

(No Model.)

2 Sheets—Sheet 1.

E. R. & C. E. CAHOONE & G. WALKER.

ORNAMENTING AND PROTECTING METAL ARTICLES.

No. 251,409.

Patented Dec. 27, 1881.

Fig. 1.

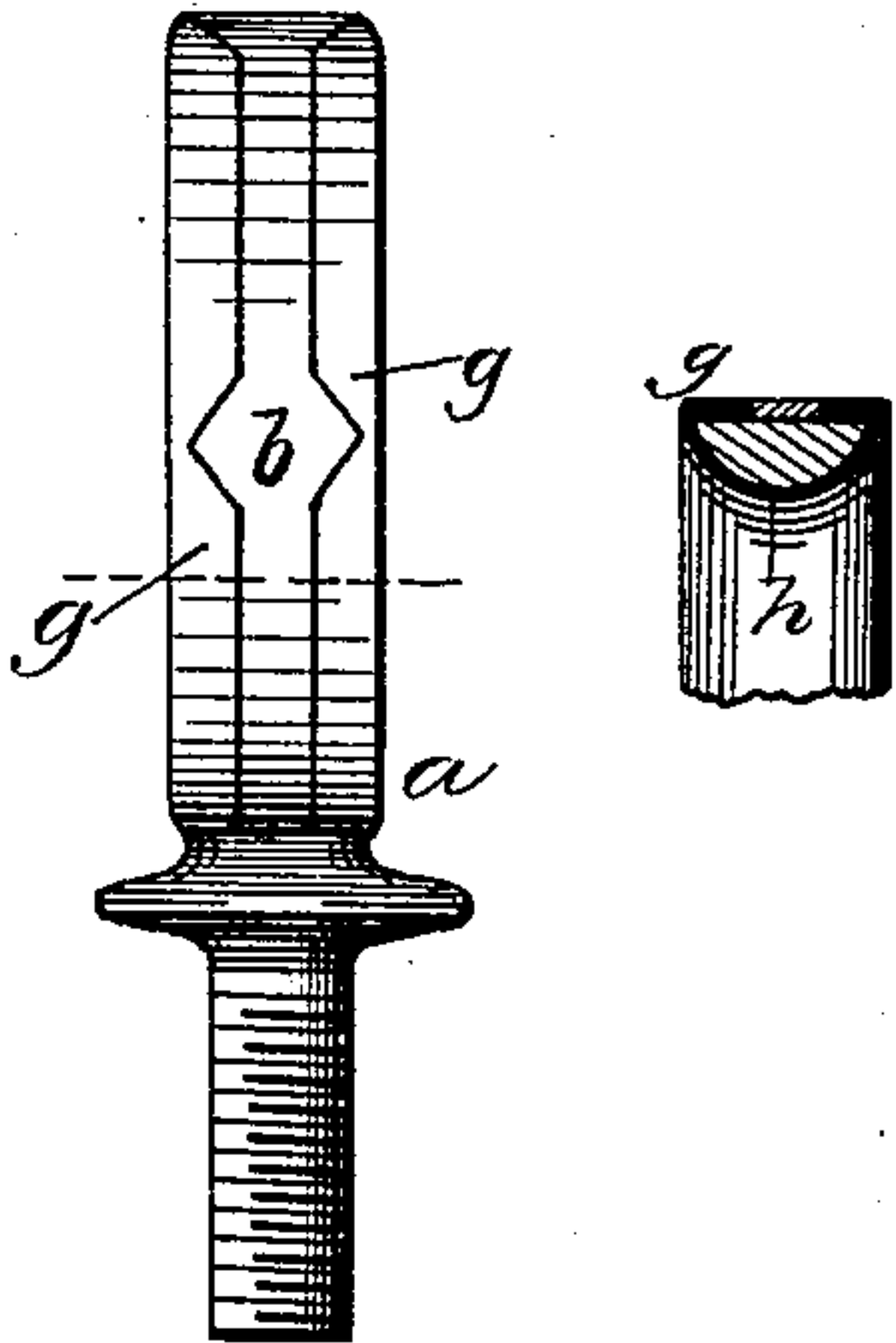


Fig. 2.

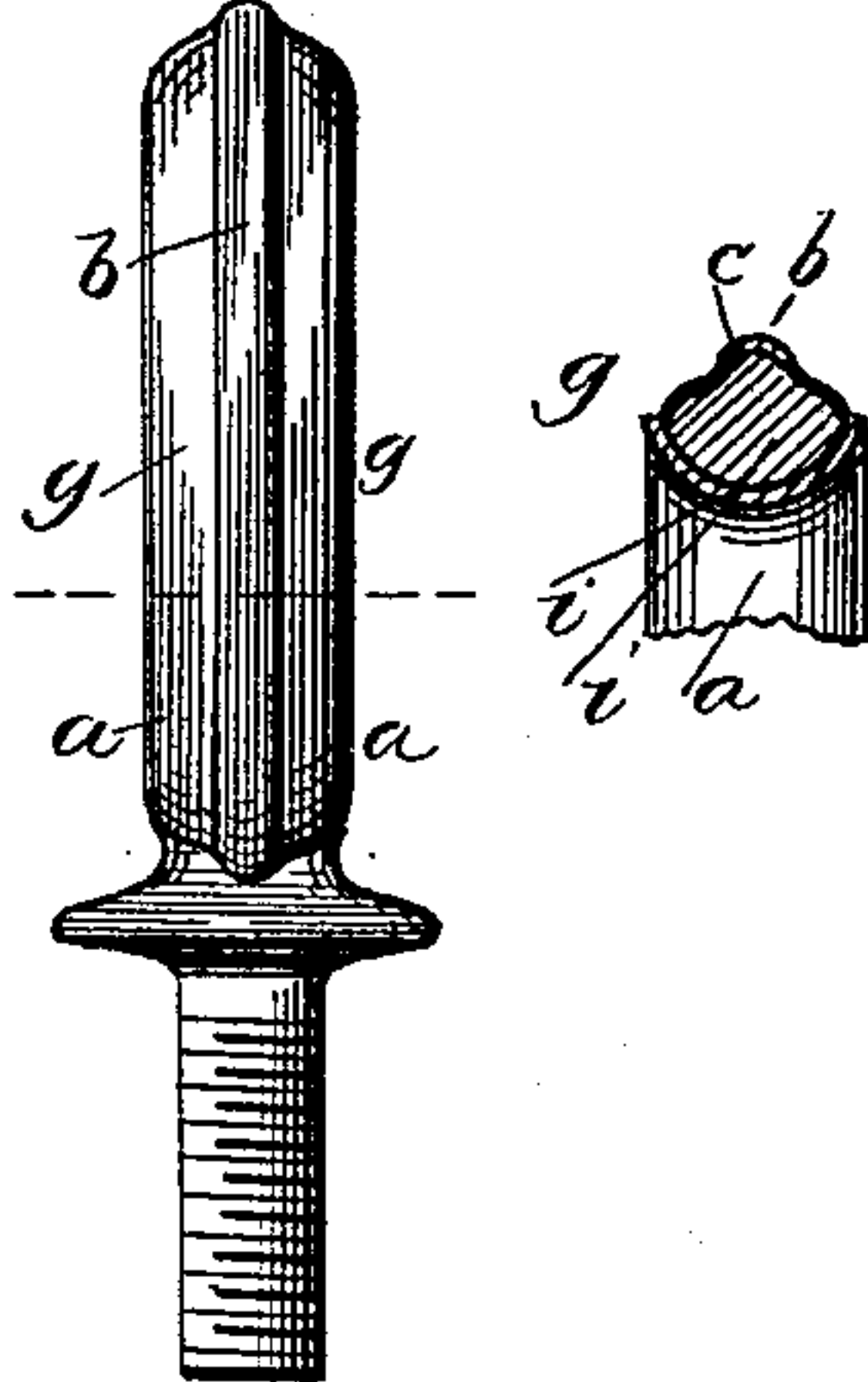


Fig. 3.

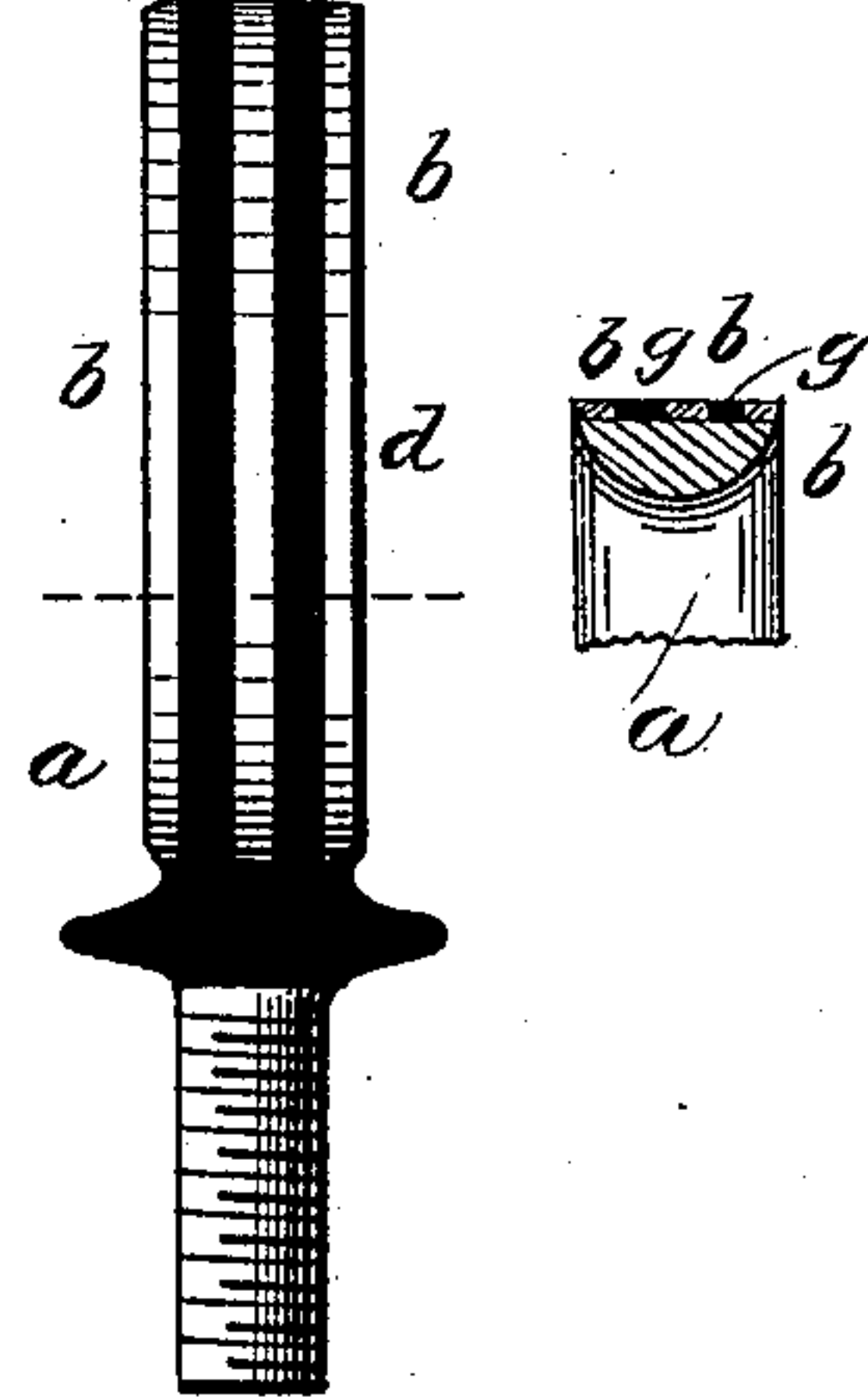


Fig. 4.

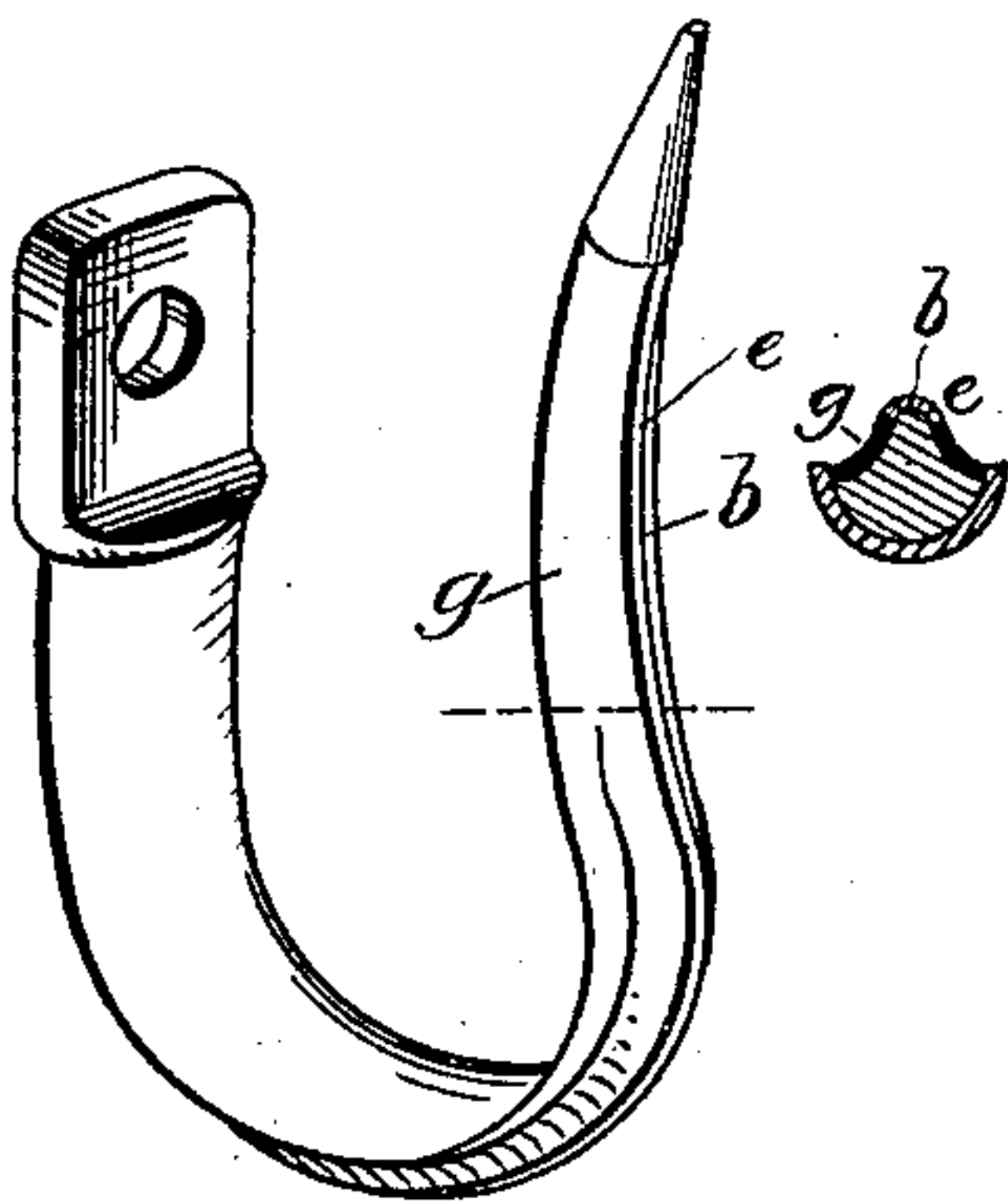


Fig. 5.

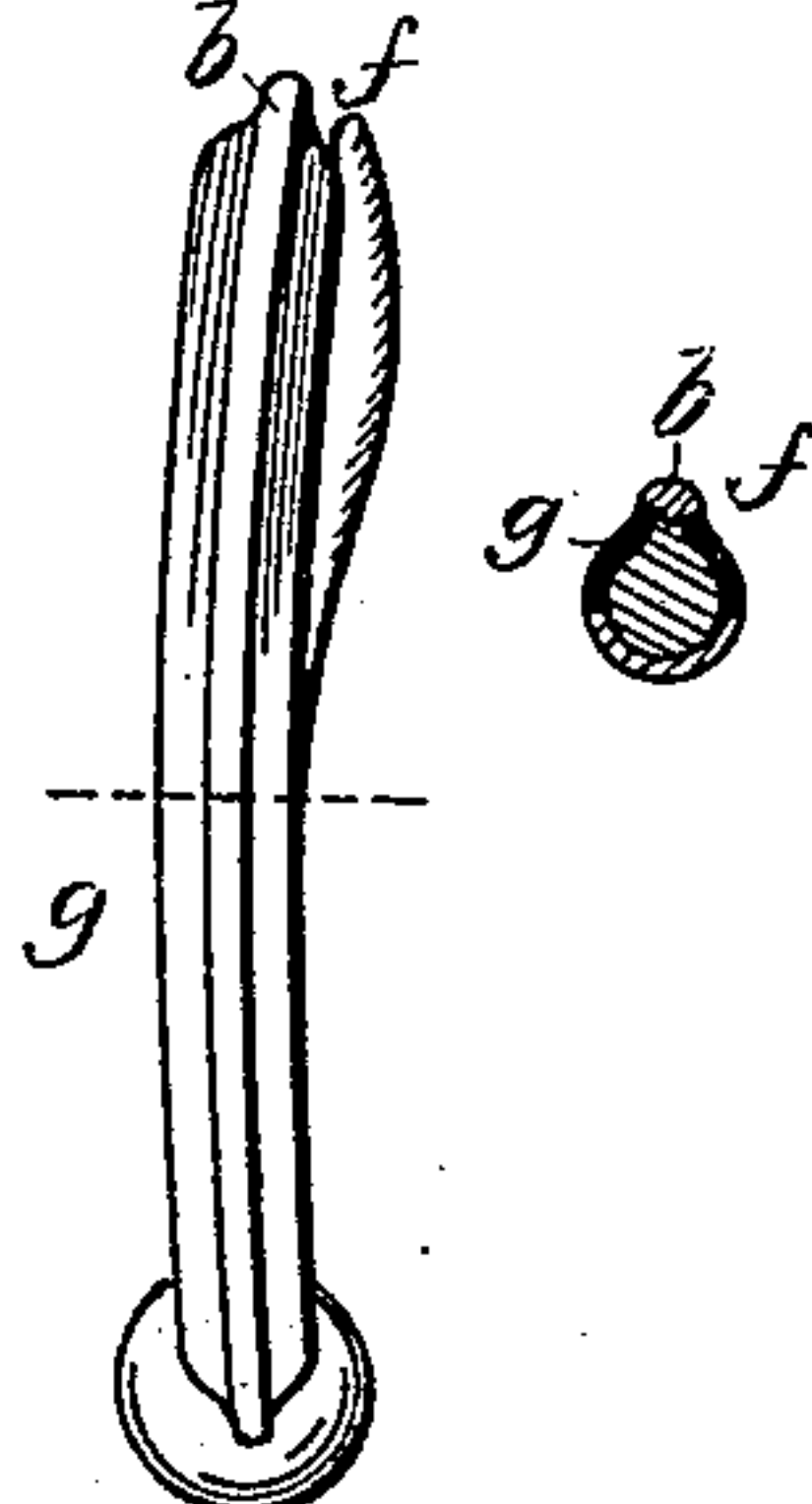
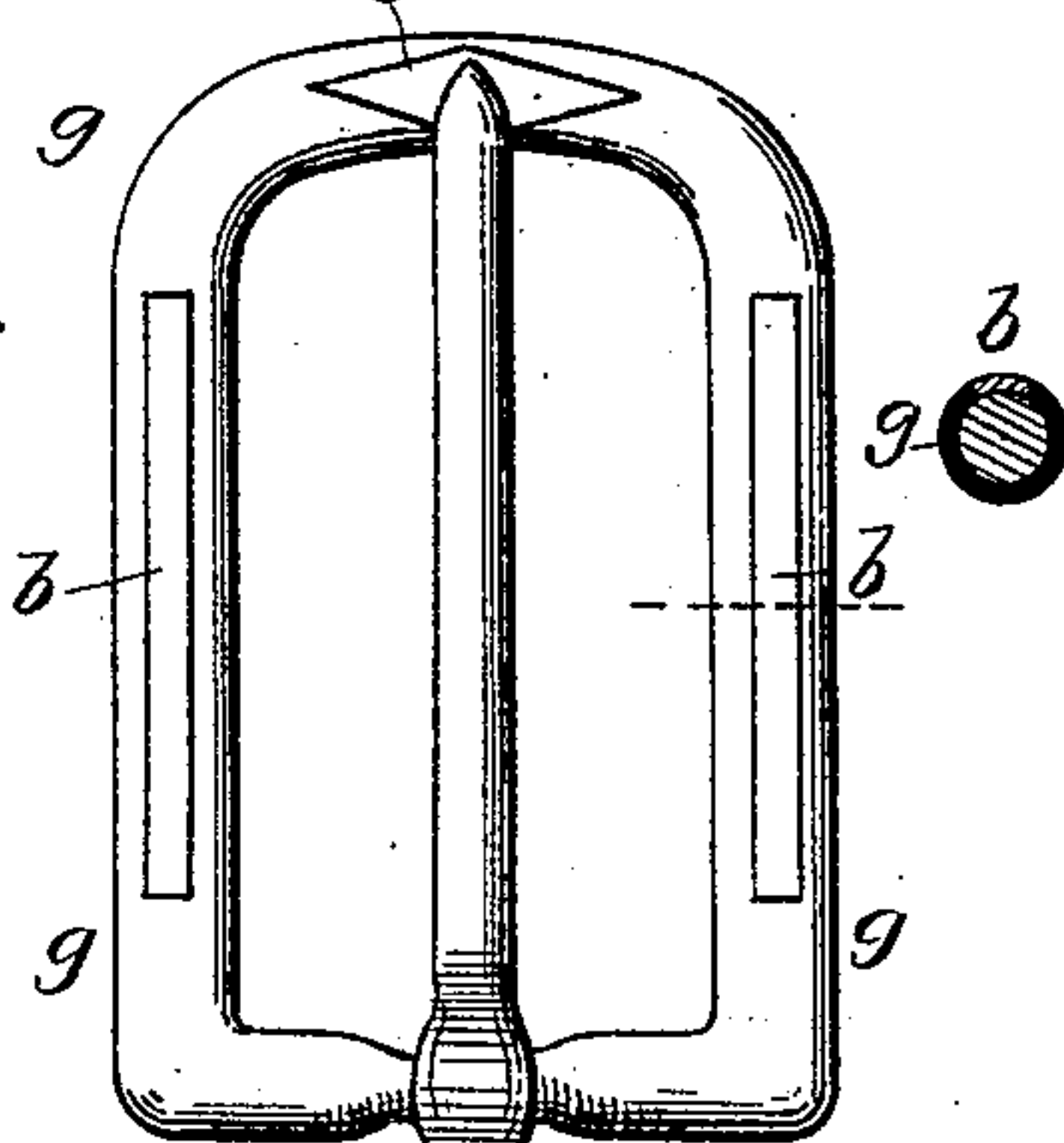


Fig. 6.



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(No Model.)

2 Sheets—Sheet 2.

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Fig. 7.

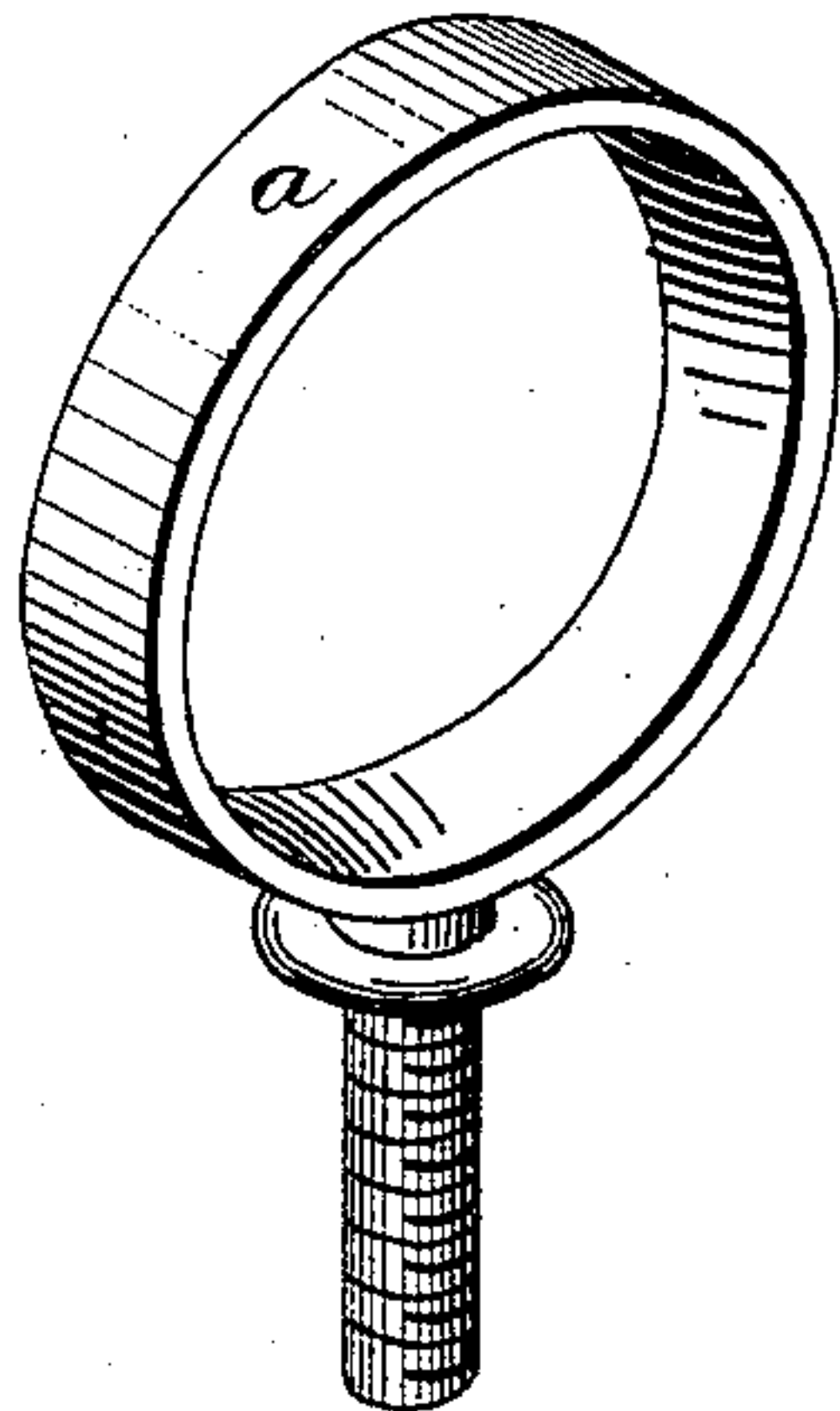


Fig. 8.

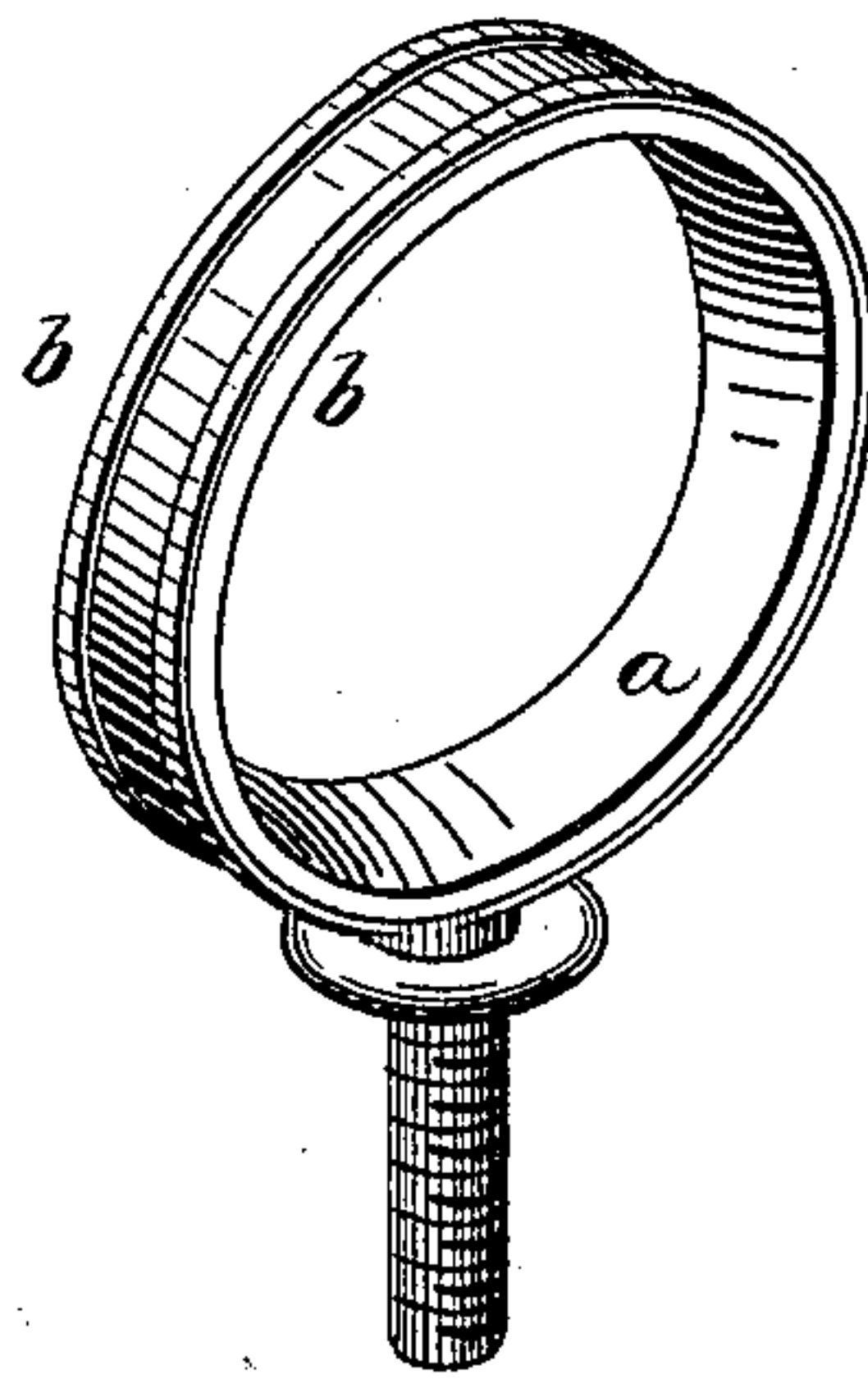


Fig. 9.

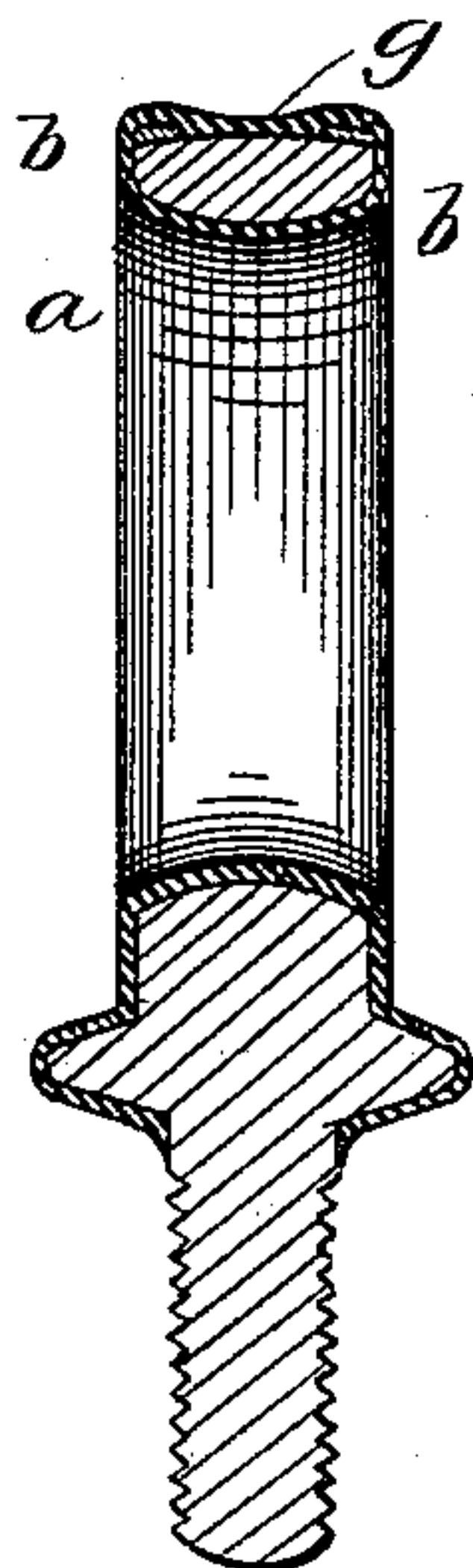
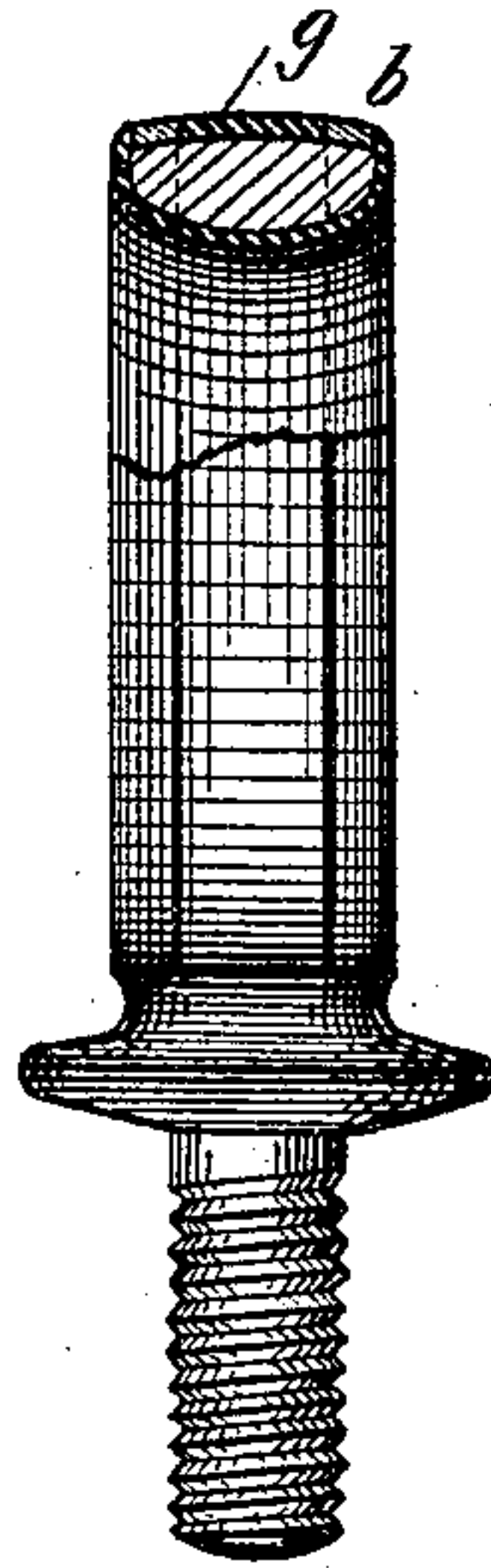


Fig. 10.



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UNITED STATES PATENT OFFICE.

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ORNAMENTING AND PROTECTING METAL ARTICLES.

SPECIFICATION forming part of Letters Patent No. 251,409, dated December 27, 1881.

Application filed June 11, 1881. (No model.)

To all whom it may concern:

Be it known that we, EDWIN R. CAHOONE, CHARLES E. CAHOONE, and GEORGE WALKER, citizens of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Ornamenting and Protecting Metal Articles; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in ornamenting and protecting against disfigurement such metallic articles as harness-trimmings, carriage-hardware, &c.; and the invention consists in soldering to the exposed surfaces of such articles, in suitable designs, strips or pieces of thin ornamental metal, then lacquering, plating, or japanning such articles until the desired quantity of lacquer or japan has been applied, and then removing the surplus lacquer or japan and polishing, whereby elegant and durable trimmings are produced, upon which the lacquer, japan, or plating is protected from being chipped off and disfigured by blows, &c.

In the accompanying drawings, in the several figures of which like parts are similarly designated, Figures 1, 2, and 3 are edge elevations and cross-sections of various shapes and designs of terrets embodying our invention. Fig. 4 is a perspective view and cross-section of a water-hook. Fig. 5 is a side view and section, and Fig. 6 a front view and section, of buckles. Fig. 7 is a perspective view of a terret-blank; Fig. 8, a similar view of a terret-blank having our protecting and ornamenting strips soldered on. Fig. 9 is a vertical cross-section of the blank shown in Fig. 8, after the same has been coated; and Fig. 10 is a sectional elevation of the coated blank of Fig. 9, after the surplus coating has been removed and the article finished for market.

In order to produce the articles shown in Figs. 1 to 6 and others, we first take the ordi-

nary casting—say a terret, *a*, Fig. 7—and having prepared suitable designs in thin sheet nickel-plated, German-silver, gilded, or other metal or alloy, as strips *b*, we solder such designs to the casting. If for ornament only, we arrange such strips in the most effective manner; but if utility is to be sought also, we arrange such strips upon exposed surfaces, as the rib *c* of a terret; Fig. 2, or edges *d* of a terret; Fig. 3, or the spine *e* of a water hook, Fig. 4, or the head *f* of a buckle, Fig. 5, or elsewhere where the article is apt to come into violent contact with another surface. After the strips are soldered in place we apply lacquer, japan, or other coating, *g*, by brushing, dipping, or otherwise, until the desired thickness is obtained, when we remove the surplus and polish the surface in any suitable manner. If the coating is applied by dipping, the article will, when sufficiently coated, be wholly covered by the coating, as in Fig. 9; but by then subjecting it to a grinding mechanism the coating will be taken off until even with the strips, and the whole then finished by polishing.

Terrets, &c., made after this manner may have their inner surface, *h*, section-figures 1, 6, 9, and 10, coated and polished; or such surface lined with a bright metal, *i*, as in Figs. 2, 4, and 5, corresponding in color with the strips *b*; or such inner surface may have the coating removed and the original metal polished, as in Fig. 3. By thus constructing such articles their coating is preserved intact through long and hard usage, and very elegant trimmings produced at great economy of labor, material, and selling cost.

Before our invention it was common to cast or strike up in dies metal articles—such as drawer-pulls, harness-trimmings, &c.—with depressed and salient portions, to then apply a coating of plastic or fluid substance, which entered the depressed portions and covered the salient portions, and then, after the depressed portions were sufficiently filled—as, for instance, flush with the salient surfaces—the enamel or coating was ground off and polished, leaving exposed the metal of the salient portions, which is afterward polished or plated. The formation of these salient surfaces by cast-

ing involves costly molds, and in small articles—such as harness-trimmings—there must be always more or less defects in the casting. By striking up from sheet metal expensive dies must be had. By either method the product is too expensive to be commercially successful as compared with the variety of design, rapidity of manufacture, elegance in appearance, and economy of production obtainable by soldering on the salient features, for the original casting is made in the plainest possible manner, with the simplest molds, and of the cheapest material, and the finish put on to suit. An ordinary iron casting can be readily converted into the most elegant gold, silver, or nickel mounted trimming.

Cloisonné work in the ceramic art has long been known, and has been practiced in some instances by soldering threads or strips of metal to a metal base in such designs as to form cells of various configuration. These cells were then filled with an enamel, it being usual to use enamels of contrasting colors in adjacent cells throughout the work. The most common illustrations of cloisonné work are vases, cups, and the like. Now, the purpose of these metal strips in cloisonné work is to form cells to receive different-colored enamels, rather than to form a protecting-surface for them and the article into which they enter. The primary object of our invention is to protect by these metal strips that portion of the article to which they are applied which is most exposed to hard usage, our invention being utilitarian rather than æsthetic.

What we claim is—

1. The improvement in the mode of protecting the exposed portions of metal trimmings which consists in soldering strips or pieces of sheet metal in ornamental or other designs to the blanks on such portions as will be exposed to wear or hard usage in the finished articles, next coating such articles with japan, lacquer, or other substances, and then reducing and polishing the surfaces, so as to bring the outer surfaces of the strips or bits of metal and the coating flush, substantially as described.

2. Harness-trimmings and the like composed of a metal body, strips or pieces of bright metal soldered thereto, and a lacquer, japan, or equivalent coating surrounding and flush with the said strips, substantially as described.

3. Coated, japanned, or lacquered metal bodies—such as harness-trimmings—provided with metal strips or pieces in ornamental or other design soldered to their exposed portions to take the wear or damage to such bodies and protect the coating from fracture, substantially as described.

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

EDWIN R. CAHOONE.
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Witnesses:

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