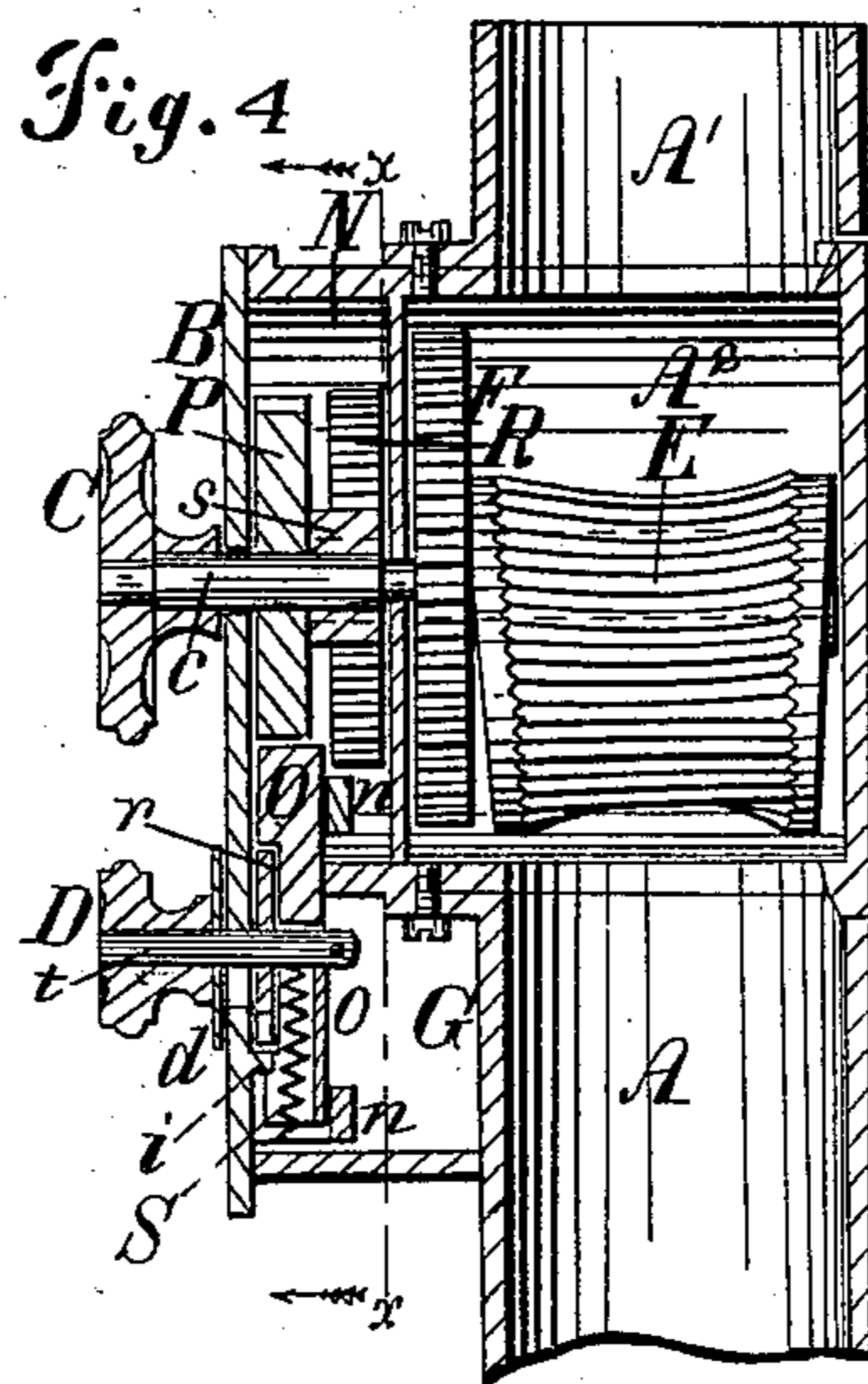
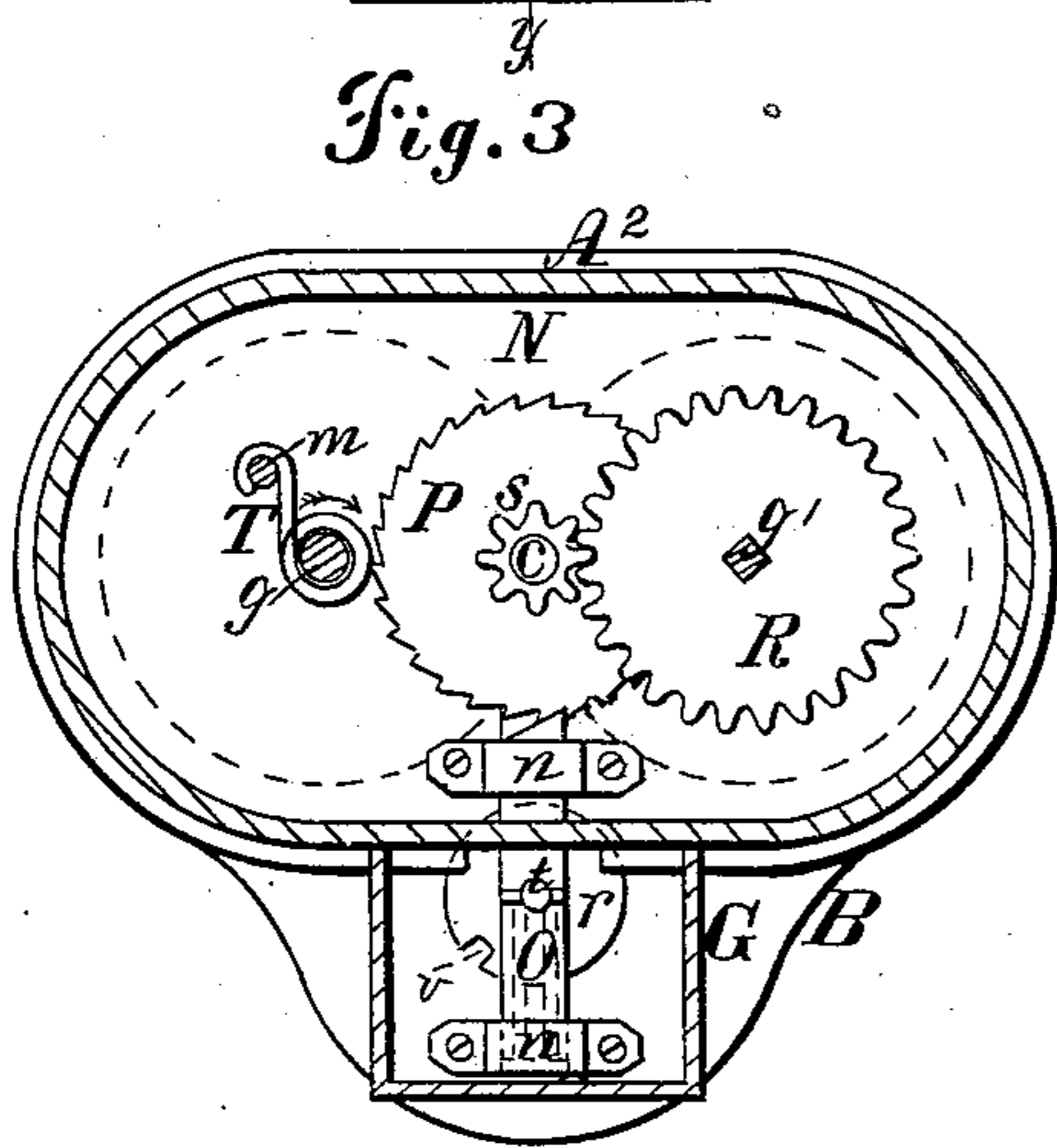
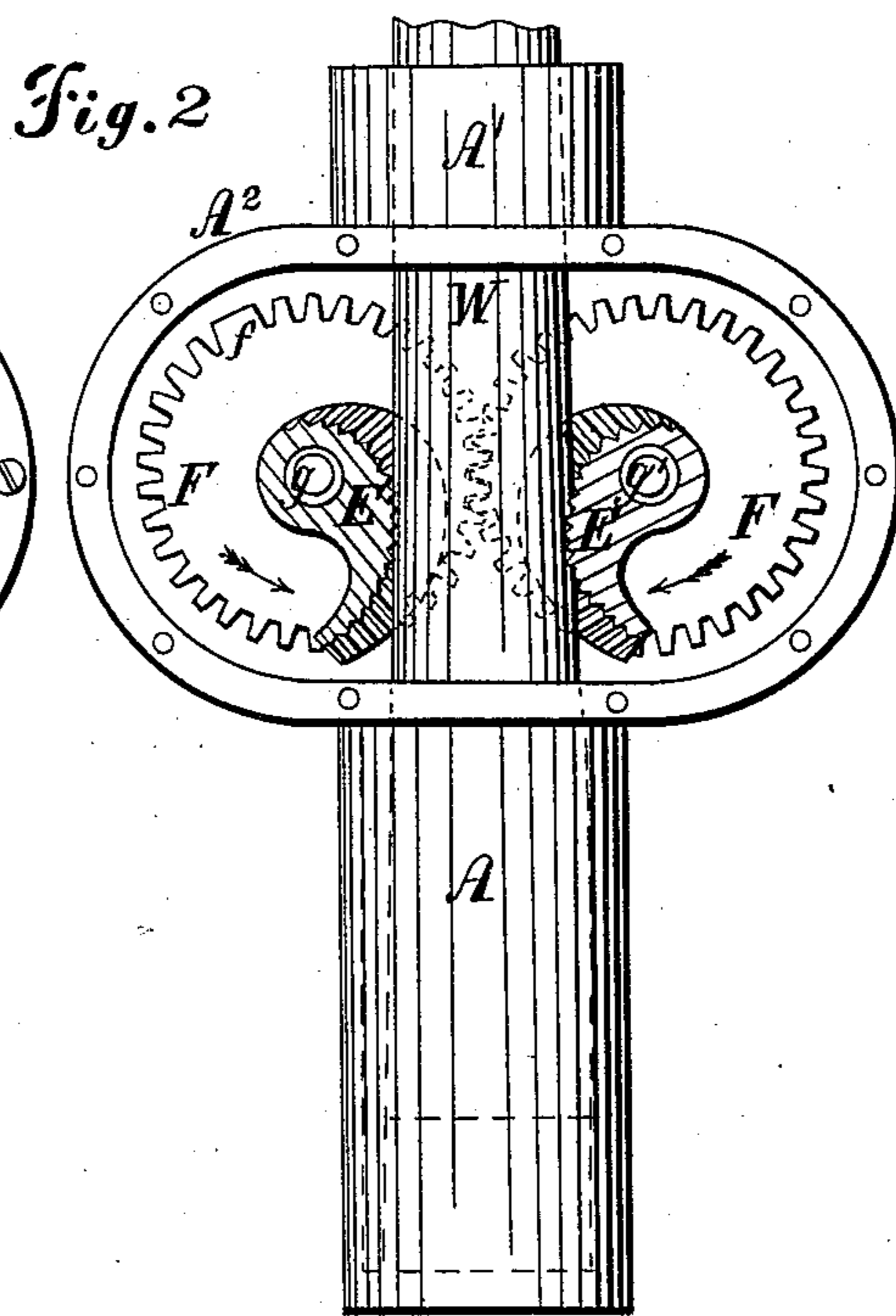
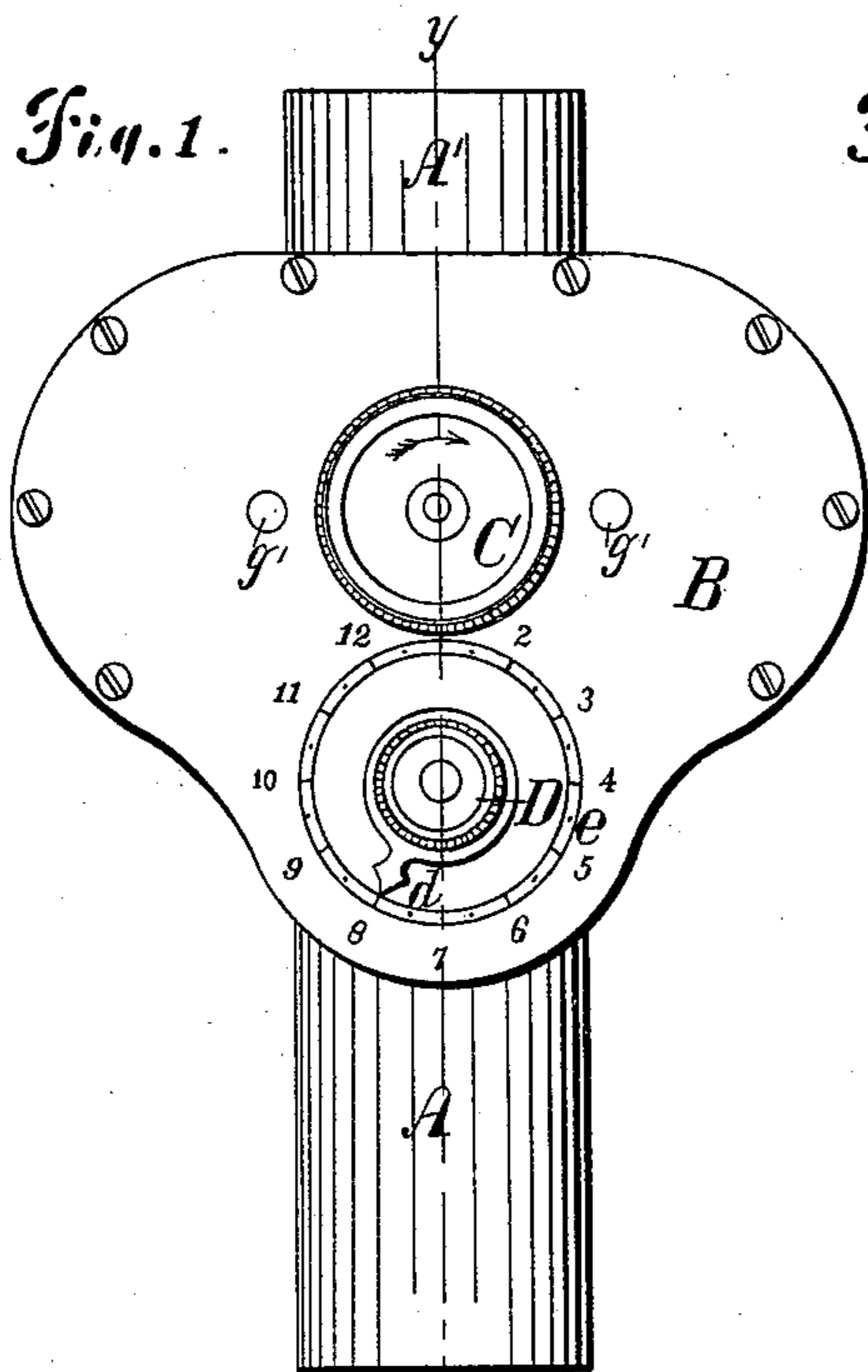


W. D. PUTNAM.

Whip Socket.

No. 103,368.

Patented May 24, 1870.



Witnesses.
R. J. Campbell.
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United States Patent Office.

WINTHROP DAVIS PUTNAM, OF CHICAGO, ILLINOIS.

Letters Patent No. 103,368, dated May 24, 1870.

IMPROVED SAFETY SOCKET FOR WHIPS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WINTHROP DAVIS PUTNAM, of Chicago, in the county of Cook and State of Illinois, have invented a Safety Socket for Whips; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings making part of this specification, in which—

Figure 1 is a view of the front of the improved socket.

Figure 2 is a view of the back of the socket, with the back plate removed and the two whip-clamps in section.

Figure 3 is a sectional view taken in the vertical plane indicated by line *x x*, fig. 4.

Figure 4 is a transverse section taken in a vertical plane indicated by dotted line *y y* in fig. 1.

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

This invention relates to an improvement of whip-sockets for vehicles, and consists in providing the socket with clamps for receiving and gripping the whip when in the socket, in combination with some suitable means for locking the clamps, so that a person unacquainted with the lock cannot remove the whip from the socket, as will be hereinafter explained.

To enable others skilled in the art to understand my invention, I will describe its construction and operation.

In the accompanying drawings—

A A¹ represent two sections, forming the main portion of the whip-socket, which sections are respectively secured to the top and bottom of a box, A², so that their vertical axes coincide.

The bottom of the lower tubular section A is closed, and the top and bottom of the upper shorter section is open.

The box A² is preferably made of the elliptical form shown in the drawings, with a face-plate, B, on one of its flat sides, from which project two thumb-nuts, C D.

Interiorly, the box is divided into two apartments by a vertical partition, N, and below the front apartment is a chamber, inclosed by a box, G.

Within the rear apartment two scroll-shaped oscillating clamps, E E, are applied on horizontal shafts *g g*, which clamps are arranged on opposite sides of the axial plane of the socket-tube A A¹, and constructed with tapering concave surfaces, which may be serrated, so as to gripe and hold firmly a whip, W, placed in the socket, as shown in fig. 2.

On the shafts *g g* spur-wheels F F, of equal diameter, are keyed, one of which wheels has the space between two of its teeth filled, as shown at *f*, fig. 2, so as to prevent a spring, T, on the shaft *g* from turning the wheels F F and the clamps E E entirely around, which it would do were it not for the obstruction *f*.

The wheels F F cause the two clamps to approach and recede from one another equally, and to clamp or release the whip W, as the case may be, at the same time.

Within the apartment of the box A² shaft *g* has a spur-wheel, R, keyed on it, which engages with a pinion, s, on the stem *c* of the thumb-nut C. Thus, by turning the nut C toward the right hand, the wheels F F will be moved in the direction indicated by the arrows in fig. 2, and the clamps E E will approach the whip W, and confine it.

On the stem or shaft *g* a helical spring T is applied, one end of which is secured to said shaft, and the other end is secured to a fixed stud, *m*, on the plate N. This spring is coiled in such manner that it will be wound up in the act of applying the clamps to a whip, and thereby operate by its recoil to separate the clamps.

On the stem *c* of thumb-nut C, a ratchet-wheel, P, is keyed, which is engaged by the nose of a vertically-sliding spring pawl, O, as shown in fig. 3, and when the parts are thus engaged, the clamps gripping the whip, the latter cannot be removed from its socket until the pawl O is depressed, and the wheel P thus released.

Within the box G the releasing mechanism is applied. This consists of the pawl O, in which is a spring, S, that acts upon the bottom of said box, and forces the pawl upward against the teeth of ratchet P, when this pawl is unrestrained.

The stem *t* of the thumb-nut D has a disk, *r*, applied on it within box G, which disk has a notch, *v*, in its periphery. By turning the nut D so as to bring the notch *v* in line with a fixed boss, *i*, on the face-plate B, and pressing down the nut D and said disk, the pawl O will release the ratchet P, when spring T will cause the clamps E E to separate and release the whip.

The pawl O works in guides *n n*, fastened to the back of face-plate B, and it is slotted, to receive the boss or stop *i*, and the hole through the face-plate B, through which stem *t* passes, is oblong vertically, to allow this stem to be depressed, when the notch *v*, in disk *r*, is made to register with the boss *i*, as shown in fig. 4.

In order to determine when the notch *v* does coincide with the boss *i*, a pointer, *d*, is applied to stem *t*, between the face-plate B and the thumb-nut D, and a circle, *e*, of figures is engraved on the face-plate, concentric to the axis of stem *c*, and the pointer so adjusted with respect to the notch *v*, that, when this pointer is brought around to a given figure, the notch *v* will be at the point required.

Thus, the pointer shown in the drawings is adjusted with respect to the notch *v* and boss *i* for the figure 8 on the circle of figures, so that, with the pointer ad-

justed to any other figure, the pawl cannot be depressed, as the circumference of disk *r* will abut against the boss *i*.

To render the device permutable, that portion of the rotary stem *t*, which receives the pointer *d*, may be made prismatic.

Operation.

When the clamps *E E* are separated to their fullest extent a whip may be inserted into or removed from the socket, as with the ordinary whip-socket. To fasten the whip in place in the socket, the thumb-nut is turned from left to right, which will cause the clamps *E E* to gripe the whip, and hold it firmly. The ratchet *O* will allow the pawl *P* to turn freely in the act of clamping the whip, but will not allow the spring *T* to separate the clamps. After clamping the whip, the pointer *d* should be turned to any number in the circle *e*, so that it be not the number which will bring the notch *v* opposite the boss *i*.

To release the whip thus clamped, the pointer is turned to the figure 8, and the thumb-nut *D* depressed. This will cause pawl *O* to release ratchet-wheel *P*, when spring *T*, which was wound up in applying the clamps to the whip, will cause the clamps *E E* to recede from the whip.

Having described my invention,

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

1. A clamping device, in combination with the interior of a whip-socket or holder, operating upon the principle set forth.
2. A secret locking device, a clamping device, and a whip-socket or holder, constructed and operating upon the principle set forth.

WINTHROP DAVIS PUTNAM.

Witnesses:

A. D. SHARP,
FRANK S. WRIGHT.