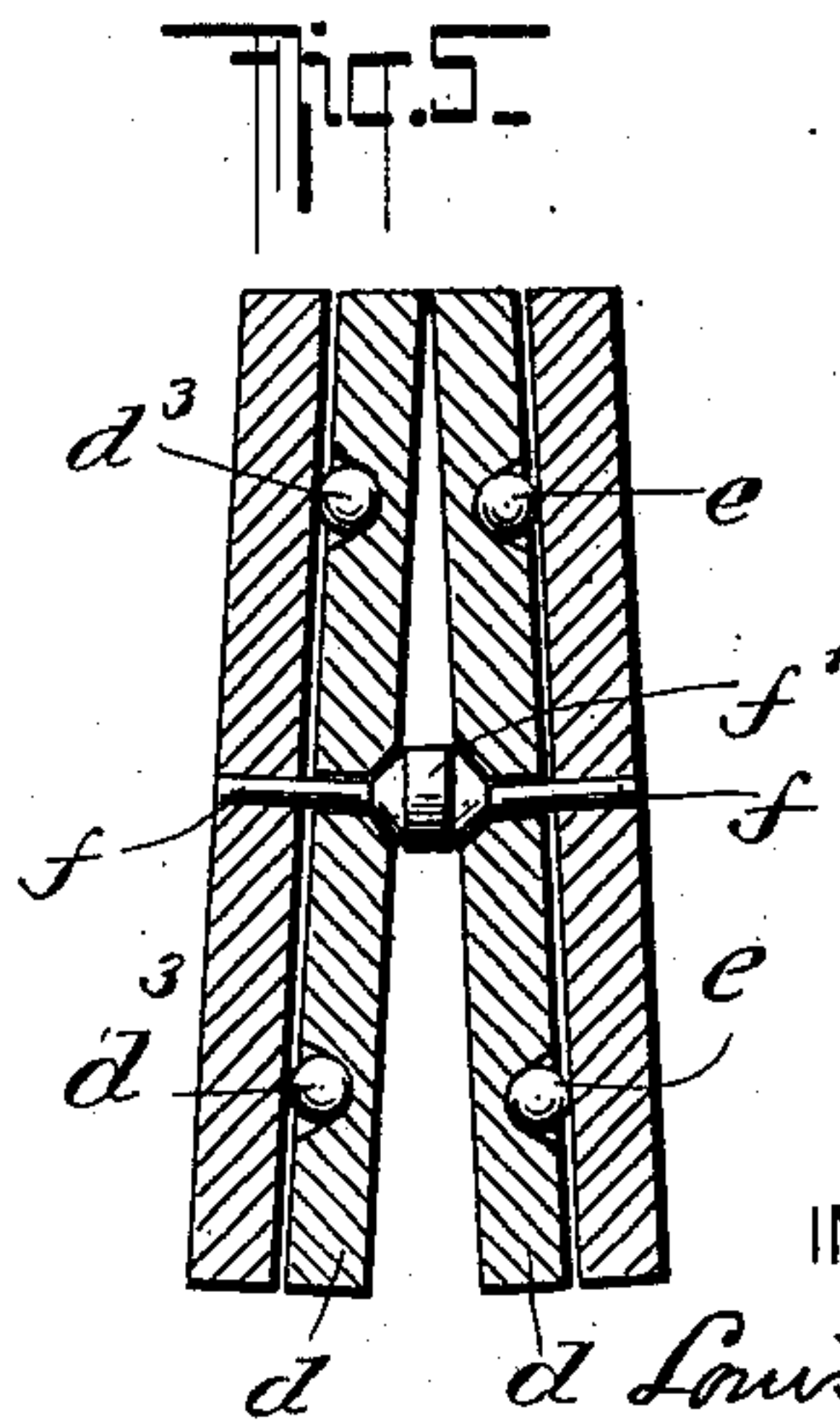
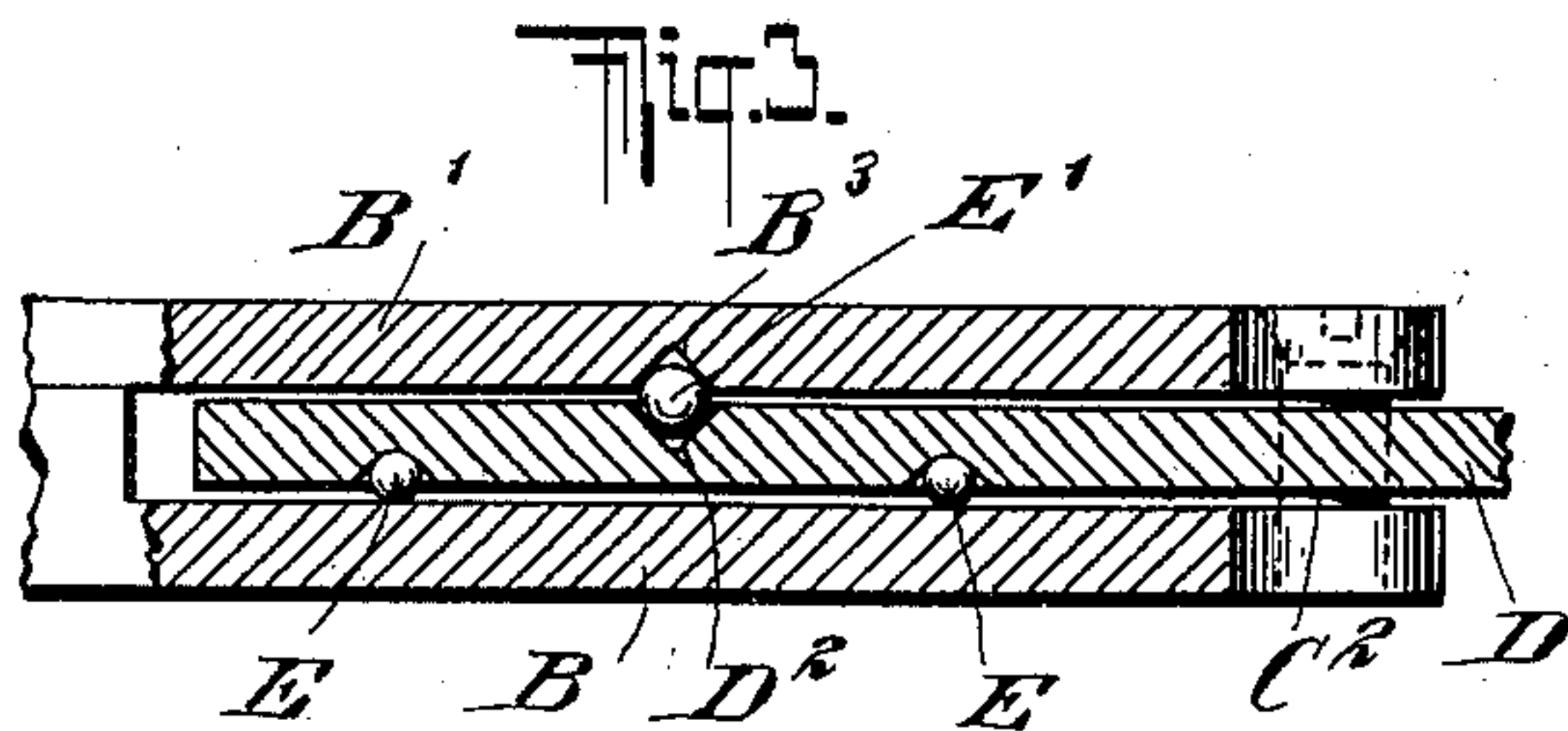
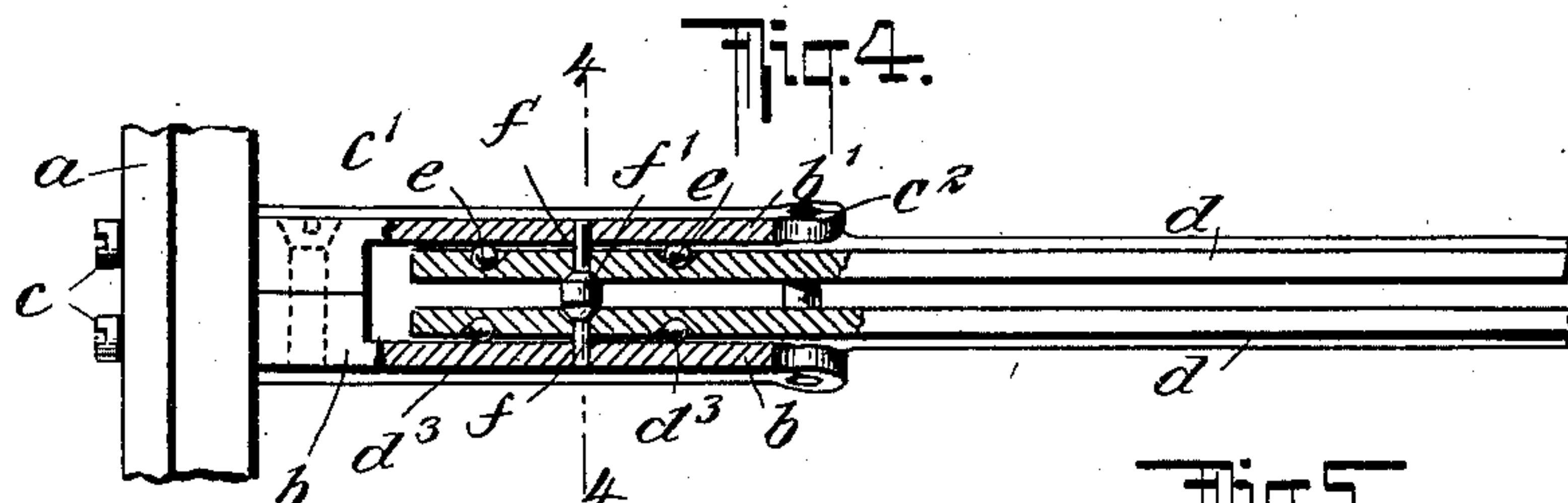
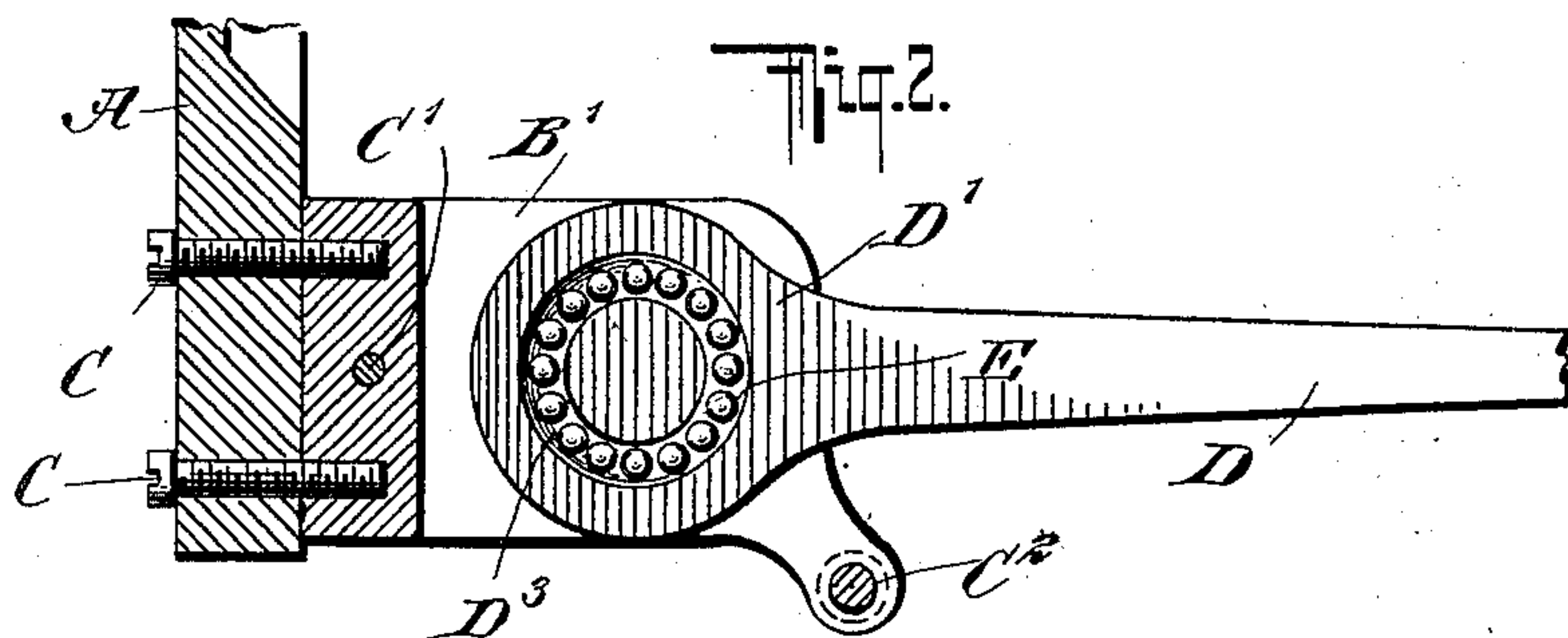
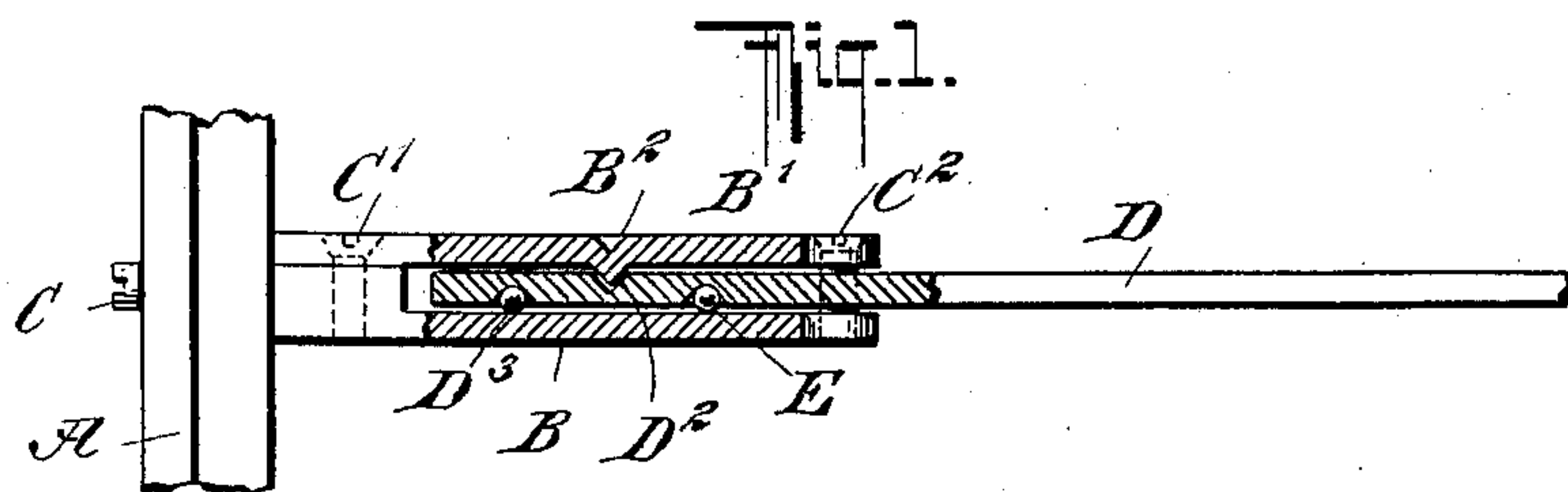


No. 755,033.

PATENTED MAR. 22, 1904.

L. MYERS.
TYPE BAR BEARING.
APPLICATION FILED JUNE 30, 1903.

NO MODEL.



WITNESSES:

Julius H. Smith

John L. Ka

INVENTOR

Louis Myers

BY *Briesen & Knauth*

ATTORNEYS

UNITED STATES PATENT OFFICE.

LOUIS MYERS, OF HARTFORD, CONNECTICUT, ASSIGNOR TO UNDERWOOD TYPEWRITER COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

TYPE-BAR BEARING.

SPECIFICATION forming part of Letters Patent No. 755,033, dated March 22, 1904.

Application filed June 30, 1903. Serial No. 163,746. (No model.)

To all whom it may concern:

Be it known that I, LOUIS MYERS, a citizen of the United States, and a resident of Hartford, in the county of Hartford, State of Connecticut, have invented certain new and useful Improvements in Type-Bar Bearings, of which the following is a specification.

My invention relates to bearings for the type-bars of a type-writing machine and the like, and has for its object to provide a simple construction of the above-indicated character.

I will now proceed to describe my invention with reference to the accompanying drawings and will then point out the novel features in the appended claims.

Figure 1 is a sectional plan of a type-bar bearing embodying my invention. Fig. 2 is an elevation thereof with parts in section and one-half of the bearing removed. Fig. 3 is a partial section of another form of my invention. Fig. 4 is a plan showing a form of my invention in which one bearing supports two type-bars, and Fig. 5 is a sectional elevation on line 5 5 of Fig. 4.

A indicates the supporting part of the typewriter frame, generally known under the name of the "segment." The bearing proper comprises two sections, one of which, B, is about L-shaped and is secured to the segment A in any suitable manner, as by screws C. The other section, B', is connected with the first-named section B by a screw C', located adjacent to the segment A. The free ends of both members or sections B B' are adjustably connected by a pressure-screw C². The type-bar D is provided at its pivot portion D' with a central peripherally-conical depression D² at one side and with an annular groove D³ upon its other side or face. The central depression D² is adapted to be engaged by a projection B² on the bearing member B'. The annular groove D³ is adapted to receive balls E, arranged to project from said groove into engagement with the annular surface of the bearing member B.

It will be seen that the function of holding the type-bar against movement parallel to the members B B' is performed exclusively by the central projection B² engaging the central depression D². Instead of this central projec-

tion forming part of the bearing member it might consist of a ball E' engaging the depression D² and a corresponding depression B³ of the member B', as shown in Fig. 3.

The balls E prevent movement of the type-bar in an axial direction and also serve to reduce friction. The bearing member B is perfectly smooth and need not be grooved to form a race for the balls E.

The pivot portions D' of the type-bars are thinner at one end than at the other, as shown in Fig. 3, and the bearing members B B' are correspondingly arranged, this being a consequence of the arrangement of the bars.

As shown in Figs. 4 and 5, each bar-section b b' is approximately L-shaped, said sections being connected to the segment A by screws c and with each other by screws c' c². Furthermore, the two members b b' are connected by a pivot f, provided at its center with a bearing portion f', formed by an engagement of the pivot. The type-bars are in this case formed exactly as described with reference to Figs. 1, 2, and 3, except that a central perforation is added for the passage of the pivot f. Two type-bars are inserted between the bearing members b b', with their smooth surfaces toward each other, so that the grooves d³ will face the inner surfaces of the bearing-section b b'. The one side of the pivot f is passed through one of the type-bars and into the opening in one of the bearing members, after which the other type-bar is placed upon the other side of the pivot f, the said pivot portion also projecting through the second type-bar, whereupon the second bearing member is placed so that the said projecting pivot portion will pass into the opening in said second bearing member, the two bearing members being then fastened together to retain the type-bars on the said pivot between them. The balls e will perform the same function as the balls E in the construction first described. The bearing f' will perform the same function as the bearing B², Fig. 1, or the ball E' of Fig. 3.

Various modifications may be made without departing from the nature of my invention.

What I claim as new, and desire to secure by Letters Patent, is—

1. A type-bar bearing comprising spaced

opposing members, a type-bar, the pivot portion of which extends between said members, a central ball arranged to rotate about its own axis and engaging said type-bar on one side, 5 and a series of traveling balls engaging said type-bar on the other side, and also engaging the adjacent member of the bearing, one of the surfaces engaged by said traveling balls being flat or smooth, and the other of said 10 surfaces having an annular groove for said balls.

2. A type-bar bearing comprising two spaced opposing members, a pivot connecting said members and having a central bearing, two 15 type-bars the pivot portions of which are arranged between said bearing members and perforated for the passage of said pivot, said type-bars having depressions on their inner or opposing faces to receive said central bearing,

and annular bearings on the outer surfaces of 20 the type-bars.

3. A type-bar bearing comprising spaced opposing members, a type-bar, the pivot portion of which extends between said members, a central bearing engaging said type-bar on 25 one side, and a series of traveling balls engaging said type-bar on the other side, and also engaging the adjacent member, one of the surfaces engaged by said traveling balls being flat or smooth, and the other of said surfaces hav- 30 ing an annular groove for said balls.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LOUIS MYERS.

Witnesses:

JOHN LOTKA,
EUGENE EBLE.