

No. 751,160.

PATENTED FEB. 2, 1904.

S. GARRETT.
RUBBER AND METAL CAP TIP FOR CHAIRS.
APPLICATION FILED SEPT. 8, 1903.

NO MODEL.

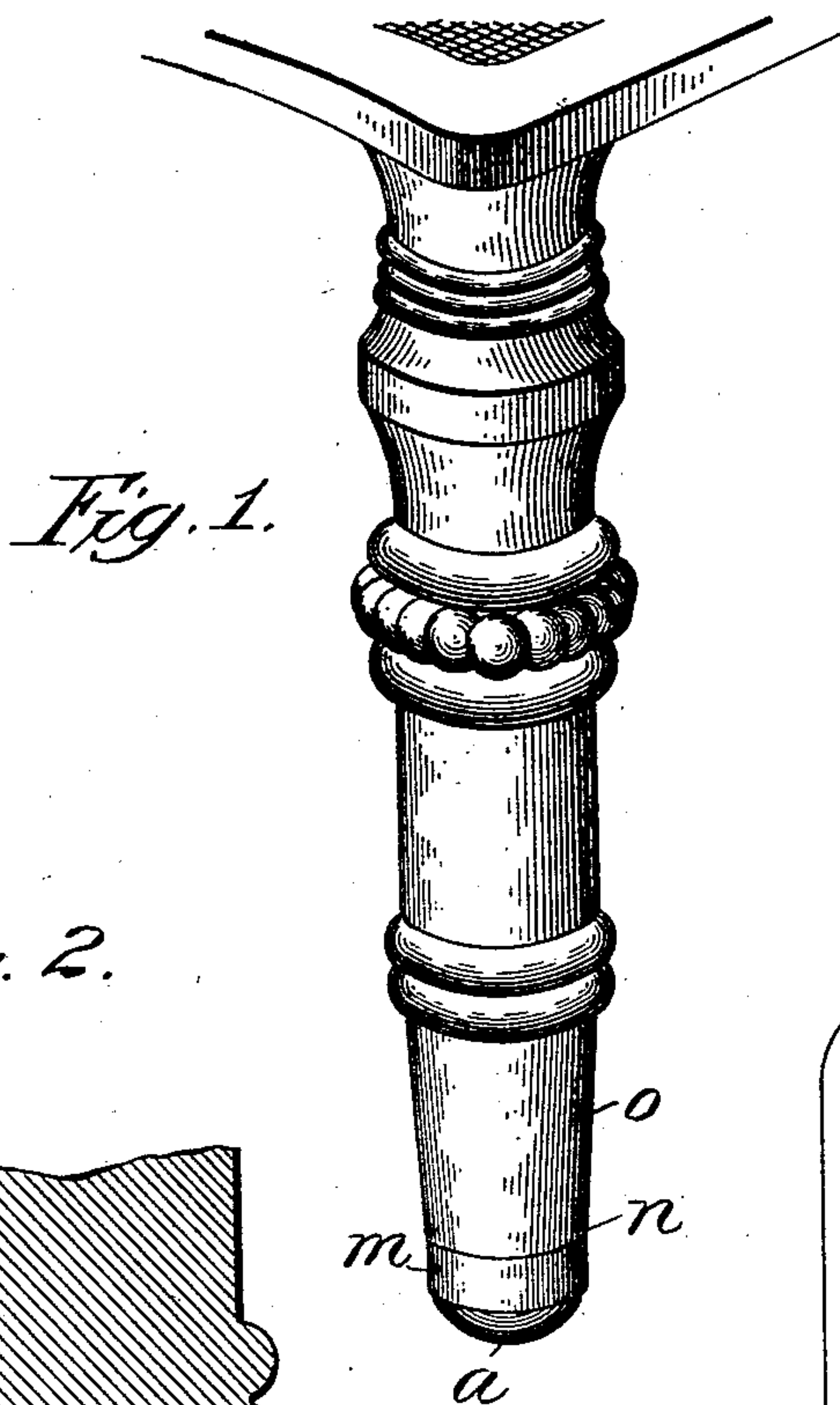


Fig. 2.

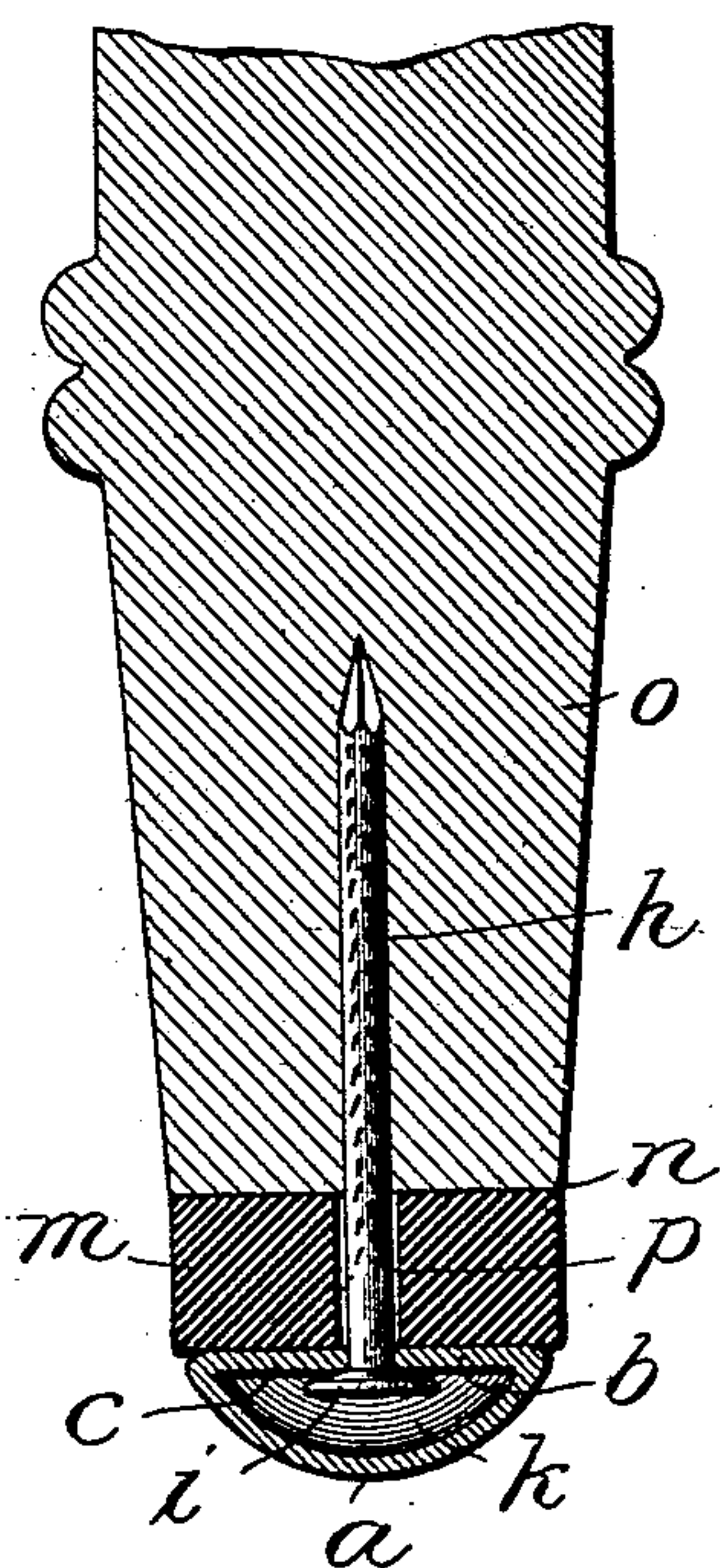


Fig. 3.

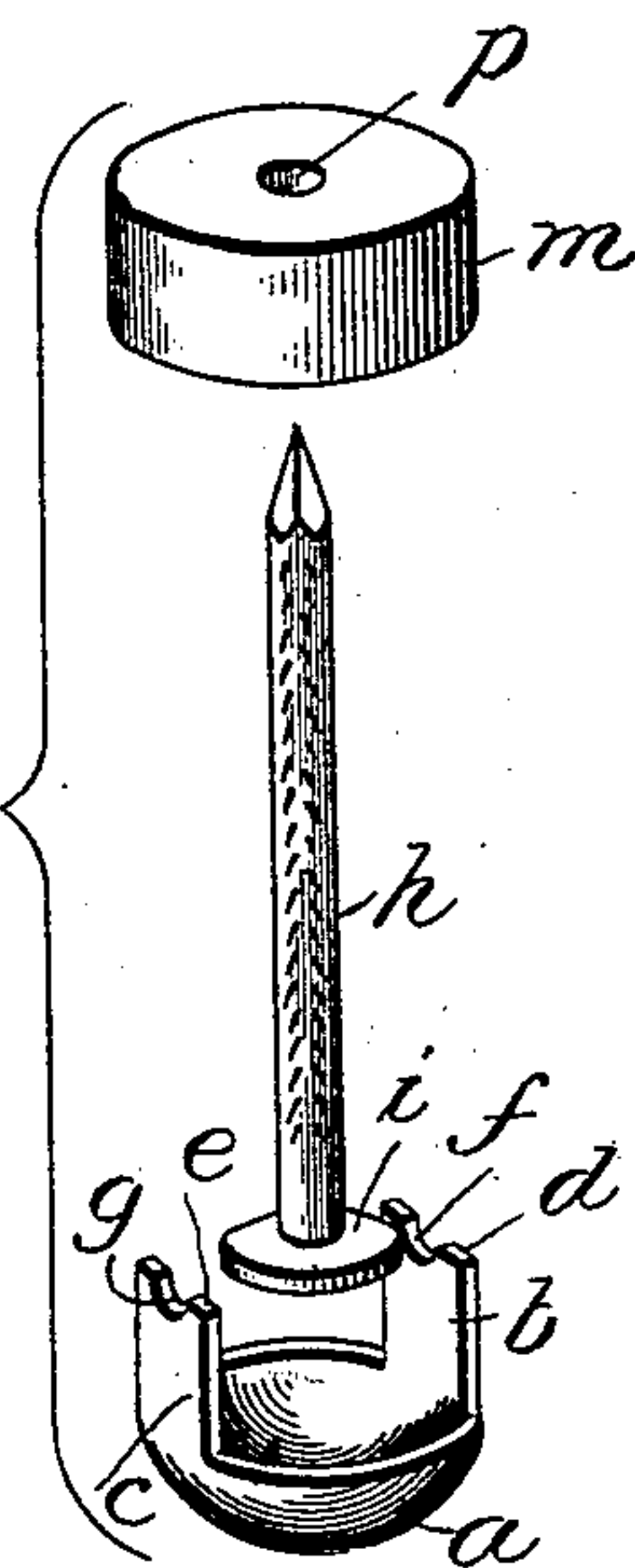
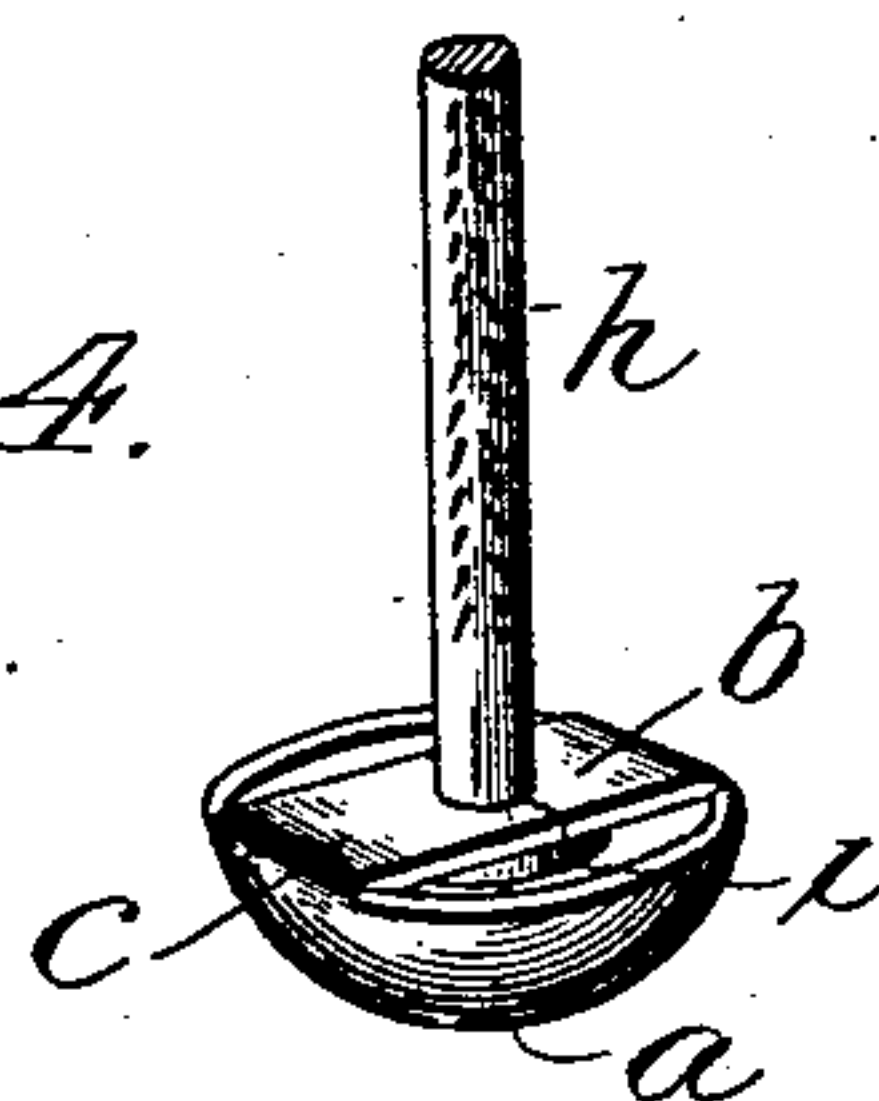


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

SAMUEL GARRETT, OF CHICAGO, ILLINOIS, ASSIGNOR TO GARRETT TIP COMPANY, OF CHICAGO, ILLINOIS, A COPARTNERSHIP.

RUBBER-AND-METAL-CAP TIP FOR CHAIRS.

SPECIFICATION forming part of Letters Patent No. 751,160, dated February 2, 1904.

Application filed September 8, 1903. Serial No. 172,281. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL GARRETT, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Rubber-and-Metal-Cap Tip for Chairs, of which the following is a specification in its best form now known to me, reference being had to the accompanying drawings, in which similar letters indicate the same parts throughout the several views.

My invention relates to tips placed upon the bottoms of chair, table, or other furniture legs to reduce, if not entirely prevent, their making noise upon or scratching the floor, particularly when used on a mosaic or concrete floor.

The object of my invention is to provide such a device which can be easily and cheaply manufactured and applied to the legs of furniture and which will not be easily injured or destroyed by use and which will not be likely to mar the floor.

My invention consists in mechanism capable of accomplishing the above objects and in many details of construction, which will hereinafter be more fully described and claimed as the specification proceeds.

The device here described is most often used upon chairs, and is consequently so entitled and described; but manifestly it may be used upon other furniture with equal effect.

In the drawings, Figure 1 is a perspective view of the leg of a chair having the mechanism of my invention applied thereto. Fig. 2 is a central sectional view of the bottom of a chair-leg, showing the device applied thereto. Fig. 3 is a detail perspective view of the parts of the mechanism of my invention in the course of construction. Fig. 4 is a perspective view of the metal cap and lower portion of the nail for fastening it to a chair ready for use.

My invention, broadly stated, consists in the application to the bottom of a chair of a rubber cushion with a metal cap below it, which does not destroy the resiliency and noise-preventing property of the rubber, but which protects the rubber from injury by contact with

the floor, and also in a novel form of cap for this purpose.

In constructing the mechanism of my invention I take, preferably, a solid piece of metal and by hand, if necessary, but preferably with automatic machinery, punch from it a circular concave cap *a*, having extending from its circular edges the wings or lips *b* and *c* of such a length that when folded in over across the upper surface of the cap, as shown in Fig. 4, the edges *d* and *e* will just butt against each other, as shown in Fig. 4. In the upper edges *d* and *e* of each of the wings or lips *b* and *c* I cut notches *f* and *g*, forming a hole through which the shank *h* of a nail having a head *i* is adapted to pass freely. I place this nail with its head *i* within the space *k* in the cap *a* and fold in the wings or lips *b* and *c* until the parts assume the position shown in Fig. 4. The parts are so proportioned that in this position the head *i* of the nail is about one-eighth of an inch above the inside of the metal cap *a*.

With the mechanism just described I provide a rubber washer *m*, preferably about three-eighths of an inch in thickness and of about the same diameter as the metal cap *a* and about the same diameter as the bottom *n* of the chair-leg. Through this washer *m* is cut a hole *p* of about one-sixteenth of an inch greater diameter than the nail-shank *h*, so that when the washer *m* is placed on the nail-shank the nail may move freely through the rubber.

In applying my device to a chair I place the washer *m* over the metal cap *a*, having a nail with its head loosely secured inside the cap, as shown in Fig. 4, as heretofore described, and drive the nail by pounding upon the bottom of the cap into the center of the chair-leg, as shown in Fig. 2. In this operation the rubber of the washer *m* and the cap *a* itself gives sufficiently so that the blows of the hammer will drive the nail into the chair-leg far enough to leave a clearance (shown in Fig. 2 and heretofore described) between the bottom of the nail-head *i* and the inner surface of the metal cap *a*.

When a chair-leg is equipped with my in-

vention, the metal cap protects the rubber washer *m* from being torn upon the floor, while the washer itself performs the same function of preventing noise and relieving jar which it would perform were the metal cap not present. As the nail is rigidly secured in the chair-leg and there is a clearance between it and the washer *m* and the wings or lips of the metal cap, as heretofore described, it will be seen that when a weight is placed upon the chair the rubber washer *m* can be easily compressed between the metal cap *a* and the bottom of the chair-leg, the head *i* of the nail moving downward inside the space *k* in the metal cap, as heretofore described.

I do not wish to be limited to the exact form of construction herein shown and described, which may be varied within reasonable limits without departing from the principle of my invention.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

1. As an article of manufacture, a concave unperforated metallic cap *a*, having wings *b* and *c* folded in in the plane of the upper surface of the cap and inclosing a nail or rod, the head of the rod or nail being freely movable within said cap, substantially as described.

2. As an article of manufacture, a concave circular unperforated metallic cap having a bar or plate extending across the circular edge of said cap and a nail with its head inside the concave surface of the cap and its shank extending through said plate on said cap, the head of the nail being freely movable backward and forward within the cap.

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Witnesses:

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