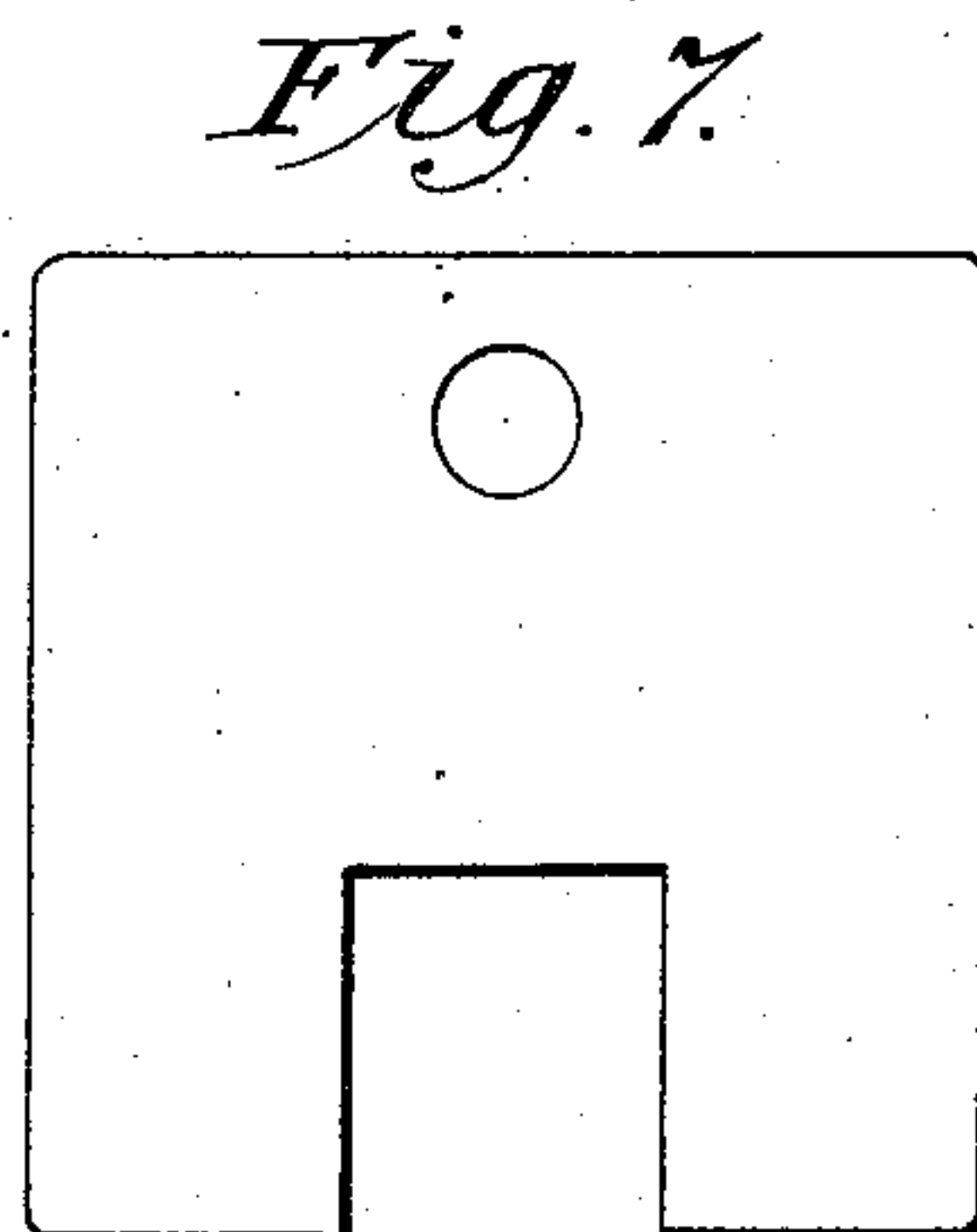
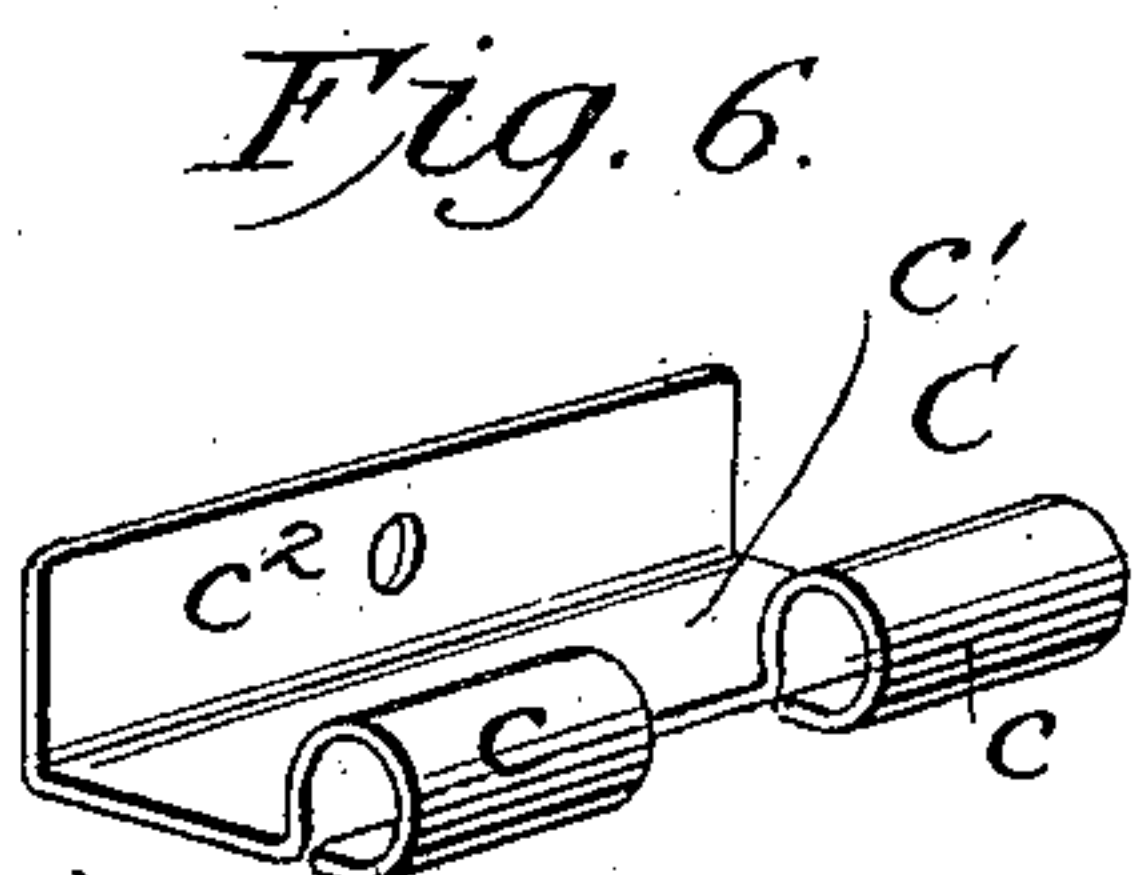
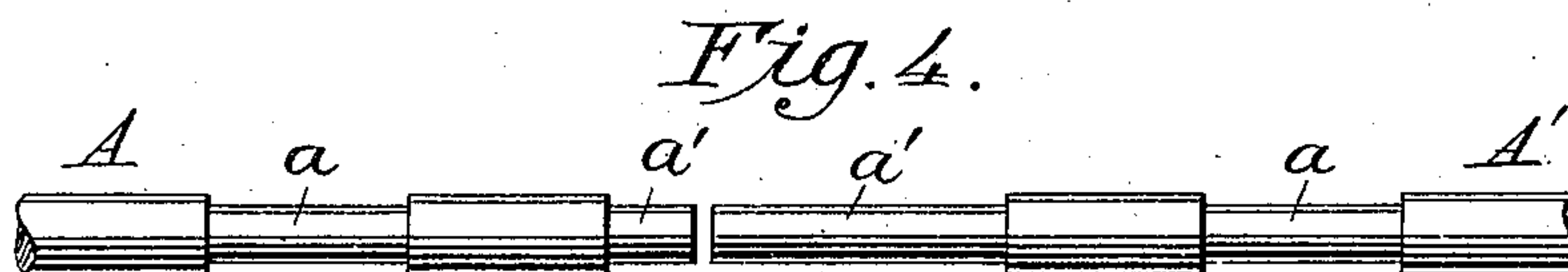
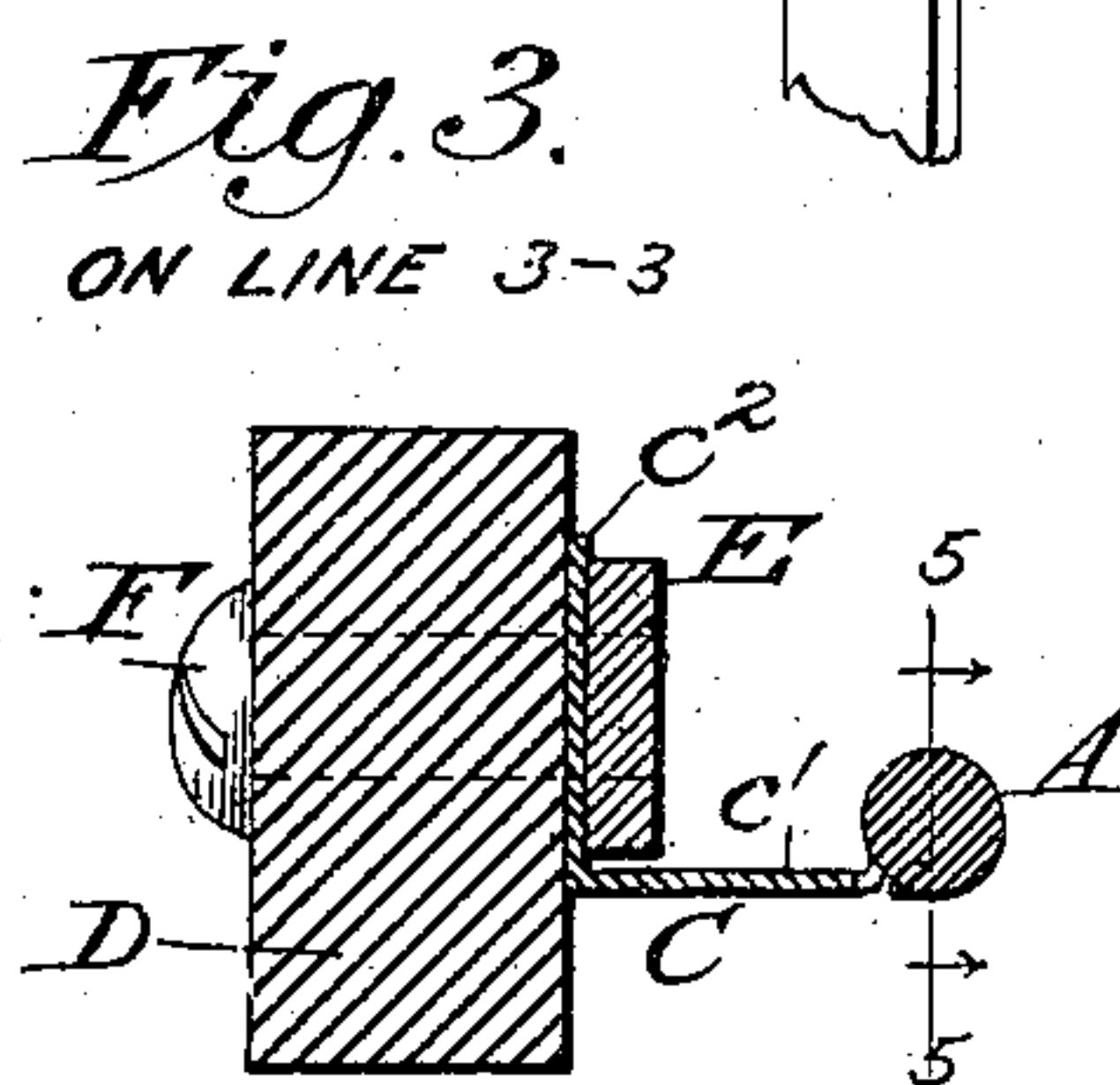
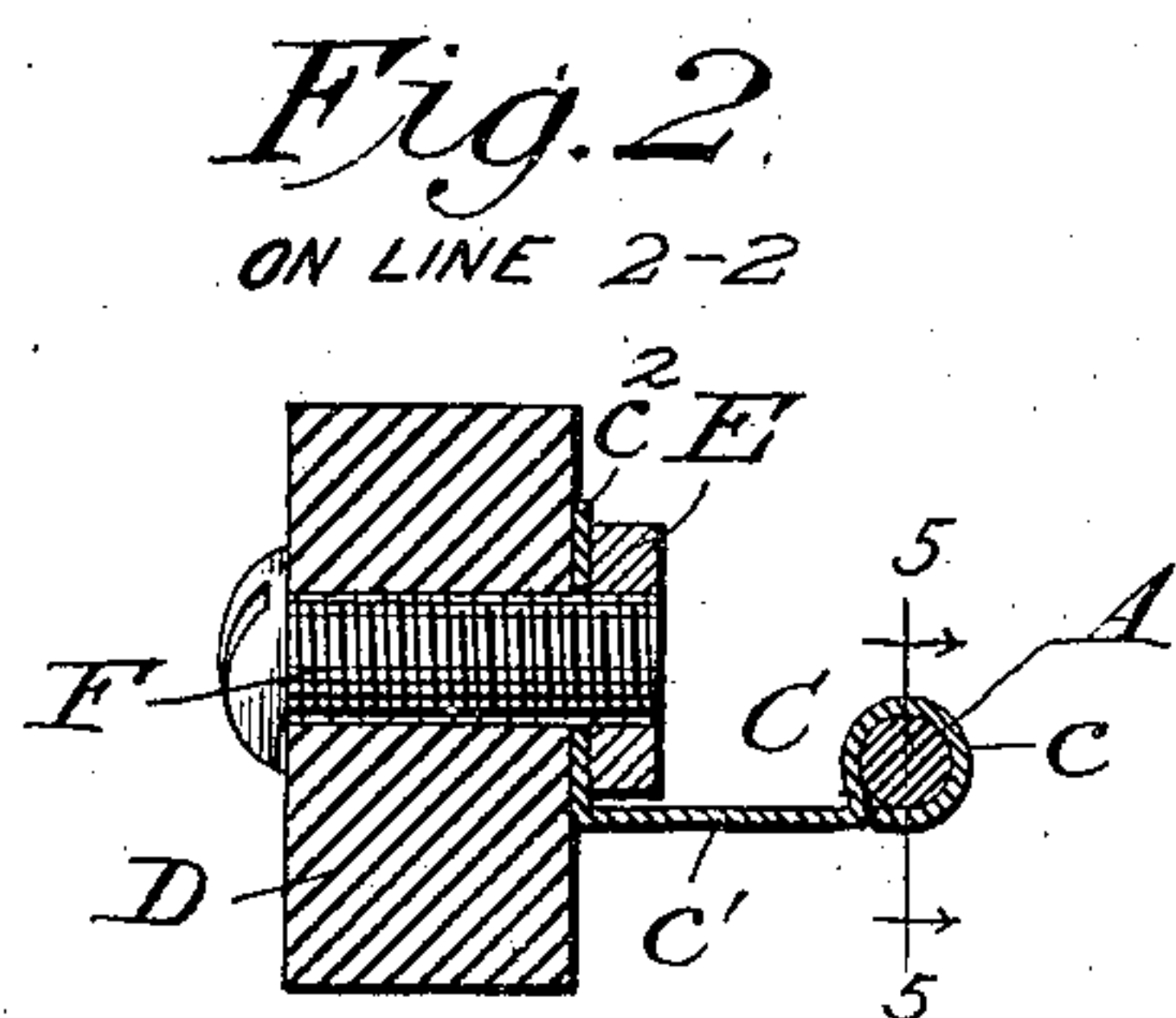
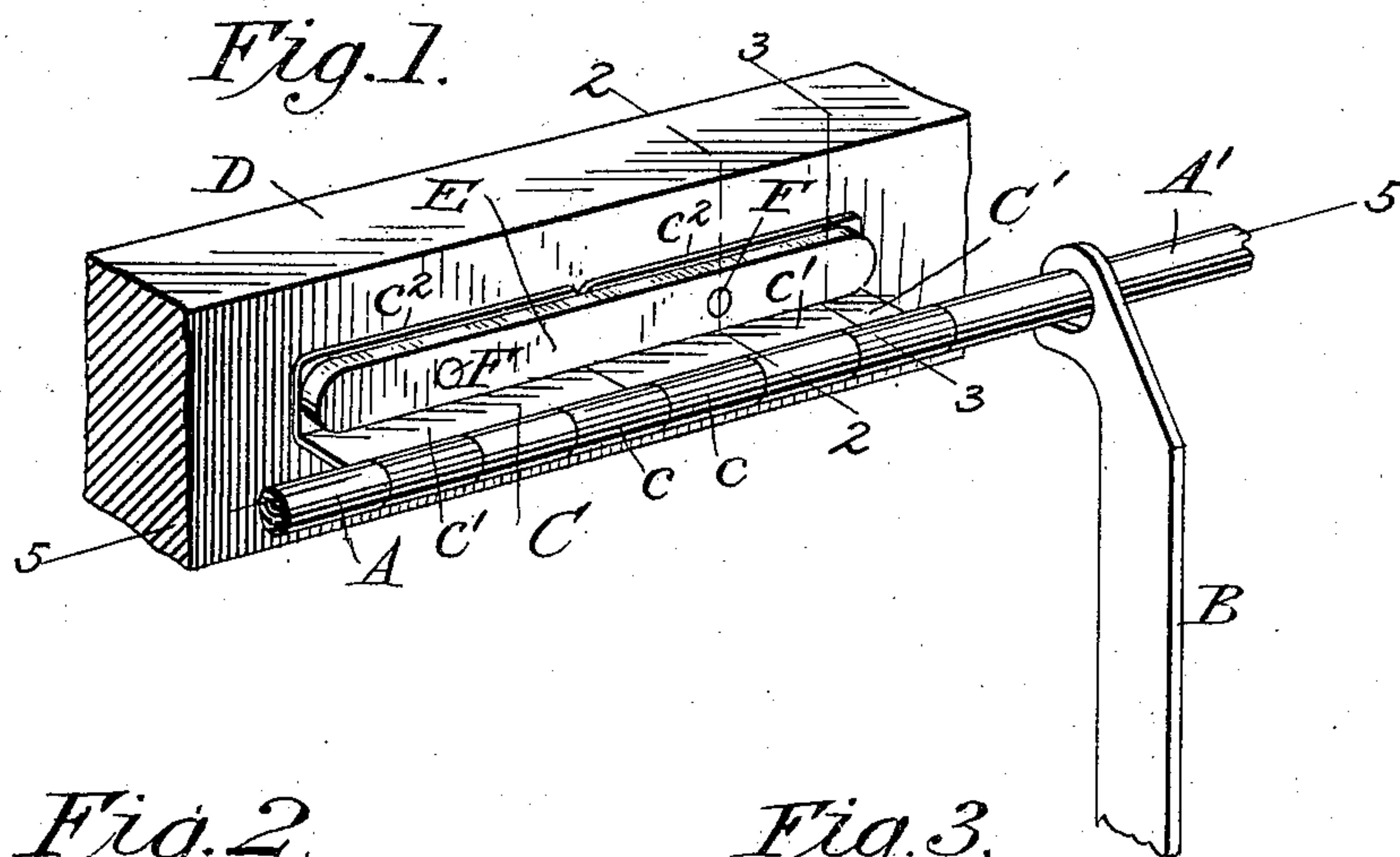


No. 846,972.

PATENTED MAR. 12, 1907.

J. ALLAN.
 LINOTYPE MACHINE.
 APPLICATION FILED DEC. 13, 1906.



Witnesses:
 L. C. Harrison
 M. E. Smoot

Inventor:
 John Allan
 By P. P. Dodge
 Attorney

UNITED STATES PATENT OFFICE.

JOHN ALLAN, OF NEW YORK, N. Y., ASSIGNOR TO MERGENTHALER
LINOTYPE COMPANY, A CORPORATION OF NEW YORK.

LINOTYPE-MACHINE.

No. 846,972.

Specification of Letters Patent.

Patented March 12, 1907.

Application filed December 13, 1906. Serial No. 347,671.

To all whom it may concern:

Be it known that I, JOHN ALLAN, of the borough of Brooklyn, county of Kings, in the city and State of New York, have invented a new and useful Improvement in Linotype-Machines, of which the following is a specification.

My invention has reference to linotype-machines wherein the matrices are suspended from inclined wires or guides, and more particularly to the machine represented in Letters Patent of the United States to J. R. Rogers, No. 679,481, wherein the suspended matrices travel around continuous or endless inclined wires or guides. The wire guides are commonly made in two or more sections arranged end to end.

My improvement has reference to the manner of supporting and connecting the ends so that they will remain in exact alinement, affording a smooth unbroken surface over which the open eyes or hooks of the matrices may freely travel. To this end I provide each wire near its extremity with a circumferential groove or channel and in this channel I seat an encircling lip formed on a supporting plate or clip, these plates being in turn firmly secured to a base-plate or other support by which they are held in line, as hereinafter more fully explained.

In the drawings, Figure 1 is a perspective view of a rail having two sections connected by my device. Figs. 2 and 3 are cross-sections of the same on the correspondingly-numbered lines of Fig. 1. Fig. 4 is a plan view of two rail-sections such as are connected in Fig. 1. Fig. 5 is a longitudinal section on the line 5 5 of Figs. 1, 2, and 3. Fig. 6 is a perspective view of one of the clips, and Fig. 7 is a perspective view of one of the plates from which the clips are formed.

Referring to the drawings, A A' represent the two sections of the guide wire or rail, which require to be firmly connected end to end, so as to form portions of a continuous track or guide over which the matrices B may freely pass, these matrices being each provided at the upper end with an open hook or ear to engage over the guide in a manner well understood by those familiar with the art and fully explained in the patent above referred to.

Each of the wires is provided near its end

with a neck or portion *a* of reduced diameter and is also provided at the end with a similar neck *a'*. These necks are formed by turning or otherwise producing circumferential grooves in the wire, and the several necks are of equal diameter. The ends of the wires A A' are supported, respectively, in clips C C', preferably formed from sheet metal. Each of these clips is formed from a flat blank, such as shown in Fig. 7, having at one end two arms, which are bent or coiled into cylindrical form around the wires, as shown at *c*, and in such manner as to tightly encircle the necks *a a'* and lie flush with the outer surface of the wire, so that the body of the wire and the sleeves or portions *c* of the clips inclosing the same will present a continuous and uniform cylindrical surface over which the ears of the matrices may pass freely and smoothly without danger of retardation. Each clip is formed with a horizontal portion *c'*, extending laterally from the wire, and also with a vertical flange *c''*, preferably turned upward.

The neck *a'* of one wire is projected beyond its clip and adapted to enter the sleeve of the adjoining clip in the manner shown in Fig. 5, so that when the wires are joined end to end their exact alinement is insured and maintained.

The clips C C' may be supported in any suitable manner; but I prefer to seat them, as shown, against the vertical face of a rigid supporting bar or frame D, and to secure them thereto by means of an overlying plate E, which is seated over the flanges of both clips and secured rigidly in place by screws F or equivalent fastenings.

It is to be observed that the clips seated in the circumferential grooves and encircling the necks are adapted to give very firm support to the wire or guide to hold the same in exact alinement and also to prevent the sections from being separated endwise.

The essence of the invention lies in combining with the wires arranged end to end a sustaining clip or clips seated in and around reduced portions of the wires, so that they serve both as supports to hold the sections of the wire in proper relation and also as portions of the surfaces to support and guide the passing matrices.

It is manifest that the clips C C' may be made in one continuous piece; but it is pre-

ferred to use separate clips, as shown, for the reason that it permits of more convenient manufacture and assemblage of the parts.

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

1. In a linotype-machine, the combination of guide-wires A, A', each having at one end reduced portions *a*, *a'*, with sustaining-clips encircling said portions and flush with the surface of the wires, whereby the two wires are held in line and prevented from separating longitudinally.

2. In combination with the wires A, A', each having at one end reduced portions *a*, *a'*, the clips encircling and sustaining said portions, one of the wires having its end extended into the clip supporting the opposite wire, as described, whereby the wires are maintained in line and held together end to end.

3. In a linotype-machine, and in combination, a matrix-supporting wire having a cir-

cumferential groove with side shoulders therein, and an encircling clip seated within the groove flush with the outer surface of the wire; whereby it is adapted to sustain the wire and also to hold the same against end motion.

4. In combination with the wires A, A', each having the reduced portions at one end, the encircling clips B, B', applied to the respective wires, and a common support having said clips rigidly secured thereto and held in line thereby.

5. In combination with the wires A, A', each having reduced portions, clips C, C', a supporting-bar D, a confining-plate E, and rigid connections between said parts.

In testimony whereof I hereunto set my hand, this 7th day of December, 1906, in the presence of two attesting witnesses.

JOHN ALLAN.

Witnesses:

JOHN R. ROGERS,
DAVID S. KENNEDY.