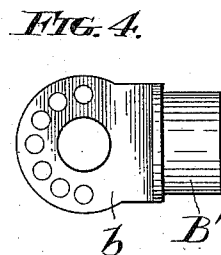
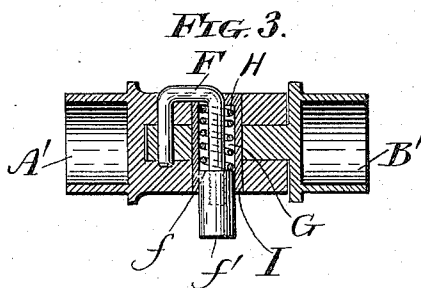
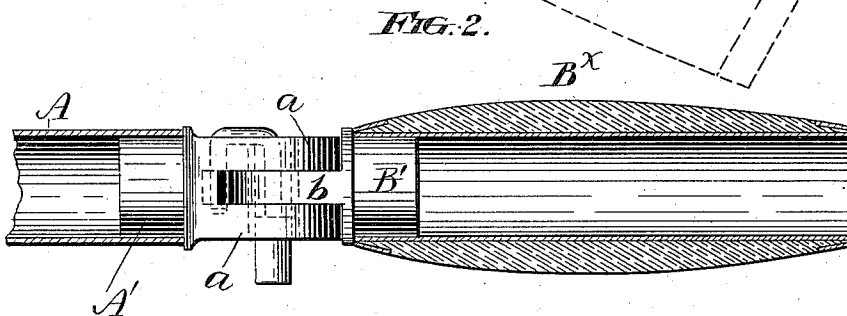
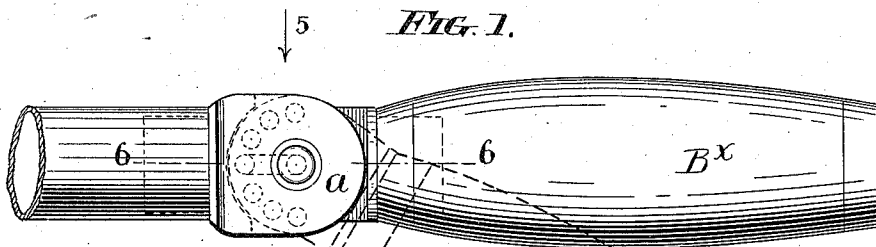


(No Model.)

W. B. LORD & C. C. GRISWOLD.
JOINT FOR ADJUSTABLE PARTS OF MACHINERY.

No. 579,277.

Patented Mar. 23, 1897.



Witnesses.
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UNITED STATES PATENT OFFICE.

WILLIAM B. LORD AND CHARLES C. GRISWOLD, OF CHICAGO, ILLINOIS,
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JOINT FOR ADJUSTABLE PARTS OF MACHINERY.

SPECIFICATION forming part of Letters Patent No. 579,277, dated March 23, 1897.

Application filed February 17, 1896. Serial No. 579,543. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM B. LORD and CHARLES C. GRISWOLD, citizens of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Joints for the Adjustable Parts of Machinery, of which the following is a specification.

The present invention relates to that class of joints by which two parts of a piece of machinery are so united that their positions with relation to each other may be changed or adjusted by their relative movement about an axis, and when adjusted or brought to the desired relative positions may be locked, the locking means being of such a character that the parts may be readily unlocked for new adjustments.

In its broadest aspect the invention is not limited to the use of the improved joint in machinery of any particular character, but on the contrary we reserve to ourselves the exclusive right to use it in machines of all classes, and this notwithstanding the fact that for the purposes of this application we have illustrated it as being used in a bicycle or other velocipede for uniting the handles to the handle-bar; nor is the invention in its broadest aspect limited to the character of the circular series of locking features hereinafter mentioned or to a detent of any particular construction or arrangement.

With these qualifying observations it may be stated generally that the invention consists in the features of novelty that are particularly pointed out in the claims hereinafter, and in order that it may be fully understood we will describe it with reference to the accompanying drawings, which are made a part of this specification, and in which—

Figure 1 is an elevation of a joint embodying the invention for uniting two parts and two parts united thereby. Fig. 2 is an elevation thereof viewed in the direction of the arrow 5, Fig. 1, and a section of the parts by which it is united. Fig. 3 is a section thereof on the line 6 6, Fig. 1. Fig. 4 is an elevation of one of the parts. Figs. 5 and 6 are sections on the lines 8 8, Fig. 6, and 9 9, Fig. 5, respectively, showing a joint embodying some features of the invention.

The parts to be united are provided with overlapping ears *a* and *b*, respectively, that are perforated for the passage of a pintle *I*, about which as an axis the parts are relatively movable. The two parts that are united may take the form of stubs *A' B'*, that are adapted to be attached to other parts of the machine. As shown in Figs. 1 and 2, the parts that are attached to these stubs are respectively the handle-bar *A* and a handle *B'*, but for the purpose of this application the parts *A A'* may be regarded as a single member, and so with the parts *B B'*, the invention in its broadest aspect being not limited to the character of the parts that are united. The pintle *I* is hollow and forms a socket *G'*, in which the spring *H* for actuating the detent *F* is arranged, the relations of the spring and detent being such that the spring holds the detent normally in engagement with one or another of a series of locking features (perforations) with which the ear *b* is provided, said features being disposed in a circular series concentrically with the pivotal axis.

The detent consists of a substantially U-shaped piece of metal, one arm of which is longer than the other and passes through the socket. It is provided with an enlarged portion *f'*, which provides at one and the same time a push-button for operating it, a shoulder *f*, against which the spring bears in one direction, and means for guiding the detent and confining it to movement in a direction parallel with the pivotal axis, this enlarged portion being of such diameter that it fits the socket snugly. Its other arm passes through a single perforation in one of the ears *a* and is adapted to engage one or another of the perforations in the ear *b*.

Having thus described our invention, the following is what we claim as new therein and desire to secure by Letters Patent:

1. In a joint for the parts of machinery, the combination of two parts having overlapping perforated ears, a pintle occupying the perforations of the ears, said parts being relatively adjustable about said pintle as an axis, a socket formed in said pintle, a movable detent having a portion occupying said socket, and a coiled spring arranged in said socket and surrounding the pintle and exerting its

pressure in one direction against it and in the other direction against the socket, substantially as set forth.

2. In a joint for the parts of machinery, the
5 combination of two parts having overlapping, perforated ears, a pintle occupying the perforations of the ears, said parts being relatively adjustable about said pintle as an axis, a socket formed in the pintle, a substantially
10 U-shaped detent one arm of which passes through the socket and is provided with a shoulder, a coiled spring arranged in the socket and surrounding the arm of the detent which passes through the socket, said spring

being arranged to exert its pressure in one di- 15 rection against said shoulder and in the other direction against the socket, and perforations formed in the overlapping ears for receiving the other arm of the detent, the perforations in one of said ears being arranged in a circular 20 series concentric with the pivotal axis, substantially as set forth.

WILLIAM B. LORD.
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