

No. 891,089.

PATENTED JUNE 16, 1908.

H. M. MASON.
BRIDLE BIT.

APPLICATION FILED AUG. 21, 1907.

2 SHEETS—SHEET 1.

Fig. 1.

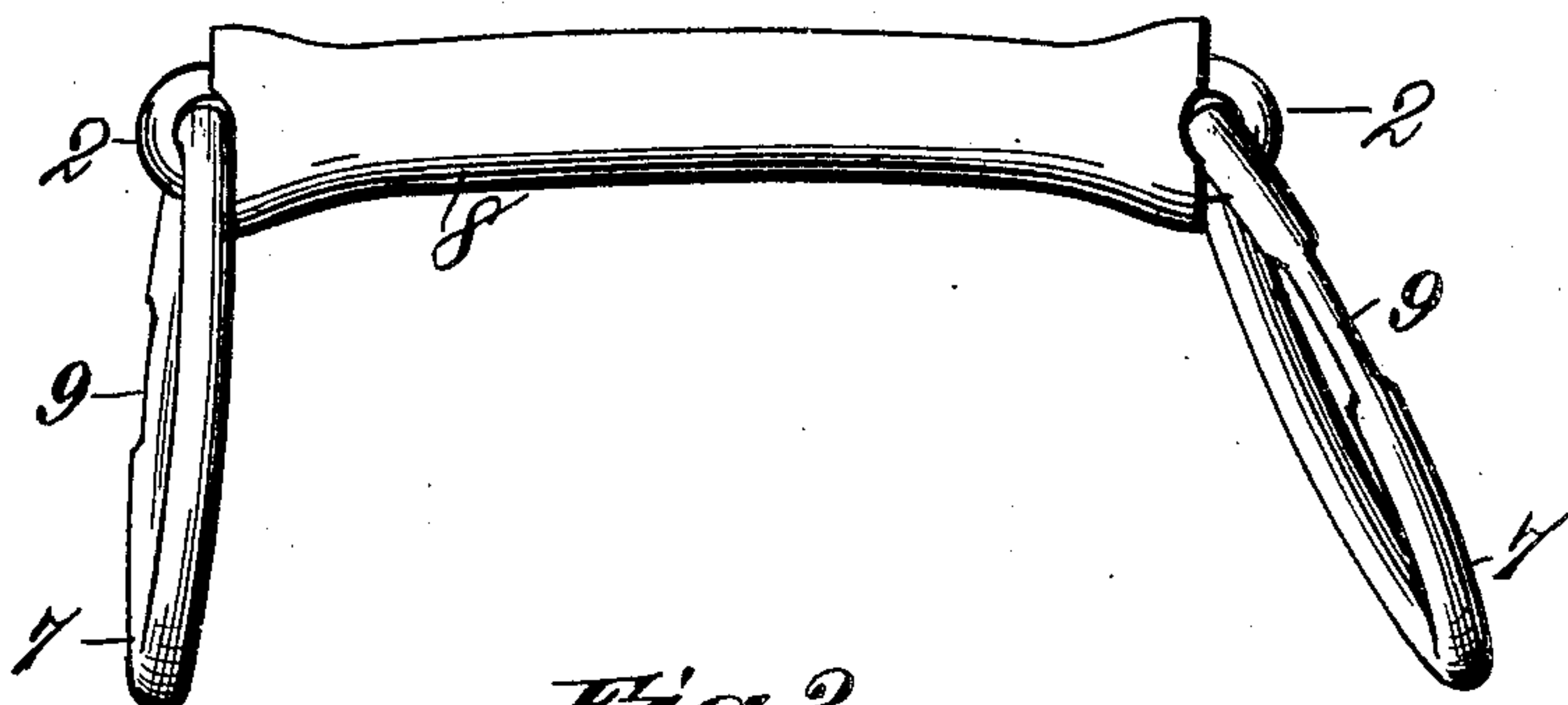


Fig. 2.

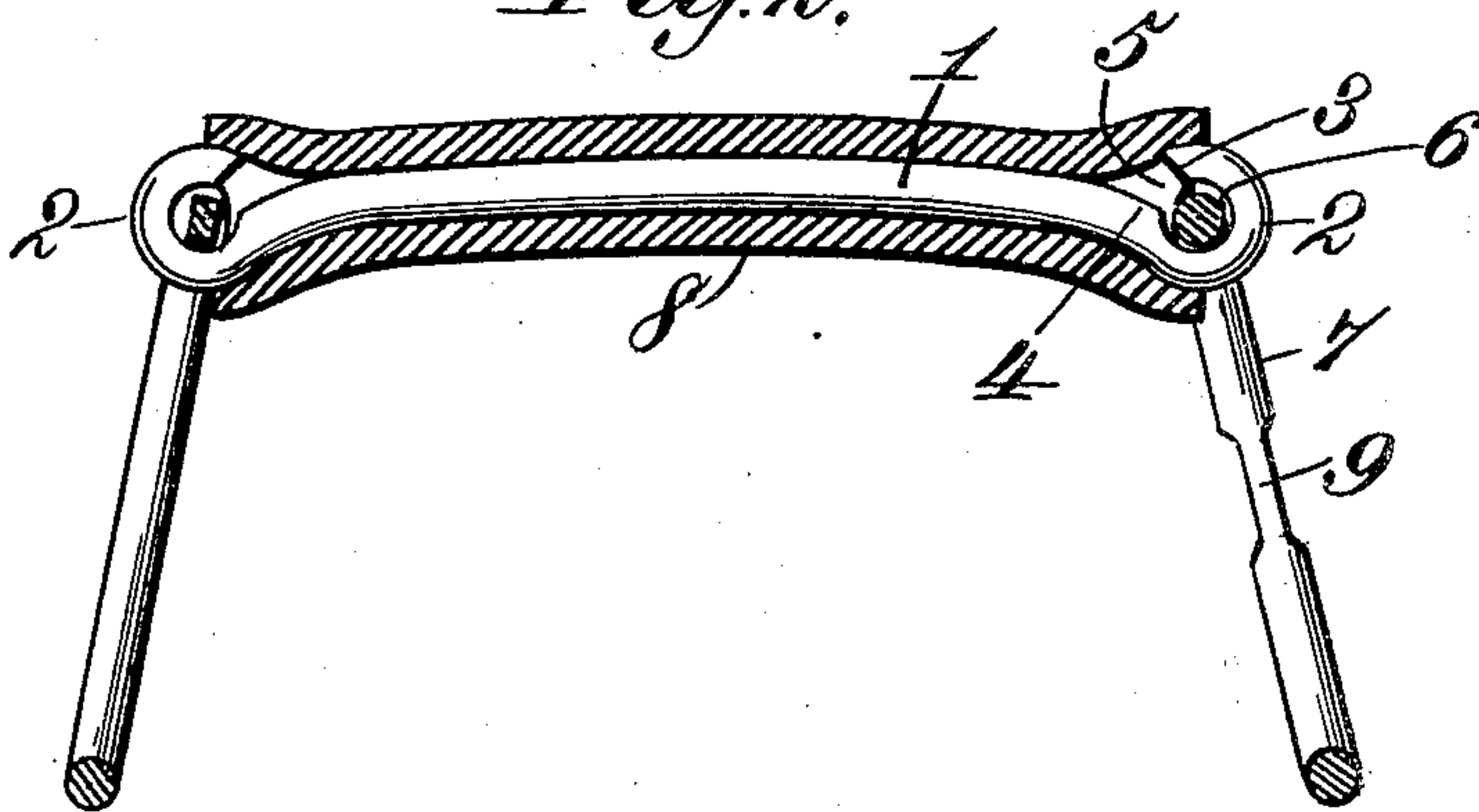


Fig. 3.

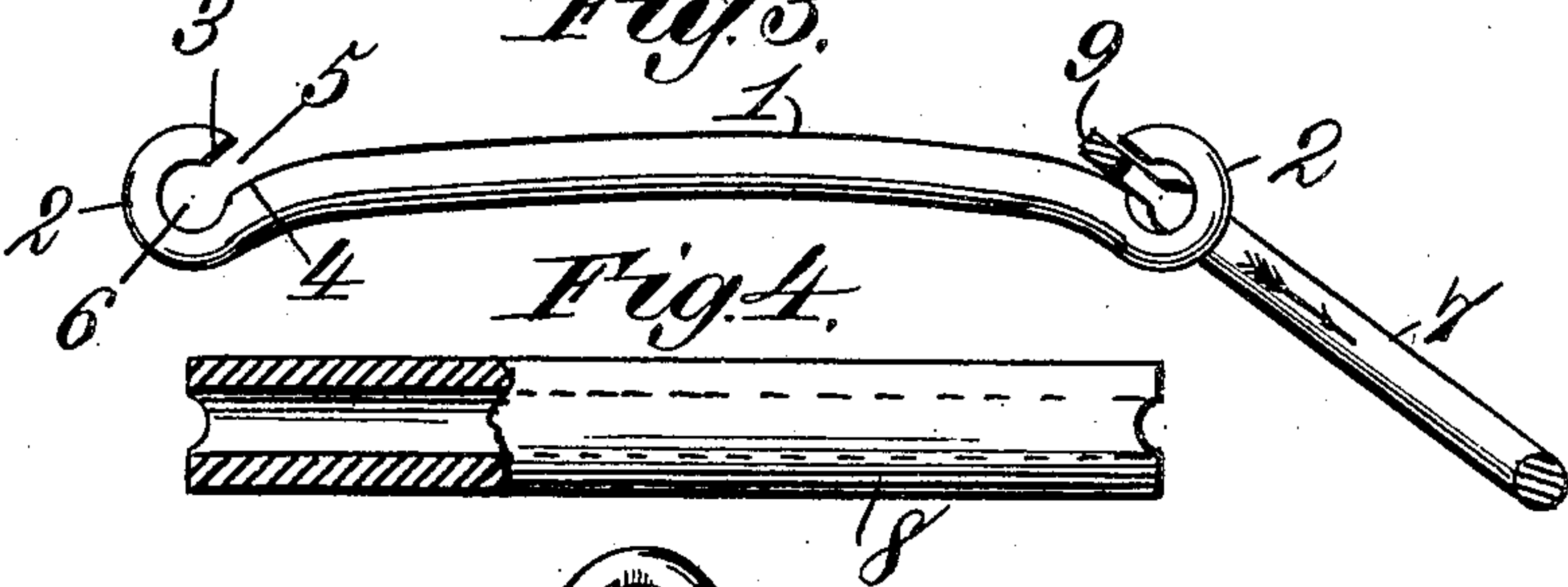


Fig. 4.

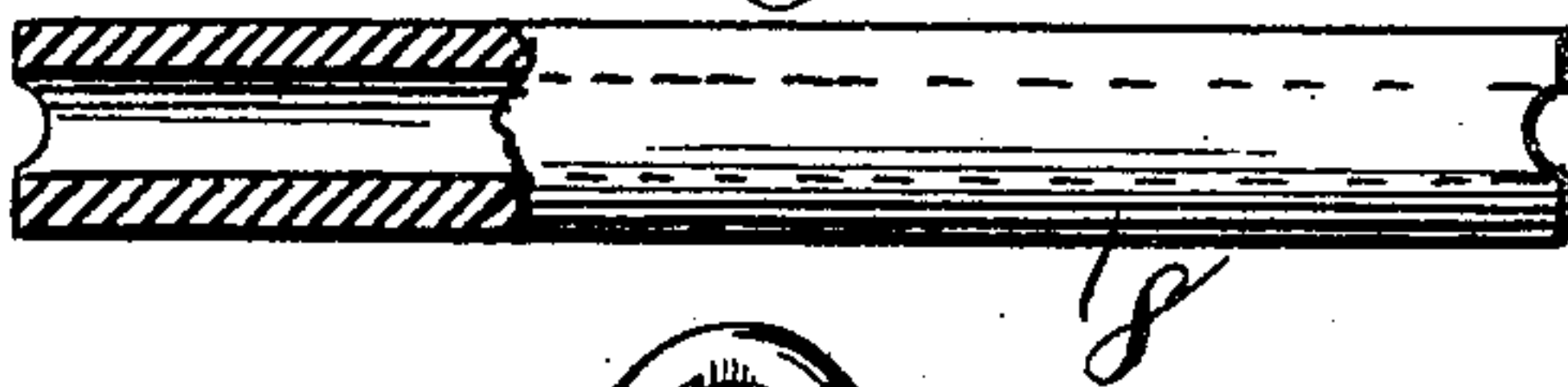
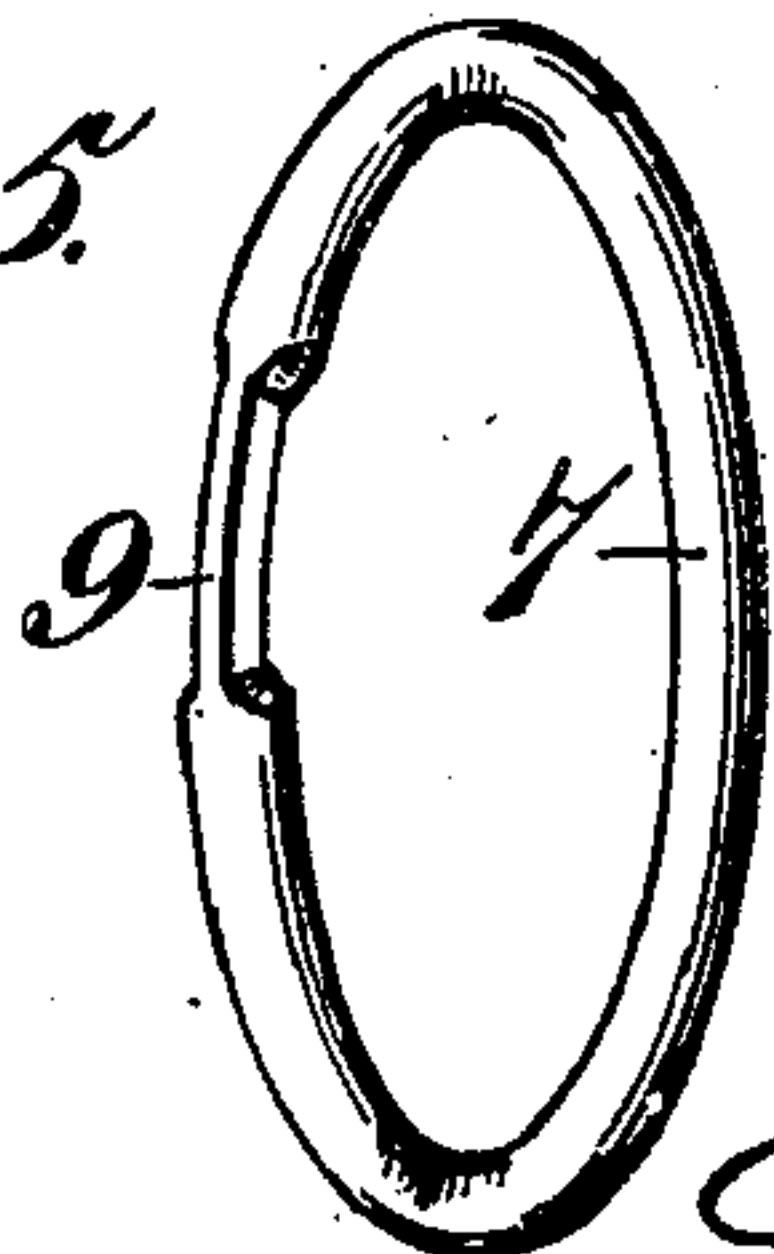


Fig. 5.



Witnesses.
Robert G. Smith,
J. B. Keefe

Inventor.
Henry M. Mason.
By
James L. Norris,
Atty.

No. 891,089.

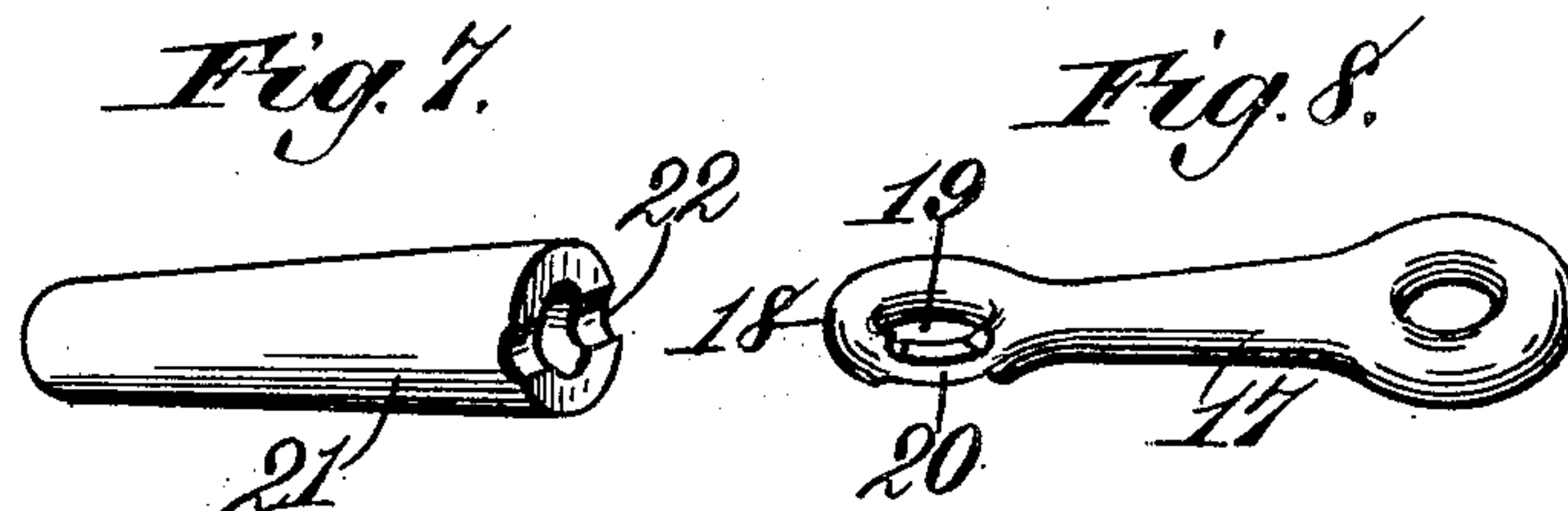
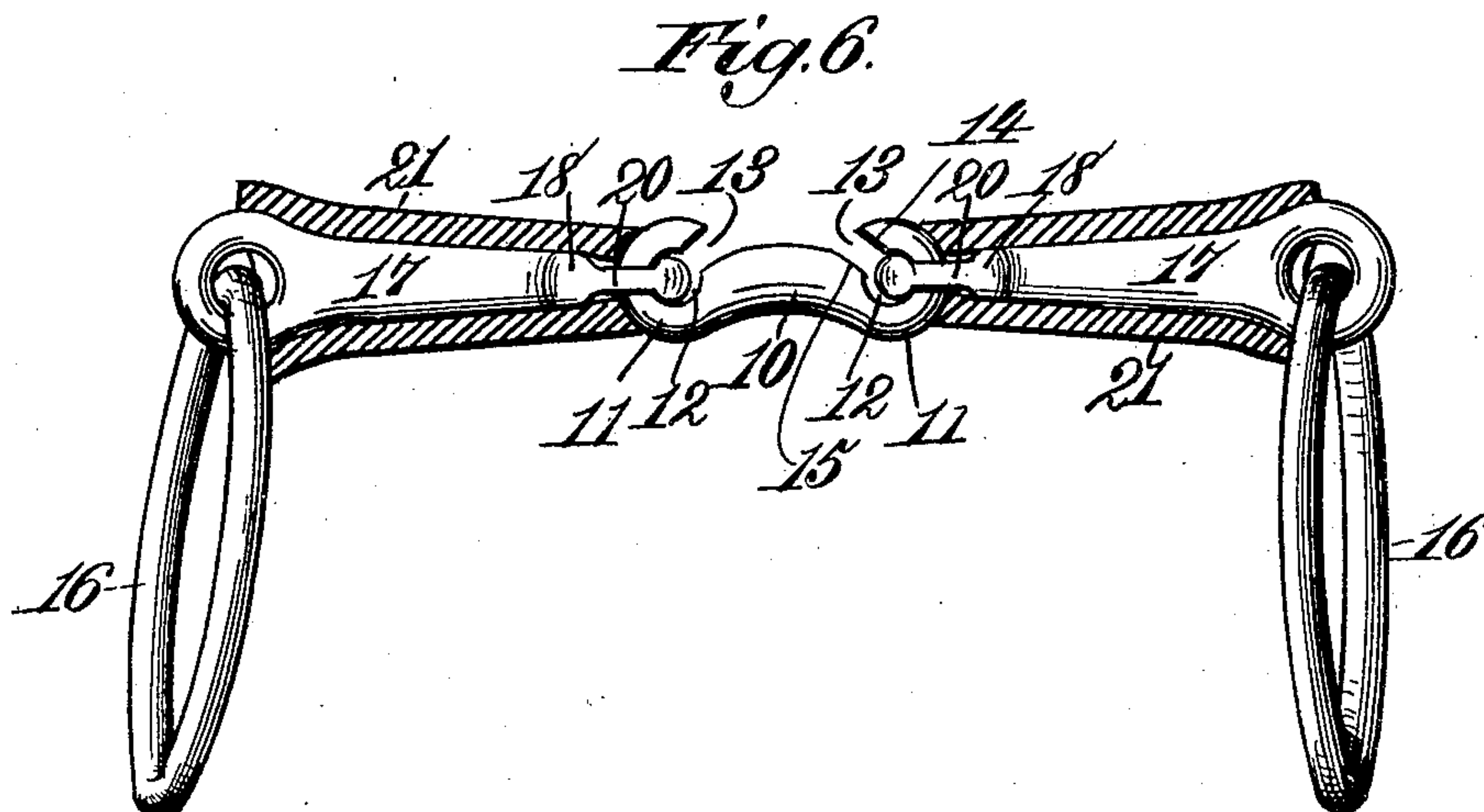
PATENTED JUNE 16, 1908.

H. M. MASON.

BRIDLE BIT.

APPLICATION FILED AUG. 21, 1907.

2 SHEETS—SHEET 2.



Witnesses.
Robert Everett,
J. B. Keeler

Inventor:
Henry M. Mason.
By
James L. Norris,
Atty.

UNITED STATES PATENT OFFICE.

HENRY M. MASON, OF OAKLAND, CALIFORNIA.

BRIDLE-BIT.

No. 891,089.

Specification of Letters Patent.

Patented June 16, 1908.

Application filed August 21, 1907. Serial No. 389,462.

To all whom it may concern:

Be it known that I, HENRY M. MASON, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented new and useful Improvements in Bridle-Bits, of which the following is a specification.

This invention relates to "bridle bits", and aims to provide a bit in a manner as hereinafter set forth with means whereby the rubber covering in the form of a sleeve can be removed when occasion so requires and a new covering substituted, thereby obtaining a saving in expense when a bit in accordance with this invention is used. This arrangement overcomes the throwing away of the bit, which is generally the case at present when the rubber covering becomes damaged. The rubber casing or covering is universally cast or vulcanized on the bit and becomes a permanent part thereof, so under such circumstances it is evident that when the covering or casing becomes damaged it will necessitate the throwing away of the bit; whereas in accordance with this invention the rubber casing or covering can be removed and a new one substituted, consequently obtaining a great saving in expense.

Although the invention is designed primarily for use in connection with a bar bit, yet it is thoroughly applicable for a chain or snaffle bit.

Further objects of the invention are to provide a bridle bit which shall be extremely simple in its construction, strong, with the parts thereof readily assembled and dis-assembled without the use of rivets, screws or springs, when occasion so requires, durable, efficient in its use, and comparatively inexpensive to manufacture.

With the foregoing and other objects in view, the invention consists in the novel construction, combination and arrangement of parts hereinafter more specifically described and illustrated in the accompanying drawings wherein is shown the preferred embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to which come within the scope of the claims hereunto appended.

In describing the invention in detail reference is had to the accompanying drawings, wherein like characters denote correspond-

ing parts throughout the several views, and in which—

Figure 1 is a perspective view of a bit in accordance with this invention, the bit shown being of the class of bar bits; Fig. 2 is a front elevation partly in section; Fig. 3 is a view of a bar, also showing the bit ring, the latter being in section and illustrated as being connected to the bar; Fig. 4 is a sectional view of the rubber sleeve; Fig. 5 is a perspective view of one of the bit rings; Fig. 6 is a longitudinal sectional view of a snaffle bit showing the adaptation of the invention in connection therewith; Fig. 7 is a view of the form of sleeve covering shown in Fig. 6, and, Fig. 8 is a perspective view of one of the links of the form of bit shown in Fig. 6.

Referring to Figs. 1 to 5 of the drawings, 1 denotes a bit bar having hooked ends 2 substantially circular in contour and with the end of the hook flattened as at 3, the flattened portions 3 opposing the portions 4. The portions 3, 4 extend at an inclination and form a flaring passage 5 which communicates with an opening 6 formed by the hooked ends of the bar and said openings 6 are adapted to receive the bit rings 7. These rings maintain the rubber sleeve 8 in position, the sleeve 8 constituting a covering for the bar and is of a length as to project past the passages 5 and upon the hooked ends 3 of the bar 1. Although the sleeve 8 is preferably formed of rubber, yet it can be constructed of any suitable material.

Each of the rings 7 is provided with a contracted portion 9 to permit of the seating of the rings in the openings 6. The contracted portions 9 of the rings 7 allow of the rings passing through the passages 5 and after entering the openings 6 the rings are shifted until the enlarged part thereof extends through the openings 6 and by such an arrangement the sleeve 8 is maintained in position upon the bar 1.

When it is desired to remove the sleeve 8 if it should be damaged by the teeth of the animal, one of the rings 7 is shifted so that the contracted portion 9 thereof can be moved through the passage 5 and thereby release the ring from the hooked end of the bar. The sleeve can then be pulled off the bar and a new sleeve substituted for the one re-

5 moved. The ring 7 can then be readily placed in the openings 6 and the sleeve 8 thereby retained in position. Owing to the sleeve 8 being formed of flexible material it is evident that the ring 7 can be placed in the hooked end 3 of the bar very readily.

10 In Figs. 6, 7, and 8 of the drawings the invention is shown in connection with what may be termed a snaffle bit and by reference thereto it will be noted that the bit is formed with a body portion 10 having hooked ends 11, each of which forms an opening 12 communicating with a passage 13. The passage 13 flares at its outer end and the walls thereof are inclined. One of the walls of the passage 13 is indicated by the reference character 14 and is formed at the terminus of the hooked end 11, while the other wall which is indicated by the reference character 15, is formed by the body portion 10. The reference character 16 denotes the bit rings, each of which is connected to a link 17 which tapers towards the body portion 10 and has the inner terminus thereof formed in a circular manner, as at 18, apertured as at 19, and having a contracted portion, as at 20. The contracted portion 20 performs the same function as the contracted portion 9 of each of the rings 7. The circular portions 18 of the links 17 are adapted to be seated in the openings 12 formed by the hooked ends 11 of the body portion 10, the contracted portions 20 of the circular ends 18 of the links 17 adapted to be inserted in the openings 12 through the passages 13. The circular portions 18 of the links 17 are arranged at an angle with respect to the hooked ends 11 of the body portion 10.

35 Mounted upon each of the links 17 is a sleeve 21 formed of rubber or other suitable resilient material, said sleeve tapering towards the body portion 10. The outer ends of each of the sleeves 21 are notched as at 22 to form seats for the rings 16.

40 It is evident from the manner of setting up the bit shown in Figs. 6, 7 and 8 that the sleeves 21 when damaged by the teeth of the animal can be readily removed and new ones substituted.

By employing a bit in accordance with the foregoing construction it is evident that it is not necessary to throw away the bit as an entirety if the covering sleeve or sleeves should become damaged, because the construction allows for the substituting of a new sleeve for a damaged one and at the same time utilizing the bar and rings in connection with a bar bit, or the body portion, links and rings in connection with a snaffle bit, or a chain in connection with a chain bit. As to the latter form of bit it will be stated that all that is necessary to do is to form the outer links of the chain along lines of the hooked ends of the bar or the body portion and employ bit rings having contracted portions. As this construction is obvious it is thought

unnecessary to show it. It is evident that the foregoing arrangement is a saving in expense as one does not have to substitute an entirely new bit when the covering becomes worn.

70 The ring 7 can never come out of the contracted passage, unless it is in the position shown in Fig. 3, or in other words unless it is positioned at an angle of 45 degrees. This is evident for the reason that when the bit is in the horse's mouth and the line buckled into the ring the ring would be in a position similar to that shown in Fig. 1, left-hand side and even should the contracted portion 9 work around until it was opposite the passage 5 the ring could not pass out the passage while at right angles to the main bit bar. This effectually destroys any chance of an accident, the ring being practically locked in whenever it is at right angles to the bar which is always the case when in the horse's mouth and any pull is had upon the lines.

What I claim is—

1. A bridle bit comprising a member provided with hooked ends, a covering for the said member extending over the hooked ends, and rings mounted in the hooked ends and each having a contracted portion.

2. A bridle bit comprising a member having hooked ends forming an opening communicating with a passage, a removable sleeve mounted upon said member, and bit rings detachably mounted in the hooked ends of said member, said rings having contracted portions to allow of the inserting of the rings through said passage into the said openings.

3. A bridle bit comprising a member having hooked ends, a sleeve detachably mounted upon said member, and shiftable means removably mounted in the hooked ends of said member, thereby retaining the sleeve upon said member.

4. A bridle bit comprising a member having a hooked end, a sleeve removably mounted upon said member, and a shiftable bit ring removably mounted in the said hooked end, said ring having a contracted portion to permit of the insertion and removal of the ring in and from the hooked end of said member.

5. A bridle bit comprising a bit bar having each terminus thereof bent upon itself in a curvilinear manner to form a hook, each of the hooks having the free end thereof outwardly beveled, the portions of said bar opposing the beveled ends of the hooks being correspondingly beveled, thereby forming said bar at each end with a passage gradually decreasing in width inwardly, and rings adapted to be mounted in the hooks at the ends of the bar, each of said rings having a contracted portion allowing of the passing of the rings through said passages and into the hooks whereby said rings can be connected to and disconnected from the bar, the enlarged outer ends of said passages facilitating

ing the entrance of the contracted portions of the ring.

6. A bridle bit comprising a member having one end formed with an opening communicating with a contracted passage, a sleeve mounted upon said member, and means engaging in said opening for retaining the sleeve upon said member, said means having a contracted portion to allow of the

inserting of said means through said passage into said opening.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

HENRY M. MASON.

Witnesses:

CHARLES T. ASKEW,
GANO G. KENNEDY.