AMERICAN ELECTRO-THERAPEUTIC ASSOCIATION.

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ELECTRO-THERAPEUTIC ASSOCIATION.

OFFICE OF THE SECRETARY,

68 MADISON AVENUE, NEW YORK.

At a meeting of the Executive Council of the American Electro-Therapeutic Association, held at the office of the Secretary, March 2d, 1893, the following resolution was adopted:

"*Resolved*, That the Secretary be instructed to prepare a circular to send to Fellows of the Association, to members of the medical profession, to electrical experts and to manufacturers of electrcial appliances for medical work, containing titles of all the committees, the members serving on them with their addresses and the matter prepared for discussion and investigation by each committee.

"And that manufacturers be asked to communicate with the members of the different committees, if they desire to have their instruments examined and tested, stating their claims and merits.

"And that physicians, electrical experts and manufacturers be asked to co-operate in making suggestions and in relating their experience and preference for instruments, with reason and data.

"And to mail this circular to all members of the Association, manufacturers, medical journals and to others who are known to use electricity extensively, asking for a speedy reply either to the Secretary or to the members of the respective committee whom it concerns."

In accordance with the above resolution the following has been prepared:

COMMITTEE ON STANDARD COILS.

DR. W. J. MORTON, 19 East 28th St., New York.

DR. A. H. GOELET, 351 West 57th St.,New York.

DR. WM. F. HUTCHINSON, Providence, R. I.

DR. G. J. ENGELMAN, 3003 Locust St., St. Louis Mo.

MR. A. E. KENNELLY, Chief Electrician, Edison Laboratory, Orange, New Jersey.

POINTS TO BE CONSIDERED.

I. Portability.

II. Practical mechanism of machines as adapted to physicians' use.

III. Range and rate of vibration.

IV. Electro-motive force and its range in relation to resistances to be overcome.

V. The resistance of the coil producing these electro-motive forces.

VI. The battery-power required for individual coils.

VII. Shape of the generated wave of electro motive force.

COMMITTEE ON STANDARD METERS.

DR MARGARET A. CLEAVES, 68 Madison Ave., New York.

DR. EMIL HEUEL, 352 Willis Ave., New York.

MR. W. J. JENKS, Electrical Engineer, 44 Broad St., New York.

POINTS TO BE CONSIDERED.

I. A good meter should have a clear, legible scale, fairly uniform over the range, and not crowded at different points.

II. It should be capable of being noted or observed at a distance.

III. The resistance should be low.

IV. There should be no tendency to overheat with the strongest current employed.

V. It would be advantageous to avoid a shunt, if one milliampere can be read throughout the scale.

VI. The instrument should be capable of indicating in all positions.

VII. Any instrument whose indications depend directly upon the local magnetic force is objectionable, for the reason that

its indications are liable to be affected by iron in the vicinity.

VIII. The suspended system should require as little attention as possible, either for adjustment or shipment.

IX. It is an advantage for the instrument to indicate with either direction of the current.

X. Portability.

XI. Liability to fracture.

COMMITTEE ON STANDARD ELECTRO-STATIC OR INFLUENCE MACHINES.

DR. W. J. MORTON, 19 East 28th St., New York.

DR. J. H. KELLOGG, Battle Creek, Mich.

DR. G. BETTON MASSEY, 212 South 15th St., Philadelphia.

DR. MARGARET A. CLEAVES, 68 Madison Ave., New York.

POINTS TO BE CONSIDERED.

I. Electro static machine best adapted to medical work, to be determined by its "output." Its output to be determined as follows:

(*a*) At, respectively, 100 and at 150 revolutions per minute.

(*b*) With two Leyden jars, each of whose outer metallic surfaces has the area of $4\frac{1}{4} \times 1\frac{1}{16}$ inches $= 5\frac{5}{16}$ square inches.

(*c*) With discharging-rods having ball terminals one inch in diameter and arranged respectively six inches and ten inches apart.

(*d*) Give the number of sparks per minute which will pass between the discharging-rods.

II. Give the greatest maximum length of spark with machine arranged as in Section I., except as to distance apart of the discharging-rods.

III. Give the maximum length of the brush discharge between the discharging-rods with machine arranged as in Section I., except that no Leyden jars are used.

IV. Give the maximum length of spark that may be obtained by a brass-ball electrode two inches in diameter, from a person's back, seated in the usual manner upon an insulated plat form—the platform connected to one prime conductor of the machine, the other being connected to the ground.

(*a*) With above Leyden jars.

(*b*) Without Leyden jars.

V. Kind of electro-static machine best adapted to medical work, whether a Holtz, Wimshurst, Toepler, Voss, Carré, Lewandowski, Toepler-Holtz, Wimshurst-Holtz or machine not here named, provided the type as constructed successfully fulfills requirements outlined in Section I.

VI. Does the machine preferred easily reverse its charge?
Does it maintain its charge successfully?

VII. Facility and means of charging machine under all atmospheric conditions.

VIII. Can a good meter to measure the output of the machine be suggested?

IX. Mechanical construction of machine.

(*a*) Ease of actuating machine by motive power.

(*b*) Durability of the mechanism causing the revolution of its plates.

(*c*) Durability of its construction.

(*d*) Is a glass case necessary?

X. The best means for drying the air within an enclosing glass case.

XI. The best means for absorbing the ozone and nitrogen compounds formed within a glass case.

XII. Is it not advisable to decide in a general way that no machine, the diameter of whose revolving-disks is less than 26 inches, and the number of whose disks is less than six should be recommended by this committee for medical work?

XIII. Suggestions as to a practical switch for the utilization of Morton's Static Induced and the Transformer Currents.

COMMITTEE ON CONSTANT-CURRENT GENERATORS AND CONTROLLERS.

DR. W. J. HERDMAN, 48 East Huron Street, Ann Arbor, Mich. Current Controllers and Battery Tests.

DR. ROBERT NEWMAN, 68 West 36th St, New York. Primary Stationary Batteries.

DR. D. S. CAMPBELL, Correspondence with Physicians.

R. G. BROWN, E. E., Brooklyn, N. Y. Secondary Batteries and Dynamos.

POINTS TO BE CONSIDERED.

I. Primary batteries.

Express what preference for a certain form of battery and and give reasons therefor.

Determine voltage, internal resistance current and durability.

By what accessory appliances are currents from these batteries best controlled and applied?

II. Secondary batteries.

What are the defects and inconveniences?

What the advantage over other forms?

What the ampere hours, what the constancy, voltage and action?

III. As to dynamo currents.

What the nature of the current, what its voltages, how is it modified by the form of controller under consideration. What are its physiological effects and its therapeutical application?

IV. Report new forms of batteries and improvements, with claims as to superiority over those now in use.

V. Rheostats and Controllers.

Test the various forms and devices used and recommended to modify and control currents; difference in effect produced by each, mechanically, chemically, physiologically, or therapeutically.

COMMITTEE ON STANDARD ELECTRODES.

Dr. A. Lapthorn Smith, 248 Bishop St, Montreal, Canada.
Dr. Charles R. Dickson, 263 Victoria St., Toronto, Ontario.
Dr. Plym S. Hayes, 84 Washington St., Chicago, Ill.

POINTS TO BE CONSIDERED.

I. Inactive electrodes.
   1. What is the best material in general for the ground-work of the electrode and what in special cases?
   2. How may it best be connected with its rheophore?
   3. What is the best material to cover its conducting-surface?
   4. When necessary, how may it best be insulated?
   5. In what way may it be kept warm and moist when not in use, should this be necessary?
   6. What should be accepted as standard sizes and shapes, and how best designated?
   7. What other points require to be considered?

II. Active electrodes.
   1. What is the best material in general and in special for the ground-work of the electrode?
      (*a*) When used at the positive pole?
      (*b*) When used at the negative pole?
   2. How may it best be connected with its rheophore?
   3. What is the best material to cover its conducting-surface when necessary, in general and special?
   4. How may it be insulated when necessary?
   5. What is the best form of construction where flexibility is required for tortuous canals?
   6. What shall be considered the standard shapes and sizes; what scale shall be adhered to in considering the latter; how may their surface area be estimated when they are of irregular shape?
   7. When designated by numerals as to size and surface, how may such best be expressed when stamped or otherwise marked on them?

8. How may simplicity of construction be best obtained and cost of manufacture reduced without impairing efficiency?
9. How may facility of cleansing and rendering aseptic best be achieved.
10. What other points to be considered?

III. Active and inactive electrodes.

1. Are the terms "active" and "inactive" the best standard terms we can employ?
2. In the case of both active and inactive electrodes, should not the threads of ALL screws used in construction as a means of attachment, also all plugs and sockets, etc., be of a *standard* gauge, that electrodes might be used with attachments of all makes, etc., and to facilitate repair.

Since this circular was issued slight changes in some instances have been made in the Points To Be Considered by the various Committees. A Committee on Electric Light as a Therapeutic and Diagnostic Agent was created at the annual meeting of the Association in Chicago, Sept. 12, 13 and 14, 1893.

COMMITTEE ON ELECTRIC LIGHT AS A THERAPEUTIC AND DIAGNOSTIC AGENT.

DR. PLYM S. HAYES, 84 Washington St., Chicago.
DR. MARGARET A. CLEAVES, 68 Madison Ave., New York.
DR. H. H. HAHN, 304 E. Federal St, Youngstown, Ohio.

POINTS TO BE CONSIDERED.

THERAPEUTICS.

I. How can the heat of the incandescent and arc light best be utilized in the treatment of disease?

II. (*a*) What form of apparatus is best adapted for the use of the electric light in the treatment of disease?

(*b*) Is there any difference in the therapeutic effects of the incandescent and arc lights?

(*c*) Does the coloring of the light, by causing it to pass through colored glass or similar substances, add to the efficacy of the light?

(*d*) Is the light and heat derived from the electric light different or of greater therapeutic value than that derived from any other source?

(*e*) What pathogenic germs have their growth arrested, or are killed, by continuous exposure to the influence of light?

(*f*) Can a disease produced by the above mentioned germs be modified or arrested by the continuous exposure to light?

DIAGNOSIS.

I. Illumination by means of a combination of the electric light reflectors and condensors so arranged as to furnish parallel or convergent rays of light. What form of apparatus is best adapted for general use? what for special?

II. What are the best forms of apparatus for illuminating the various cavities of the body, and at the same time enabling the physician to obtain a view of the whole or part of the cavity?

Is the heat evolved, from the lamp employed, of sufficient intensity to require especial means for its absorption?

III. To what extent is the introduction of an electric light into the various cavities of the body, in order to determine the condition of those cavities or the translucency of the surrounding tissues, of advantage?

Your prompt and full reply is earnestly solicited to any or all of the points above suggested.

MARGARET A. CLEAVES, M. D.,
Secretary.

Dec. 4th, 1893.