(No Model.) 2 Sheets—Sheet 1.

C. O. PELLIKAN.

LAMP.

No. 456,963. Patented Aug. 4, 1891.

Fig. 1.

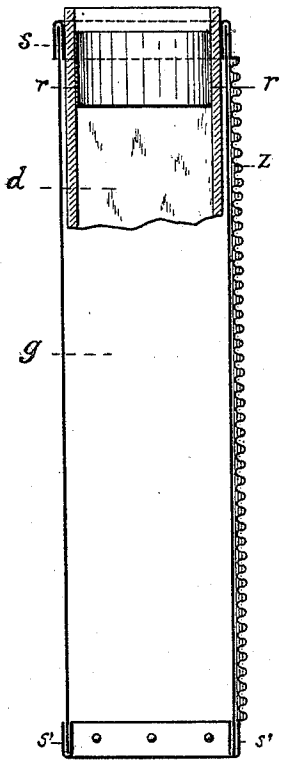


Fig. 2.

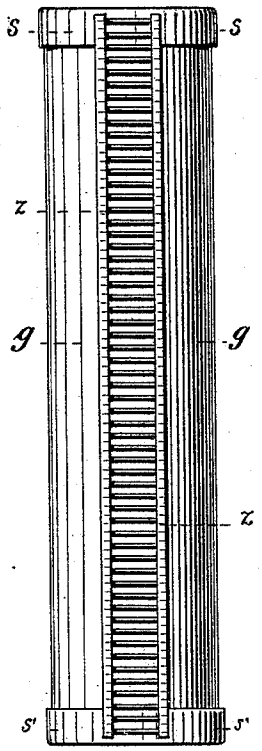


Fig. 3.

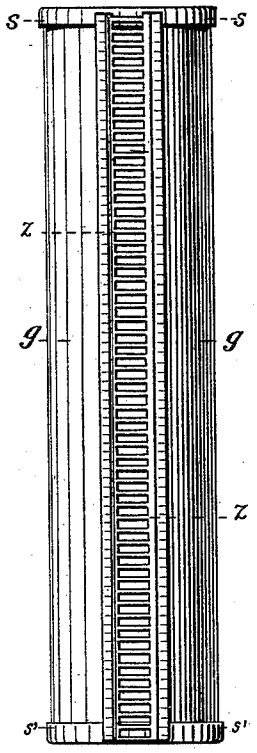
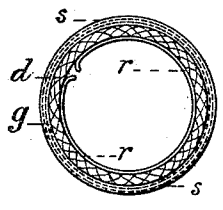
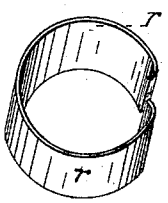
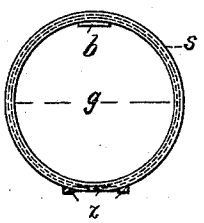


Fig. 5.







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(No Model.) 2 Sheets—Sheet 2.

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Fig. 4a

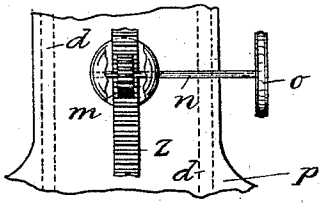
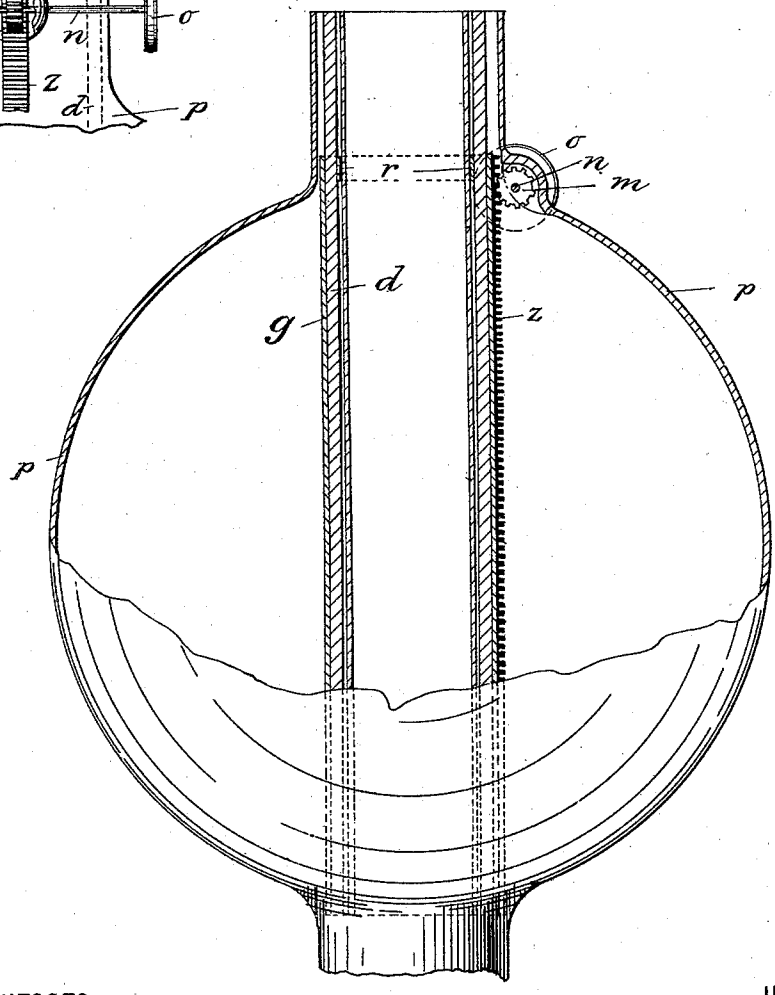


Fig. 4.



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UNITED STATES PATENT OFFICE.

C. OTTO PELLIKAN, OF VIENNA, AUSTRIA-HUNGARY.

LAMP.

SPECIFICATION forming part of Letters Patent No. 456,963, dated August 4, 1891.

Application filed June 22, 1887. Renewed June 5, 1891. Serial No. 395,184. (No model.)

To all whom it may concern:

Be it known that I, C. OTTO PELLIKAN, a subject of the Emperor of Austria, residing at the city of Vienna, in the Empire of Austria-Hungary, have invented a new and useful Improvement in Lamps, of which the following is a specification.

The object of my invention is to provide the wicks of lamps with a non-conducting sheath which will prevent the convection of heat from the flame down into the reservoir of the lamp.

The nature of the invention consists in the details of combination and construction, substantially as illustrated in the accompanying drawings, hereinafter described, and subsequently pointed out in the claims.

Figure 1 is a side view of my device with a part broken away to illustrate the wick and the interior spring. Fig. 2 is a side view in elevation of the same. Fig. 3 is another side view illustrating a modification of my invention, more fully hereinafter described. Fig. 4 illustrates a lamp having a removable burner with my invention applied. Fig. 4ª illustrates a lamp with a fixed burner and with my device applied. Fig. 5 shows three detail views illustrating the form and operation of the ring *r*, hereinafter more fully described.

In the drawings, *g* designates a tubular sheath, which may be round, flat, oval, or prismatic. In the example of my invention here given it is illustrated as being cylindrical. This sheath may be made of any non-conducting material, such as mica, asbestus, hard rubber, and the like. When made of a material which is not of a plastic nature—such, for example, as mica—a sheet of the material is bent into the desired form, and retained in position by the end rings *s s'*. The ring *s'*, which is on the bottom end, may, if it be desirable, be perforated. This, however, is hardly ever necessary, because the unevenness of material almost always allows room enough for oil to pass under the sheath into the lower end of the wick. To further insure the permanency of this sheath, a plate is fixed over the connection formed by the two longitudinal edges. In this plate is cut the rack *z*. The spring *r*, which, as illustrated, is of annular form, is fitted to the inside of the upper part of the sheath, so that it will compress the wick, as hereinafter described.

To use this invention in the case of a lamp with a removable burner, as illustrated in Fig. 4, the lower part of the wick *d* is inserted into the sheath until there is only enough thereof without the ring *s* to pass up properly through the burner. The spring-ring *r* is then put into the inside of the wick, so that it will compress the wick against the inside of the upper part of the sheath. The part of the wick without the sheath is now inserted into the burner in the common way. The burner is then put on the lamp, so that the sheath *g* will stand upright in the reservoir around the wick a little below the burner, being retained in place by the wick, which is compressed, as before described, by the spring *r*. The pressure of this ring is sufficient to hold up the sheath, but not so much, however, but that the wick may be slipped up and down, as may be required for adjustment, without in any way disturbing the sheath. When a new wick is to be put in, the burner is taken off, the sheath taken out and arranged as before described. In the case of a lamp with a fixed burner, as illustrated in Fig. 4ª, the feed-wheel projects a little into the wick-tube, and as it is down through this tube the sheath *g* and wick *d* must pass some provision must be made to avoid the teeth of the wick-feed wheel, which would otherwise be in the way. To this end the rack *z* is provided, which is of the same pitch as the feed-wheel. When the sheath has been put on the wick, as before described, the wick and sheath are pushed down the wick-tube 2 until the teeth of the feed-wheel engage the rack. Then, by turning the feed-wheel, the sheath will be carried down until it passes said wheel and stands upright in the reservoir just below the burner and with its upper end just out of reach of the feed-wheel. Now if the feed-wheel be slowly turned the wick may be slipped either way as much as may be required for adjustment without disturbing the sheath; but if the feed-wheel be suddenly turned with a jerk in the proper direction the sheath will be brought far enough upward to engage the feed-wheel. By turning the feed-wheel the sheath may now be brought out of the lamp through the burner.

In all cases it is intended that the wick shall be adjusted for clipping and increasing and decreasing the light entirely independently of the sheath.

If the material of which the sheath *g* is made be plastic, as rubber, gutta-percha, and the like, the rack *z* may be formed in the material, as illustrated in Fig. 3, in which case the end rings *s* and *s'* may be used as illustrated in said Fig. 3, or, if the material be of sufficient strength, dispensed with entirely.

By the use of my invention as hereinbefore described the oil in the reservoir of the lamp will always be kept so cool that no vapor will be generated sufficient to produce an explosion.

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

1. The combination, with the wick of a lamp, of a sheath of non-conducting material to surround said wick in the reservoir of the lamp below the burner, a rack upon the side of said sheath to afford facility for raising it out of and lowering it into the reservoir of the lamp, and a spring within the upper end of said sheath, whereby the said wick is compressed against the interior of said sheath, all substantially as and for the purpose set forth.

2. In a lamp, the combination of the non-conducting sheath *g*, the ferrules *s* and *s'*, and the rack *z*, substantially as and for the purpose set forth.

3. In a lamp, the combination of the non-conducting sheath *g*, the ferrules *s* and *s'*, the rack *z*, the wick *d*, and the spring *r*, substantially as and for the purpose set forth.

In witness whereof I hereunto set my hand in presence of two witnesses.

C. OTTO PELLIKAN.

Witnesses:
EDMUND JUSSEN,
VICTOR TISCHLER.