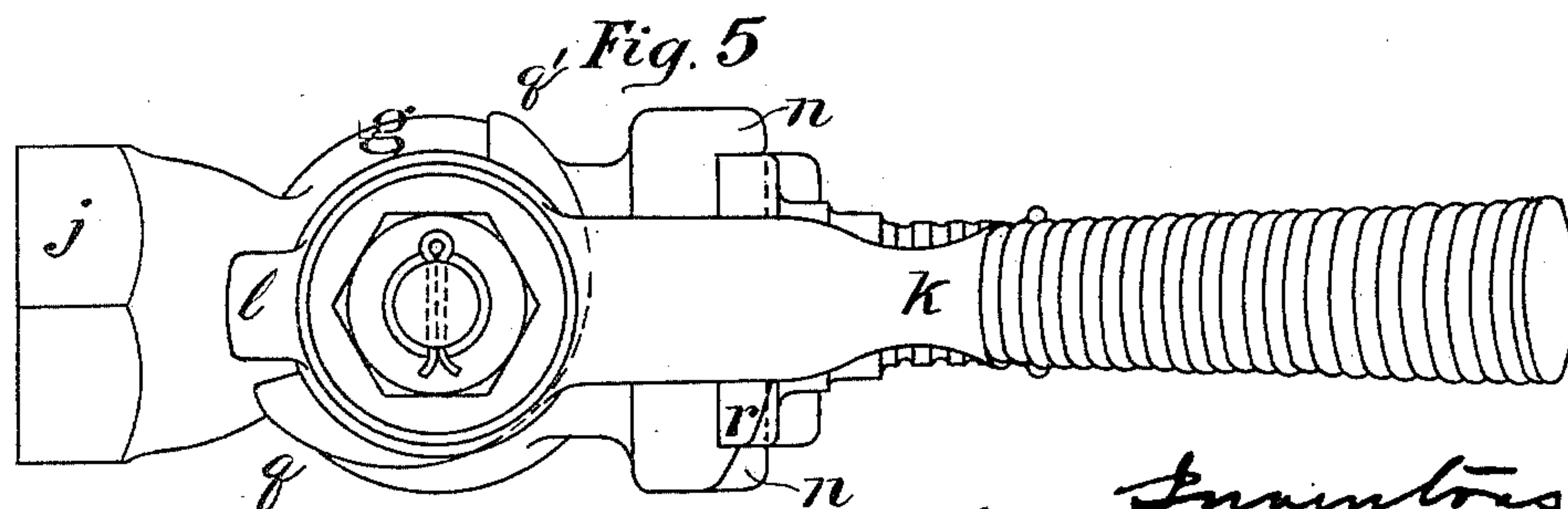
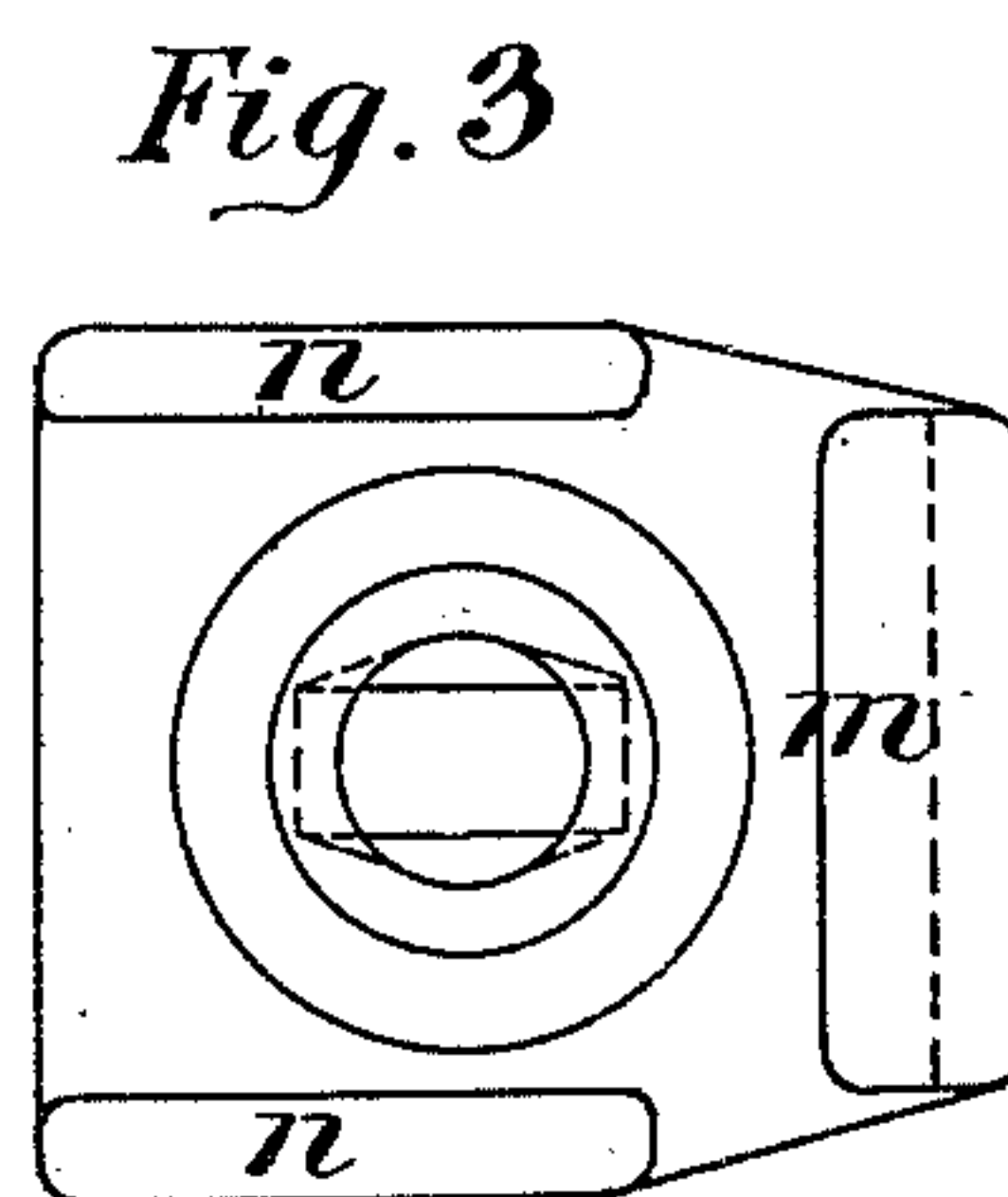
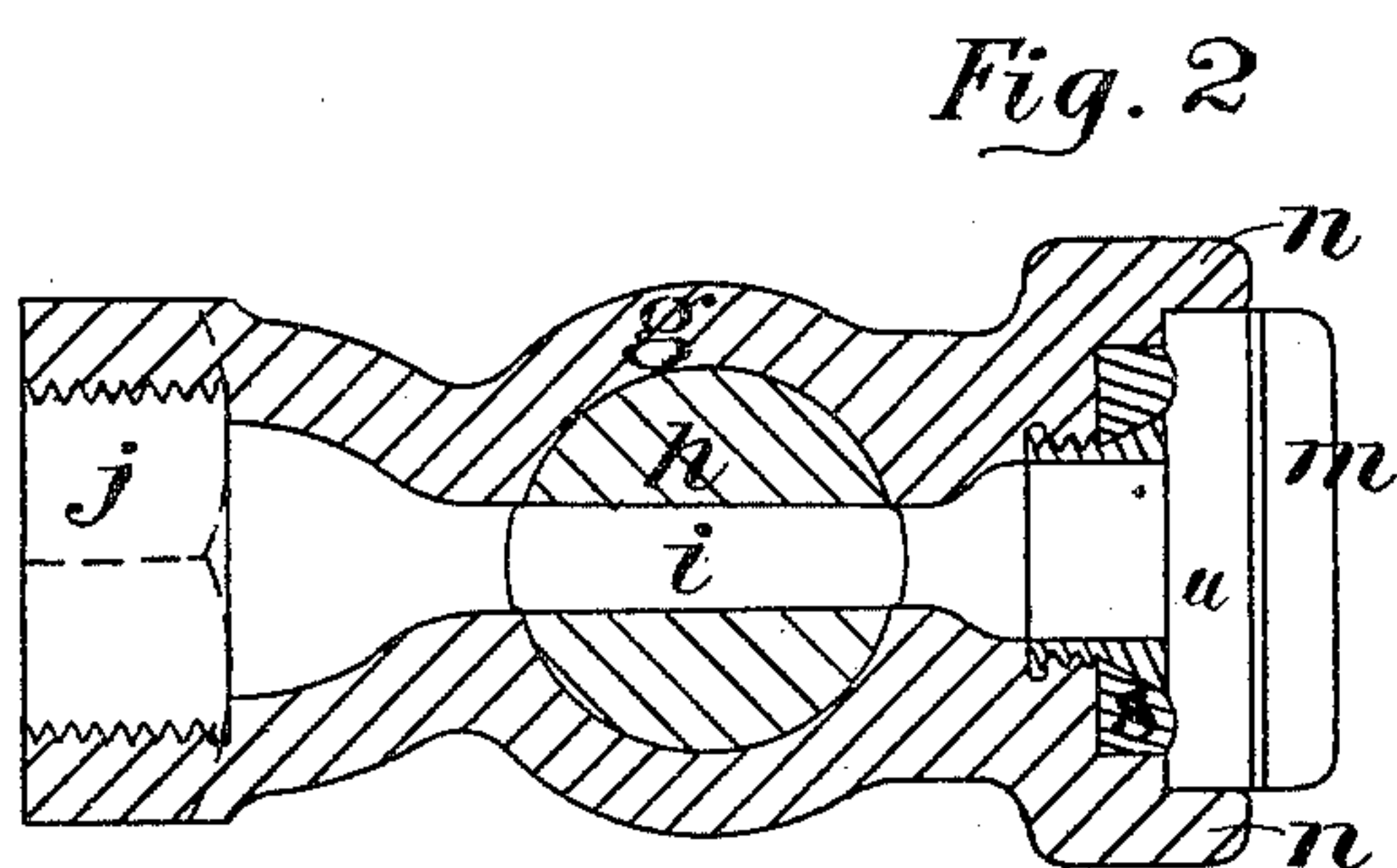
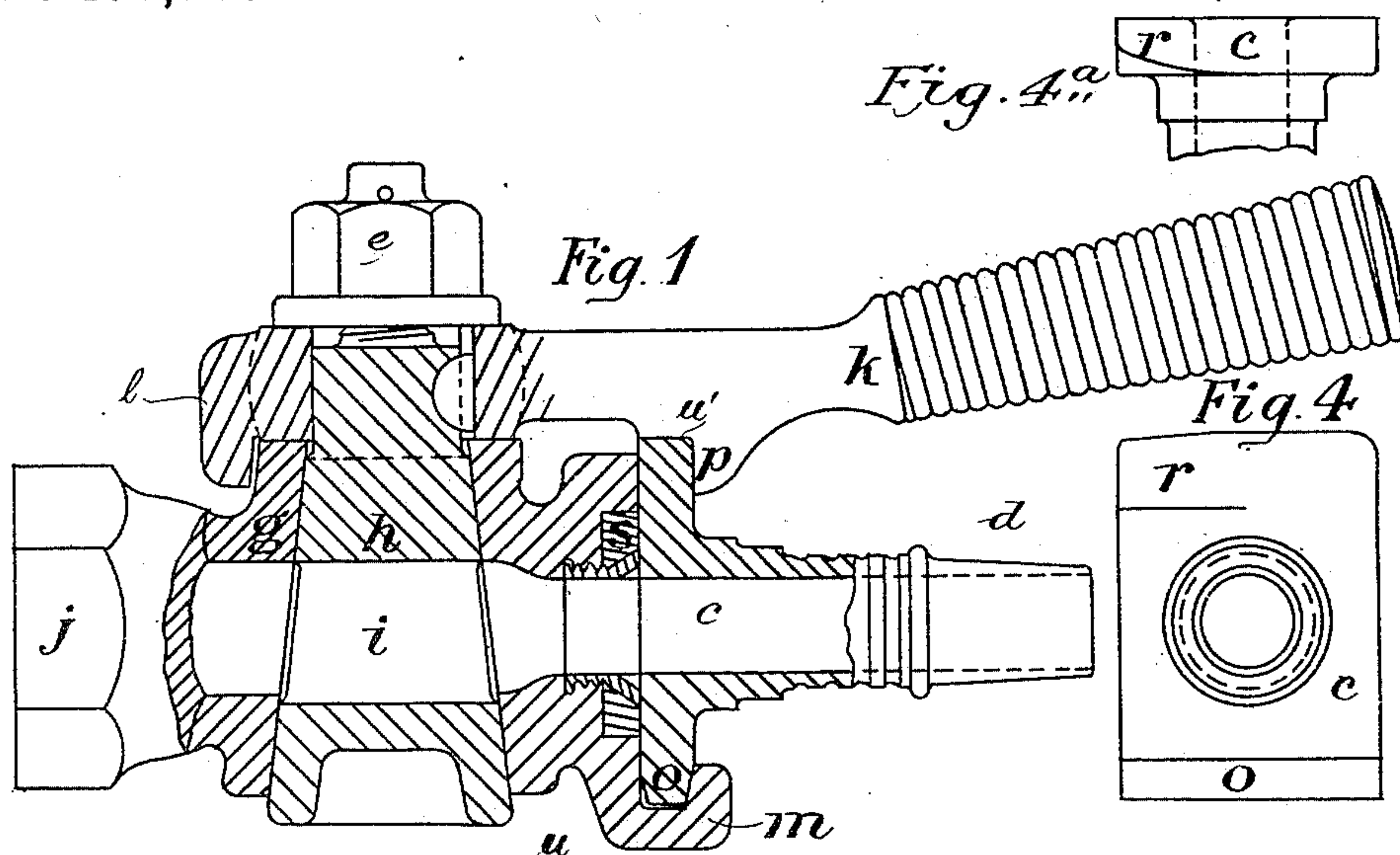


(No Model.)

S. W. JOHNSON & T. G. CLAYTON.
COMBINED COCK AND COUPLING.

No. 477,125.

Patented June 14, 1892.



Witnesses.
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UNITED STATES PATENT OFFICE.

SAMUEL WAITE JOHNSON, OF NOTTINGHAM, AND THOMAS GETHING
CLAYTON, OF NORMANTON, ENGLAND.

COMBINED COCK AND COUPLING.

SPECIFICATION forming part of Letters Patent No. 477,125, dated June 14, 1892.

Application filed June 23, 1891. Serial No. 397,266. (No model.) Patented in England January 6, 1891, No. 253; in France December 10, 1891, No. 217,964, and in Belgium December 10, 1891, No. 97,509.

To all whom it may concern:

Be it known that we, SAMUEL WAITE JOHNSON, residing at Nottingham, in the county of Nottingham, and THOMAS GETHING CLAYTON, residing at Normanton, in the county of Derby, Kingdom of England, subjects of the Queen of England, have invented a new and useful Combined Cock and Coupling, (for which we have obtained Letters Patent in England, dated January 6, 1891, No. 253; in France, dated December 10, 1891, No. 217,964; in Belgium, dated December 10, 1891, No. 97,509, and in Germany filed an application December 9, 1891, which has been accepted for publication under date of March 8, 1892,) of which the following is a specification.

Our invention is an improvement in the connections employed in coupling detached lengths of service pipe or hose and is intended for use in coupling pipes used for conveying water, steam, compressed air, or any such like fluids in connection with the warming of railway-carriages, working railway-brakes, or for any other purpose that the said novel device of combined cock and coupling may be suitable for or applicable to.

In the drawings, Figure 1 is a side view partly in section. Fig. 2 is a view partly in section, taken on the line *xx* of Fig. 1. Fig. 3 is a view of the end of the device adapted to receive the coupling *c*. Fig. 4 is an end view of the coupling *c*. Fig. 4^a is another view of the coupling *c*, showing the inclined surface *r*. Fig. 5 is a top plan view of the complete device in operative position.

g is the outside casing or body of the cock; *h*, the plug; *i*, the passage through the plug, and *j* the end which screws on or is otherwise attached to a suitable main supply-pipe.

k is the handle which turns the plug and also secures the two elements of the coupling.

c is a coupling-plate having an extension *d*, adapted to receive a pipe of any desired construction.

The handle *k* is secured to the plug *h* by the nut *e*, and is also provided with a projection *l*, which strikes against lugs *g' g'* upon and integral with the casing *g*, and is thus stopped at the limit of its two extreme opera-

tive positions. The casing *g* is formed at its lower side, as distinguished from the upper side, to which the handle *k* is attached, with a depending lip or flange *m*, which is turned up at its outer edge to form a groove *u*. The handle *k* is provided with a projection *p*, which, in conjunction with the casing *g*, forms a groove *u'*, corresponding to the groove *u*. Guides *n n* project from the end face of the casing *g* and extend upwardly from the lip *m*, as shown in Figs. 2 and 3.

Figs. 4 and 4^a show a face and side view of the coupling-plate *c*, and, as seen in Figs. 1 and 4, the lower edge of the said plate is beveled to fit into the groove *u*. The said plate *c* is at its upper edge formed into an inclined or wedge-shaped portion *r* to receive the shoulder or projection *p* on the handle *k*, so that the projection will force and hold the plate *c* against the casing *g*. A flexible elastic metallic packing *s* is provided to secure a perfectly-tight joint. This packing is shown as being embedded in the casing *g*, though it might obviously just as well be attached to or embedded in the plate *c*.

In Fig. 5 the device is shown in operative position, with the projection *p* upon the handle *k* forced upon the incline *r* of the plate *c* and jamming it into position against the face of the casing *g*.

Having described our invention, what we claim, and desire to secure by Letters Patent, is—

1. A combined cock and coupling comprising a main body or casing formed with a groove upon its face, said groove being in a plane at an angle to the longitudinal axis of the coupling, a plug in the casing, a handle for turning the plug, a shoulder upon said handle, and a detachable coupling-plate held at one edge by the groove, and thereby prevented from longitudinal movement, and secured at its other edge by the shoulder on the handle.

2. A combined cock and coupling comprising a main body or casing formed with an inclined groove upon its face, said groove being in a plane at an angle to the longitudinal axis of the coupling, a plug in the casing, a

handle for turning the plug, a shoulder upon said handle, and a detachable coupling-plate having an inclined edge engaged by the groove, and thereby prevented from longitudinal movement, and secured at its other 5 edge by the shoulder on the handle.

3. A combined cock and coupling comprising a main portion consisting of a body or casing, a plug, a handle for rotating said plug, a 10 lip or flange forming a groove upon the face of the body or casing in a plane at an angle to the longitudinal axis of the coupling, and flanges extending from the face of the body or casing, and a secondary portion consisting of a 15 detachable pipe-holding coupling-plate held in operative position by the groove, the flanges, and the depending shoulder upon the handle.

4. A combined cock and coupling comprising a main element consisting of a body or casing, a plug therein, and a handle for rotating said plug, and a secondary element consisting of a detachable coupling-plate held at one edge by a groove on the face of the main portion and in a plane at an angle to the longitudinal axis of the coupling and at its other 20 edge by a shoulder on the handle, and a packing between the main and secondary portions. 25

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Witnesses:

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*Clerks to Messrs. Moody & Woolley, Solicitors,
Derby.*