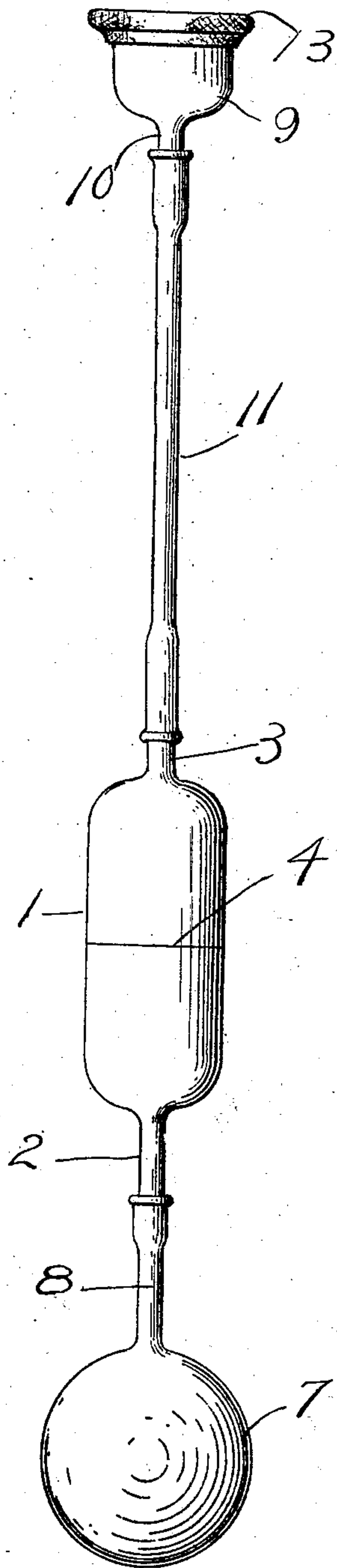


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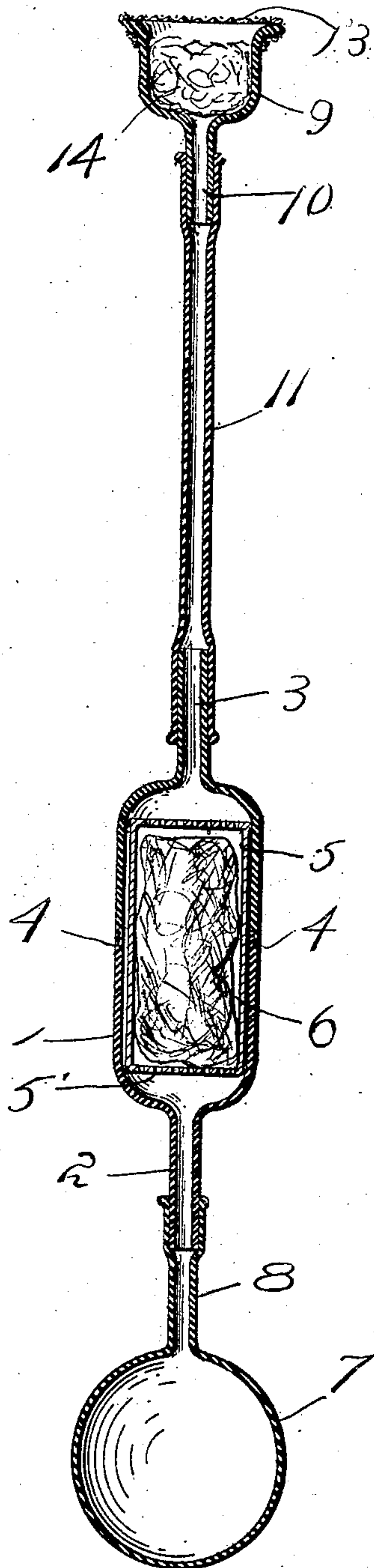
PATENTED APR. 7, 1908.

E. M. JEFFERSON.  
DEVICE FOR APPLYING COUNTER IRRITANTS.  
APPLICATION FILED MAY 6, 1907.



Witnesses  
J. C. Simpson.  
Arthur W. Crossley.

Fig. 1.



Inventor  
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Fig. 2.

By *Samuel J. ...*

Attorney S.



# UNITED STATES PATENT OFFICE.

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## DEVICE FOR APPLYING COUNTER-IRRITANTS.

No. 884,160.

Specification of Letters Patent.

Patented April 7, 1908.

Application filed May 6, 1907. Serial No. 372,211.

*To all whom it may concern:*

Be it known that I, EDWARD M. JEFFERSON, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Devices for Applying Counter-Irritants; and I 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.

This invention has relation to instruments that are employed to apply counter-irritants in the form of nebulized medicaments to the skin of the human body to alleviate such pains as may be reached by the method indicated.

It is the purpose of my improvements to provide an instrument by which powerful medicaments may be employed and thorough nebulization effected in their application, and by which, also, the application may be readily distributed over as large an area of the surface of the body as may be desired.

The nature of the invention is fully and clearly ascertainable from the device portrayed in the annexed drawings, forming a part of this specification in view of which it will first be described with respect to its construction and mode of employment and then be pointed out in the subjoined claims.

Of the said drawings Figure 1 is a side elevation of the instrument. Fig. 2 is a longitudinal central sectional view of the same.

Similar numerals of reference designate similar parts or features, as the case may be, wherever they occur.

In the drawings, 1 designates a cylindrical chamber composed of hard-rubber having small tubes 2 and 3 integrally connected with its ends to which soft-rubber tubes may be connected by stripping the ends thereof thereover, as is usual. The tubular portion 1 is connectibly divided centrally, as at 4, where it is provided with screw-threaded means to join the two parts when the instrument is in use.

The reason for arranging for the division of the cylinder 1, as stated, is for the purpose of introducing therein a cylinder 5 having foraminous ends 5' composed of hard rubber or aluminium, filled with a sponge, 6, saturated with a suitable medicament to be

vaporized by the instrument. The two parts of the cylinder 1 are, of course, rejoined after the cylinder 5 is introduced therein.

7 designates an air-bulb of usual construction which is connected with the tube 2 at one end of the cylinder 1 through the medium of a soft-rubber tube 8.

A bell-shaped device 9 having a hollow stem 10 communicating with the interior of the said device is connected with the cylindrical body 1 through the medium of a flexible rubber tube 11 secured on the stems 3 and 10, in the usual way. The said bell-shaped device may be composed of hard-rubber, aluminium, or other suitable metal, and has its mouth covered with flannel or felt 13 and its interior filled with sponge or cotton 14. This construction is provided in order that the fumes or nebula escaping from the mouth of the bell-shaped device will be divided as nearly as possible into atoms, so that they may not act too severely on the skin of the patient.

The medicament with which the sponge in the cylinder 5 is saturated is a counter-irritant and rubefacient that will relieve such pains as may be reached through the skin by counter-irritation, and being oftentimes too severe in its effects when applied in bulk directly, it becomes necessary to vaporize or nebulize it as far as practicable before it is applied in order to avoid the burning and blistering effects of plasters, liniments and blisters.

By employing a relatively long flexible tube between the applying device 9 and the cylindrical body 1 the former can be moved about with the greatest readiness, while the bulb can be kept at a substantially fixed place.

It will be understood that by squeezing the bulb and forcing the air out through the tubes and medicated sponges and covered end of the applying device 9, the medicament will be finely nebulized and be forced on the skin of the patient where the device 9 is applied.

What is claimed is—

An instrument for applying counter-irritants to the skin of the human body, comprising a hollow cylinder capable of being opened, a sponge-containing cylinder having foraminous ends, loosely supported in said body, a compressible air-bulb, a flexible tube

connecting the latter with one end of the cylindrical body, a bell-shaped applying device having its mouth covered with a sheet of fibrous material, and a relatively long flexible  
5 tube connecting the applying device with the other end of the body, permitting the applying device to be moved about without moving the said body or bulb, and applying the

medicament at all times in a nebulous condition.

In testimony whereof, I affix my signature, in presence of two witnesses.

EDWARD M. JEFFERSON.

Witnesses:

DANIEL J. CAMPBELL,  
J. K. WARD.