

(No Model.)

J. T. LISTER.
INCANDESCENT LAMP.

No. 599,002.

Patented Feb. 15, 1898.

Fig. 1

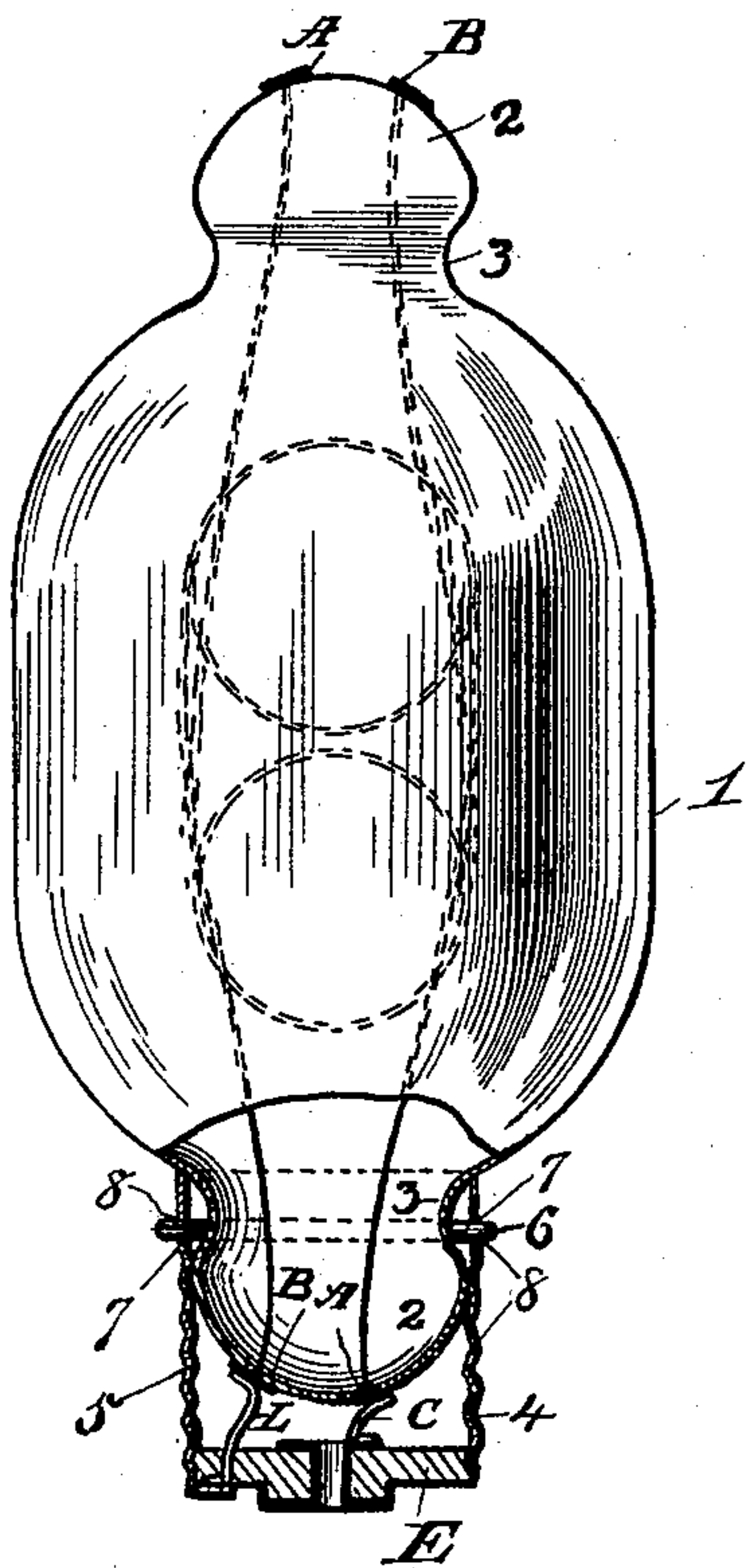
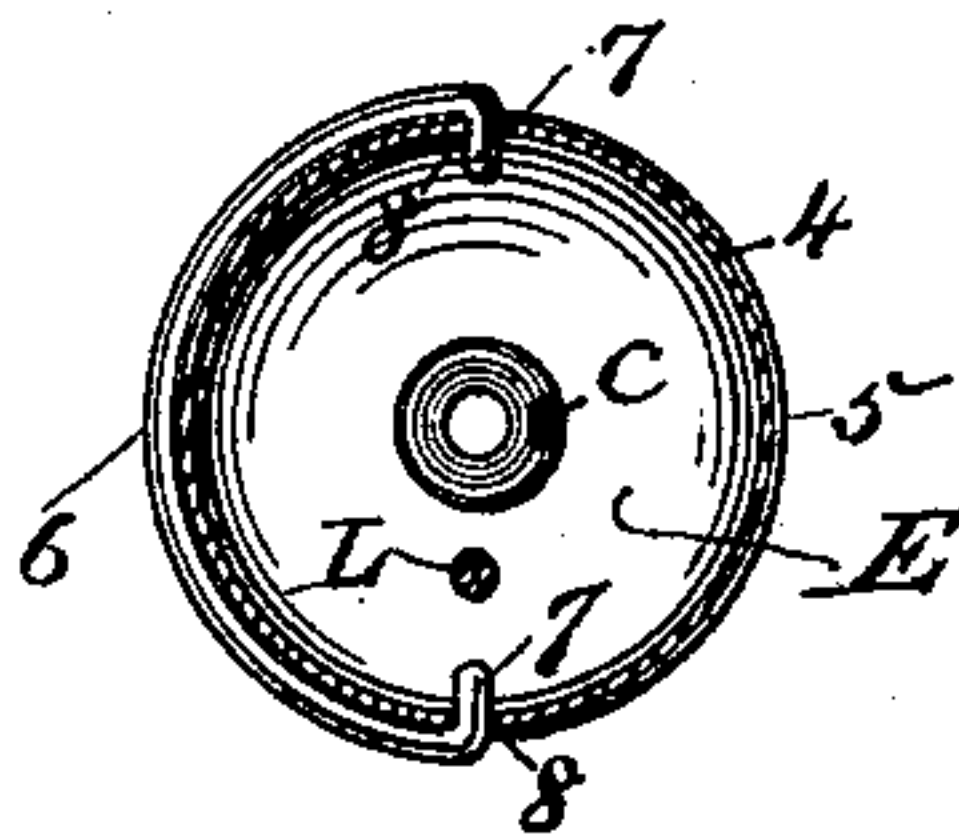


Fig. 2



Witnesses
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JOHN THOMAS LISTER, OF CLEVELAND, OHIO.

INCANDESCENT LAMP.

SPECIFICATION forming part of Letters Patent No. 599,002, dated February 15, 1898.

Application filed October 14, 1896. Renewed January 17, 1898. Serial No. 667,004. (No model.)

To all whom it may concern:

Be it known that I, JOHN THOMAS LISTER, a citizen of the United States, and a resident of Cleveland, county of Cuyahoga, State of Ohio, have invented certain new and useful Improvements in Incandescent Lamps, of which I hereby declare the following to be a full, clear, and exact description, such as will enable others skilled in the art to which it ap-
10 pertains to make and use the same.

My invention relates to improvements in fittings for incandescent lamps; and the objects of the invention are to provide means for detachably attaching a cap to the lamp-shell and thereby making the necessary electric connections with the lamp-socket.
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My invention, further, is adapted for use with a lamp previously invented by me in which the shell extremities are correspondingly shaped to receive the cap at either end and provided each with the terminals of an incandescent filament.
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My improved cap can be interchangeably secured to either extremity.

25 My invention consists in the combination, with the annularly-recessed extremities of the shell, of a cylindrical cap and clamping-spring and in the arrangement therewith of the circuit and lamp terminals and construction of details, as hereinafter described, shown in the accompanying drawings, and specifically pointed out in the claim.
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In the drawings, Figure 1 is a side elevation of the lamp, partly broken away to show the filament-terminals. Fig. 2 is a transverse section of cap, showing the clamping-spring.
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In the views 1 is the shell, provided with slightly projecting and rounded extremities 2, annularly recessed at 3.

40 4 is a cylindrical cap exteriorly screw-threaded at 5 for attachment to the lamp-socket.

6 is a curved steel spring inserted at either extremity 7 in diametrically opposite openings 8 in the cap. As shown in Fig. 1, these 45 extremities project into the annular recess 3 in the shell extremity and tightly secure the cap thereon, while a slight pull upon one side will detach the cap. Both extremities of the shell being alike, the cap can readily be at- 50 tached to either, or two caps may be employed to permit the use of both filaments, and thus obtain a light of double strength.

The filament-terminals A and B in the lamp are provided with expanded electrodes upon 55 the outer surface of the shell, which are engaged by the spring-electrodes C and L in the cap, insulated at E from one another.

I believe myself to be the first to employ an independent cap for lamp-shells and can utilize the same in a lamp provided with only one filament by adapting the shell to its reception.
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Having described my invention, what I claim as new, and desire to secure by Letters 65 Patent, is—

In an incandescent lamp, the combination with the annularly-recessed extremities of the shell, of a cylindrical cap therefor adapted to fit interchangeably over either extremity, a 70 pair of filament electrodes extending through each shell extremity, corresponding electrodes adapted to engage the pair of filament electrodes when the lamp is in place, and means for securing the cap upon the shell extremity 75 consisting of a wire spring, partially encircling the cap, and provided with inwardly-turned extremities which pass through the wall of the cap and enter the annular recess in the shell, substantially as described.

JOHN THOMAS LISTER.

Witnesses:

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