No. 674,778. Patented May 21, 1901.

F. O. LAGERBECK.

SPANNER.

(Application filed Oct. 27, 1900.)

(No Model.)

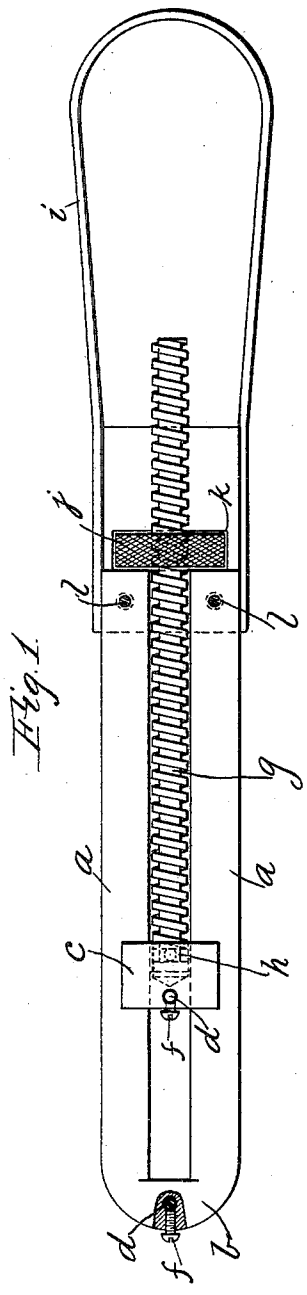


Fig. 1.

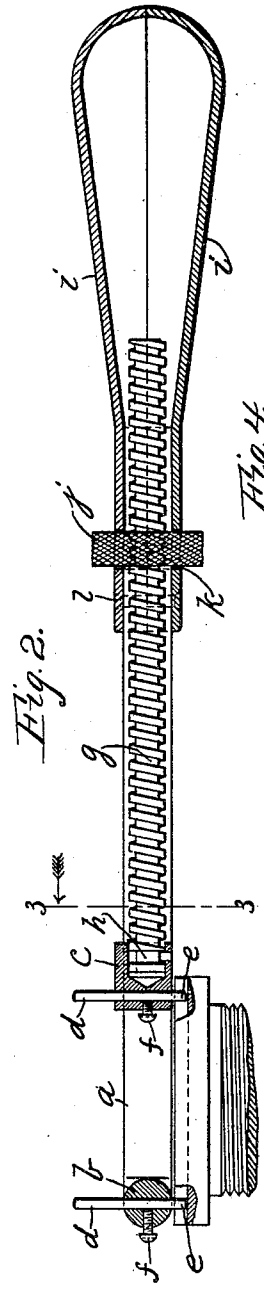


Fig. 2.

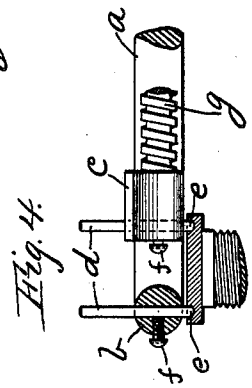


Fig. 4.

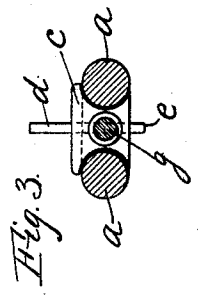


Fig. 3.

WITNESSES

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FREDRICK OSCAR LAGERBECK, OF BROOKLYN, NEW YORK.

SPANNER.

SPECIFICATION forming part of Letters Patent No. 674,778, dated May 21, 1901

Application filed October 27, 1900. Serial No. 34,666. (No model.)

To all whom it may concern:

Be it known that I, FREDRICK OSCAR LAGERBECK, a citizen of the United States of America, and a resident of the borough of Brooklyn, city, county, and State of New York, have invented certain new and useful Improvements in Spanners, of which the following is a specification.

My invention relates to spanners of the kind in which two spurs or studs are employed in connection with a handle for engaging sockets or a nick in the head of the screw or other object to be turned; and it consists of an improved and simpler and cheaper construction for adjustability of the spurs or studs for adaptability to screw-heads or other such objects of different sizes and also for renewing the spurs or studs when broken, as hereinafter described, reference being made to the accompanying drawings, in which—

Figure 1 is a plan view of my improved spanner with a part in section. Fig. 2 is a longitudinal section with a nicked screw-head, showing the application of the spanner to it. Fig. 3 is a transverse section on line 3 3, Fig. 2. Fig. 4 is a detail in longitudinal section, showing the application to a screw-head having sockets for the studs or spurs of the spanner.

In the first place I take a suitable rod or bar of iron, preferably of round cross-section, and bend it double, as represented by *a a*, forming a loop-head *b* and two parallel guideways, between which I fit a suitable cross-head *c*, so as to be retained in the guideways with freedom to slide toward and from the head *b*. Through said head and perpendicularly to the plane of the two members *a* I insert a stud-pin *d*, with a projecting spur *e*, and through the cross-head I fit a like pin *d*, also with a projecting spur *e*, and provide a set-screw *f* to each pin for setting them in position.

With the cross-head I provide an adjusting-screw *g*, swiveled to it at *h* and extending along between the two members *a* into a chambered handle *i*, attached to the ends of said members *a* and through an adjusting thumb-nut *j*, fitted in a slot *k* of the handle at the ends of the members *a*, so that by turning the nut one way or the other the cross-head may be shifted accordingly with relation to head *b*, and thereby adjust the spurs relatively to each other.

The handle is in this example represented as consisting of two equal parts stamped into the required shape and dimensions and riveted to the parts *a*, as indicated at *l*. They may be otherwise constructed and fastened to said parts and to each other as desired.

What I claim as my invention is—

1. The combination of the rod or bar bent double at the middle and forming two parallel members joined by the loop of the bend, with a slideway between them, a handle attached to the ends of the two parallel members, a cross-head arranged on the slideway between the handle and the loop of the bend, an adjusting-screw swiveled at one end in the cross-head, a thumb-nut located in the handle at the extremities of the two members, and traversed by the adjusting-screw, and the studs in the loop of the bent rod and the cross-head respectively.

2. The combination of the rod or bar bent double or thereabout at the middle and forming two parallel members joined by the loop of the bend, with a slideway between them, a handle attached to the ends of the two parallel members, a cross-head arranged in the slideway between the handle and the loop of the bend, an adjusting-screw swiveled at one end in the cross-head, a thumb-nut located in the handle at the extremities of the two members, and traversed by the adjusting-screw, and the studs in the loop of the bent rod and the cross-head respectively, and being adjustable thereon and provided with means for setting them fixedly.

Signed at New York city, New York, this 10th day of September, 1900.

FREDRICK OSCAR LAGERBECK.

Witnesses:
ERNST LUNDGREN,
C. SEDGWICK.