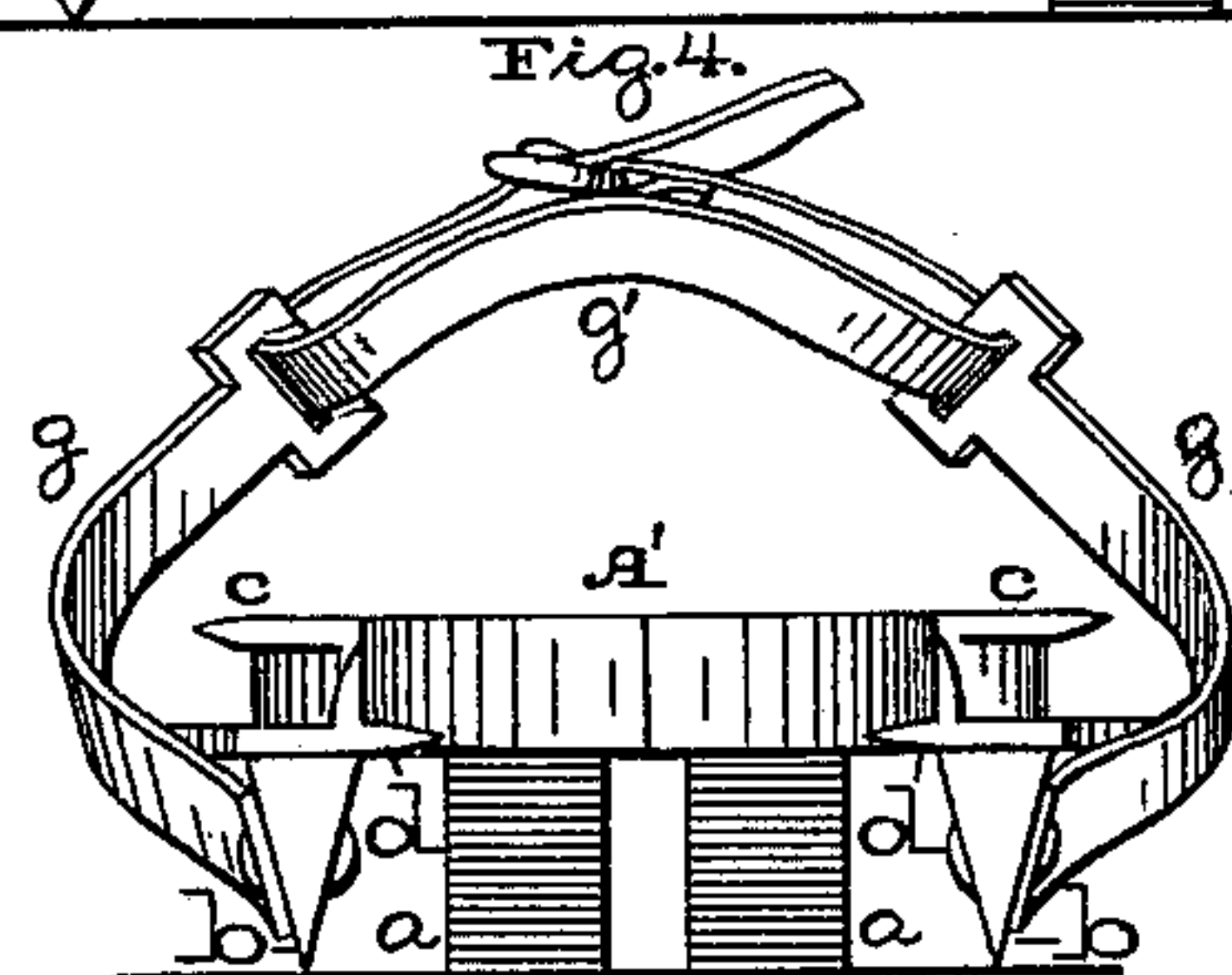
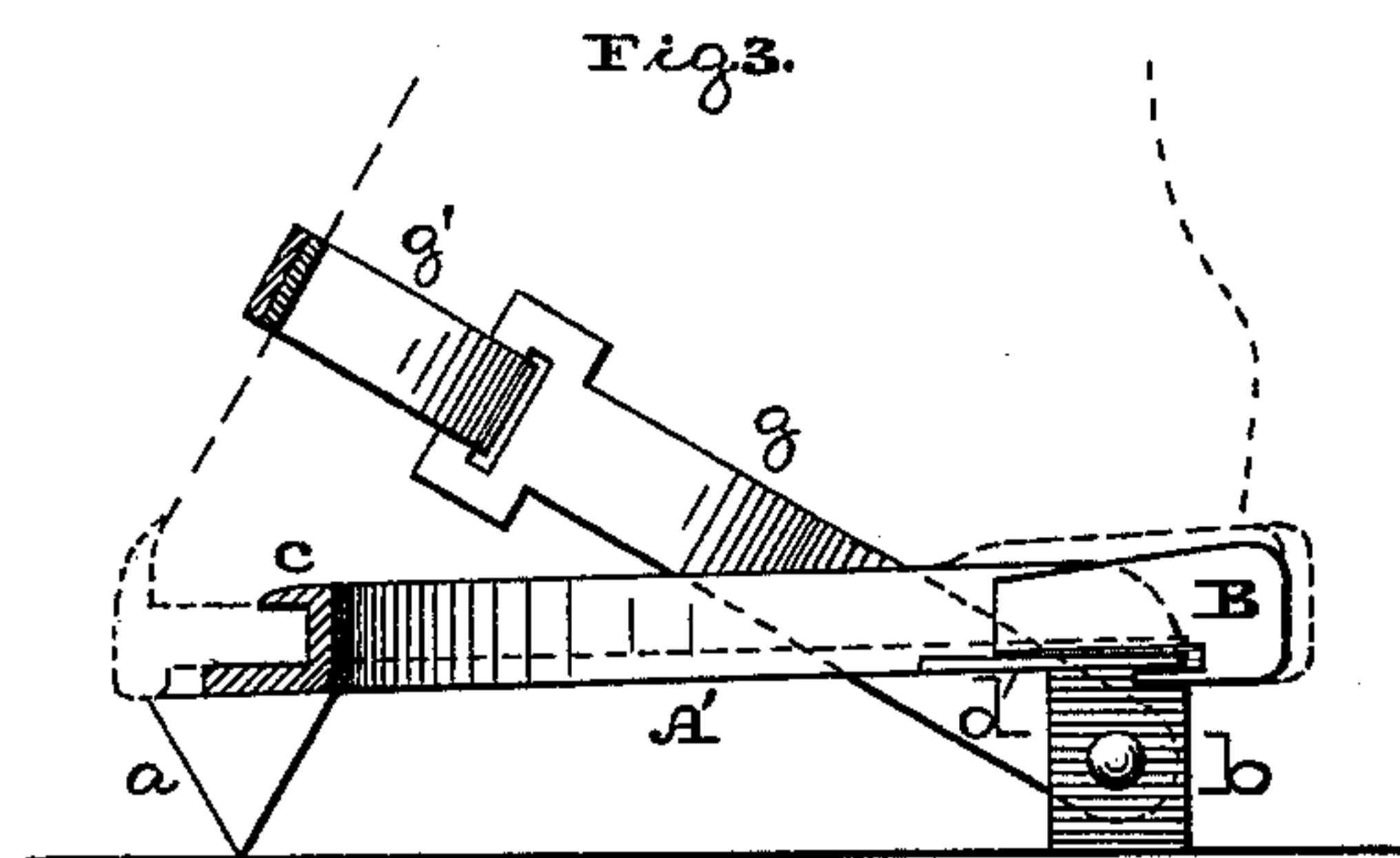
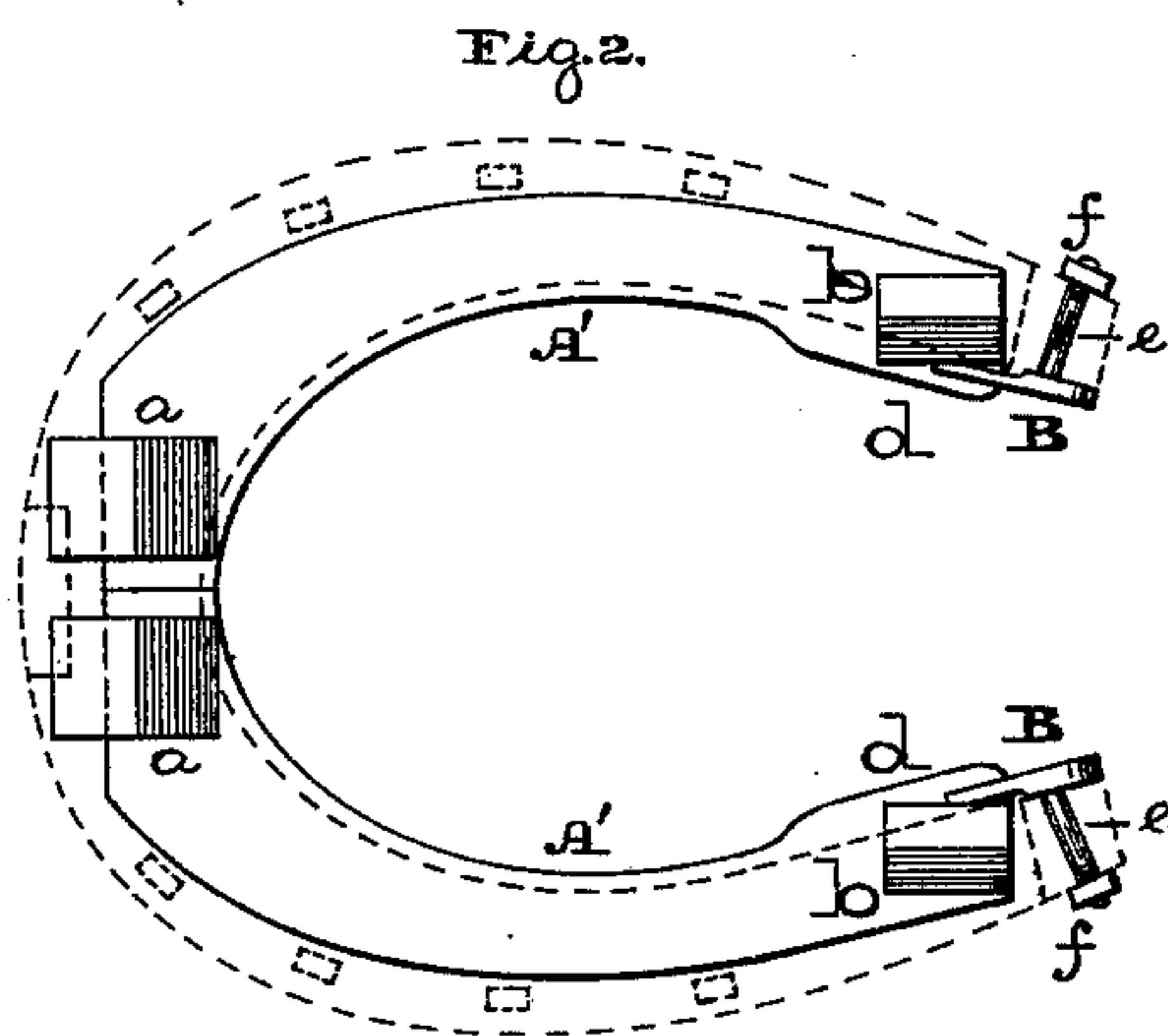
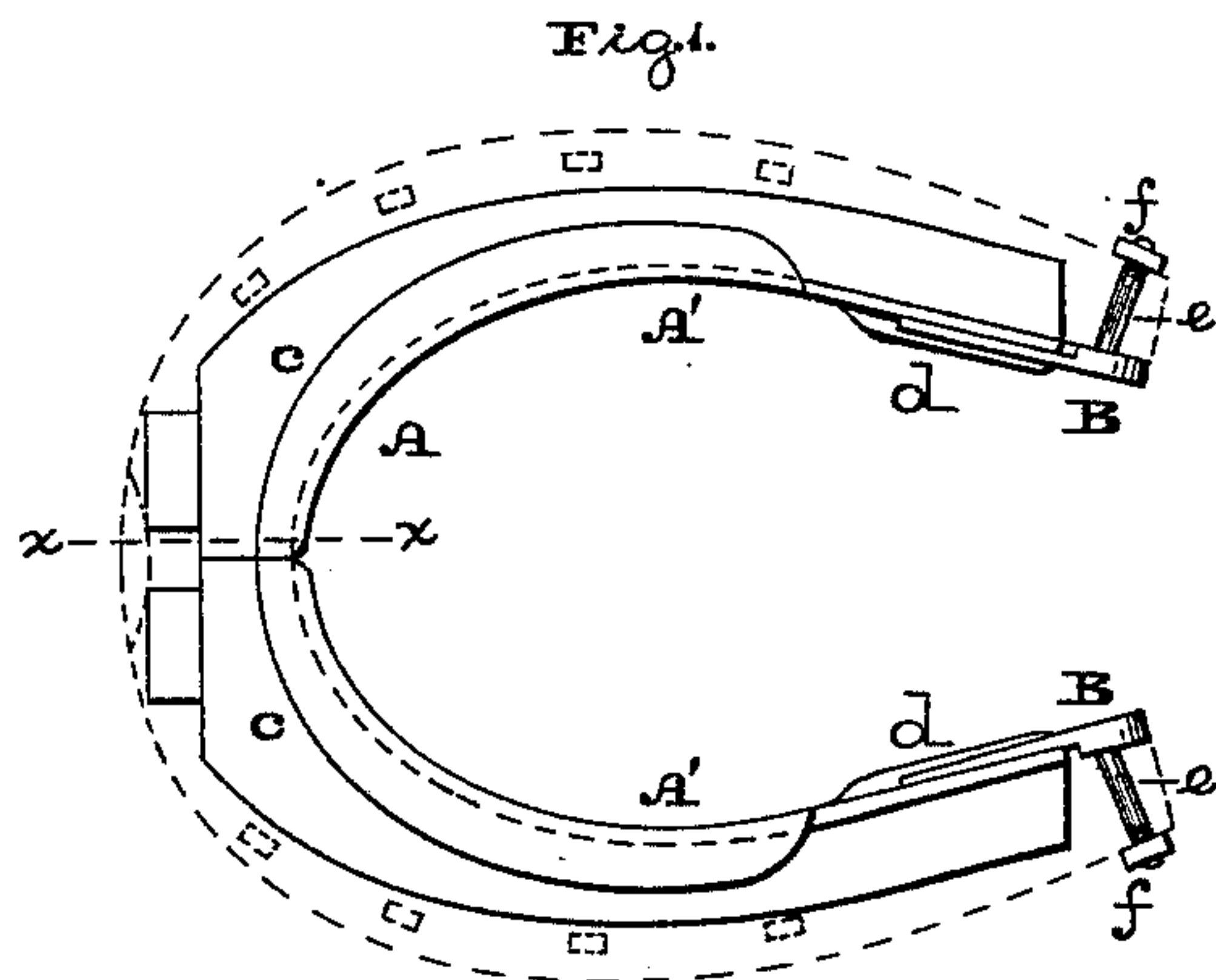


J. FORSYTH.
Horse-Creeper.

No. 220,597.

Patented Oct. 14, 1879.



Witnesses:

Lo. P. Grant,
H. F. Kischer

Inventor:

John Forsyth,
by John A. Diederichsen
ATTORNEY.

UNITED STATES PATENT OFFICE.

JOHN FORSYTH, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN HORSE-CREEPERS.

Specification forming part of Letters Patent No. **220,597**, dated October 14, 1879; application filed January 25, 1879.

To all whom it may concern:

Be it known that I, JOHN FORSYTH, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Horse-Creepers, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a top view of the creeper embodying my invention. Fig. 2 is a bottom view thereof. Fig. 3 is a vertical section in line *x x*, Fig. 1. Fig. 4 is a rear view thereof.

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

My invention consists of ice-creepers which may be attached to the shoes prior or subsequent to nailing on the animal's hoofs.

The creepers are made of two parts, flanged to embrace the shoes, and provided with fastening devices, whereby they may be readily applied and firmly secured, and afterward easily removed.

The fastening devices are applied to the rear of the two parts or plates of the creeper, and secured to the heel ends of the shoe, thus leaving the middle spaces of the shoes and creepers or portions beneath the frogs unobstructed, as in cases where only the shoes are nailed to the hoofs, and locating the fastenings where they are not liable to be struck.

Referring to the drawings, A represents the creeper, which is adapted to conform to the inner curve of the horseshoe and formed of half-sections or two plates, A' A', each having toe and heel calks or ice-spurs *a b*, respectively, and an upper flanged part, *c*. From the inner face of each plate A' there projects a horizontal lip, *d*, with which engages a bifurcated key, B, connected to or formed with a bolt, *e*, which is passed through an opening in the rear end of the horseshoe and provided with a nut, *f*.

The operation is as follows: Each section A' is applied in position on the shoe, previously nailed to the hoof, by forcing the flanged part *c* between the shoe and hoof, the

upper face of the shoe being always sufficiently sloped, whereby said part *c* may be admitted. Insert the bolts *e*, cause the keys B to embrace the lips *d*, and tighten the nuts *f*, and the creeper is ready for service.

It will be seen that as the sections A', with their flanged parts *c*, embrace both faces of the shoe on its inner curve the creeper can neither drop nor rise, and as its rear is held by the keys B, longitudinal shifting and other movements are prevented, and the creeper is securely held without loose or rattling joints.

It is evident that a simple and reliable ice shoe or creeper is provided.

In order to remove the creepers, the nuts *f* are loosened, the bolts *e* removed, and keys B disengaged from the lips *d*. Each section may then be drawn from the shoe, leaving the latter intact or unaffected by the previous application of the creeper.

As an additional fastening, I may employ bands *g*, which are connected to the rear calks of the creeper, or other portion thereof, and pass around the hoofs, where they are secured by a strap, *g'*, or other suitable means.

It is evident that the creeper may be applied to the shoe prior to nailing of the latter to the hoof, and the lips may be bifurcated to embrace the keys B without producing different results from those above stated.

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

1. The sectional plates A', formed with upper and lower flanges, *c*, and secured to the shoe by means of keys engaging with the rear of the plates and bolted to the heel ends of the shoe, substantially as and for the purpose set forth.

2. The plates A', with flanged parts *c* and lips *d*, in combination with the engaging-keys B and holding bolts and nuts, substantially as and for the purpose set forth.

JOHN FORSYTH.

Witnesses:

JOHN A. WIEDERSHEIM,
A. P. GRANT.