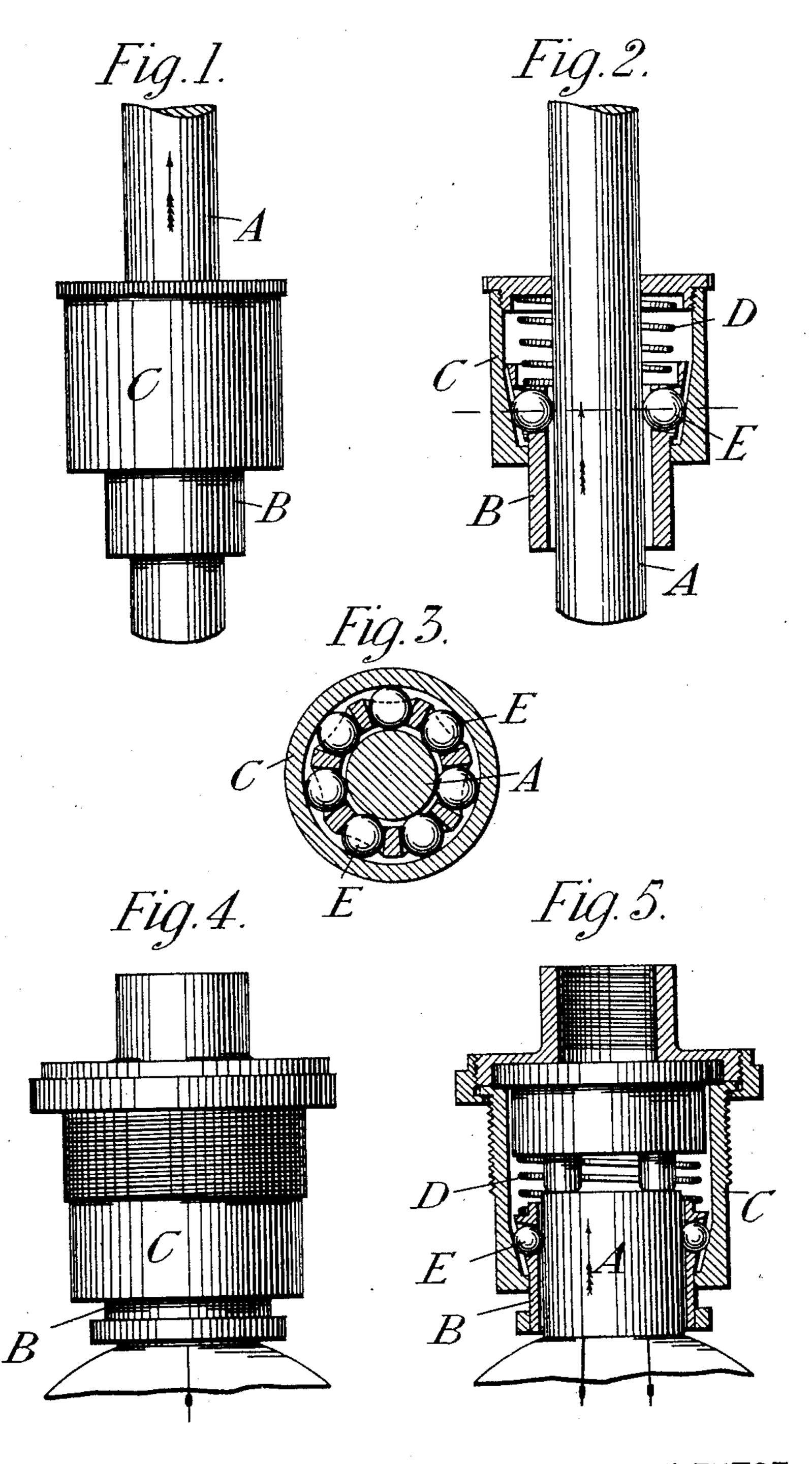
W. L. PREECE. ELECTRIC ARC LAMP.

No. 581,136.

Patented Apr. 20, 1897.



WITNESSES

Af M. Corum, Warren W. Swartz

INVENTOR

William L. Prece by Bakuvel & Bakuvell this attys.

United States Patent Office.

WILLIAM L. PREECE, OF DERBY, ENGLAND.

ELECTRIC-ARC LAMP.

SPECIFICATION forming part of Letters Patent No. 581,136, dated April 20, 1897.

Application filed July 7, 1896. Serial No. 598,283. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM LLEWELLYN PREECE, a citizen of England, residing at Lime Leigh, Burton Road, Derby, in the county of Derby, England, have invented a certain new and useful Frictional Grip for Sliding Rods Applicable to Holders of Electric Lamps, Carbons, and the Like, of which the following is a specification.

My invention relates to a frictional grip which allows a sliding rod to be freely moved in one direction, but holds it firmly when strained in the opposite direction unless it be released. Such a grip is applicable to sliding rods generally, but it can be usefully applied in particular to the fixing of carbons of electric-arc lamps in their holders, to the clutching and releasing of the rods of such holders, and to the holders for electric glow-

Figure 1 is an elevation, Fig. 2 is a longitudinal section, and Fig. 3 is a sectional plan, of a grip according to my invention for a sliding rod. Fig. 4 is an elevation and Fig. 5 a vertical section showing its application as the holder of an electric glow-lamp.

A, Figs. 1, 2, and 3, is a sliding rod which is to be gripped. In Figs. 4 and 5 it is the cylindrical head of an electric glow-lamp. It is passed through a sleeve B, which can slide within a socket C, being urged in the one direction by a spring D. In the sleeve B are cut spaces receiving balls E, which are interposed between the sliding rod or lamp-head A and an internally-coned part of the socket C.

When the rod or lamp-head A is moved in the direction of the arrow, it is quite free, but when it is pulled in the opposite direc-

tion the balls, tending to roll along the coned surface of the socket, exert a wedging action 40 on A, holding it firmly.

By pushing the sleeve B inward and thereby moving the balls to a wider part of the cone the rod is left free and can be withdrawn.

The spring D tends to keep the sleeve and 45 balls in the position to grip unless the sleeve be moved in opposition to the spring.

Having thus described the nature of this invention and the best means I know of carrying the same into practical effect, I claim— 50

1. A frictional grip for a rod or similar part, comprising a hollow case surrounding the same and having an internal inclined face, a sleeve surrounding the rod or part within the case and provided with apertures, and a 55 series of balls or rollers held in the apertures in the sleeve and bearing upon the rod or part and upon the inclined face of the case.

2. A frictional grip for a rod or similar part, comprising a hollow case surrounding the 60 same and having an internal inclined face, a sleeve surrounding the rod or part within the case and provided with apertures, a series of balls or rollers held in the apertures in the sleeve and bearing upon the rod or part and 65 upon the inclined face of the case, and a spring arranged to press upon the sleeve and force the balls against the inclined face.

In testimony whereof I have signed my name to this specification, in the presence of 70 two subscribing witnesses, this 19th day of June, A. D. 1896.

WILLIAM L. PREECE.

Witnesses:

C. R. B. Eddowes, W. G. Lowe.