being formed with a bend, which embraces the top and back of said bar, and with an inwardly-turned lip which enters said groove, substantially as hereinafter set forth.

It also consists in certain other features and combinations of features hereinafter set forth.

Referring to the drawings, A represents a bar or rule formed on one face or back with a longitudinally-extending groove, *a*.

B represents a slide formed of a plate of metal, which lies flat against the side of the bar opposite to the groove *a*, as at *b*, is bent, as at *c*, forming a hook, which embraces the back of the bar, and then turned inwardly into a lip, *d*, which enters the groove *a*.

To the slide B is secured a holder, C, for a pencil and point or center, said holder being constructed of a piece of elastic metal riveted or otherwise rigidly connected at its center with the slide B, the ends having grooves or jaws D D for the reception of the pencil and center, it being seen that the pressure of the ends of the holder forces the pencil and center, which rest in the jaws D, against the slide and firmly holds them, permitting, however, the raising and lowering of said pencil and center for the purposes of adjustment, as desired.

The parts as constructed are duplicated; or they may be multiplied, so that several pencils and centers may be employed.

It will be seen that a circle may be described by and marked with the pencil by using the center of the holder to which the pencil is attached; or a larger circle, formed by employing the center of another holder or one of the centers, may be employed in lieu of the pencil for scribing purposes. One holder may have two pencils and the bar be turned on the center of another holder for describing two circles, and other uses of the instrument will suggest themselves, it being noticed that the pencils and centers are adjustable on the holders relative to each other. The slides are fitted to the bar or rule by being slipped over the end thereof, the lips *d* entering the groove *a*, the bends *c* causing pressure of the lips against the walls of said groove. Consequently the slides are securely held on the bar and prevented from displacement over the top edge thereof, or shifting, when adjusted.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The trammel having a double holder formed by a slide and an attached plate which is provided at each end with a jaw, substantially as and for the purpose set forth.

2. In a trammel, a bar provided with a groove, in combination with a holder and a slide to which said holder is attached, said slide being formed with a bend which embraces the top and back of said bar, and with an inwardly-turned lip which enters said groove, substantially as set forth.

3. In a trammel, a holder and grooved bar, in combination with a slide which embraces said bar, and is provided with a lip that enters said groove, substantially as set forth.

4. The trammel consisting of a double holder, a slide having a bend and lip, and a grooved bar, combined and operating substantially as and for the purpose set forth.

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Witnesses:

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