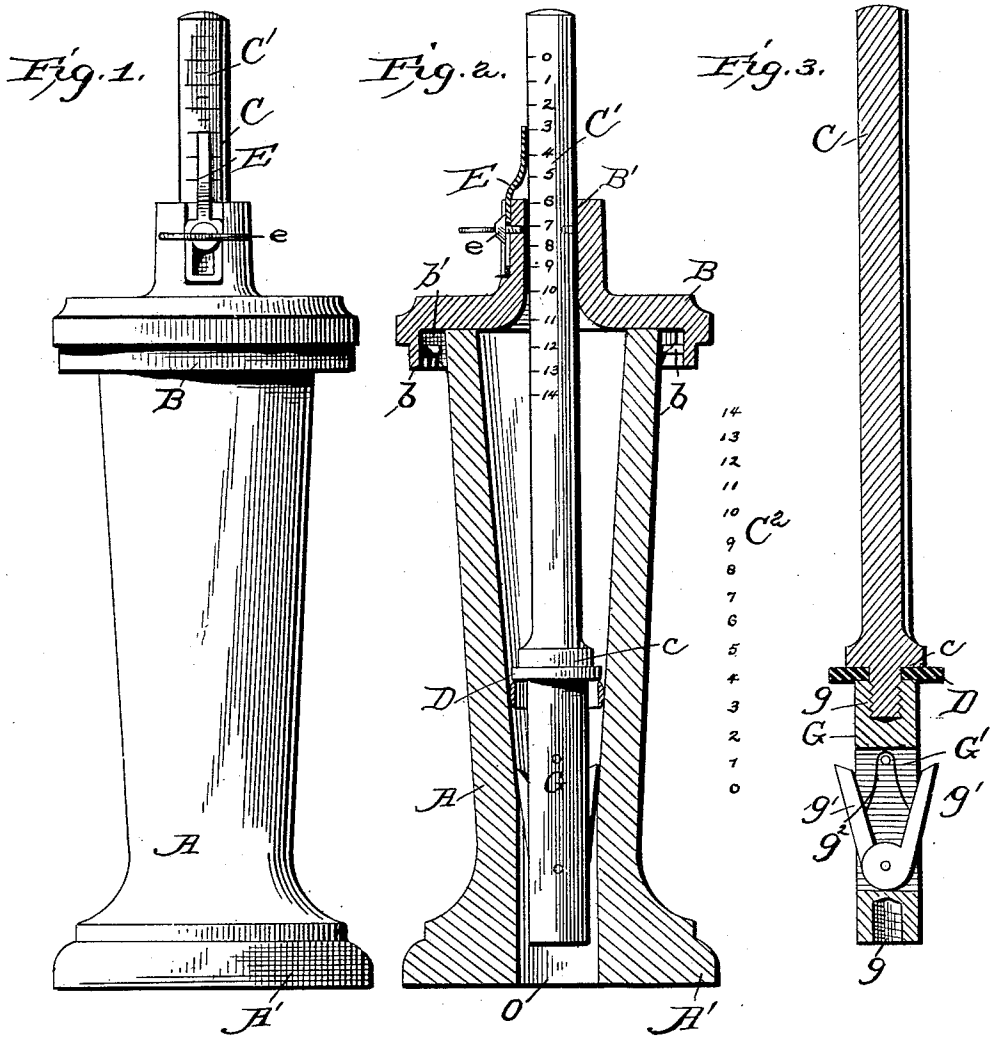
(No Model.)

G. P. SOMMER & T. SLY.

DEVICE FOR REDUCING SIZE OF RINGS.

No. 569,522. Patented Oct. 13, 1896.



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UNITED STATES PATENT OFFICE.

GEORGE PHILIP SOMMER AND THOMAS SLY, OF HONESDALE, PENNSYLVANIA.

DEVICE FOR REDUCING SIZE OF RINGS.

SPECIFICATION forming part of Letters Patent No. 569,522, dated October 13, 1896.

Application filed April 28, 1896. Serial No. 589,478. (No model.)

To all whom it may concern:

Be it known that we, GEORGE PHILIP SOMMER, and THOMAS SLY, citizens of the United States, residing at Honesdale, in the county of Wayne and State of Pennsylvania, have invented certain new and useful Improvements in Devices for Reducing the Size of Rings, of which the following is a specification, reference being had therein to the accompanying drawings.

Our invention is an improved device for reducing the size of gold rings, and by its use a jeweler is enabled to quickly and accurately fit a ring to the finger of a purchaser. By our improved device a ring can be quickly and accurately reduced to the desired size while the customer waits, and no skill is required to manipulate the device.

We have illustrated the invention in the accompanying drawings, in which—

Figure 1 is an elevation of the device. Fig. 2 is a central vertical section of the same, and Fig. 3 is a detail sectional view of the ring-extractor.

Referring by letters to the figures, A represents the base or body portion of the reducer or die, which is provided with a conical opening through the same, the upper end of the opening being of sufficient size to accommodate the largest-size ring used, and the lower portion (indicated at O) being small enough to prevent the smallest-sized ring passing through without reducing the same.

The bottom of the die is enlarged, as shown at A′, to form a suitable supporting-base to hold the device steady during the operation.

The inner face of the die is perfectly smooth and highly polished to permit the ring to be reduced without scratching or injuring its outer face and to reduce the friction.

The upper end of the die is provided with a suitable cap B, which may be detachably secured in place by any suitable form of connection, such, for instance, as the inwardly-projecting lugs *b b*, formed on the depending flange of the cover and engaging a rim *b′* upon the upper edge of the die. This cap is provided with a central opening B′, through which is passed a drift or plunger C, by means of which the requisite pressure is applied to the rings to force them down within the conical opening in the die to reduce them. This drift is provided near its lower end with a flange *c*, and a disk D is adapted to be slipped upon the lower end of the drift and be securely held thereon against upward movement by the flange *c*, as clearly shown in Fig. 3. A considerable number of these disks are provided, corresponding in size to the various sizes of rings which it may be desired to reduce, and when a larger or smaller ring is to be operated upon the disk D is removed and a larger or smaller one placed upon the drift.

In order to accurately gage the operation of reducing the ring, the stem of the drift is provided with a scale (indicated at C′) with numbers running from the smallest size at the upper end of the drift downward to the largest size ring which it is ever desired to operate upon. These numbers correspond with the various positions which the different sizes of rings would occupy within the die, as indicated by the scale C^2, (reversed in position as regards the scale C′.) An indicating-finger E is provided upon the neck of the cap, which is arranged in the path of the scale, and this indicator may be made adjustable by means of a slot and set-screw *e*.

In order to easily and quickly extract the ring after it has been reduced in size, I provide an attachment (indicated at G) which consists of a short section of rod having threaded sockets or recesses in its ends, as indicated at *g*, adapted to engage the threaded extremity of the drift. This part G is provided with a central slot or passage-way G′, in which are journaled two arms *g′ g′*, which are forced normally outward by means of an interposed spring *g″*. By this means the ring after having been reduced may be withdrawn from the upper end of the die by simply pulling upward upon the drift, the arms engaging the under side of the ring, or should the ring be held so tightly that this method is not effective the drift may be slipped from out the cap and the part G reversed upon the end of the drift, when it may be inserted through the bottom of the opening in the die, the die being inverted, and a tap from a hammer upon the end of the drift will quickly release the ring.

The operation of reducing the size of the

ring will be obvious from the above description, but may be summed up as follows: The cap of the die is removed and the ring to be reduced is dropped into the die. A disk D of the proper size (indicated by the number of the size of the ring) is placed upon the end of the drift and the drift and cover or cap replaced, when a few sharp taps of a hammer will force the ring downward in the conical opening. The distance which the ring has been forced downward within the die will be indicated by the finger E upon the scale, thus indicating the size to which the ring has been reduced.

While we have described our device as adapted especially for jewelers' use in reducing the size of gold rings, it will be readily understood that it may be made larger and stronger and used for reducing the size of rings of other metals and of larger size, such adaptations being clearly within the scope of our invention.

Having thus described our invention, what we claim is—

1. In combination the die, the drift, and the detachable and reversible extractor carried by said drift, substantially as described.

2. In combination the die, the drift, and the extractor comprising the detachable and reversible part G, and the pivoted extracting-arms carried by said part G, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

GEORGE PHILIP SOMMER.
THOMAS SLY.

Witnesses:
GEORGE A. SMITH,
LEWIS F. BISHOP.