(No Model.)

J. O'MEARA.

ELECTRIC HEATER FOR DENTAL VULCANIZERS.

No. 448,743. Patented Mar. 24, 1891.

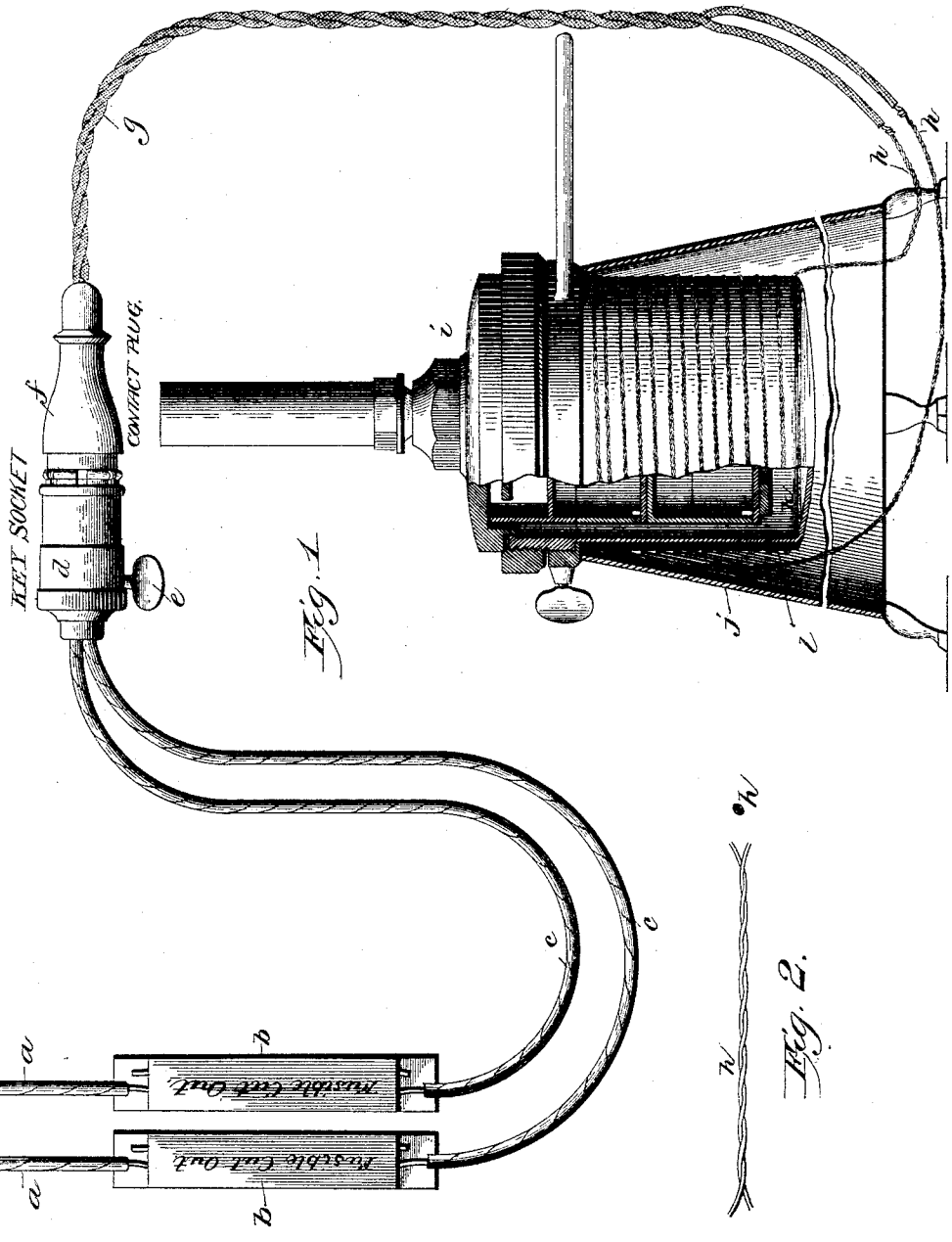


Fig. 1.

Fig. 2.

WITNESSES.
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UNITED STATES PATENT OFFICE.

JEREMIAH O'MEARA, OF NEW YORK, N. Y.

ELECTRIC HEATER FOR DENTAL VULCANIZERS.

SPECIFICATION forming part of Letters Patent No. 448,743, dated March 24, 1891.

Application filed October 22, 1890. Serial No. 368,960. (No model.)

To all whom it may concern:

Be it known that I, JEREMIAH O'MEARA, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented a certain new and useful Improvement in Electric Heating-Coils, of which the following is a full, clear, and exact description.

My invention relates to the heating of a dental vulcanizer by means of an electric heating-coil; but I wish it to be distinctly understood that my invention is applicable to other vulcanizers than those for dental purposes.

In the accompanying drawings illustrating my invention, in the figures of which like parts are similarly designated, Figure 1 is an elevation showing the dental vulcanizer partly in section, and Fig. 2 shows in elevation and cross-section a portion of the twisted wires.

In the example of my invention shown, *a a* may be the leading-in wires from an electric-light circuit.

b b are fusible cut-outs, of any approved construction, which are ordinarily interposed in light and other circuits to prevent the burning out of the instruments in case of grounding or other mishap.

c c are the distributing-wires, and I have shown them terminating in a lamp-socket *d*, of any approved construction, the said lamp-socket having a switch and its key *e* for cutting in and out the circuit. Assuming that the socket *d* contains a lamp, then for the purposes of my invention the lamp may be removed and in its place in the socket may be inserted a plug or contact-piece *f*, having conductors *g*, which conductors are split and their ends connected with the ends *h* of the heating-coil.

The dental vulcanizer *i* may be of the well-known Whitney construction, and for convenience, as an illustration, I refer to the patent of A. B. Woodard, No. 181,758, dated August 29, 1876. This vulcanizer is provided with a stand *j*, and has a steam-generator *k*. In applying my invention to such a vulcanizer I surround the steam-generator with an incombustible jacket *l*, and upon this jacket coil my wires, as shown.

The application of my heating-coil to a dental vulcanizer does not interfere in the least with the use of an alcohol or other lamp or other source of heat when the electric current is not available, or when it is desired to supplement it.

My experiments have demonstrated that the best results are obtained by twisting together a number of lengths of wire, rather than coiling a single continuous wire in proportion to the voltage; and I have also demonstrated that these lengths of wire should be fifty feet long in order to secure the best results. Theoretically it might appear that twisting together two naked wires without interposed insulation and using such twisted wires as a heating-coil would result in the burning out of the wires; but, as a matter of fact, in use such twisted wires do not injure one another in the least, but constitute a most efficient heating device.

I do not limit my invention as applied to dental vulcanizers to the use of twisted wires.

In using the term "coil" I do not wish to be understood as limiting my invention to the disposition of the heating-wires in the form of a technical coil; but I use the term generally in the absence of a better one that will describe the device.

What I claim is—

The combination, substantially as shown and described, of a dental vulcanizer having a steam-generator, a surrounding incombustible jacket, and an electric heating-coil placed around said jacket, with an electric conductor, a plug to which it is attached, and leading-in or supply-circuit wires provided with a socket with which the plug may be engaged, substantially as described.

In testimony whereof I have hereunto set my hand this 21st day of October, A. D. 1890.

JEREMIAH O'MEARA.

Witnesses:

JOHN D. HOUSTON,

J. H. CURRY.