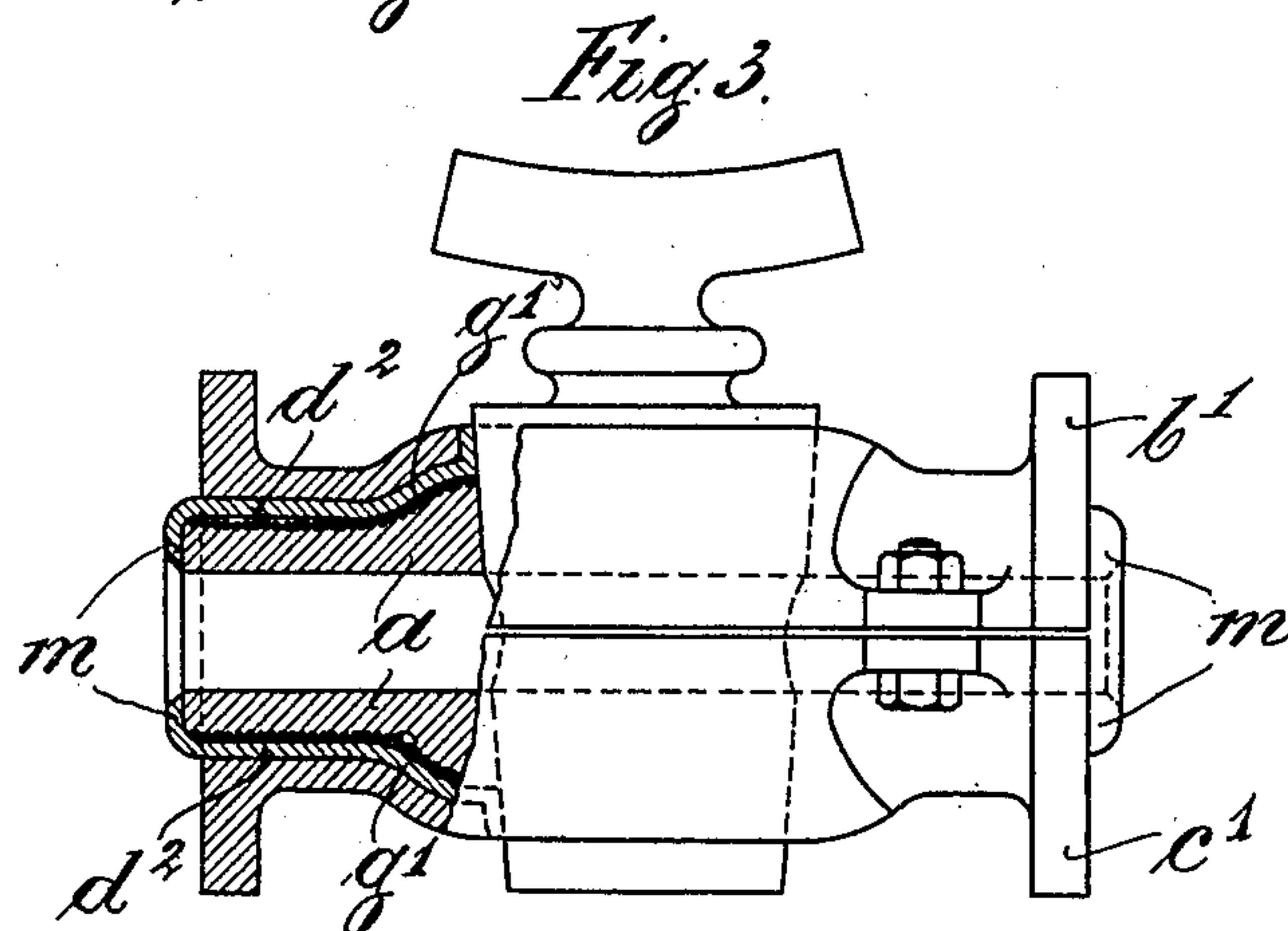
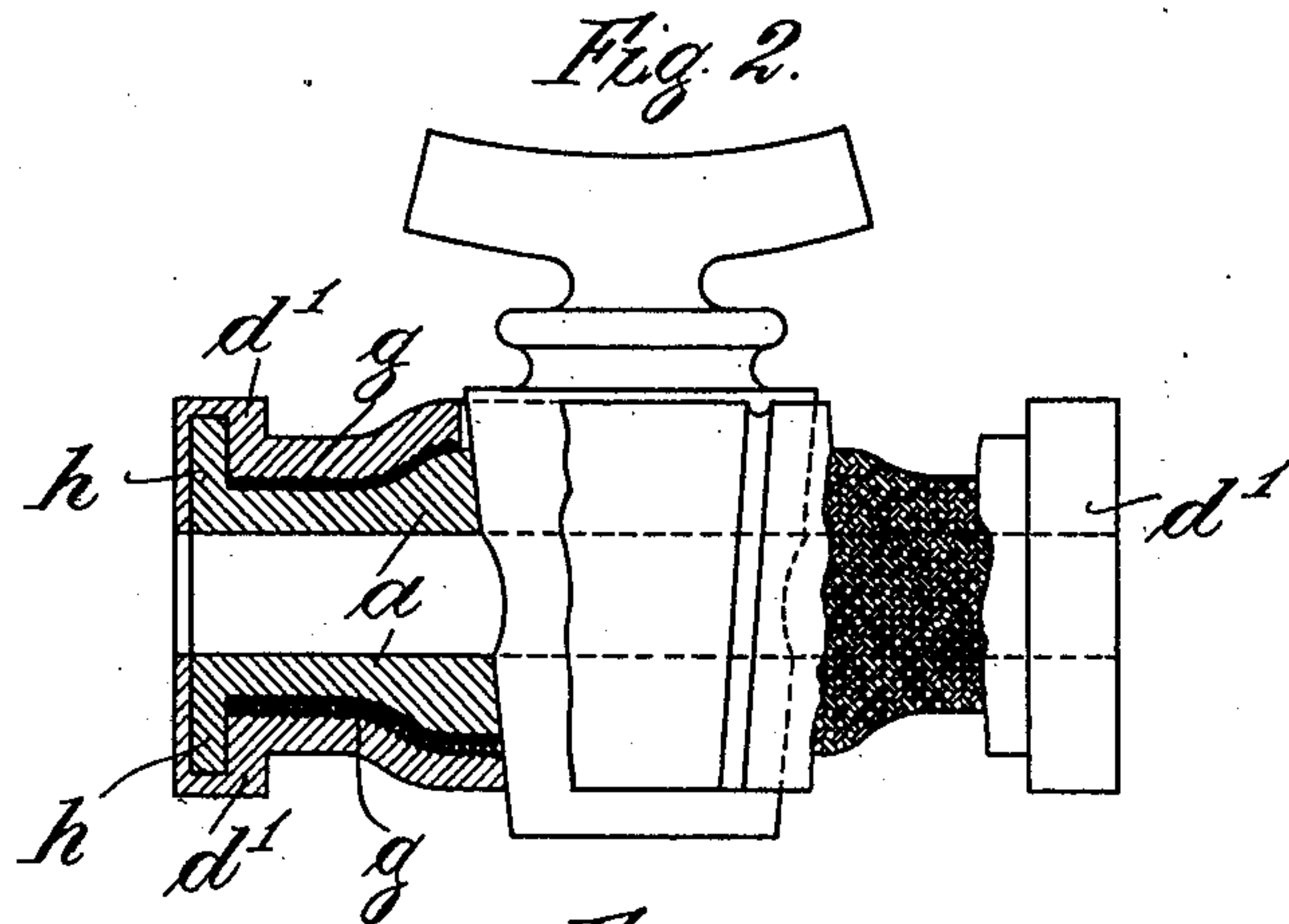
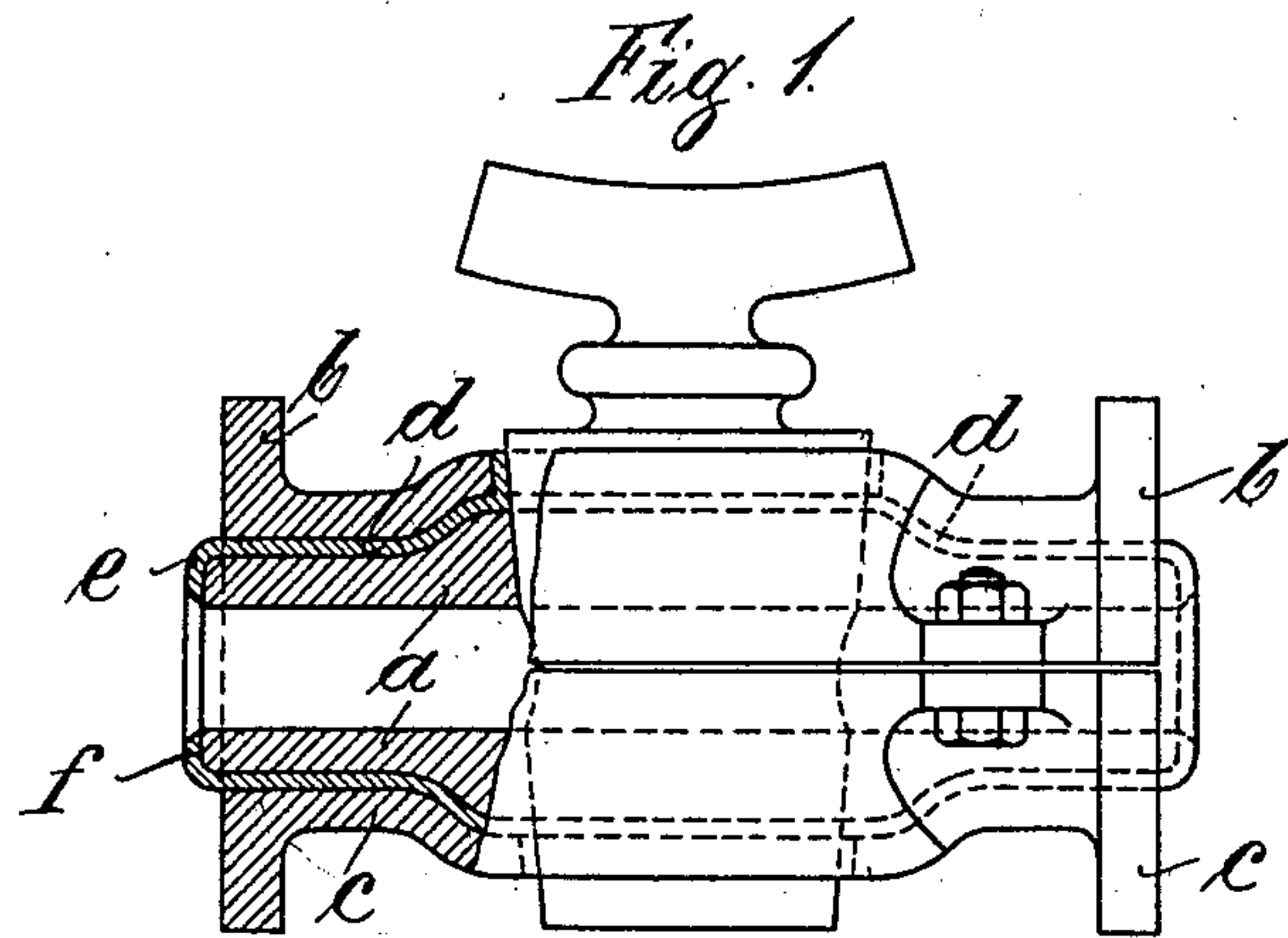


E. HENSS.
COVERING FOR EARTHENWARE PIPES AND THE LIKE.
APPLICATION FILED JULY 24, 1908.

925,809.

Patented June 22, 1909.
2 SHEETS—SHEET 1.



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Fig. 4

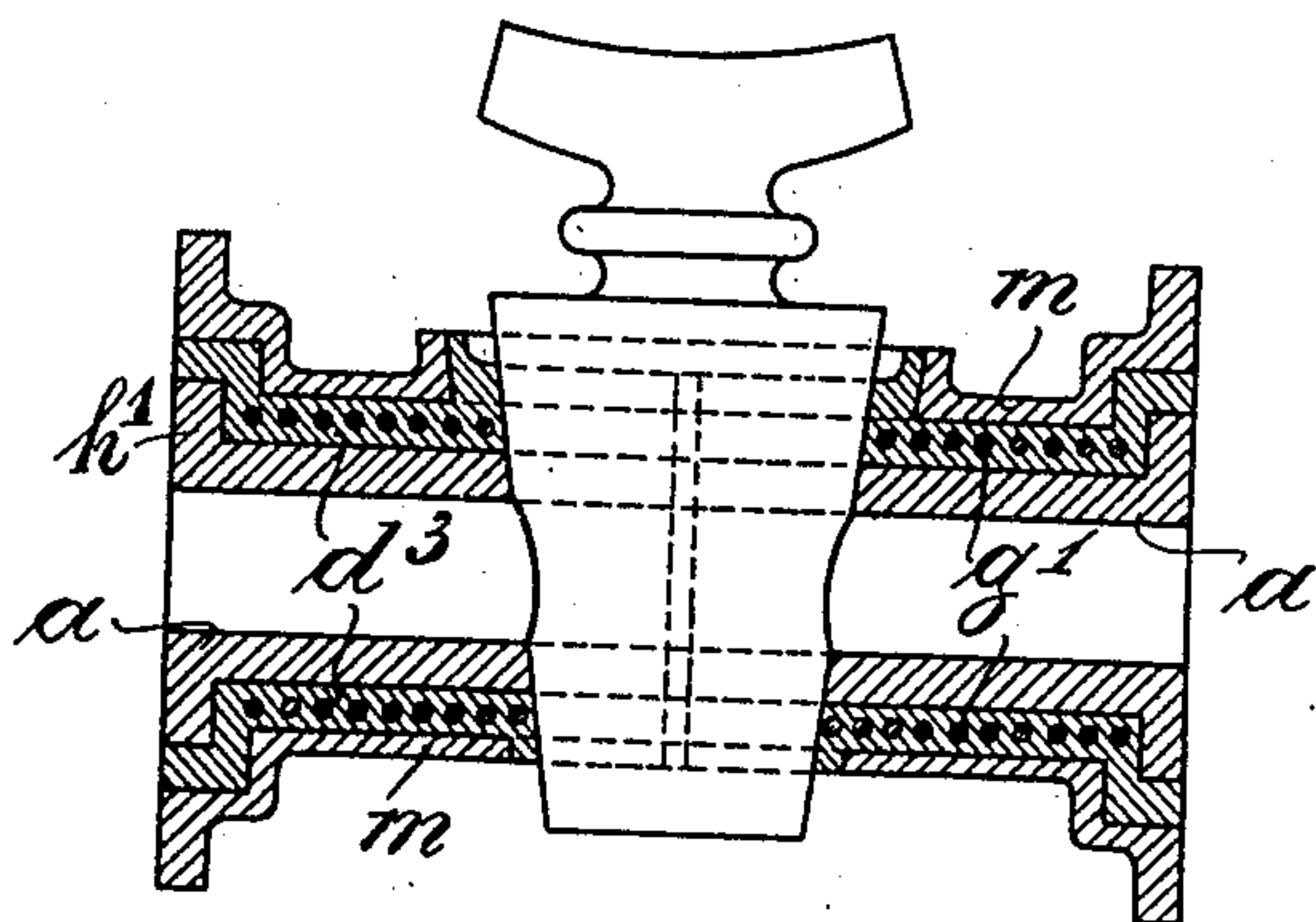
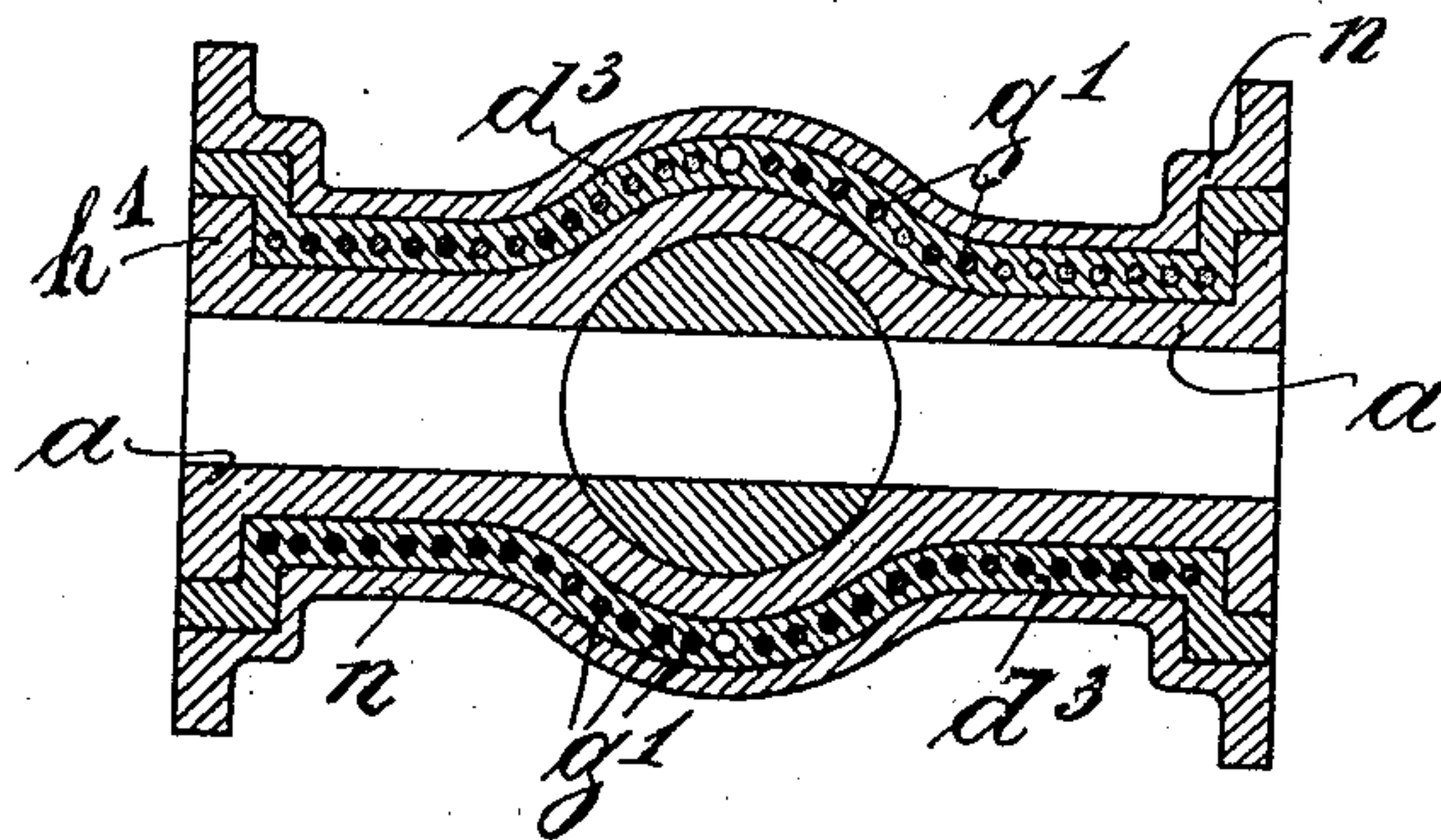


Fig. 5



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UNITED STATES PATENT OFFICE.

ERNST HENSS, OF NIED-ON-THE-MAIN, GERMANY.

COVERING FOR EARTHENWARE PIPES AND THE LIKE.

No. 925,809.

Specification of Letters Patent.

Patented June 22, 1909.

Application filed July 24, 1908. Serial No. 445,180.

To all whom it may concern:

Be it known that I, ERNST HENSS, a subject of the Grand Duke of Hesse, and resident of 5 Elisabethenstrasse, Nied-on-the-5 Main, in the German Empire, have invented a new and useful Covering for Earthenware Pipes and the Like, of which the following is an exact specification.

This invention relates to pipe and like hollow articles such as cocks made of earthenware. In such articles it has already been proposed to strengthen the same by means of metal coverings which were sometimes made of material like lead adapted to resist the attacks of acid or lyes.

The object of the present invention is to provide an improved construction of covering for such pipes, cocks or the like.

The invention is hereinafter described with reference to the accompanying drawings which show three modifications and the novel features are pointed out in the claims.

In the drawings Figure 1 illustrates a cock partly in section and partly in elevation provided with a lead covering and a metal casing according to this invention. Fig. 2 illustrates in part sectional elevation a modification in which metal wire netting is placed between the lead covering and the earthenware. Fig. 3 is an elevation and shows also in part sectional elevation a construction with the features according to Figs. 1 and 2 combined. Fig. 4 illustrates in vertical section another modification of my invention, and Fig. 5 shows this modification in sectional plan view.

In carrying the invention into practice according to the form shown in Fig. 1 the cock *a* which is only taken by way of example as a pipe may be treated in exactly the same manner, is made of earthenware and around the cock there is arranged a split casing *b c* of cast iron or the like metal. Between the casing *b c* and the cock body *a* there is a space which is filled with lead or like material *d* capable of resisting the action of acid, alkali or the like. The lead or the like forms a jacket and is so cast that it covers the outside ends of the pipe part *d* as shown at *e* and *f*. In this way when the acid for example "sweats" or soaks through the earthenware *a* it is met by the lead layer and from this layer it cannot by any means pass to the outer casing *b c*. This result is obtained by casting the lead over the ends of the pipes as shown so that the acid gradually passing

through the earthenware and reaching the lead layer works its way between the lead and the earthen-ware back into the pipe and is guided away from the metal flanges by the overlapping parts *e f*.

The feature of the present invention as illustrated by this construction is the provision of a jacket of acid- or alkali- proof material covering the outer surface of the pipe or the like and having at the jointing faces overlapping parts which open toward the interior of the pipe or cock so that the liquid leaking or soaking through the earthenware is directed back again to the interior of the pipe.

According to the form shown in Fig. 2 the earthen-ware body *a* is provided with flanges *h* and around the body a wire netting *g* is wound. Over the wire netting and body *a* and flanges *h* there is cast a lead casing or jacket *d'* which as described above with reference to the pipe part *a* in Fig. 1 covers the flanges so as to conduct all acid or the like soaking through the body of the cock back into the pipe. In this case also the wire netting acts as a reinforcing means to strengthen the earthenware and lead casing. The lead when cast in place passes through the meshes of the wire netting and on contracting holds the wire netting tightly against the wall of the pipe or cock *a*.

In Fig. 3 there is illustrated a combination of the constructions shown in Figs. 1 and 2. In this form the body *a* is first covered with a wire netting *g'*, the lead *d²* is then cast on and the overlapping parts *m* at the ends of the pipe serve the purpose described above. The split or like casing *b' c'* of cast metal is then placed in position over the lead.

In the modification shown in vertical section in Fig. 4 and in sectional plan view in Fig. 5 the projecting flanges *m* are dispensed with. In this case the cock body *a* is provided with flanges *h'* and is covered with metal netting *g'* over which a lead jacket *d³* is cast but without projecting parts such as *m* in Fig. 3. Over the cock so prepared there is fitted a split cast housing *n*.

I claim:—

1. In combination with earthen ware cocks, pipes and the like, a continuous wire netting wound around said earthen ware body part, and an acid proof metal cast over said wire netting.

2. In combination with hollow earthen ware bodies, an acid and alkali proof pro-

protecting covering, comprising a metal jacket of acid and alkali proof material adapted to allow the liquid to drain back into the interior of said hollow earthen ware body, and
5 a protective split metal casing on said metal jacket.

3. In combination with earthen ware cocks, pipes and the like, an acid and alkali proof protective covering, comprising a
10 metal jacket of acid and alkali proof material on the outside of the earthen ware having inward flanges at the jointing faces to drain back the liquid into the pipe, and a split protective metal casing on said metal
15 jacket.

4. In combination with earthen ware cocks, pipes and the like, an acid and alkali proof protective metal covering, comprising
20 a metal jacket of acid and alkali proof material composed of wire netting wound

around the earthen ware body, and a lead jacket having inward flanges at the jointing faces for draining the liquid into the pipe, and a split casing on the lead jacket.

5. In combination with earthen ware 25 cocks, pipes and the like an acid and alkali proof protective metal covering, comprising a metal jacket of acid and alkali proof material composed of wire netting wound around the earthen ware body, and a lead 30 jacket having inward flanges at the jointing faces for draining the liquid back into the pipe.

In witness whereof I have hereunto set my hand in the presence of two witnesses. 35

ERNST HENSS.

Witnesses:

JEAN GRUND,
CARL GRUND.