

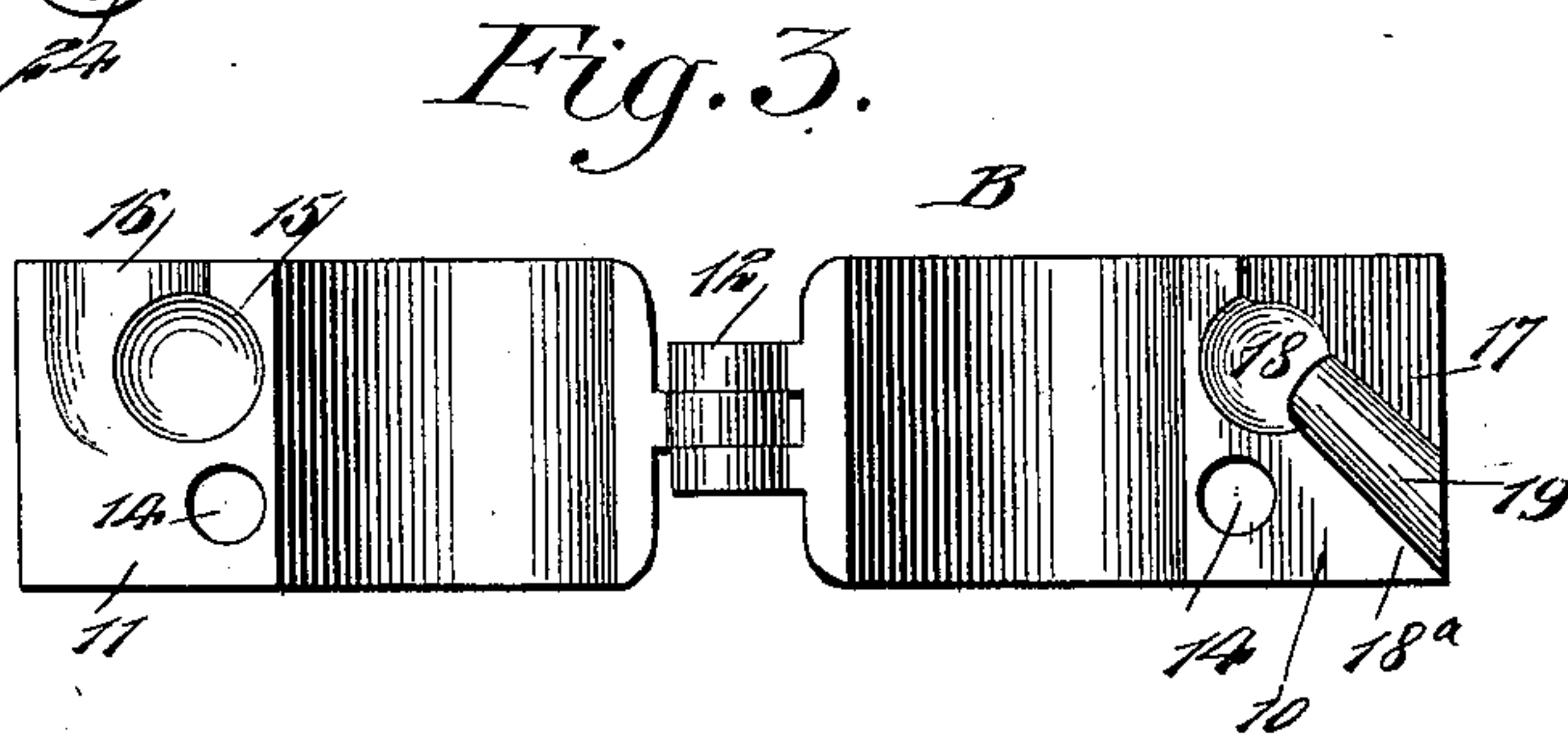
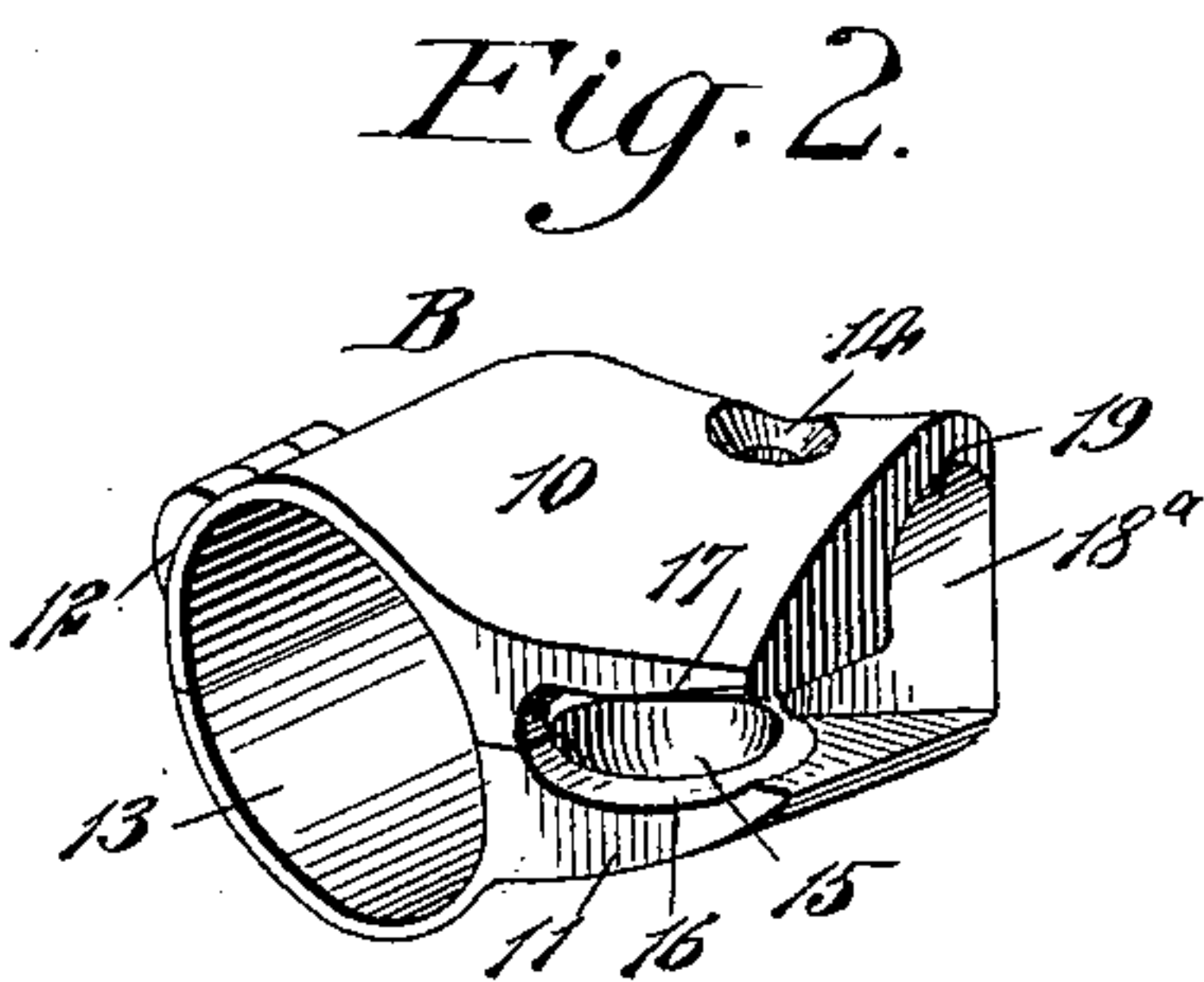
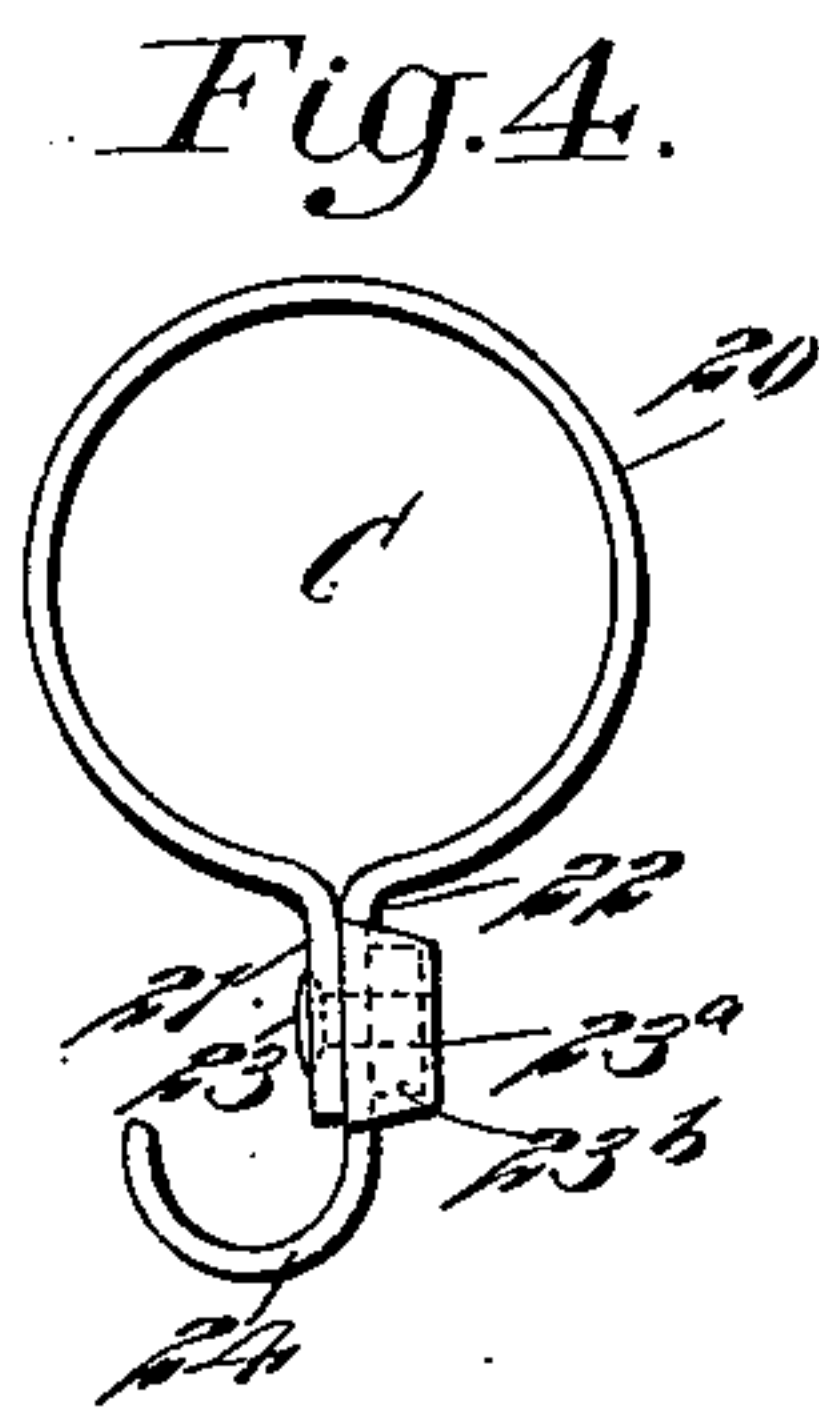
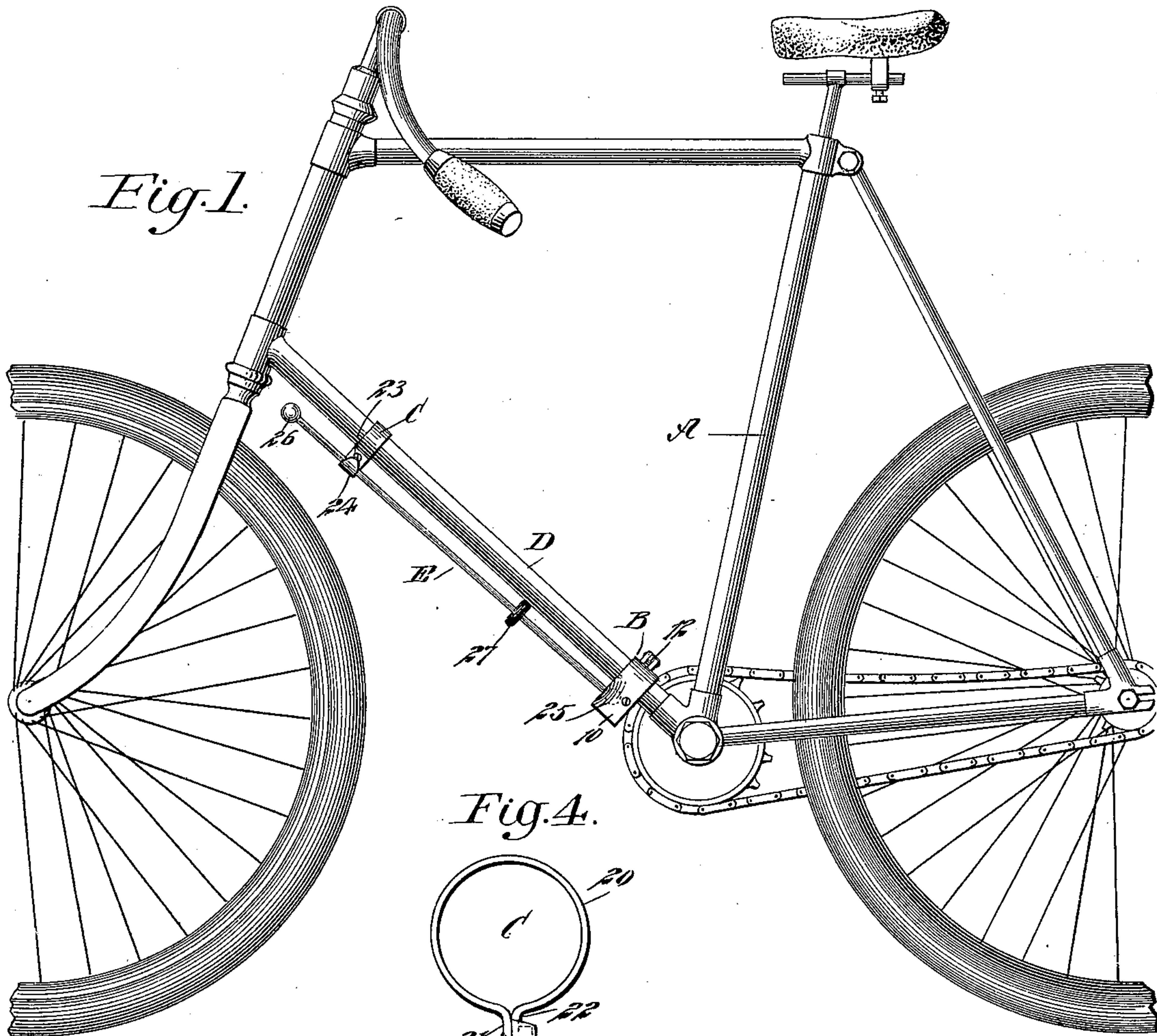
No. 636,680.

Patented Nov. 7, 1899.

S. M. MILLER.
BICYCLE SUPPORT.

(Application filed Feb. 16, 1899.)

(No Model.)



Witnesses:
Julius Lutz
Fred A. Ken

Inventor:
Samuel M. Miller
By *Wm. L. W.*
Attorneys

UNITED STATES PATENT OFFICE.

SAMUEL M. MILLER, OF MASON CITY, ILLINOIS.

BICYCLE-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 636,680, dated November 7, 1899.

Application filed February 16, 1899. Serial No. 705,648. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL M. MILLER, of Mason City, in the county of Mason and State of Illinois, have invented a new and Improved Bicycle-Support, of which the following is a full, clear, and exact description.

The object of my invention is to provide a very simple, durable, and economic support capable of ready attachment to any bicycle-frame, the support being adapted to hold the bicycle-frame upright after a rider has dismounted.

A further object of the invention is to so construct the bicycle-support that when not required it may be closely secured to the lower main tube of the bicycle-frame out of the path of the pedals.

Another object of the invention is to provide a means whereby the supporting-rod may be prevented from moving or rattling when locked to the frame and whereby also when the supporting-bar is lowered it may be carried to and maintained in a position at an angle to one side of the frame.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of a bicycle and a side elevation of the improvement applied to the bicycle, the supporting-bar being shown as locked to the lower main tube of the machine. Fig. 2 is a detail perspective view of the lower clamp of the device in a closed position. Fig. 3 is a plan view of the lower clamp of the device opened, and Fig. 4 is an edge view of the upper or keeper clamp of the device.

A represents the frame of a bicycle, and B the lower or anchoring clamp of the device, which is attached to the lower main tube D of the machine at a point near the crank-hanger. C represents the keeper-clamp for the device, located also on the lower main tube of the frame at a point near the front fork, and E represents the supporting-bar of the device, which is pivoted in the anchor-clamp B and is adapted to enter the keeper-clamp C.

The detail construction of the anchor-clamp B is shown in Figs. 2 and 3, the said clamp being made in two sections 10 and 11, connected by a hinge 12, and the two sections are provided with registering recesses in their opposing faces adjacent to the hinge, when the clamp is closed the two registering recesses forming an opening 13, adapted to closely receive the lower main tube D of the bicycle-frame. The two sections of the anchor-clamp are held together and in fixed or positive position on the lower main tube of the bicycle-frame by means of a screw or a like device passed through registering apertures 14, made in the members 10 and 11, one of the said apertures having its wall threaded, the outer portion of the opposing aperture being preferably countersunk.

When the anchor-clamp is secured upon the frame, the members of the clamp extend below the lower main brace of the frame, as illustrated in Fig. 1. A circular cavity 15 is made in the inner face of the member 11—for example, adjacent to the opening 13—adapted to receive the brace, and the said member 11 is further provided with a recess 16 in the forward upper edge of its pendent member, as is also shown in Fig. 2. The member 10 of the anchor-clamp in the forward portion of its under surface is provided with a recess 17, the recess 17 being adapted to mate or register with the recess 16 in the member 11, and a circular cavity 18 is made in the under face of the pendent or lower portion of the member 10, the cavity 18 being adapted to register with the cavity 15 in the member 11 when the two members are closed together, and thus form a socket for a ball to turn in. The rear edges of the two members 10 and 11 of the anchor-clamp are adapted to engage with each other when the said clamp is closed, and in the lower edge of the member 10, at the rear, a forwardly and upwardly inclined recess 18^a is made. In the upper rear portion of this recess a channel 19 is produced, which channel is in direct communication with the concavity 18 and extended diagonally of the said member 10, as shown particularly at the right in Fig. 3, being also shown in Fig. 2.

The keeper-clamp C is shown in detail in Fig. 4 and consists usually of a strip of metal

or a like material bent upon itself to form a loop 20 and two shanks 21 and 22, the shank 22 being longer than the shank 21, and said shank 22 is made to terminate in a hook 24.

5 The loop member 20 of the keeper-clamp is adapted to receive the lower main tube D of the bicycle-frame, and the two shanks are held together, so as to secure the clamp upon the said tube of the frame, usually by means of

10 a bolt or a screw 23, passed through the shank, the bolt or screw being provided with a nut 23^a, which may be held between ears 23^b, secured to the longer shank 22, said ears being of spring material. When the keeper-clamp

15 C is secured to the frame, the hook 24 faces outwardly in the same direction as the member 10 of the anchor-clamp B.

The supporting-rod E is provided with spherical heads 25 and 26, located one at each

20 of its ends, the spherical head 25 being made to enter and adapted to turn in the registering concavities 15 and 18 in the anchor-clamp B; but the head 26 of the supporting-rod may be given any other desired contour that

25 will prevent the rod from sinking unduly into soft soil when brought to an engagement with the ground. The supporting-rod E is also provided with an elastic washer 27 between

30 its ends, and when the supporting-rod is not in use it is made to enter the hook 24 of the keeper-clamp near its free end, and when the rod is in such engagement with the said keeper-clamp the washer 27 is pressed against the lower main brace of the machine, thus

35 preventing the rod E from rattling or moving in its keeper, and likewise serving to prevent the rod from being shaken out from the keeper.

When the bicycle is to be supported, the supporting-rod is disengaged from the keeper-

40 clamp C and is carried downward through the space formed by the recesses 16 and 17 to an engagement with the rear inclined wall of the recess 18^a and outward and upward into the channel 19, whereupon the supporting-rod

45 will stand at more or less of an obtuse angle to one side of the frame of the machine and will engage at its free end with the ground, floor, or other surface upon which the machine may rest and will effectually maintain

50 said machine in an upright position, so locking it that it does not move either backward or forward. When the machine is to be again used, it is simply necessary to carry the supporting-rod upward to a position parallel with

55 the lower main tube of the frame and again engage the said supporting-rod with the keeper-clamp C.

Having thus described my invention, I claim as new and desire to secure by Letters

60 Patent—

1. In a bicycle-support, the combination,

with an anchor-clamp constructed in sections having a hinged connection, the sections being provided with an opening adapted to receive a tube of a bicycle-frame, the inner face 65 of one section being provided with a cavity in its inner face and a recess at one side and end adjacent to the cavity, the other section being provided with a registering cavity upon its inner face and a side and end recess corresponding to that in the opposing section, 70 together with an inclined inner surface at its rear portion and a diagonal channel at the inclined surface portion communicating with said cavity, of a supporting-rod provided with a head at each end, one of said heads being in the form of a ball, the ball being received within the registering cavities of the sections of the anchor-clamp, as described. 75

2. In a bicycle-support, the combination, 80 with an anchor-clamp constructed in sections having a hinged connection, the sections being provided with an opening adapted to receive a tube of a bicycle-frame, the inner face of one section being provided with a cavity in 85 its inner face and a recess at one side and end adjacent to the cavity, the other section being provided with a registering cavity upon its inner face and a side and end recess corresponding to that in the opposing section, 90 together with an inclined inner surface at its rear portion and a diagonal channel at the inclined surface portion communicating with said cavity, of a supporting-rod provided with a head at each end, one of said heads being 95 in the form of a ball, said ball being received within the registering cavities of the sections of the anchor-clamp, a keeper for the free end of the supporting-rod, adapted for attachment to the bicycle-frame, and a flexible washer at- 100 tached to said supporting-rod between its ends, as described.

3. A bicycle-support, comprising a lower or anchoring clamp formed in two hinged sections and having each a cavity, the cavities 105 registering with each other when the sections are engaged, each section also having registering recesses communicating with the cavities and leading to the edges of the sections and one of the sections further having a chan- 110 nel formed therein and leading outward diagonally from the cavity thereof.

4. A bicycle-support, comprising a locking anchoring-clamp having a cavity and also having a recess leading from the cavity to one 115 edge of the clamp, and the clamp further having a channel formed therein and leading outward diagonally from the cavity thereof.

SAMUEL M. MILLER.

Witnesses:

C. E. WALSH,
FRED L. SAFFER.