

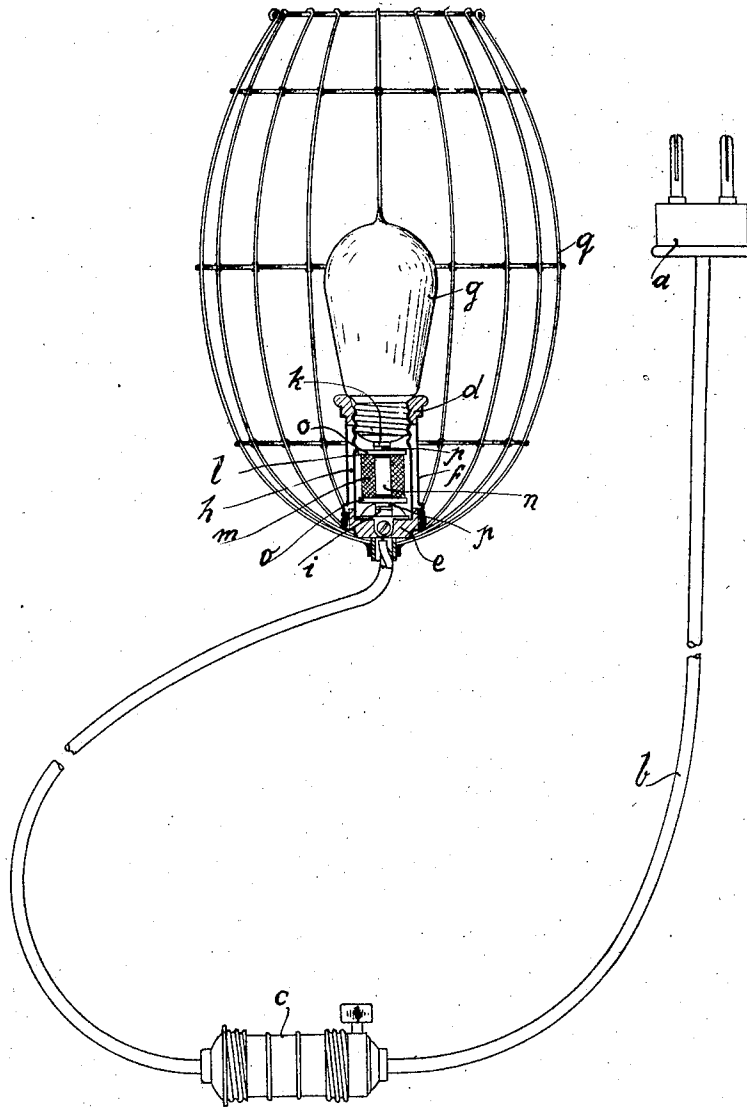
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ELECTROMAGNETIC LIGHT BATHING APPARATUS

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ELECTROMAGNETIC LIGHT BATHING APPARATUS.

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It has become known to make magnetic forces act upon the human body in simultaneously applying heat in order to prevent or heal diseases. The advantages deriving from the treatment with differently coloured light rays are also known.

This invention has for its object to utilize as intensively as possible the well known physical effects upon the human body and it utilizes for this purpose a light heating apparatus which is capable to discharge at the same time magnetic forces.

According to the invention an electromagnet is inserted in an incandescent lamp arranged in a cage between the holder or base of the lamp and the incandescent body; the coil of the electromagnet being series-connected. According to the invention the socket which encloses the magnet is made from metal and the cage which is directly mounted on the screw cap or base of the lamp is made from soft iron. The invention can be carried out in different manners and the only figure of the accompanying drawing shows by way of example the preferred form of construction in elevation, partly in section.

A lamp holder *d* of metal is fixed on the end of a flexible cord *b* the other end of which is attached to a plug *a* adapted for connection with a source of alternating current, for example, alternating current from an ordinary 110-volt light circuit. In the flexible cord *b* a switch *c* is preferably inserted. On the lamp base *e* a high metal ring *f* is screwed the current-leading threaded part of which is of such a length that a glow lamp *g* screwed into the holder leaves a gap *h* between said base *e* and the central contact *i* as well as the central lamp contact *k*. In this gap *h* an electromagnet *l* is inserted which consists of a coil *m* in which an iron core *n* is located. The electro-magnet *l* is limited at both ends by insulating pieces *o*. The contact plates *p* above said insulating pieces *o* are fixed on the coil *m* so that they are insulated from the core. The ends of the coil wire are connected with said contact plates *p*. The coil *m* connects therefore the base *e* with the central contact *k* of the lamp so that the current for the lamp must flow through the coil.

A cage *q* of soft iron is mounted on the base *e* of the lamp holder. This cage encloses the lamp and is open at the upper end

so that the lamp bulbs can be easily exchanged and differently coloured glow lamps may be screwed in. The effect of this arrangement is as follows:

The heat waves expand the parts of the human body on which the light rays are directed and the light waves act at the same time, giving the beneficial effects of a direct heat treatment, as well as the stimulating effects upon the tissues of colored light rays. Owing to the electromagnet inserted in the metal casing electric excitations are produced in this metal casing which propagate in the casing and create around the same an electro-magnet field in which the diseased part of the human body is located.

By this means as the electro-magnet and its casing and the soft iron wire cage serve as the elements of a transformer and condenser (with air as a dialectic between), eddy currents (Foucault currents) are set up by induction, which currents apparently have the effect of promoting the transference of radiant heat to the tissues by diathermic action, which, according to Joule, Foucault, d'Arsonval, Kowarschik and others cause tissue stimulation, aiding nature in the alleviation or cure of disease.

The holder which laterally encloses the magnet is made from metal on purpose in order to favour the production of Foucault currents acting on the human body, the cage of larger diameter being made on purpose from soft iron in order that by the wires of the same the dispersed lines of forces of the magnet are deflected so far they do not serve for the Foucault excitation and form small poles by magnetic induction which act also upon the light waves.

The magnetic forces produce in the treated part of the human body corresponding electric conditions. According to the searches made by Professor Finsen differently coloured lamps and consequently differently coloured light rays are used according to the kind of disease. This apparatus permits therefore simultaneously an electro-magnetic treatment, a treatment by light rays and a strong heating of the diseased organ.

I claim:—

In a device of the character set forth, in combination, a holder, a base, mounted in the holder and having a center contact, a lamp socket mounted in the holder in spaced relation to the base, an incandescent lamp mount-

ed in the free end of said socket and having a center contact, an electromagnet, comprising a wire coil and an iron core, mounted within said socket in the space between said base and said glow lamp, said coil having end contacts engaging the center contacts of the base and lamp and electrically connecting said coil and lamp in series, a soft iron cage spacedly surrounding said socket and said lamp, and means for connecting the device to a source of alternating electric current.

In testimony whereof I affix my signature.

GUSTAV VON HÜTSCHLER.