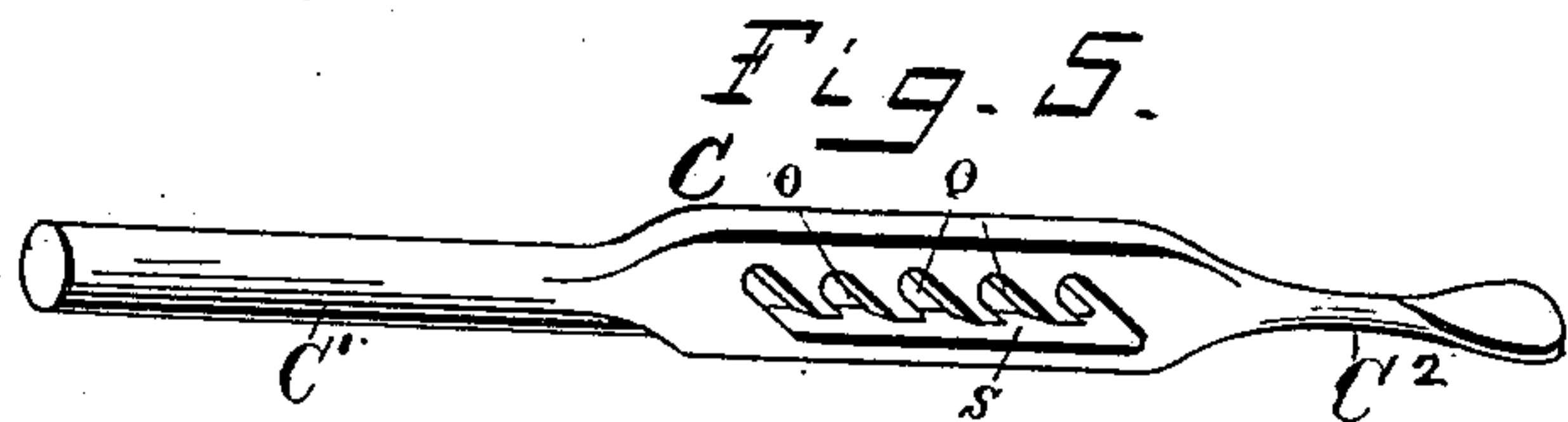
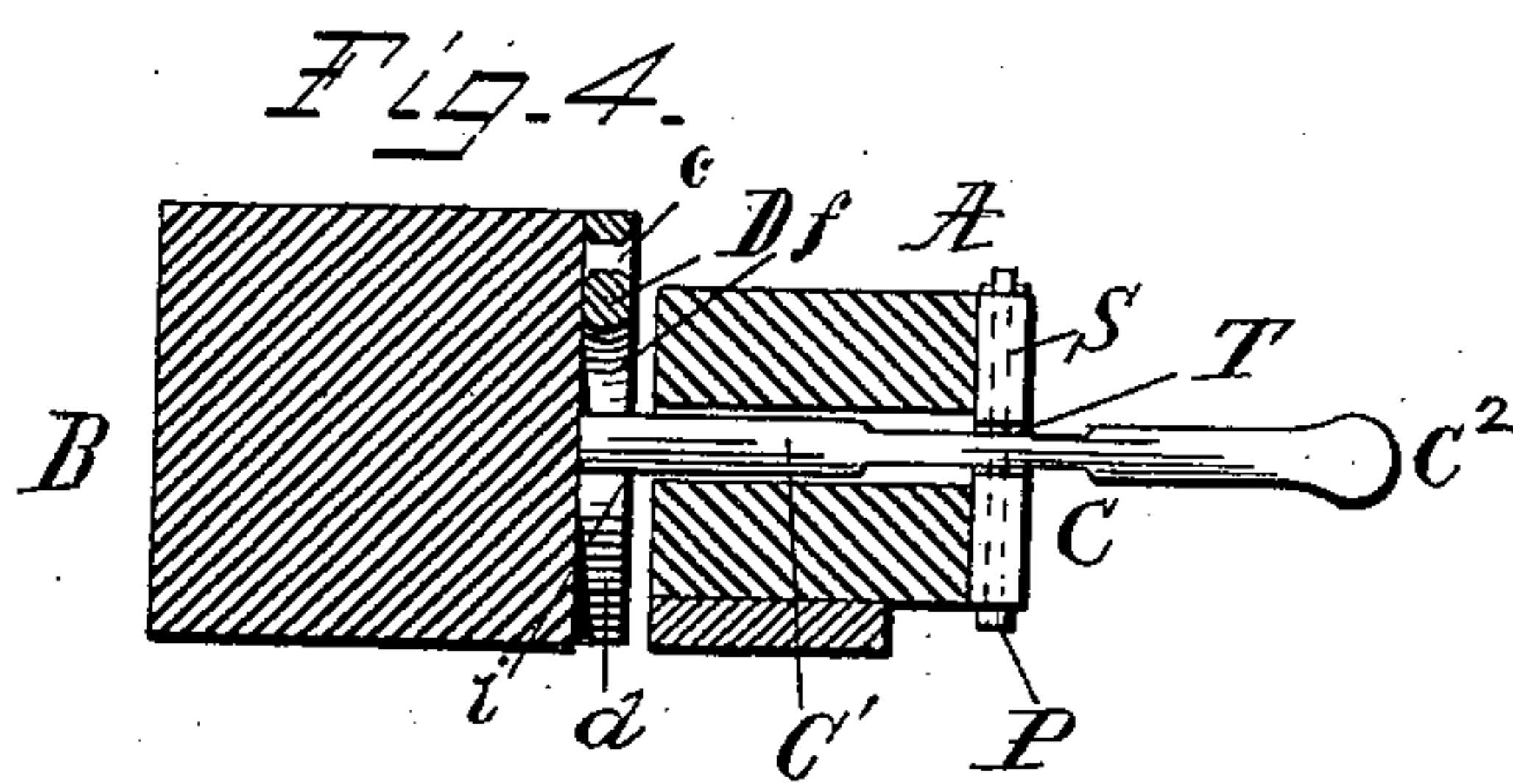
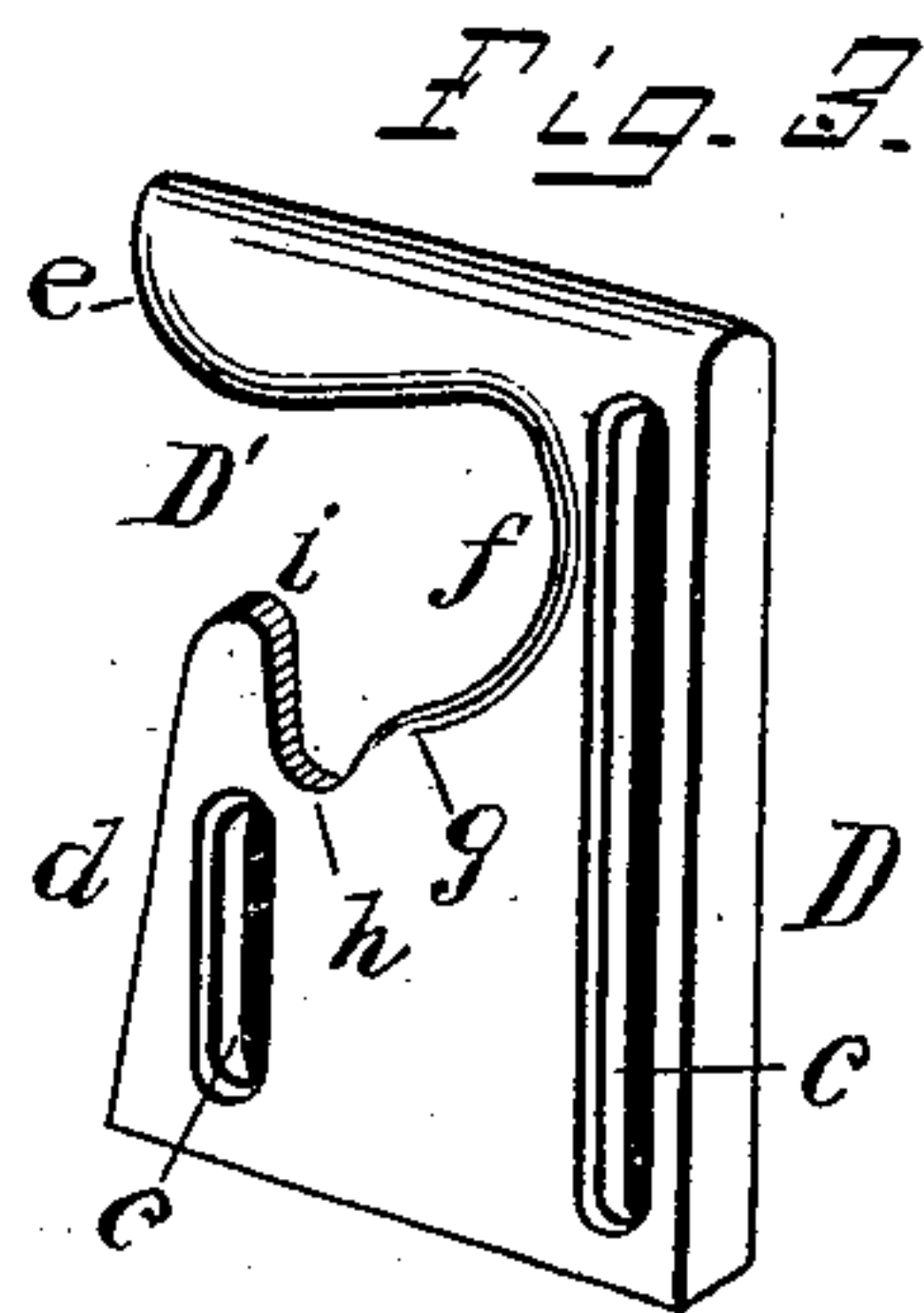
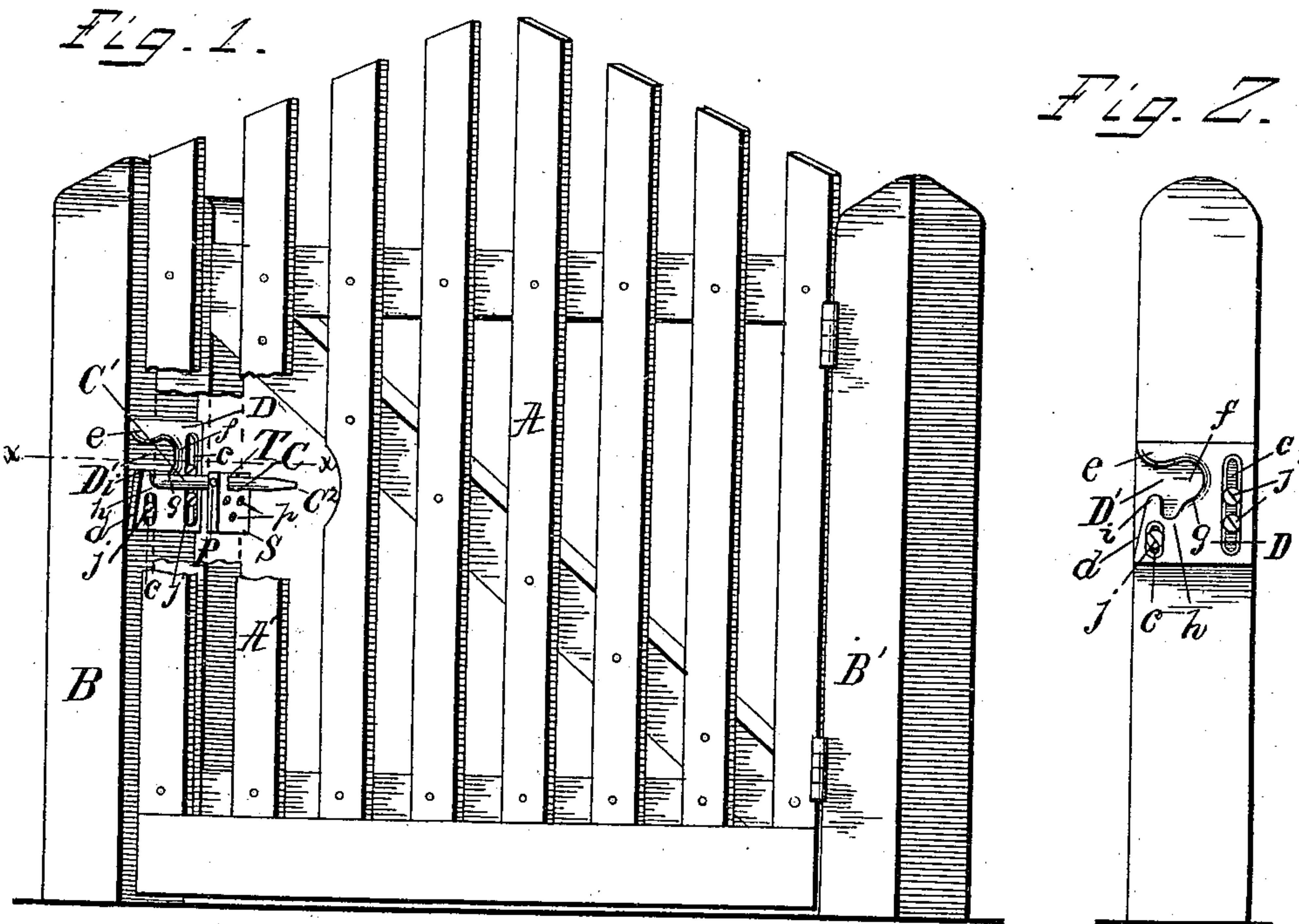


(Model.)

J. DULS.
GATE LATCH.

No. 344,952.

Patented July 6, 1886.



WITNESSES.
Douglas S. Macrae
Harvey S. W. Saw,

INVENTOR.
Jacob Duls
by Henry Hill Garnett
Atty.

UNITED STATES PATENT OFFICE.

JACOB DULS, OF CHARLOTTE, NORTH CAROLINA.

GATE-LATCH.

SPECIFICATION forming part of Letters Patent No. 344,952, dated July 6, 1886.

Application filed May 11, 1886. Serial No. 201,845. (Model.)

To all whom it may concern:

Be it known that I, JACOB DULS, a citizen of the United States, residing at Charlotte, in the county of Mecklenburg and State of North Carolina, have invented certain new and useful Improvements in Gate-Latches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to gate-latches; and my said invention consists in certain details of construction and arrangement of the parts composing the same, whereby a simple, cheap, and effective fastening is secured, that will be practical in operation, as well as durable, and capable of adjustment without removal to compensate for any sagging of the gate or settling of the posts thereof.

The object of this invention is to provide a fastening for gates whose parts will be few in number and simple in construction. The keeper being so formed that it will act as a stop to the gate, the latch will be properly guided to its seat therein and securely retained from accidental displacement, and the said keeper may be adjusted vertically without removal from its first position upon the post, in case of the sagging of the gate, so that the latch will always be properly presented to the mouth of the same and rest within its seat, and the latch made capable of adjustment, so that in case of the separation, because of settling, of the post from the gate, said latch may be adjusted without removal, or lengthened, as it were, so that it will reach the keeper and be properly seated therein. A gate-latch will therefore, when constructed according to my invention, as herein shown and described, remain in use for a much greater length of time than ordinarily, and be always capable of effective operation.

Referring now to the accompanying drawings for a better understanding of the details of construction of my invention, Figure 1 represents a view in perspective and partial section of a gate and its posts having applied thereto a latch and its keeper constructed according to my invention. Fig. 2 is a face view of the keeper as applied to the post; and Fig. 3 is a detached view, in perspective, of said

keeper. Fig. 4 is a transverse section, on the line $x x$ of Fig. 1, of the post and front upright of the gate, showing the latch as applied in position thereon. Fig. 5 is a view in perspective of the latch, showing the construction of the same.

A represents the gate, and B B' the posts thereof, of the ordinary or any approved construction.

C is the pivoted latch, and D is the keeper for the same. This keeper is formed of stout metal, having an opening, D', of peculiar form, and vertically through the body of the same are formed slots, as at $c c$, whose edges upon both faces of the said keeper are beveled or countersunk, so that said keeper may be used either upon a right or left gate. The front lower edge, as at d , of the keeper is inclined, so as to properly guide the entering latch within the keeper, and the top front end as at e , is also curved inward for the same purpose, in case the latch be raised when entering. As will be seen, the entrance or mouth of the keeper is made narrower than the inner portion, so as to permit a certain amount of play to the latch when operating the same to open the gate, and yet prevent its accidental escape therefrom by persons, &c., jarring against the gate. In addition to this, by reason of the rear extension, f , of the opening in the keeper, a stop is formed to receive the impact of the entering latch, thus limiting the movement of the gate and preventing a too far movement of the same, whereby it may not properly engage the keeper; and to further insure the retention of the latch the bottom edge of the opening therein, as at g , is curved, and terminates in a slot or recess having nearly vertical sides, as at h , into which the latch slides and rests, and thereby securely holding the gate from accidental displacement until it is raised clear of the top end, i , thereof.

As shown in Figs. 1 and 2, the keeper D is secured upon the face of the post by screws j , which pass through the slots c and enter the said post.

Turning now to the latch C, it will be seen that its front end, C', is made larger than the handle C'', and near its central portion a series of openings, o , for adjustment thereof, is provided, which openings, as seen in Fig. 5, are

connected by a slot, as at *s*, whereby the said latch may be adjusted without removing its fastening-pin. This latch is, as shown in Fig. 4, secured to the front upright, *A'*, of the gate, through which it passes, by a slotted plate, *S*, secured by screws *p* to said upright *A'*, transversely through which plate and latch, resting in the slot *T*, formed in the upper edge of said plate, passes the pivot-pin *P* of said latch. As before stated, the front end of the latch is larger than the rear; consequently it is heavier, and therefore it will rest at an inclination and securely against the bottom of the slot in the keeper. To further insure this action the adjustment-openings for the pivot-pin of the said latch are placed a little removed from the center of said latch toward the handle end, so that said end is not only heavier, but is longer than the other end, and consequently its always resting at an inclination is assured.

Turning again to Fig. 5, it will be seen that the openings *o* in the latch, for the adjustment thereof, are formed at an angle which slants away from the handle, so that when pressing said handle to open the gate the tendency is to press the latch the tighter against the pivot-pin, and said latch will not be jolted out of place by the slamming of the gate, nor can children in playing with the latch pull or easily push it out of position. When in operation the entering latch strikes against the inclined face *d* of the keeper, it is properly guided into the mouth of said keeper, and, striking against the rear edge of the recess in said keeper, the further movement of the gate is arrested, when the latch slides downward and forward and seats itself within the seat formed for its reception at the front of the keeper, from whence it will not be displaced, except by a positive pressure upon the latch to lift the same clear of the vertical projection at the mouth of said keeper. Should the gate sag, so that the latch will not properly enter the mouth of the keeper, a simple loosening of the screws which secure the keeper to its post, and either a slight raising or lowering of said keeper and again tightening of the screws, will remedy the difficulty by again bringing the keeper into proper position relatively to the latch to be properly engaged by the same; and should the post settle away from the gate, so that the latch will not reach the keeper, a simple adjustment of the said latch, so as to bring it up toward said keeper, will again bring the parts into proper position and action.

Having now fully described the construction

of my invention, its operation, advantages, &c., I will proceed to point out what I claim therein as new and of my invention, which I desire to have secured to me by Letters Patent of the United States, viz:

1. In a gate-latch, the keeper *D*, formed with adjustment-slots *c*, whereby it may be vertically adjusted without removing it from the post, mouth *D'*, with enlarged opening *f*, curved or inclined front edges, *d* and *e*, depression *h*, and front projection, *i*, substantially as described, and combined with a latch secured to the gate.

2. In a gate-latch, the latch *C*, formed of handle end *C'*, weighted end *C''*, and pivot-openings *o*, connected by a slot, *s*, pivoted to the front upright of the gate, and combined with a keeper secured upon the post, for the purposes specified.

3. The combination, in a gate-latch, of a keeper formed with slots therein, and a latch formed with adjustment-openings for its pivot, whereby both the latch and its keeper may be adjusted without removal of the fastening screws or pin, and sagging of either or both the gate and post compensated for, as shown and described.

4. As a new article of manufacture, the gate-latch herein described, composed of the keeper *D*, having vertical slots *c c* therein for adjustment of said keeper, narrow mouth *D'*, opening *f*, inclined curved front edges *d* and *e*, projection *i*, and seat *h*, secured to the post, and adapted to be adjusted thereon without removing the screws thereof, pivoted latch *C C'* *C''*, having a weighted outer end and central pivot-adjustment openings, *o o*, and connecting-slot *s*, and slotted plate *S T*, with pivot-pin *P*, secured to and passing through the front upright of the gate, all constructed, arranged, and adapted to operate substantially as set forth and shown.

5. A latch for a gate, formed through its body with a series of short angularly-placed pivot-adjustment openings connected at the bottom with a longitudinal slot, substantially as described, for the purposes specified, whereby the latch may be adjusted without removing its pivot-pin.

In testimony whereof I affix my signature this 10th day of May, A. D. 1886.

JACOB DULS.

In presence of—

J. R. HOLLAND,

W. C. WILKINSON.