

R. W. LINVILLE.  
ADJUSTABLE TROWEL.  
APPLICATION FILED JUNE 1, 1909.

963,717.

Patented July 5, 1910.

Fig. 1.

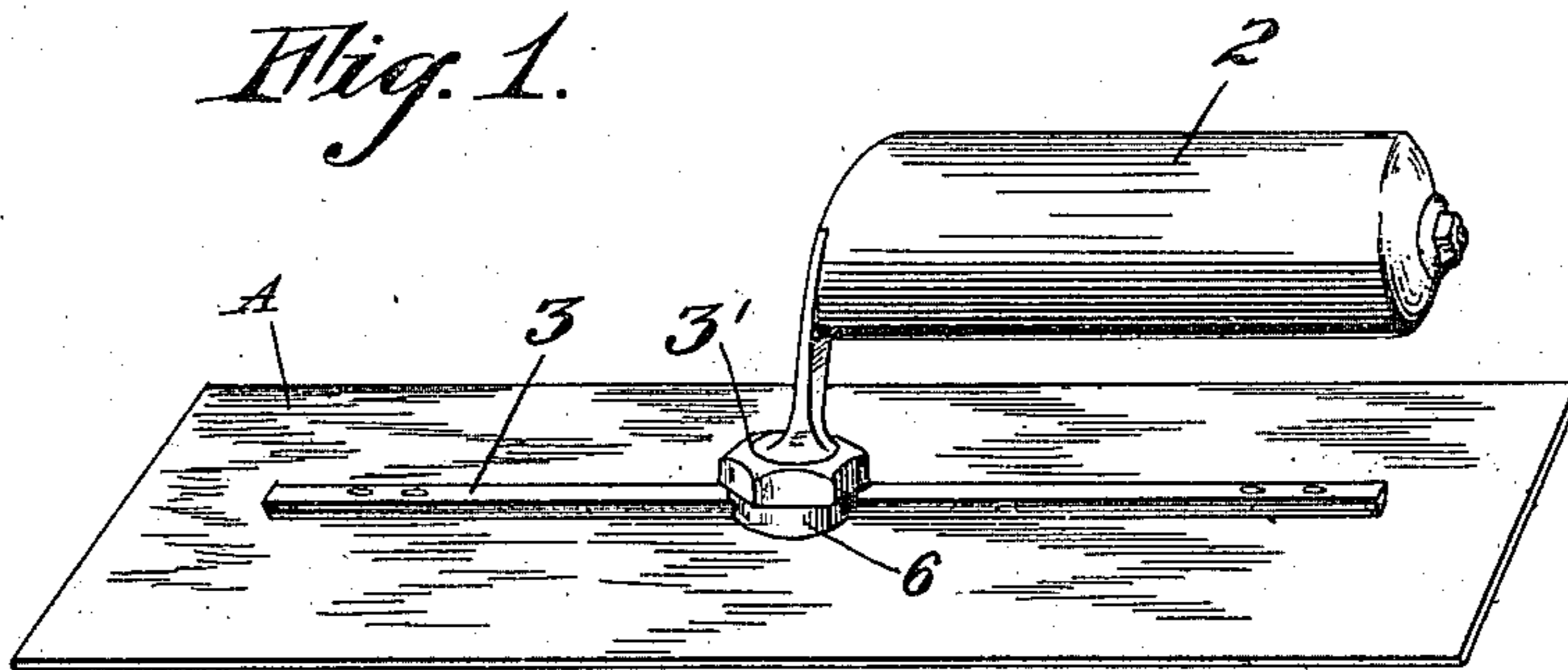


Fig. 2.

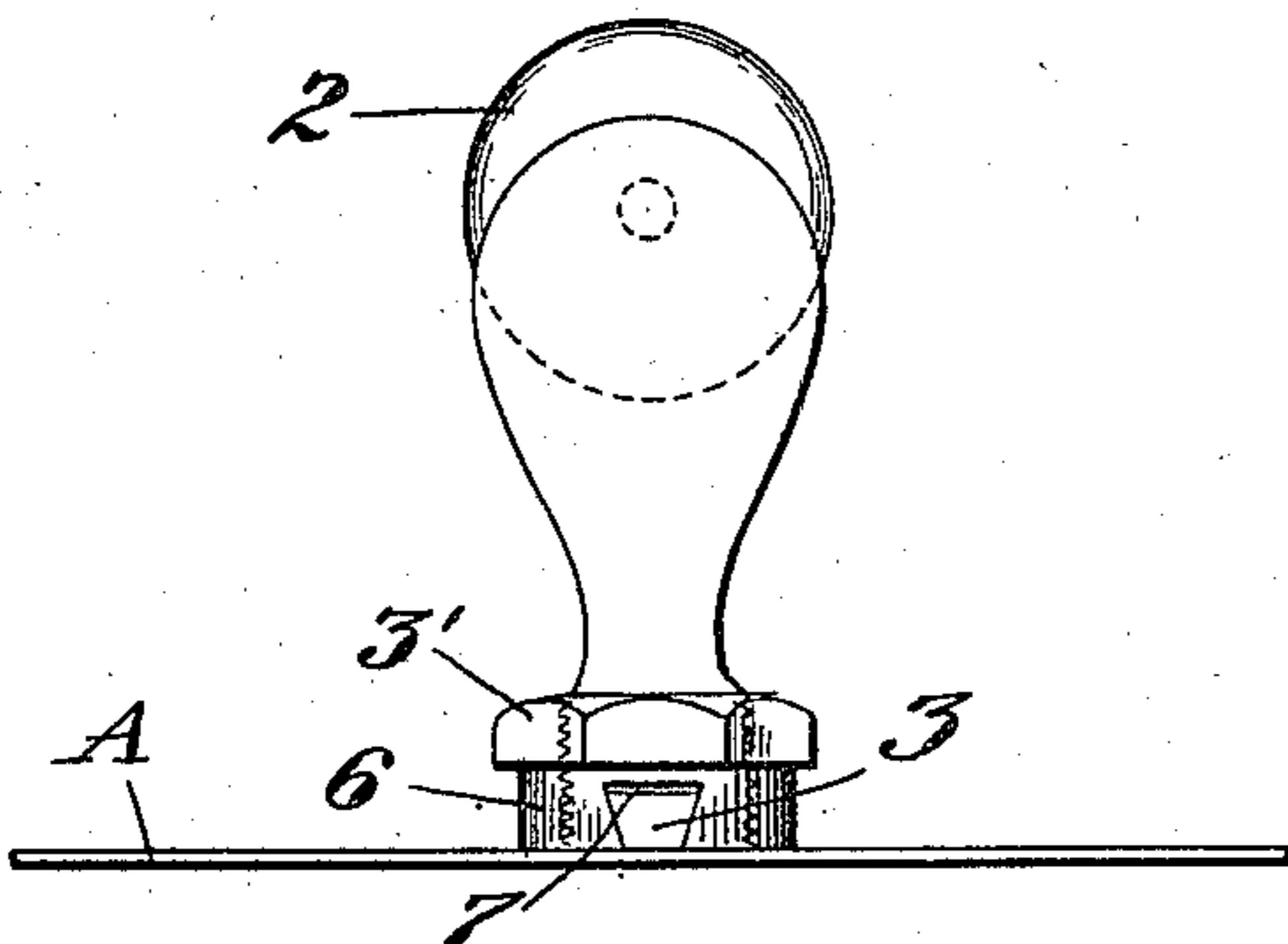


Fig. 3.

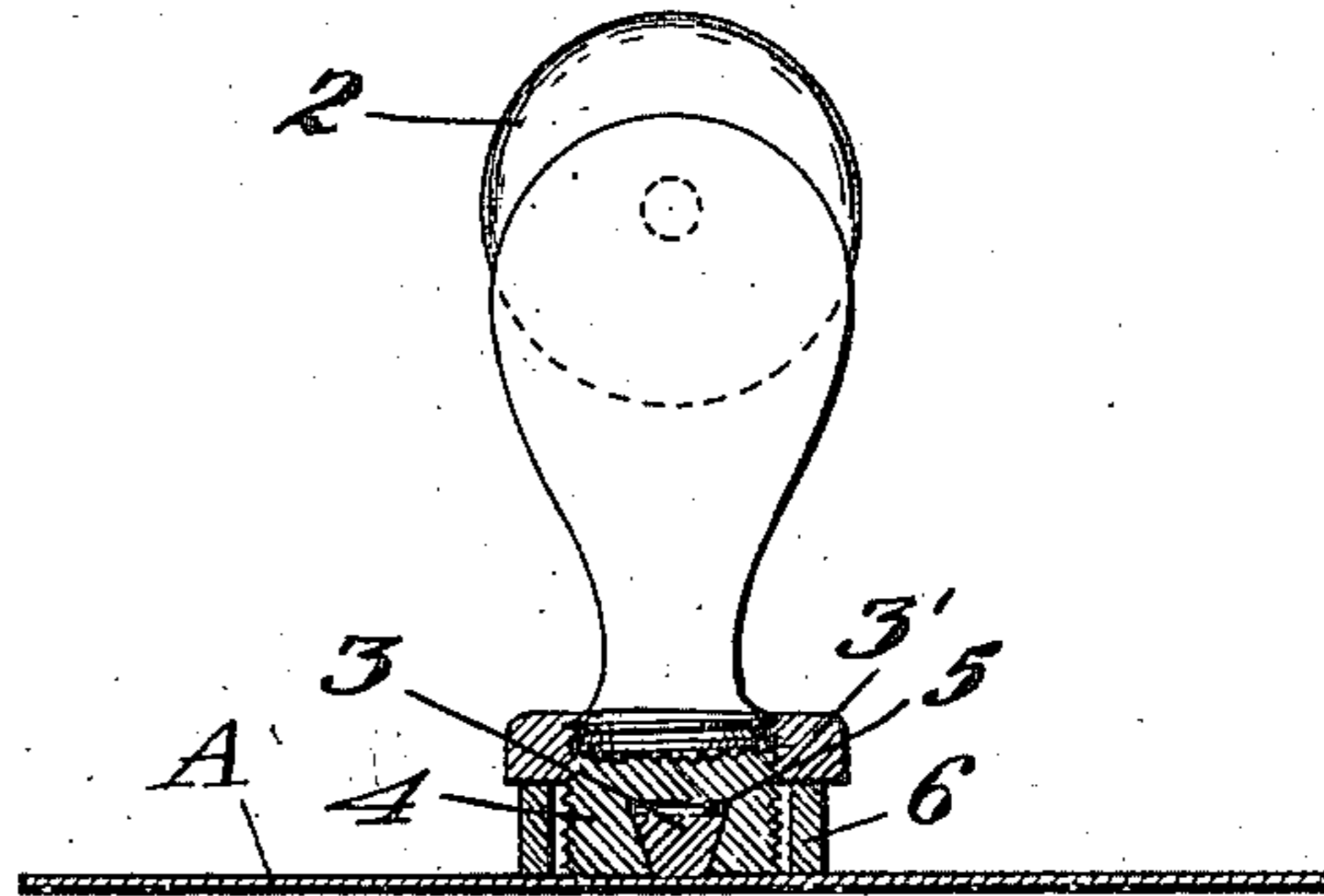
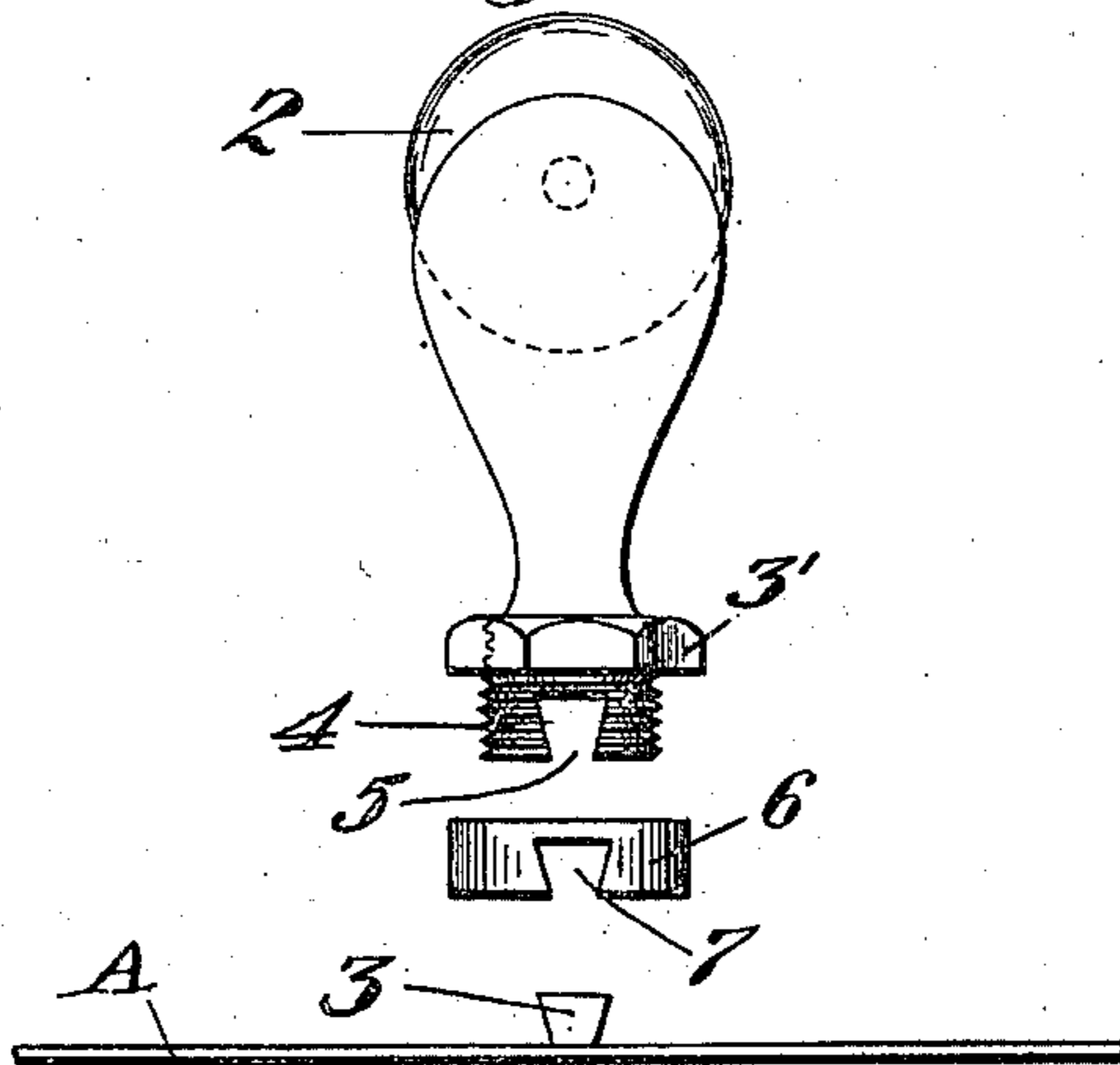


Fig. 4.



WITNESSES;

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# UNITED STATES PATENT OFFICE.

ROBERT W. LINVILLE, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR OF FORTY-NINE ONE-HUNDREDTHS TO JOHN F. SNYDER, OF RICHMOND, CALIFORNIA.

## ADJUSTABLE TROWEL.

963,717.

Specification of Letters Patent.

Patented July 5, 1910.

Application filed June 1, 1909. Serial No. 499,399.

*To all whom it may concern:*

Be it known that I, ROBERT W. LINVILLE, citizen of the United States, residing in the city and county of San Francisco and State of California, have invented new and useful Improvements in Adjustable Trowels, of which the following is a specification.

This invention relates to cement workers' tools, and pertains especially to adjustable trowels, joiners and edgers, such as are used by plasterers, brick-masons, etc.

The object of the invention is to provide a cheap, simple, practical blade and adjustable handle which can be adapted for all sorts of uses, and for work under various conditions, by means of which handle and particular form of blade construction, the same handle will serve for a number of blades.

This invention consists of the parts and the construction and combination of parts as hereinafter more fully described and claimed, having reference to the accompanying drawings, in which—

Figure 1 is a perspective view of the invention. Fig. 2 is an end view. Fig. 3 is a cross section through the locking device. Fig. 4 is an end view of the parts before being assembled.

A represents a flat sheet metal blade of suitable dimensions. Usually these blades, when used in a trowel, are from 10 to 12 inches in length, according to the requirements of the user.

2 is the handle which is adjustable along the dovetailed flange, or beveled back-strip 3, which is carried on the back of the blade, and extends centrally lengthwise thereof. The handle has a vertically threaded rigid stem portion 4, which is provided with a transverse dove-tailed slot, corresponding in cross section to the cross section of the dovetailed flange 3. A nut 3' screws on to the stem 4, and by simply turning this nut so as to bear down on the top of the flange, the handle is locked at any desired place along the length of the trowel. In order to exclude the cement and mortar from the threads, and allow the clamp to have a better clamping action, I provide a ring 6 which surrounds the threaded portion of the stem below the nut, and is notched at opposite sides, as shown at 7, in line with the slot 5 in the stem so as to pass the dove-tailed

flange 3. When the nut is screwed down, it acts on this ring, which in turn coacts with the undercut edges of the flange 3, and conjointly with the dove-tailed slot 5 to securely lock the handle to the blade. The blade is quickly removed or reset by simply slacking up on the nut. By means of this handle and special locking arrangement, a single handle serves for a number of blades. Manifestly, the same locking arrangement may be used with tools other than trowels.

Having thus described my invention, what I claim and desire to secure by Letters Patent is—

1. An improved trowel consisting of a blade having a strip on its back extending longitudinally along the central portion thereof and having a dovetailed form in cross section; a handle having a grip portion arranged substantially parallel with said strip and spaced therefrom, said handle having a portion turned toward the flange and externally threaded and forming a stem, said stem having a transverse slot conforming to said flange and slidably receiving the latter; a ring loosely surrounding the threaded portion of the stem; and a nut on the threaded portion of the stem having its inner side adapted to bear upon said ring and thereby tend to lift the stem in a plane perpendicular to the blade and to cause it to fixedly clamp the flange.

2. In an adjustable trowel for applying plastic material, the combination of a blade having a flange on its back surface, and a handle slidably mounted on said flange and externally threaded, of a loose ring inclosing the threads on the handle and preventing the admission thereto of the plastic material, and a nut operable on the threads of the handle and adapted to seat upon and close the open top of the ring, said ring serving as a fixed fulcrum for the nut and having its lower end bearing against the back of the blade.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ROBERT W. LINVILLE.

Witnesses:

CHARLES EDELMAN,  
NAU.