

No. 875,118.

PATENTED DEC. 31, 1907.

G. J. SECKEL.
INCANDESCENT MANTLE,
APPLICATION FILED APR. 29, 1907.

Fig. 1.

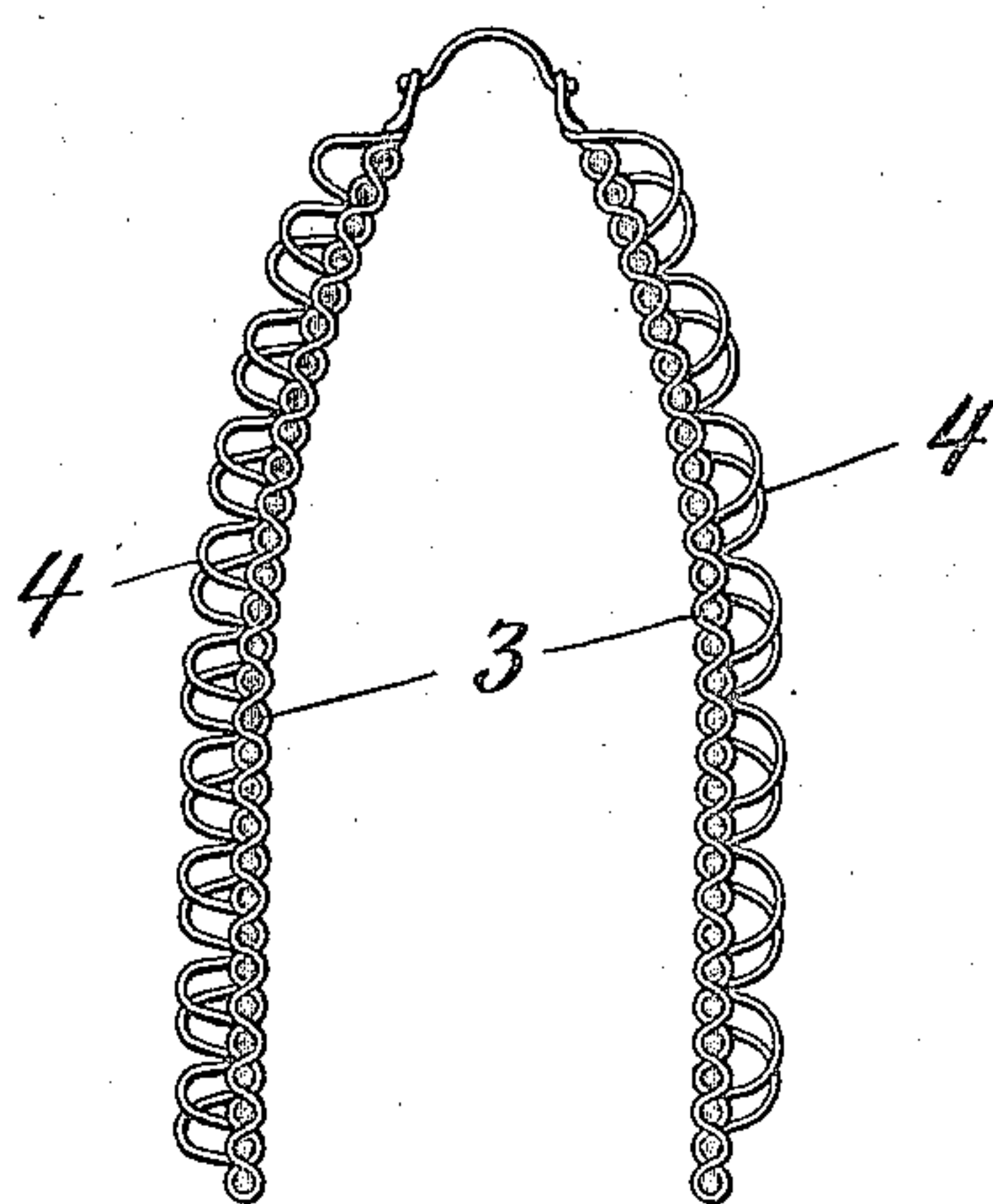
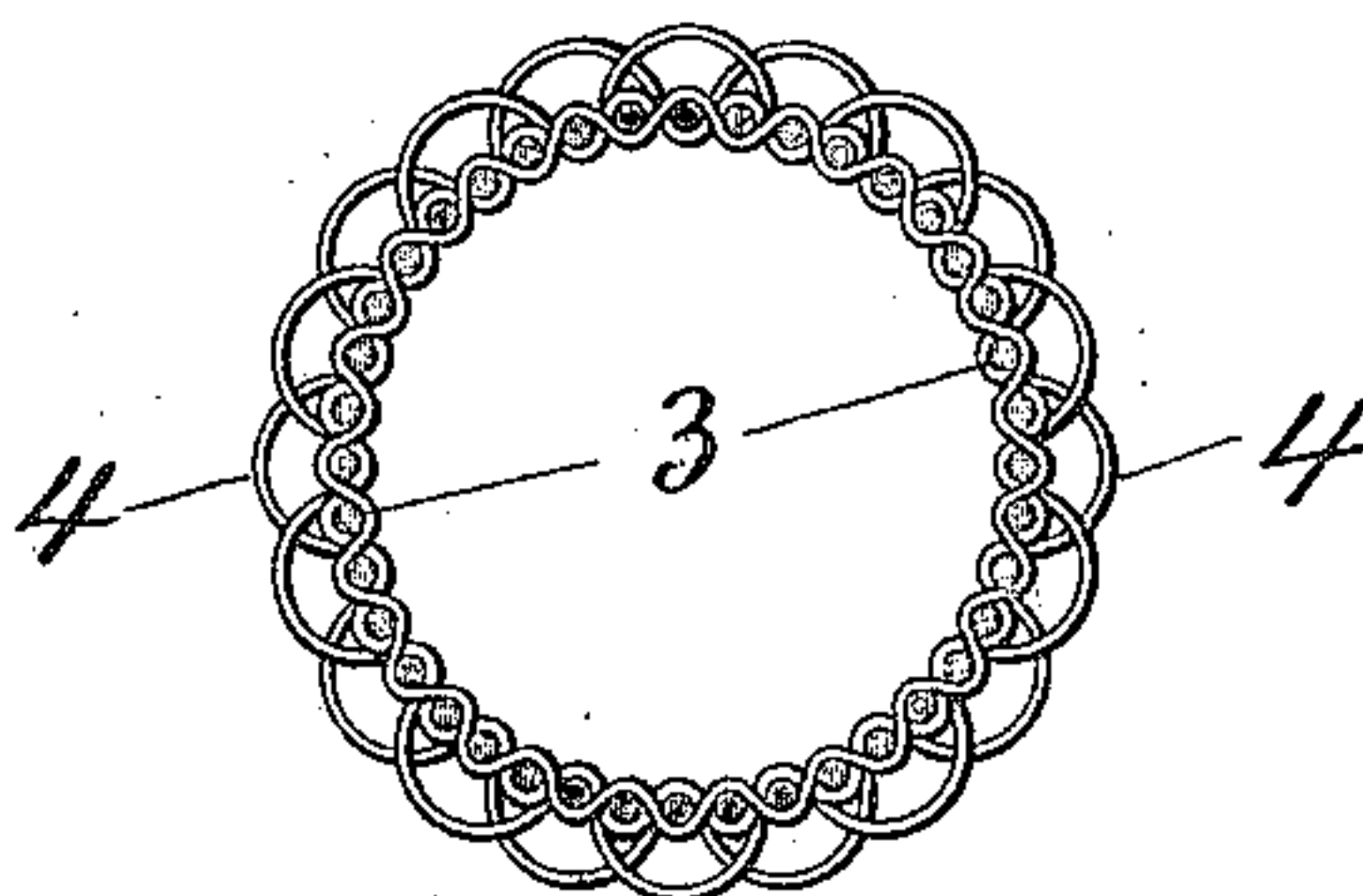


Fig. 2.



Witnesses:
William Schulz.
Adolph Winer

Inventor:
Gerrit Jan. Seckel
by his attorney Frank R. Brien

UNITED STATES PATENT OFFICE.

GERRIT JAN SECKEL, OF ENSCHEDE, NETHERLANDS.

INCANDESCENT MANTLE.

No. 875,118.

Specification of Letters Patent.

Patented Dec. 31, 1907.

Application filed April 29, 1907. Serial No. 370,957.

To all whom it may concern:

Be it known that I, GERRIT JAN SECKEL, a subject of the Queen of the Netherlands, and a resident of Enschede, Netherlands, have invented new and useful Improvements in Incandescent Mantles, of which the following is a specification.

The object of the present invention, is a fabric for incandescent gas mantles which is thereby characterized that a portion of the threads woven into the fabric are longer than others so that it is sufficiently firm and keeps its form well, but a portion of the threads are so loose that the gas can pass through readily and in this manner a large surface is presented to the gas. It is also possible to put a comparatively great number of threads in one place without at all blocking the passage of the gas.

It has been suggested from different quarters to attach loops, knots or similar formations of threads to the mantles but this would have to be effected by the knitting process and would make the mantles heavier and they would offer more resistance to the passage of the gas; a drawback to this method of making the mantles is, that the loops &c., hang free and, when in use as a mantle, they cause movement or are moved themselves and so spoil the mantle.

In the accompanying drawing: Figure 1 is a longitudinal section of my improved mantle, and Fig. 2 a cross section thereof.

In the weaving of the fabric a simple taffeta or other weave can be employed in which, with the aid of suitable contrivances, a part of the weft or warp threads, or both, remain loose. Also, by the aid of a suitable process, a lengthening or shortening of the

threads or a part thereof, can be provided for whereby a uniform fabric is attained. For example, partly mercerized threads and partly unmercerized threads could be employed. When, after the fabric is finished and dipped in a suitable liquid, the non-mercerized threads 3 shrink and the previously shrunk threads 4 are then considerably longer and project from the fabric. Either the warp or weft threads, or both, can be subjected to this treatment. The process can, if so desired be so applied that the part of the fabric which is to form the head or top of the mantle, remains flat. When the mantle is first lighted, the loose threads inside it are forced outwards.

The loose threads 4 form loops that project from the surface of the mantle and may pass over one or more of the threads 3, as shown in the drawing.

The loops formed on the mantle stand off laterally from the body thereof, so that they are entirely exposed and do not overlies those portions of the threads which form the ground work of the mantle.

Having now fully described my invention, what I claim as new and desire to secure by Letters Patent is

An incandescent mantle composed of woven threads that form the mantle-body, and integral loops which stand off laterally from such body, substantially as specified.

Signed by me at Amsterdam, Netherlands, this 28 day of March, 1907.

GERRIT JAN SECKEL.

Witnesses:

AUGUST SIEGFRIED DOCEN,
ANNA STAPELVELD.