

J. SCHULTZE.
LATHE ATTACHMENT.
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998,718.

Patented July 25, 1911.

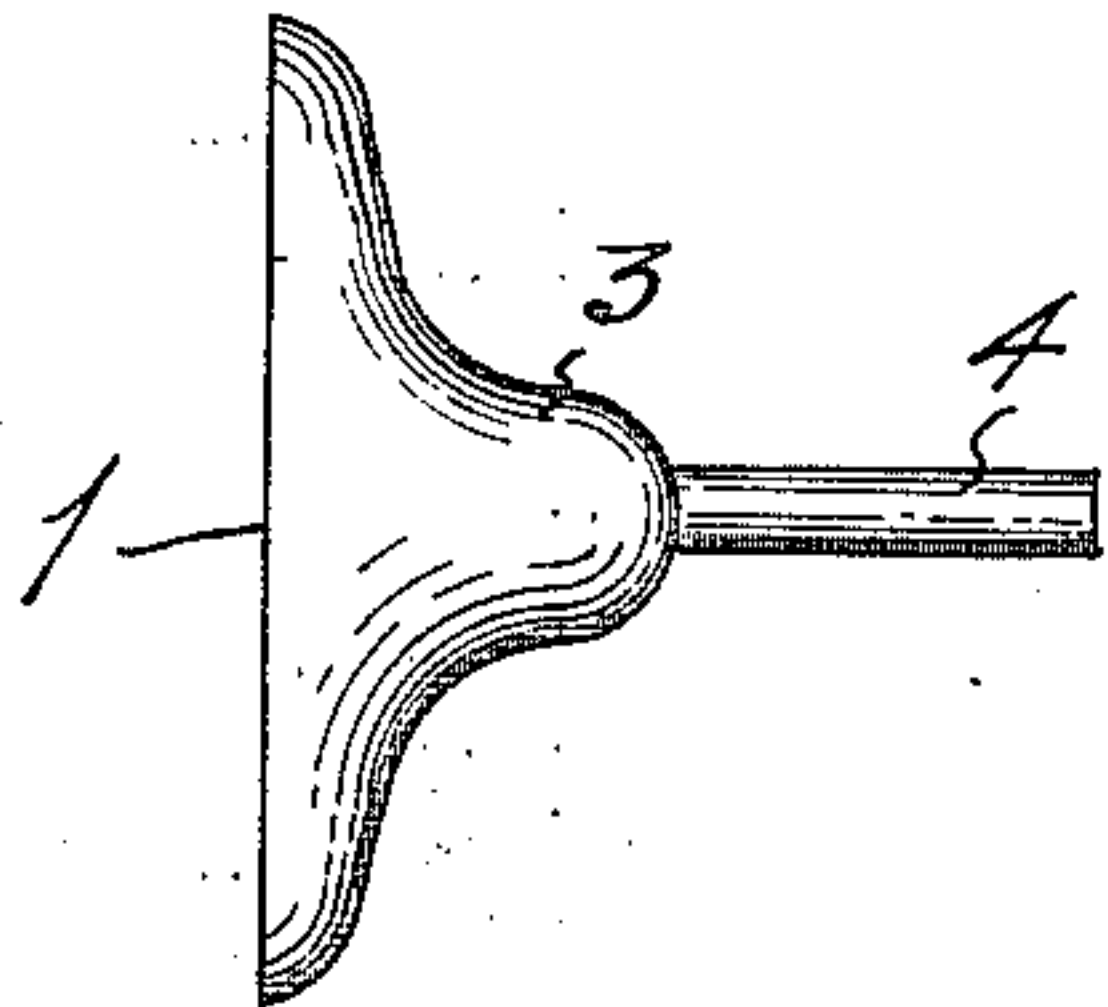


Fig 1

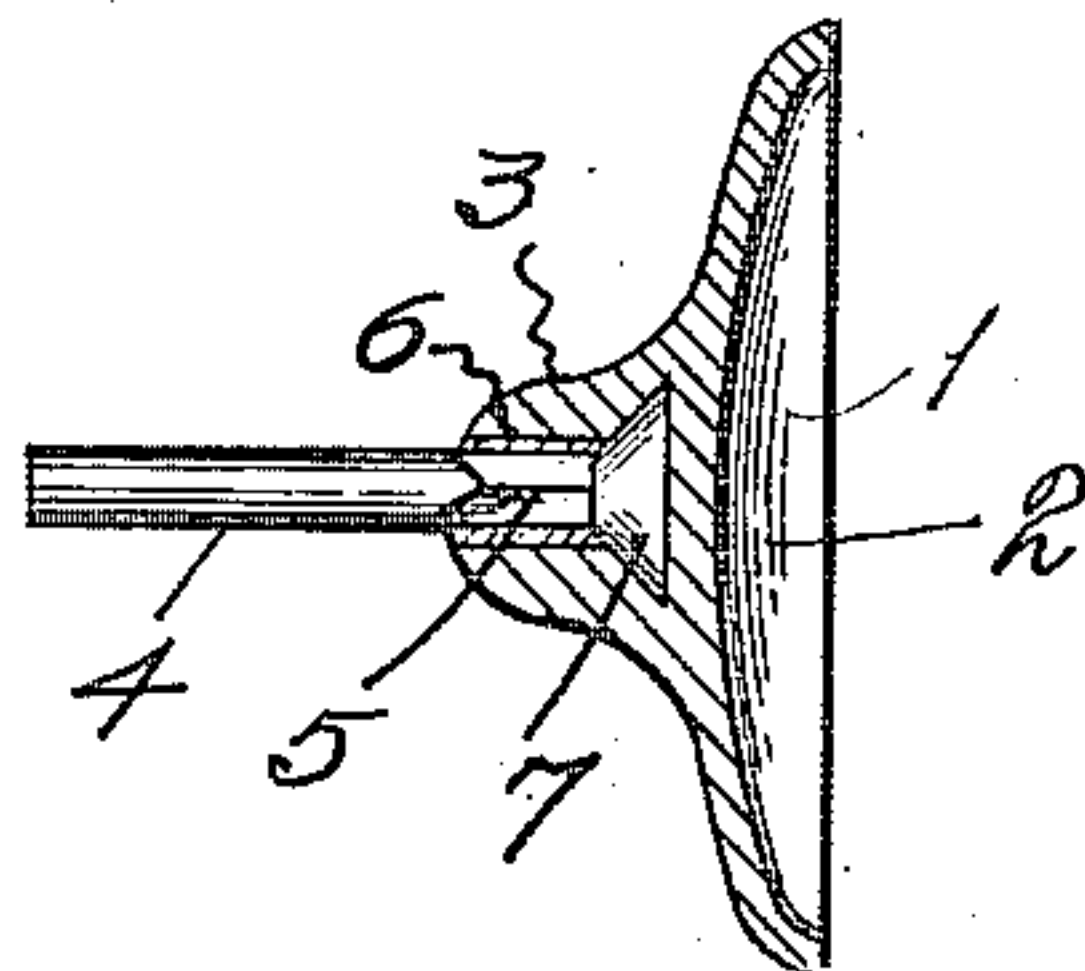


Fig 2

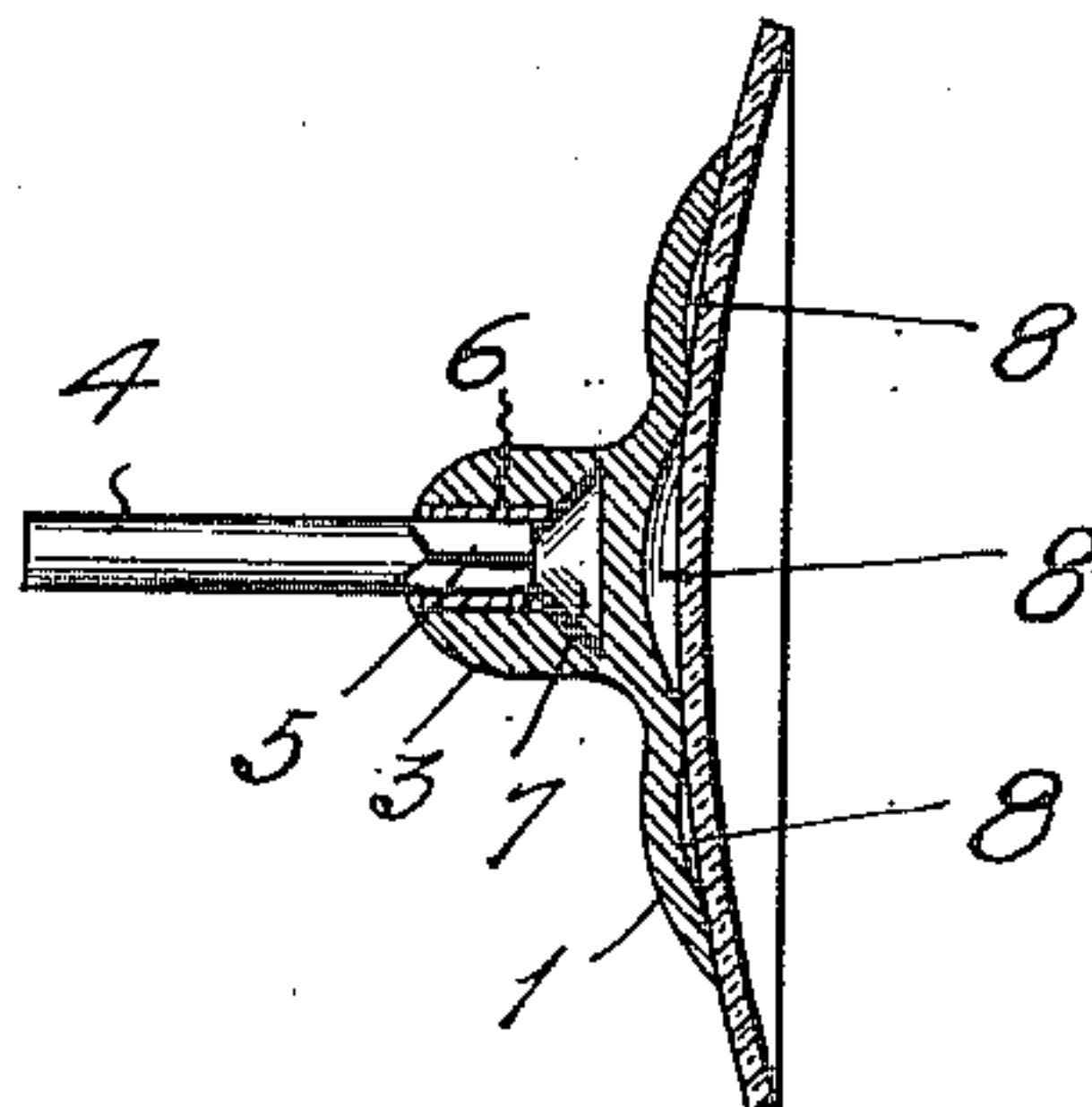


Fig 3

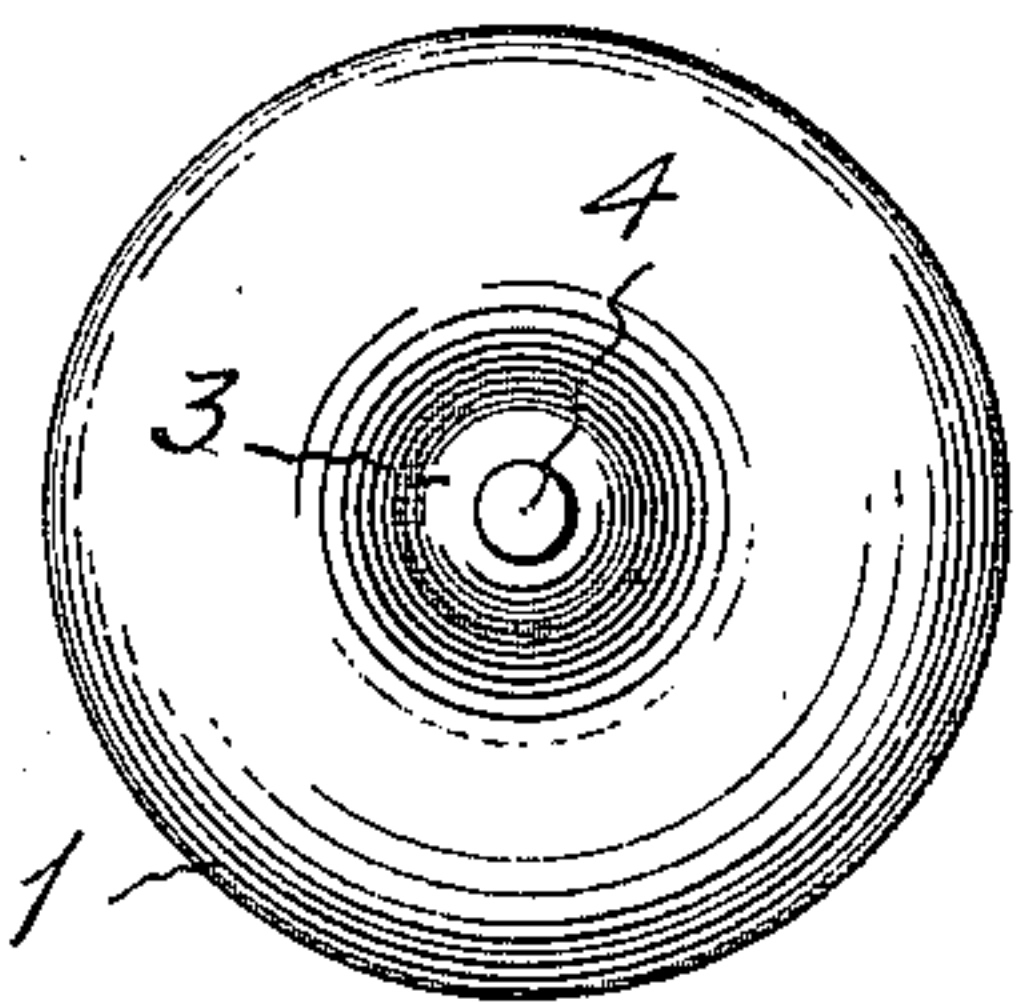


Fig 4

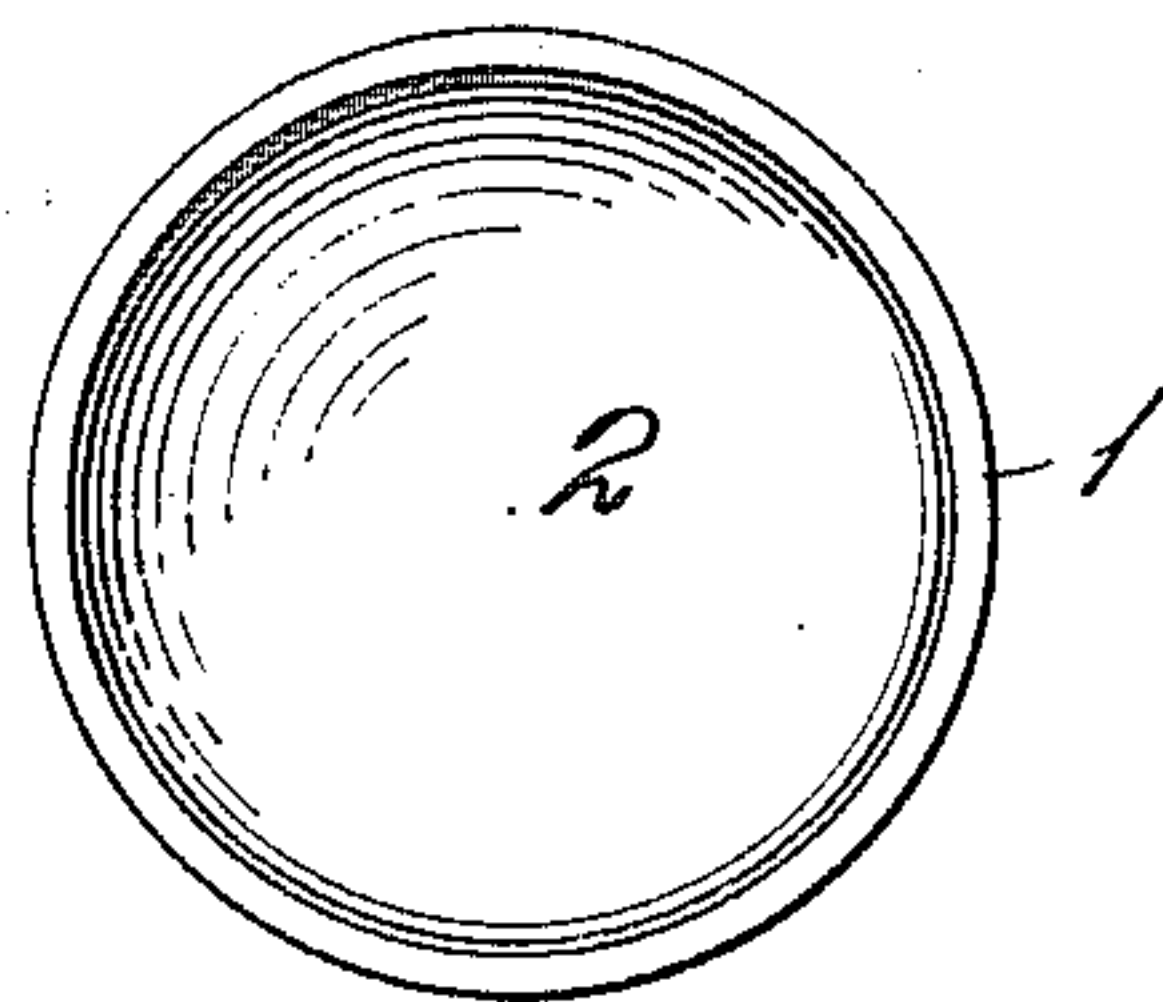


Fig 5

WITNESSES:

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LATHE ATTACHMENT.

998,718.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN SCHULTZE, citizen of the United States, residing at Cooper, in the county of Delta and State of Texas, have invented certain new and useful Improvements in Lathe Attachments, of which the following is a specification.

My invention relates to new and useful improvements in lathe attachments and more particular to that class of lathe attachments used by jewelers for holding fragile articles to be turned.

The object of my invention is to provide a device of the character described which will be easy to attach to any lathe and one which will hold an article to be turned without scratching its surface.

Another object of my invention is to provide a device of the character described which can be used for holding the crystal of a watch so that the edge may be ground down and one which will protect the face of the crystal while it is being ground.

Finally the object of the invention is to provide means of the character described that will be strong, durable, efficient, and easy of operation, simple and comparatively inexpensive to construct, and also in which the several parts will not be likely to get out of working order.

With the above and other objects in view, the invention has relation to certain novel features of construction and operation, an example of which is described in this specification and illustrated in the accompanying drawings, wherein:

Figure 1 is an elevation of my device, Fig. 2 is a cross sectional view of the same, Fig. 3 is a section showing the device holding a watch crystal, Fig. 4 is a rear elevation of my device, and Fig. 5 is a front elevation of the same.

In the drawings, the numeral 1 designates a yielding suction cap having a concaved face 2, and an enlarged portion 3. A mandrel 4 extends rearwardly from the portion 3 and is held against rotation by a squared portion 5 which engages with a sleeve 6 held in the portion 3. It is apparent that if the squared portion 5 and sleeve 6 were not provided and the surface of the mandrel being smooth, said mandrel might have a tendency to turn or revolve in the cap as only the frictional engagement of the resilient material with mandrel would be relied upon to fasten the parts together. By providing

the sleeve, any rocking or turning movement of the mandrel in the cap is checked by the sleeve. If the sleeve was not provided a slight movement of the mandrel would in time wear the resilient material until the mandrel would be free to turn. While the sleeve may be omitted it is a desirable element. This mandrel is held against lateral movement by a head 7 embedded in the enlarged portion.

In Fig. 3 I have shown my suction cap attached to a watch crystal ready for inserting the mandrel in the chuck of an ordinary lathe so that the crystal may be ground down. It is often necessary to grind a crystal and make it smaller in order to get the same to fit the bezel. The common method of attaching these crystals to a lathe, has been long and tedious as the crystal is first glued to a piece of wood and allowed to dry, then the wood is fastened to a face by means of screws. After the crystal has been ground down it is necessary to wash the crystal in order to remove the glue or adhesive material from its face. To use the suction cap for attaching these crystals to a lathe it is only necessary to place the cap over the crystal and to press the two together until the air beneath the cap has been exhausted. When this is done the spaces 8 as shown in Fig. 3 will be sealed by the contacting portions of the suction cap forming vacuum strong enough to hold the cap and crystal together. The mandrel may then be inserted in the chuck of a lathe and the size of a crystal may be reduced, by holding a piece of emery paper against the edge of the crystal. Should the crystal show a tendency of working loose it is only necessary to remove the same and slightly moisten it and then replace it where it will be held more firmly than before.

It is obvious that this suction cap may be used to fix other articles of manufacture in a position to be ground or scraped by a suitable tool.

What I claim is:

1. A lathe chuck comprising a body of resilient material having a dished face and provided with a solid central and rearwardly extending boss, and a metallic mandrel having its head embedded against rotation in the boss of the body.

2. The combination in a lathe chuck of a circular body of resilient material having a dished face and provided with a solid central

and rearwardly extending boss, a metallic
mandrel having a head and a flattened por-
tion adjacent the head, and a sleeve sur-
rounding the flattened portion of the man-
5 drel, the sleeve and the head of the mandrel
being embedded against rotation in the boss.

3. In a lathe chuck for watch crystals, a
circular body of resilient material having a
dished face, a boss extending rearward from
10 the central rear side of the body, said boss
protruding a considerable distance from the

head, and a mandrel having an enlarged
head and a squared portion extending from
the head, the head and squared portion be-
ing embedded in the boss.

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In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

JOHN SCHULTZE.

Witnesses:

JACK A. SCHLEY,
L. E. NOACK.