

Vi-Ray-O



Western Coil & Electrical Company
Racine, Wisconsin, U. S. A.

PAGE	OUTFIT	LIST
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Prices of complete therapeutic attachments
and X-Ray apparatus on application.

WHAT VIOLET RAYS ARE

The Violet Ray High Frequency Current or more commonly called the "Violet Ray" is a new phase of electricity. It is applied to any part of the human body without pain, muscular contraction or disagreeable sensation of any kind. The electrical oscillations representing the High Frequency Current follow each other with such tremendous rapidity that they out-speed our nervous sensitivity. We do not become conscious of their presence. In other words: our nerves are insensitive to the electrical oscillations of the Violet Ray. The oscillations are so rapid that they exceed sometimes many hundred thousand repetitions per second. The Violet Rays are pleasing and though most stimulating and highly invigorating to the entire system, our nerves or muscles cannot record the presence of their great power.

WHAT VIOLET RAYS DO

Violet Rays or High Frequency Currents benefit all living matter. Through the glass vacuum applicator light, heat, electric energy and ozone are created. These forces are uniformly potent in relieving and eliminating human ailments. Violet Rays present a remedy upon which we can rely. They are positive and certain in action. They will reach where medicine does not and often cannot reach—yet they cause no pain, no disagreeable sensation, no discomfort. They furnish a soothing relief. They destroy germs and have a strong power over infection.

KEEP THIS IN YOUR MIND

Do not be afraid of the Violet Ray High Frequency spray or spark. It never harms. It causes no shock. Use Violet Rays freely so you may familiarize yourself with their peculiar nature.

Violet Rays grow in their usefulness the more you study their action and effect. Make it clear to yourself what you want to accomplish. If you want a soothing effect, don't apply a strong spray by holding the applicator distant from the part to be treated; make a close contact instead with the bare skin. If you wish stimulation treat through the clothing with a current strong enough to reach your tissues. If you desire a tranquillizing effect to quiet the nervous system, do not use a current strong enough to cause irritation. If you actually want to destroy a wart or small growth, you must use an escharotic spark from a sharp point in order to obtain a cauterizing effect. Let these be the guiding principles to you and the result in the use of the Violet Rays will be surprising.

Many people, after stopping their treatments for many weeks and even months, report continual increase in health and strength. As a matter of fact, the greatest benefit comes after the course of treatment is over. This answers the question often asked as to whether the treatment does not have to be kept up indefinitely.

ABOUT MEASURING THE DOSAGE

The length of the High Frequency spray or spark is a simple method of giving an idea of the strength of the employed current. A short spark represents a weak current while a long spark can be obtained only by a strong current.

Always manage to use the applicator in such a manner that it directs the current in the most effective way. Use the right applicator for the specific purpose. Move it about when indicated and enforce its action by proper manipulation.

THE DIFFERENT WAYS OF TAKING TREATMENTS



Local Application to Face

It clears the complexion, brightens the eye and brings natural color to the cheeks

Violet Ray applications do not have to be of long duration. Comparatively short treatments repeated at convenience are very effective.

First—Local applications. They are taken or given with anyone of the specific surface or official applicators made for the purpose.

A beneficial warmth is induced by the action of the Violet Ray, the capillary circulation of the skin is stimulated. The blood supply in the treated parts is increased during the application and for some time after. Any local application with a vacuum applicator is an effective antiseptic, greatly on account of the developed ozone.

While local applications produce quickly the desired result at the treated part they also benefit to a remarkable degree the whole system. The entire body is penetrated by radiant atomized electricity restoring energy and vitality to the human body.

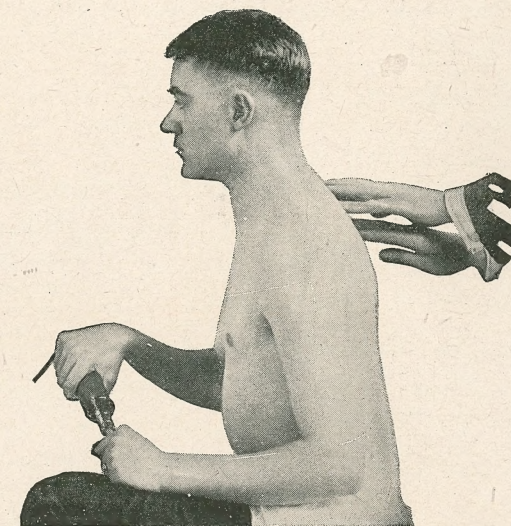
SECOND—General application—They are taken as so-called electrification treatment for the effect on your general condition. You charge your entire body with electric energy by holding an applicator in one or both hands. The effect thus obtained is sedative or quieting.

The Violet Ray High Frequency Current has the tendency to establish a normal equilibrium of the whole nervous system when the same is impaired. The arterial tension during an electrification treatment usually increases somewhat while the blood pressure falls a short time afterward. General electrification treatments are recommended in all nervous disorders and diseases.



Taking an electrification treatment by holding Electrode No. 1 in one hand. A splendid tonic to all nerves when you are too tired to rest

THIRD—Indirect application. The indirect method of applying High Frequency current combines the local and general method of treatment. It requires two people. The party to be treated holds the instrument with attached applicator. The second party then draws with either hand, finger-tips or another electrode the H. F. current to the desired spot of the patient's body. In this way a combination treatment is accomplished as the electric cellular massage of the high frequency current can be successfully combined with the mechanical massage of the operator's hands or fingers. This indirect method is considered as very effective. It presents a most agreeable way of administering Violet Rays to the eyes for instance. Also all other sensitive organs of the body can be treated easily and without discomfort by the indirect method. For the removal of warts, moles, etc., the indirect method is ideal.



A Spinal Application by the Indirect Method

PREPARATION FOR TREATMENT

Surface treatments can be given in direct contact with the skin and also through the clothing. As any clothing represents an interposed dry resistance, a treatment through the same would cause small sparks. It depends entirely on the desired effect, which way to treat and the instructions given in this booklet refer to the proper technique. If no sparks are desired any clothing covering the part to be treated must be removed.

Metallic objects as hair pins, corset steels, chains, should be taken off if they cannot be avoided in the treatment.

MILD TREATMENTS

Keep the applicator in close contact with the body at any part which requires a mild treatment.

Start with the weakest current possible. Avoid the initial little spark which occurs when you bring the applicator close to the body in making the contact. Make contact quickly and the initial spark will not be annoying. Do the same when the treatment is finished. Remove the electrode quickly. This will save you the little sparks you may otherwise feel. By no means does this little spark when making contact with the applicator and when removing it, hurt.

If you think it does, it is imaginary. Just use common sense and a little judgment and you will find that even an inch of High Frequency spark does not cause any pain.

Treatments which require a mild spray can be given through a handkerchief or sometimes through the underclothing.

Whenever stimulation is desired and sharp sparks are required the clothing need not be removed. A certain thickness of clothing always insures a uniform definite length of sparks.

Surface Applicators in direct contact with the skin usually stick. This is due to the dampness of the skin. Use a little talcum powder or lubricant to overcome it.

TO RELIEVE PAINS USE THE FOLLOWING TECHNIQUE

Always apply as much of a current strength as can be tolerated. If a person is very sensitive, keep the electrode in close contact with the painful spot and move it slowly about. If the sufferer from pain does not object to it, treat through clothing or a towel and cause a counter irritation by sparks. It depends largely on the part or area you treat what method should be employed. It is therefore necessary to adapt yourself to circumstances.

FULGURATION OR CAUTERIZATION

Removal of Warts and Moles, Etc.



Removing a Wart

If a high-frequency spark is caused to flow from any sharp point to a certain spot for a few seconds it will have a cauterizing effect. That means that by the action of the spark and its heat, tissue can be destroyed. A dry necrosis of the tissue is produced, as it is technically termed. In naevi, warts, moles, perforation of sluggish ulcers this method is very much appreciated as it is sure in action but painless and safe. A special electrode, No. 23, has been designed for this purpose. The platinum point projecting from its tip is approached to about one thirty-second of an inch to the spot to be cauterized. Sometimes close contact is sufficient. From a few seconds to one minute application of the current usually produces the desired effect. The application can be repeated after sufficient time has been allowed to determine the extent of the destruction of the tissue. This is usually several days. When the eschar separates, smooth granulating

tissue can be seen beneath. Several treatments give usually the desired results. No bleeding takes place and if the proper care and cleanliness is observed no inflammatory reaction can be noticed.



MUSCULAR RHEUMATISM OF THE SHOULDER AND NECK

This condition is best treated by applying a proper counter-irritant dosage. Lift the electrode No. 1 about $\frac{1}{8}$ of an inch from the surface or interpose a dry resistance such as clothing. Many operators prefer to cover the bulb part of their applicator with one or more layers of chamois skin. They obtain thus the same effect as by an interposed resistance. The application should last until pain is relieved. It is important that in giving the treatment, the operator should posture the muscle fibers. The parts are therefore best strained into a position where pain is felt. After a short application, freedom of movement will be re-established and comfort restored. The success of treating rheumatic pains of this nature depends largely on the proper application of the H. F. Current; that is, on posturing the muscle fibers and treating these in the right manner.

ABOUT ORIFICIAL TREATMENTS

All orificial electrodes must be lubricated before insertion. They should be properly sterilized. It is wrong to believe that orificial treatments are painful. There is in fact no other sensation than that of a beneficial warmth during the application. Orificial treatments do not last over 5 minutes. It is also advisable to move the electrode during the treatment just slightly so as to avoid its sticking to the mucous membrane. Orificial treatments require for safety's sake and for better results always two people, patient and operator. Always turn the current on after insertion of the applicator and turn the current off before removing the same.

TAKE CARE OF GLASS APPLICATORS

Cleanliness is of great importance. Inasmuch as the Violet Ray in itself is germicidal in character, all applicators should be kept clean so that no infection can be spread wherever several people may use the same Violet Ray Instrument. The wiping off of the electrodes on a towel or just rinsing in water is not enough. Use warm water and soap at least to guard against troubles. Especially in cases of skin and scalp diseases be exceptionally careful. All glass electrodes stand heating and can be boiled in water. If you intend to use some antiseptic solution for immersing the electrode, be sure that the mixture is strong enough. Benetol, crethol and other solutions are used especially with all orificial electrodes. Rinse these sterilized electrodes in warm water before using them.

DIFFERENT EFFECTS OBTAINABLE

The treatments can exert different effects according to their way of administration.

FIRST—They can be sedative or quieting. You can charge your entire body with the Violet Ray high frequency current. You can electrify yourself completely. You can calm painful sensations by sedative treatments; besides sedative action is strongly constitutional in its effect. Sedative treatments are of great benefit in all nervous ailments. They tranquillize your nerves. Sedation can be produced locally by keeping the applicator in close contact with the part to be treated. Nervous troubles are quickly and most beneficially influenced by the sedative current. A general electrification treatment refreshes the entire nervous system.

SECOND—They can be stimulative. Stimulation is produced whenever an electrode is somewhat lifted during the application.

This stimulation is caused by the many small sparks called the High Frequency Spray. They bombard the area which they cover causing a tingling but pleasant sensation. They have a beneficial heating effect too. Besides they generate ozone. Particles of this ozone are driven right into the tissues causing the ozonization of the blood. Sparks are also germ-killing and have a great power over infection.

Stimulating treatments are best produced by application through the clothing or through a towel which has been put over the part to be treated. As the length of the stimulating spray depends on the thickness of the interposed dry resistance, that is the clothing or towel, any desired effect is obtainable. From a handkerchief to a doubled Turkish towel can be used for this purpose. The use of any kind of clothes insures a uniformity in spark length which cannot be obtained in any other way. Powdering the skin with talcum powder often suffices to create the desired dry resistance. This will at the same time allow an easy



TREATMENTS OF THE CHEST IN CASES OF BRONCHITIS, PNEUMONIA, PLEURISY, OR PAINS AGGRAVATED BY RESPIRATORY EFFORTS.

The patient should continuously expand the lungs forcibly and then slowly exhale during the treatment. This shifting of the relation of the ribs to internal tissue permits the current to reach the inner organs with effects that cannot be obtained in any other way. The counter-irritant technique is often indicated in certain forms of bronchitis, and should be applied in the usual way by interposing a dry resistance, as for instance a towel.

Powdering the skin with talcum powder gives also a dry resistance often sufficient for the successful administration of H. F. Currents as counter-irritant.

The electrode No. 5 is best adapted for use in the mentioned cases. Move the same over all the surface of the chest, front and back, with posturing of muscle fibers if pain in motion exists or during expansion and deflation of the lungs. If respiration is difficult work on the chest until it becomes free from distress. Soreness along the trachea should be dispelled by continued applications.

Mild cases as described may be treated sufficiently once a day. In a more active inflammation the current can be applied mornings and nights. If a rapid rise in temperature indicates the onset of a grave disease of any kind, as pneumonia, a sharp irritating dosage is necessary till the skin reddens. Repeat this application several times at intervals of an hour until the attack is modified.

In asthmatic conditions the same technique as in ordinary bronchitis is used. Efforts should be made as to the discovery of the cause of the asthma. Benefit is always apparent during treatment and at least temporary relief can be obtained. Attacks can be averted if the current is used at the proper moment, a fact which is well worth knowing.

The H. F. Currents are a physiologic support to nerve tone, heart, eliminative functions and vasomotors and therefore can abate much of the gravity of named diseases. Recovery can be made more decisive and complete with their assistance.

sliding of the applicator. A slight perspiration results from the treatment. If the application of talcum powder is not desirable use of lubricant is recommended.

Stimulating treatments through clothing find a profound use in rheumatism, lumbago, partial paralysis, etc. Slight stimulation is also sometimes desired in skin troubles where the blood circulation is impaired. A single layer of a handkerchief presents enough resistance in such a case. Chronic rheumatic troubles however may require the use of several layers, at least two of a turkish towel.

Long sparks from the applicator will cause a counter irritation. Counter irritation relieves wonderfully quick pains of many sorts. It is often the very welcome means to kill the dreadful pain of a sudden toothache. You will appreciate this pain relieving quality of the Violet Ray in sprains, bruises, etc. Counter irritating applications are better, swifter, and more effective than plasters and liniments. In fact they replace them entirely. Stimulating treatments are long lasting in their effects. They are not like drugs or a glass of wine because they are not followed by a reaction. They do not create any habits.

RESULTS OF VIOLET RAY TREATMENTS

When you apply the H. F. Current directly or indirectly, either as a sedative or as a stimulant you obtain a powerful tonic to all nerves.

It tones nerve centers and the nerve endings and all nerve functions, the muscular fibres and blood vessels and capillaries and the force of the heart.

It gives ozonizing tonic to the blood and increases the number of red corpuscles in the blood.

It is a promoter of the metabolic exchange, a tonic to the energies of respiration, a destroyer of uric acid, a tonic to the completion of combustion in the tissues and the production of heat energy and the maintenance of normal temperature.

It is a tonic to the secretion of glands and the excretory functions of all organs of the body and to the skin, and a tonic to appetite.

It fills you with the radiant energy which increases your vitality—your efficiency.

It is a natural foe of disease.

THE MOST IMPORTANT THERAPEUTICAL INSTRUMENT

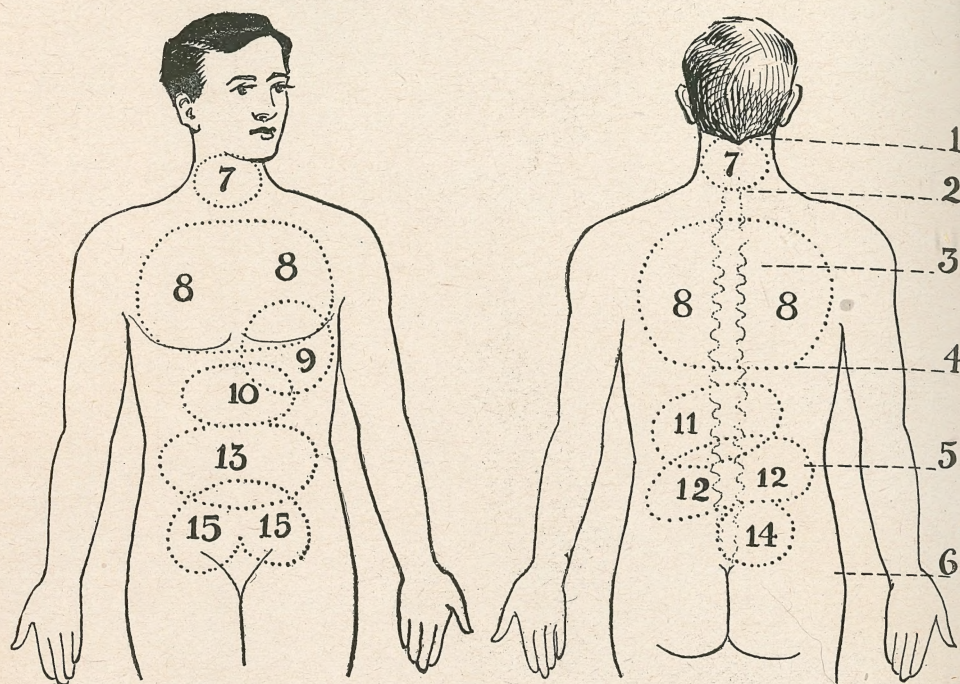
No other appliance in modern therapeutics has become of such necessity, importance and so great a value to physicians and suffering humanity as a Violet Ray Generator. It efficiently and conveniently directs the marvelous power of the new phase of electricity in an agreeable manner without any bad effects. Violet Ray High Frequency Generators made by the Western Coil & Electrical Co., Racine, Wis., U. S. A., are known the world over to be the best. This Company is the largest manufacturer of portable High Frequency Generators and is thereby placed in the position to give its customers better products at the best possible prices.



TREATMENTS OF THE KNEE AND OTHER JOINTS

In a local application of the knee-joints (or any other joint) for any form of arthritis or synovitis, whether rheumatic, gouty or traumatic, the part should be exposed and the electrode No. 1 moved slowly over the affected area. Localize the action of the current upon each point wherever advised, so that full benefit may be obtained. If Counter-Irritation (for the relief of pain and in other instances) is needed, a dry resistance, such as a turkish towel, should be interposed and the electrode kept moving. Where muscular conditions are to be treated the muscle fibres should be put on the stretch until pain is felt. The current is then applied till pain ceases entirely. Repeat your treatments in accordance with results obtained.

THE VITAL ORGANS



- | | | |
|------------------------|---------------------|--------------|
| 1. Base of Brain. | 6. End of Spine. | 11. Liver. |
| 2. Center of Neck. | 7. Neck and Throat. | 12. Kidneys. |
| 3. Middle of Shoulder. | 8. Lungs. | 13. Bowels. |
| 4. Middle of Back. | 9. Heart. | 14. Spleen. |
| 5. Hips. | 10. Stomach. | 15. Loins. |

The physiologic-medical properties of the Violet Ray High Frequency Current are of general benefit to all the vital organs of the body. Violet Ray applications represent a great aid toward improvement in the functions of these important organs. They increase the elimination of all poisonous products from them. They vitalize them in general. They flush the blood through all the capillaries, open the sweat-glands, relieve congestion and cause a general sensation of warmth and well-being. We obtain with Violet Rays a general systemic vitalization, which we can not obtain by any other agency.

The above illustration shows the location of the vital organs; it demonstrates clearly where the Violet Ray High Frequency Current can be applied and can be made to reach these organs.

HOW TO TREAT WITH VIOLET RAYS

The following instructions are written in the simplest possible way. They will give excellent results—if properly followed.

ABSCESSSES—Keep electrode No. 1 in contact with the skin. Move it gently over the whole affected area for 3—5 minutes. The current must not be too strong. If applied to a developing abscess, its growth can be arrested.

ACNE, (Pimples)—Treat the entire surface for about 6 minutes with Electrode No. 1. About the nose and other sharp angles a smaller electrode (No. 2) is more desirable. Where pustules are forming raise the electrode slightly to give a short spark for a short time. If many pustules are present treat through a thin towel or folded handkerchief. This has somewhat of a cauterizing effect and will soon cause the pimples to ripen and disappear. When the treatment through an interposed dry resistance, as a towel or handkerchief seems disagreeable, apply the applicator No. 1 or No. 2 direct, but powder the skin with talcum powder. This usually suffices to create a dry surface and at the same time prevents the sticking of the applicator to a damp skin.

ALOPECIA, (Falling Hair)—Use a weak current at first, and increase to a medium strength later on, with electrode No. 6 or No. 7. Pass the comb back and forth over the entire scalp for about 4 minutes every day. Use the same treatment for baldness due to sickness and for gray hair in order to restore it to its natural color.

ALCOHOL AND DRUG ADDICTIONS—In alcohol, morphine or opium habits, apply a strong current over liver, solar plexus and spine, for 6 or 8 minutes daily. In cocaine habits use a mild current to the soles of the feet, arms and legs until reddening results. All these applications should be made through some interposed towel or clothing. Never apply the H. F. current through shoes. Short sparks are best for all treatments in these cases.



Application to chest in Anaemia makes the heart aglow—the body atingle

ANAEMIA—General applications to the naked surface of the body, which should be dried and powdered with talcum powder, over the chest, abdomen, back and spine, covering the whole as thorough as possible, increase the oxygenation of the blood. Treat with No. 1 electrode for 8—10 minutes. The regenerative forces for the production of new blood cells are stimulated to greater activity by the High Frequency current. The oxygen carrying powers of the red blood corpuscles is increased. Ozone Inhalation with the Ozone Generator is very helpful. (See electrode catalogue for Ozone Generator).

ARTERIOSCLEROSIS, (Hardening of the Arteries, High Blood-pressure)—Daily treatments of about 8 minutes duration will serve to lower the blood pressure. High Frequency currents have the power of making calcareous deposits soluble. Electricity seeks the path of least resistance, which in

the body is in the veins, as they contain the conductible carbonates and impurities which are most in need of purifying action. Apply electrode No. 1 or No. 5 over the body generally, using a medium current strength.

ASTHMA—Apply electrode No. 1 or No. 4 over the chest and No. 8 to throat glands for about 6 minutes. Use a strong current if it can be tolerated. Also use the Ozone Generator (see electrode catalogue). If treatment is taken when attack is near, much relief can be had and sometimes the attack can be entirely averted.

ATAXIA—The current should be as strong as it can be tolerated for this treatment. Apply with electrode No. 12 (or 1) to the entire spine, over buttocks, abdomen and back of legs. Daily treatments lasting about 10 minutes necessary at first. They can be gradually decreased with the progressing improvement to about two a week.



Relieving a Backache

BACKACHE—Treat sore muscles in back with Electrode No. 1 and cover the entire painful area. This will relieve all pain. As backache may have different causes as weakness of the bladder or sexual organs, lumbago, rheumatism, kidney disease, it is of importance to treat the cause also.

BARBERS ITCH—Treat the affected area daily with No. 1 electrode for about 5 minutes. Small sparks over the whole surface and towards the edges are very helpful. Treatment through a handkerchief is advisable. You cannot remove it in one treatment, therefore be patient.

BIRTH MARKS—Applications with No. 1 electrode repeated at convenience and often, using a medium current will, if used with judgment, remove them.

BLADDER DISEASE, (Cystitis)—Treat with electrode No. 1, 4 or 5 the area over the bladder for 5—7 minutes twice a

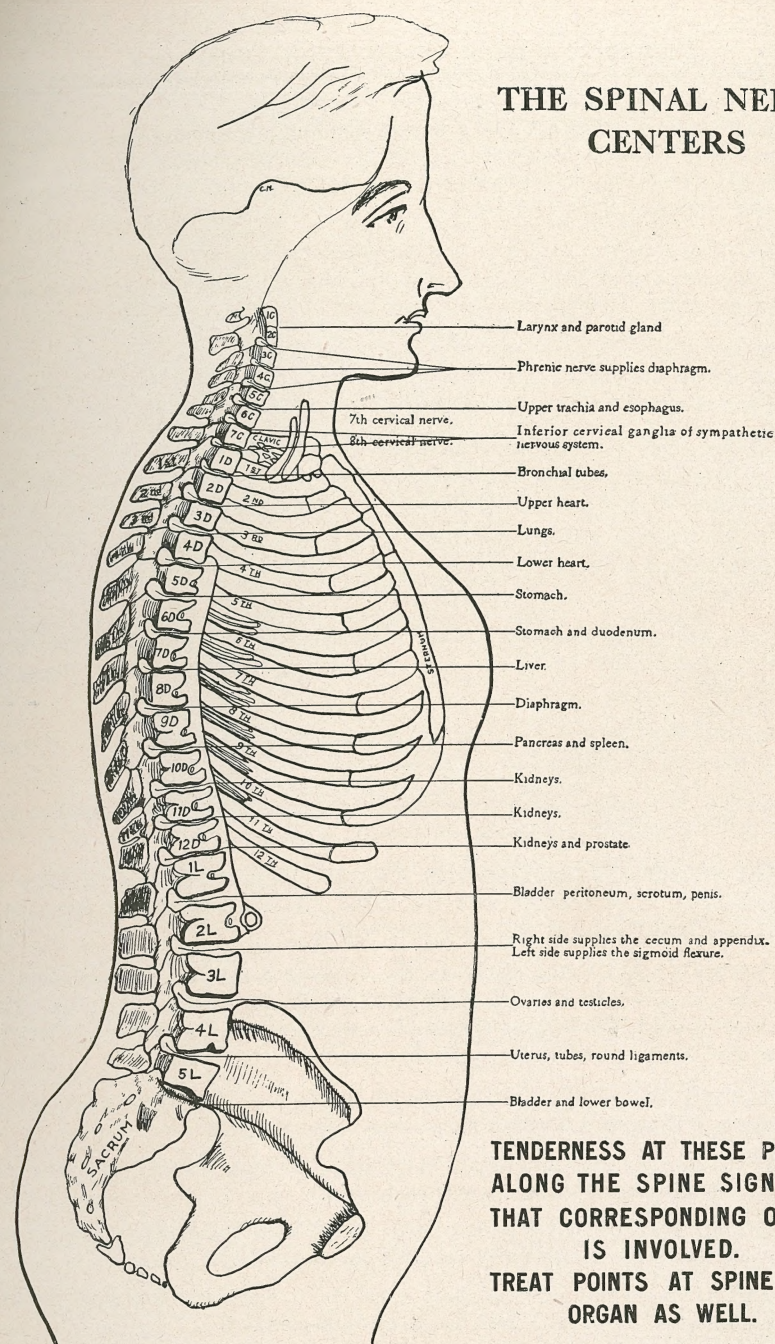
day. The urine will clear fast. Relief is usually quick with strong current.

BRONCHITIS—Short sparks applied through a Turkish towel with electrode No. 4 or 5 over the chest and back, sufficient to produce a reddening of the skin, help wonderfully. Use the Ozone Generator for inhalations. (See electrode catalogue).

BLACKHEADS—A mild to medium current applied with applicator No. 1 for 3—5 minutes at least every day once will soon remove blackheads. Use talcum powder or High Frequency lubricant over the area you intend to treat.

BRAIN FOG—Use applicator No. 1 over the forehead and eyes, back of head and neck and also down the spine for about 8 minutes. Relief is sure. Ozone-Inhalation for about 3 minutes will greatly help the condition and invigorate the whole system. (See Ozone Generator in Electrode Catalogue).

THE SPINAL NERVE CENTERS



**TENDERNESS AT THESE POINTS
ALONG THE SPINE SIGNIFIES
THAT CORRESPONDING ORGAN
IS INVOLVED.
TREAT POINTS AT SPINE AND
ORGAN AS WELL.**

The Backbone or Spinal Column contains the Spinal Cord. The Spinal Cord is an extension of the Brain. From it the nerves branch out and go to all parts and organs of the body.

We can stimulate by Violet Ray treatments these Spinal Nerve Centers and cause the parts and organs to respond which are controlled by them.

When an organ has lost its natural tone or shows impaired activity a High Frequency application to the correct spinal region is reflexed to the organ thereby causing it to regain its normal state and perform its duty.

COLDS IN HEAD—Apply No. 1 electrode over nose, above eyes and the sides of face. Use a medium current about twice or 3 times a day and take also Ozone Inhalations for several minutes with the Ozone Generator. (See Electrode Catalogue). Ozone Inhalations are very beneficial in this case. Physicians use also successfully electrode No. 15 and No. 31 in nostrils.

COLDS IN LUNGS—Treat the chest and back in the same manner as explained under Asthma. Take Ozone Inhalations repeatedly for several minutes. (See Electrode Catalogue for Ozone Generator).

CONSTIPATION—Apply a strong current with No. 4 or No. 5 over the entire abdominal area. Treat for at least 6 minutes keeping the electrode moving at all times. Physicians use electrode No. 19, No. 20, No. 21, No. 34 or No. 35 to great advantage. These electrodes should be lubricated before insertion into the rectum. 5 minutes of orificial treatment is sufficient.

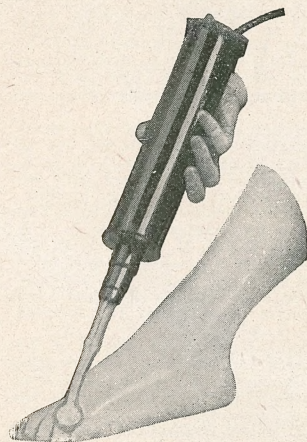
CONSUMPTION—The party to receive the treatment must be stripped of all clothing to the waist line. The skin of the trunk of the body should be dried and powdered with talcum powder all over. Use electrode No. 5 and apply the High Frequency Current to the chest. Start with medium current strength and increase to heavy discharge by and by. Move the applicator also towards the throat. This starts the secretory glands to action and improves the nutrient blood-supply through the tissues. Fill your lungs as much as possible by deep

breathing. Do this repeatedly. Move from chest towards both sides of body and also gastric region. Then after 5—6 minutes of front application have the back treated. A strong current should be used over the shoulder blades, the spinal nerve centers and the kidneys. Ozone inhalation using the Ozone Generator (see Electrode Catalogue) is of the greatest importance. It is in tubercular conditions where Ozone Inhalations do the best work.

CORNS—Take electrode No. 1 or No. 10 and turn it on its edge so that the spark passes from its edge instead from its face and hold it about $\frac{1}{8}$ " from the corn. Allow short sparks to pass into the corn for a few seconds only. Repeat this in a day or two. Applications with No. 10 which is hollow shaped, direct over the corn in close contact for 2 or 3 minutes are very pain-relieving.



Relieving a Severe Cold



Removing the Pain of an Aching Corn



EXTERNAL TREATMENT OF AN OVARY OR ANY ORGAN OR TISSUE WITHIN THE ABDOMEN OR PELVIS
Neuralgic-pains, tenderness, irritation or congestion within the abdomen or pelvis are treated externally by surface applications. It is necessary, however, to use a certain amount of pressure on the glass applicator so as to better reach the organ or part to be treated and to come as close as possible to the actual seat of the pain. The knees are preferably drawn up to bring all abdominal muscles to relaxation. The patient should forcibly exhale and retract the abdomen as much as possible. Electrode No. 13 is best adapted for above treatment. The end can be pressed down deeply into close relations with the affected part. Orificial treatments should be given through vagina or rectum whenever admissible and indicated. Pelvic abscesses are responding to treatments with electrode No. 18 or No. 36 assisted by mild external applications over the pelvic region. In pelvic adhesions intra-vaginal treatments are indicated.

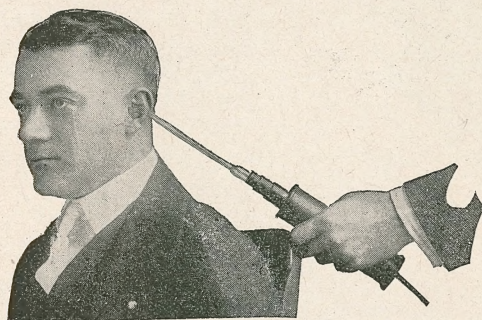
DEAFNESS—Ear electrode No. 27 gives excellent results. Use a mild current for about 3 minutes, inserting the electrode deep into ear. If the heating effect becomes too marked, interrupt treatment and repeat at convenience. Treatments twice daily are sufficient. Applications with No. 1 to the back of the ear are also helpful.

DIABETES—If proper diet is observed and application with No. 1 or No. 5 are made over the abdomen, results are gratifying in a few weeks. Apply a strong current for about 8 minutes through a thin towel every day twice.

DANDRUFF—Shampoo the scalp before treatment, dry it thoroughly and apply a medium current with applicator No. 6 or No. 7 using it in the same manner as an ordinary comb. 3 to 5 minutes are sufficient. Repeat this treatment at intervals of 2—3 days. Do not use any hair tonic.

DIPHTHERIA—Physicians treat this disease with the internal electrode No. 16 and No. 32. Applications are made for short periods as indicated by the circumstances, sometimes hourly. Electrode No. 1 is in conjunction applied to the external throat, also electrode No. 8. Ozone Inhalations have proven most beneficial. (See Ozone Generator in Electrode Catalogue).

DYSPEPSIA—Use electrode No. 1 or preferably No. 5 over the region of the stomach. Daily applications of 6 minutes will in most cases show considerable improvement. A strong current is necessary. Decrease treatment gradually, do not entirely stop with them at once. See page 15.



Treating an Earache or Catarrhal Deafness

ECZEMA—Lay a handkerchief or piece of thin cloth over the affected area and treat with electrode No. 1 through the same with a mild current at first. Increase the current strength during the treatment if it can be tolerated. If the skin itches—lift the electrode slightly from the cloth. This will bring quick relief. Daily treatments lasting 3—6 minutes effect a cure in nearly all cases.

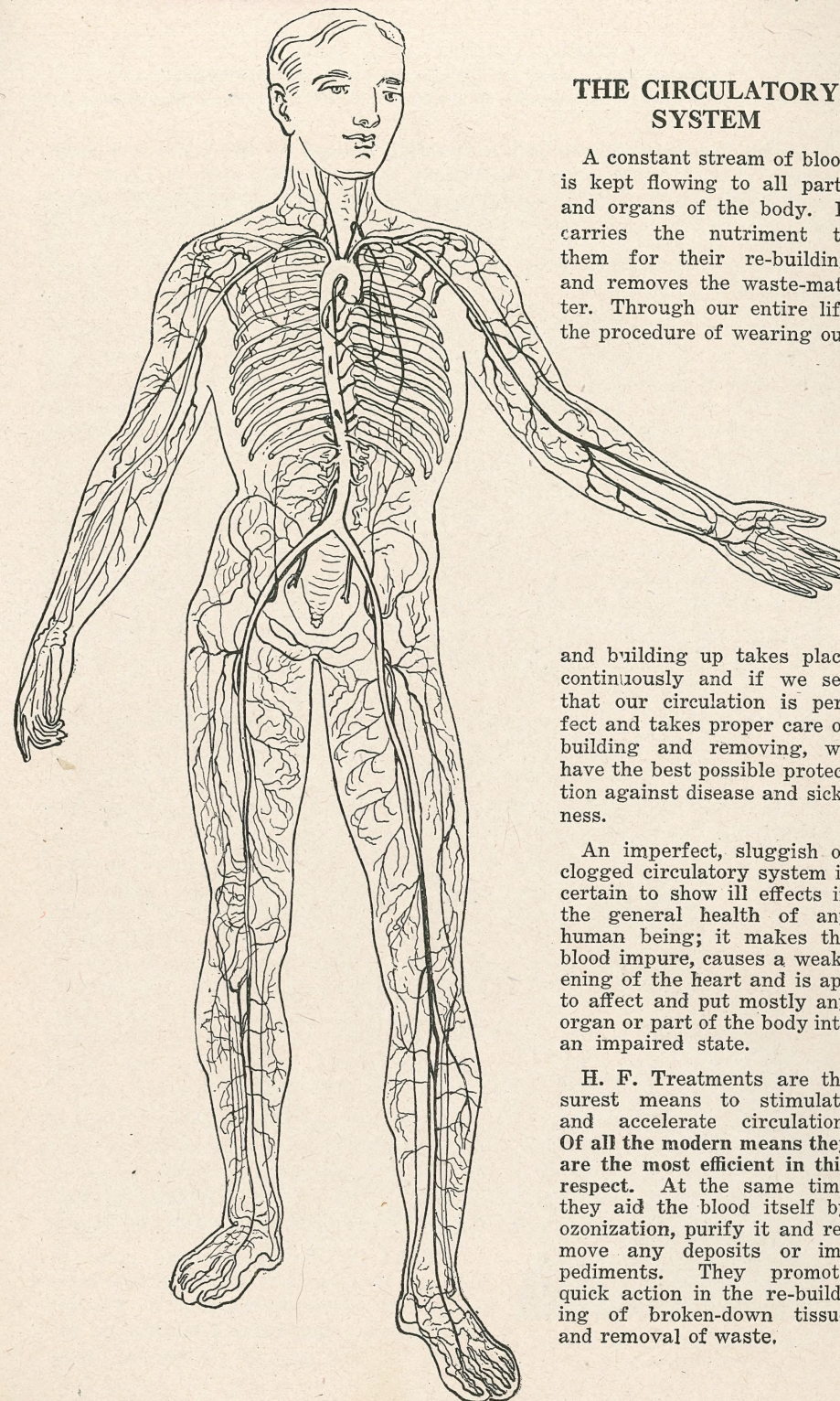
EPILEPSY—Use electrode No. 1 in contact over the brain and electrode No. 12 along the spine moving it up and down. A medium discharge for 5—8 minutes is sufficient. Repeat every other day.

EYE DISEASES—Iritis, Redinitis, Atrophy of the Optic Nerve, Conjunctivitis, Trachoma, Glaucoma, Incipient Catarract, Paralysis of Ocular Muscles,

EARACHE, EAR DISEASES—Insert electrode No. 27 and use a mild current for short periods of time. Applications to the back of the ear with No. 1 assist this treatment greatly. It may in some cases be necessary to take hourly applications. The circumstances have to dictate this necessity. If heating effect during treatment is too marked, interrupt application and repeat it at convenience.

THE CIRCULATORY SYSTEM

A constant stream of blood is kept flowing to all parts and organs of the body. It carries the nutriment to them for their re-building and removes the waste-matter. Through our entire life the procedure of wearing out



and building up takes place continuously and if we see that our circulation is perfect and takes proper care of building and removing, we have the best possible protection against disease and sickness.

An imperfect, sluggish or clogged circulatory system is certain to show ill effects in the general health of any human being; it makes the blood impure, causes a weakening of the heart and is apt to affect and put mostly any organ or part of the body into an impaired state.

H. F. Treatments are the surest means to stimulate and accelerate circulation. Of all the modern means they are the most efficient in this respect. At the same time they aid the blood itself by ozonization, purify it and remove any deposits or impediments. They promote quick action in the re-building of broken-down tissue and removal of waste.

Intra-ocular Hemorrhage have been successfully treated by the Violet Ray High Frequency current. Close eyelids and apply a mild current with electrode No. 10 or 11 for short periods, not exceeding 3 minutes at one time. Repeat as desirable.

FELONS—Treat with No. 1 electrode and a mild current in close contact daily from 4—6 minutes.

FEMALE TROUBLES—Physicians use electrodes No. 18, No. 36, and No. 37. They should be lubricated before insertion. A medium current for 5 minutes is applied. Repeat treatment as circumstances require. During menstruation an excessive flow of blood may result as High Frequency currents draw the blood. Turn the current on after insertion of electrode and turn the current off before removing the electrode to avoid unnecessary sparking.

FISTULAS—Use electrode No. 19, No. 20, No. 21, No. 35 as indicated. Lubricate it before insertion into rectum. Use a medium current for about 5 minutes daily.

FLABBY BREAST—Apply No. 1 electrode to whole surface of breast with medium current for 4—6 minutes every day once.

FRECKLES—Cover surface with gauze. Use electrode No. 1 daily from 4—6 minutes with a medium current. Results are apt to be slow, therefore be patient.

FROST BITES—No. 1 applicator with medium current strength, allowing short sparks to pass to the affected part for about 3—5 minutes every two or three hours brings lasting results in a short time.

FURUNCULOSIS—Boils, treat with No. 1 electrode. Mild or medium current strength. Inflammation ceases quickly.



Treating Goiter and Throat Trouble
with Applicator No. 8

GOITRE—Many cases yield to applications with No. 8 Electrode, using the strongest current that can be tolerated. It can be treated direct by making contact with the electrode. Sometimes it is treated through gauze. The latter way is more recommendable. Do not treat longer than 4 minutes at a time every day once. Results are usually not apparent until after the 10th or 12th treatment.

GOUT—Apply electrode No. 1 to painful area with medium current, keeping the applicator in contact but moving it slowly about. The pain may increase at first but relief will be felt after a few treatments.

GRAY HAIR—The natural color of hair can often be restored by patient treatments with Electrode No. 6 or 7. See under Alopecia. Sometimes 2 months are required for first results. Keep the scalp



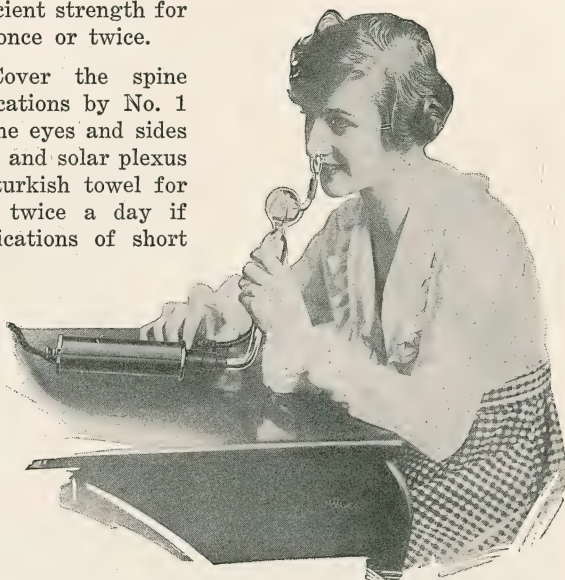
SPINAL APPLICATIONS

Every inch of the cerebro-spinal surface is accessible to the application of the stimulating H. F. Currents. They penetrate and reach the central mechanism of the body, the spinal cord. A direct and reflex stimulus can be exerted. (See page 13.) Applicator No. 12 is especially adapted for spinal treatments. Points of irritable tenderness along the spine should be treated until all irritability disappears which usually takes only a few minutes. General tonic treatments to the spine improve nutrition and nerve tone.

clean. Use a current of sufficient strength for good stimulation every day once or twice.

GRIPPE (Influenza)—Cover the spine and solar plexus with applications by No. 1 Electrode. Also treat over the eyes and sides of nose. Treatments to spine and solar plexus should be made through a turkish towel for 5—8 minutes and repeated twice a day if necessary. Intra-nasal applications of short duration with Electrode No. 15 or No. 31 and a weak current are often given by physicians in addition to the mentioned treatment.

HAY FEVER—Apply electrode No. 1 over the nose and along spine with medium current for 5 minutes and No. 15 or No. 31 in nostrils for short period of time. Applications should be of short duration but often repeated. It is advisable to anticipate the trouble and to begin treatments before attacks are expected or discomfort felt. Ozone treatments are of the greatest benefit.



Taking an Ozone Treatment for Hay Fever, Catarrhal Conditions, Lung Troubles, etc.
(See also Electrode Catalog)

HEADACHES—They are from varying causes. If relief is not felt by applying No. 1 electrode to the seat of the headache, cover the stomach and spine by treatment, using a medium current for 6—8 minutes. See page 34.

HIVES AND RASH—Use electrode No. 1 with medium current strength to affected area. Use High Frequency Lubricant before applying the electrode. 3—5 minutes should be sufficient. Repeat daily.

INFANTILE PARALYSIS—If this disease leaves muscles feeble and weak High Frequency applications help wonderfully well to make them grow again. Use No. 1 electrode with medium or strong current for 5—8 minutes. Apply in direct contact and move the applicator over entire area to be developed.

INFLAMMATIONS—Can be reduced and relieved by application with applicator No. 1. Move it slowly over the inflamed area keeping it in close contact. Use a medium current strength for 5—6 minutes.

INFLUENZA—See Grippe.

INSOMNIA—Cover back of the head, neck and eye-brows by applications with electrode No. 1. A strong current is essential in treating this ailment. 5—8 minutes should be the average length of treatment.

LEUCORRHEA—Follow the directions given under female troubles. Also use electrode No. 12 moving it up and down the spine slowly. A strong current must be used for about 5—6 minutes every day. This treatment should only be an adjunct to medicinal treatments and physician's care.



TREATING DISEASES OF THE KIDNEYS

Kidney diseases result often from deranged metabolism and incomplete tissue combustion. We all know that as is his metabolism, so is man. H. F. Current can be made to exercise a great influence in promoting the activity and completeness of metabolism. Their effects have been investigated and determined during the last few years. Clinical tests upon more than one hundred patients show that these currents exert in the majority of cases a most powerful and generally beneficial action upon diseases which are due to slackening of the nutrition; the benefits being produced by accelerating the organic changes and the combustion.

This is proved by the analysis of the urine. The quantity becomes more normal. The products of waste are better eliminated. The increase of combustion is shown by the diminution of uric acid, the percentage of urea is generally increased.

When daily treatments are given we observe the following modifications in the patient's general condition: return to sleep; increase of strength and vital energy; increase of gayety and of power for work. We notice a general progressive improvement bringing with it appetite and better digestion.

H. F. Applications are therefore of undoubted value as an electrical energy that tends to restore the normal equilibrium of disturbed metabolism.

Organic diseases of the kidneys where actual degeneration is taking place are greatly benefited by H. F. treatments. They do not interfere in any way with medicinal treatments which may be necessary in acute conditions; in fact on account of their action on circulation and due to their stimulation of vital functions they increase the therapeutic functions of medicinal agents. Cases of acute chronic nephritis, both the interstitial and parenchymatous varieties, have been successfully treated. The H. F. discharge is locally applied with electrode No. 1 and to the lumbar region.

Irritation, congestion and inflammation of the kidneys respond readily to the H. F. applications. The Vasomotor regulations of urinary excretion are especially influenced by counter-irritant application. In Chronic kidney disease we find a very reliable medium in the H. F. Current; their restorative action together with nature's resources will help to recover normal functions.

The so-called Bright's disease (Albuminuria, nephritis) in its different stages is treated with the best results. Cases in despairing states have responded to the stimulating action of H. F. Current and allowed the unfortunate a longer life with less suffering than any other known remedy ever could have done.

There are many clinical reports of the disappearance of the albumen following H. F. Treatments.

Renal congestions of an active type, occurring in the course of other diseases, can be relieved by applications with electrode No. 1, 4, 5, locally and over the solar-plexus.

Passive renal congestion is usually of the chronic or sub-acute type, and it is treated with success by the local use of electrode No. 5.

Condensed Directions for Treating Ordinary Ailments

All applications as described below can be taken with the surface applicator No. 1.

HEADACHES: Apply to 3-4, 6, 7, 2, 17, 5.

INDIGESTION: Apply to 3-4, 25, 2, 5.

CONSTIPATION: Apply to 3-4, 23 and 24.

NERVOUSNESS: Apply to 16 and move slowly up and down entire spine covering 16-17-5-13-12, treat back of head 31-31, treat also 3-4, 23, 22, 21, 28-30, 11-18-19 and 20.

INSOMNIA: Apply to soles of feet 20, over 3-4, 8-9, 2 down to 13.

NEURALGIA OF THE FACE: Apply to 10 (front of ear) and cheeks.

DEAFNESS: Apply to 31 (back of ear) and use electrode No. 27 inside of ear.

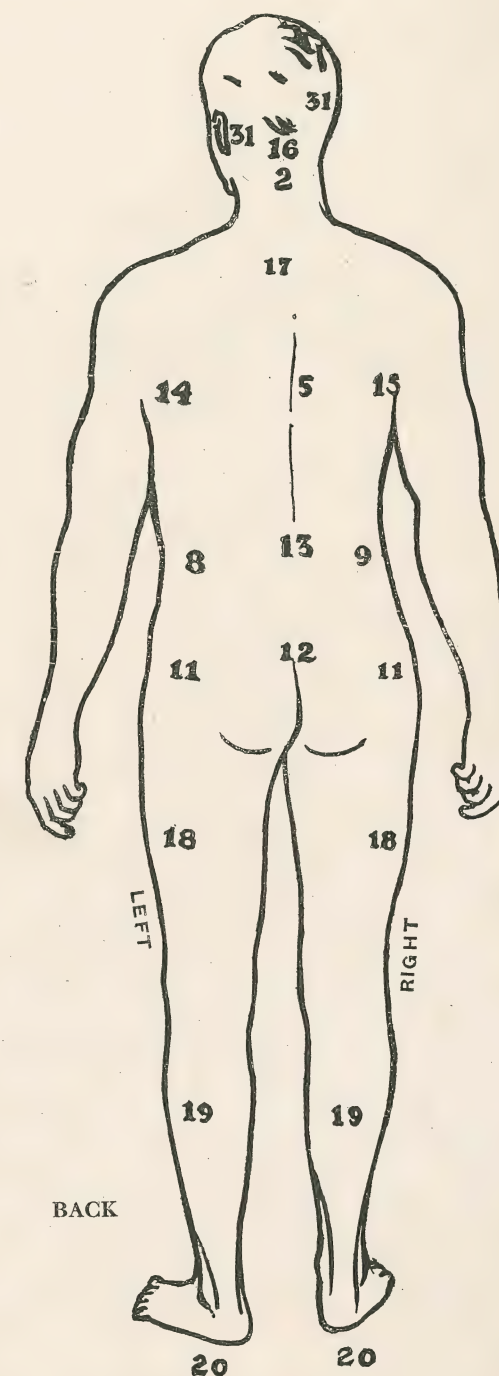
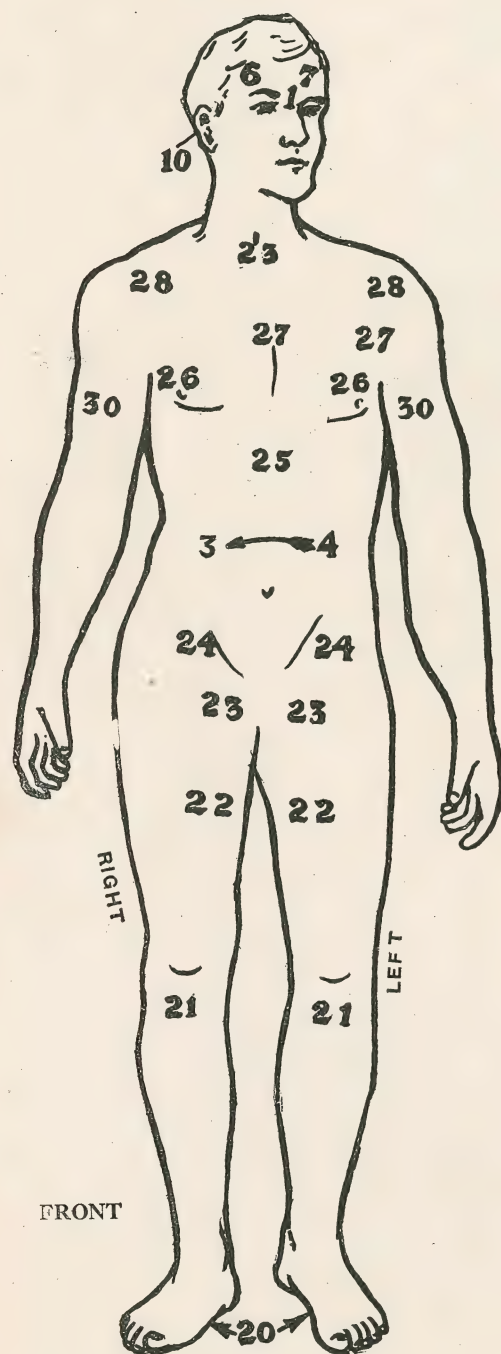
RHEUMATISM: Apply to seat of pain and to 3-4, 8-9.

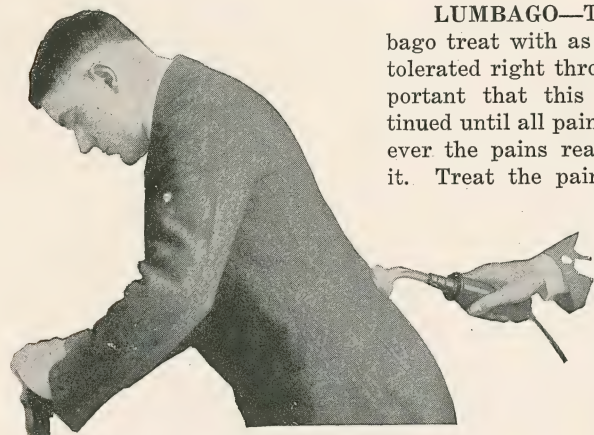
WEAK LUNGS AND TO DEVELOP CHEST: Apply to location of lungs every day three times for several minutes and from 26-26; breathe deeply during application and inhale ozone through ozone generator (see Electrode Catalogue).

SALLOW COMPLEXION: Improve your digestion by applications to 3-4, also take facial applications.

FALLING HAIR, DANDRUFF, GRAY HAIR AND PREMATURE BALDNESS: Use applicator No. 6 or No. 7 and cover entire scalp during treatment.

HOARSENESS AND TO IMPROVE VOICE: Apply to 23 and entire throat.





Lumbago Treatment

LUMBAGO—To relieve the pain of lumbago treat with as strong a current as can be tolerated right through the clothing. It is important that this treatment should be continued until all pain is dispelled. Repeat whenever the pains reappear. You cannot overdo it. Treat the painful area and beyond that.

6—8 minutes are usually sufficient. Keep the electrode moving.

MASSAGE — To use High Frequency Current as massage, place gauze or a towel over the part to be massaged. Apply a strong current for the length of time considered

sufficient. The stronger the current, the shorter the time required for the massage.

For the indirect massage place electrode No. 1 or better No. 28 in one or both hands and have a second party draw the current with his hands to the desired spot. The masseur's fingers will thus combine the electric cellular massage with the mechanical massage and movement of his hands and fingers. Use a medium current for this indirect method and increase at convenience.

MOTH PATCHES OR MOLES. Electrode No. 1 will suffice in most cases. Better results, however, can be obtained with electrode No. 23. Use a weak or medium current and apply direct to the point of treatment for just a few seconds at the time.

MUMPS—Treat the swollen parts with a medium current and electrode No. 1, keeping it in contact for about 5—8 minutes. Repeat as necessary; at least once a day.

NERVOUSNESS—Treat the spine, back of head and neck with a mild current using electrode No. 12 or No. 1. Immediate results are felt in all cases. Use a weak current at first and increase the strength gradually. 5—8 minutes is the average duration of treatment, which can be taken twice daily at first and when improvement satisfies, gradually decrease to a few times a week.

NEURALGIA—Apply a medium current with electrode No. 1 to the seat of pain. Raise the electrode occasionally so as to produce a short spark. 5—8 minutes every day are sufficient for the first treatments, which should be gradually decreased.

NEURITIS—The first few treatments may increase the pain somewhat but ultimate result is sure. The most stubborn cases yield to the High Frequency current. Use electrode No. 1 over surface for 3—6 minutes daily. Sometimes 2 or 3 treatments must be taken per day. Use medium current at first and increase to full strength when used to the application.

OBESITY—Apply electrode No. 1 to the affected parts and treat consistently. Begin with a medium current and increase the same to full power by and by. 10 minutes every day twice will help. Fat will decrease and redistribute, giving greater comfort.



Helping the Painful Knee and Restoring Knee Movement

PAINS—The pain-relieving quality of the High Frequency current is wonderful. Apply electrode No. 1 to the seat of pain until relief is felt. Close contact is best. Medium current strength and sometimes strong currents are advised.

PARALYSIS—Apply No. 1 electrode along the affected muscles. A strong current is necessary. Keep the electrode moving. Treat for about 8 minutes at a time. Lubricate the affected part so that the electrode slides easily. Sparks through a turkish towel help quickly. Use this method every day.

PHTHISIS—(See Consumption).

PILES—(Hemorrhoids and other rectal diseases)—are treated best with applicators No. 19, No. 20, No. 21, No. 34, No. 35. Lubricate electrode before insertion with High Frequency lubricant. Use a medium current for about 15 minutes not more than once a day.

PIMPLES—(Acne Vulgaris)—See Acne.

PLEURISY—Use preferably electrode No. 4 or No. 5. Cover the back and the chest by a vigorous treatment through a turkish towel until the skin becomes quite red. Keep the electrode moving and treat for about 10 minutes. High Frequency is an

adjunct only in cases of serious sickness and nobody should fail to consult the proper authority.

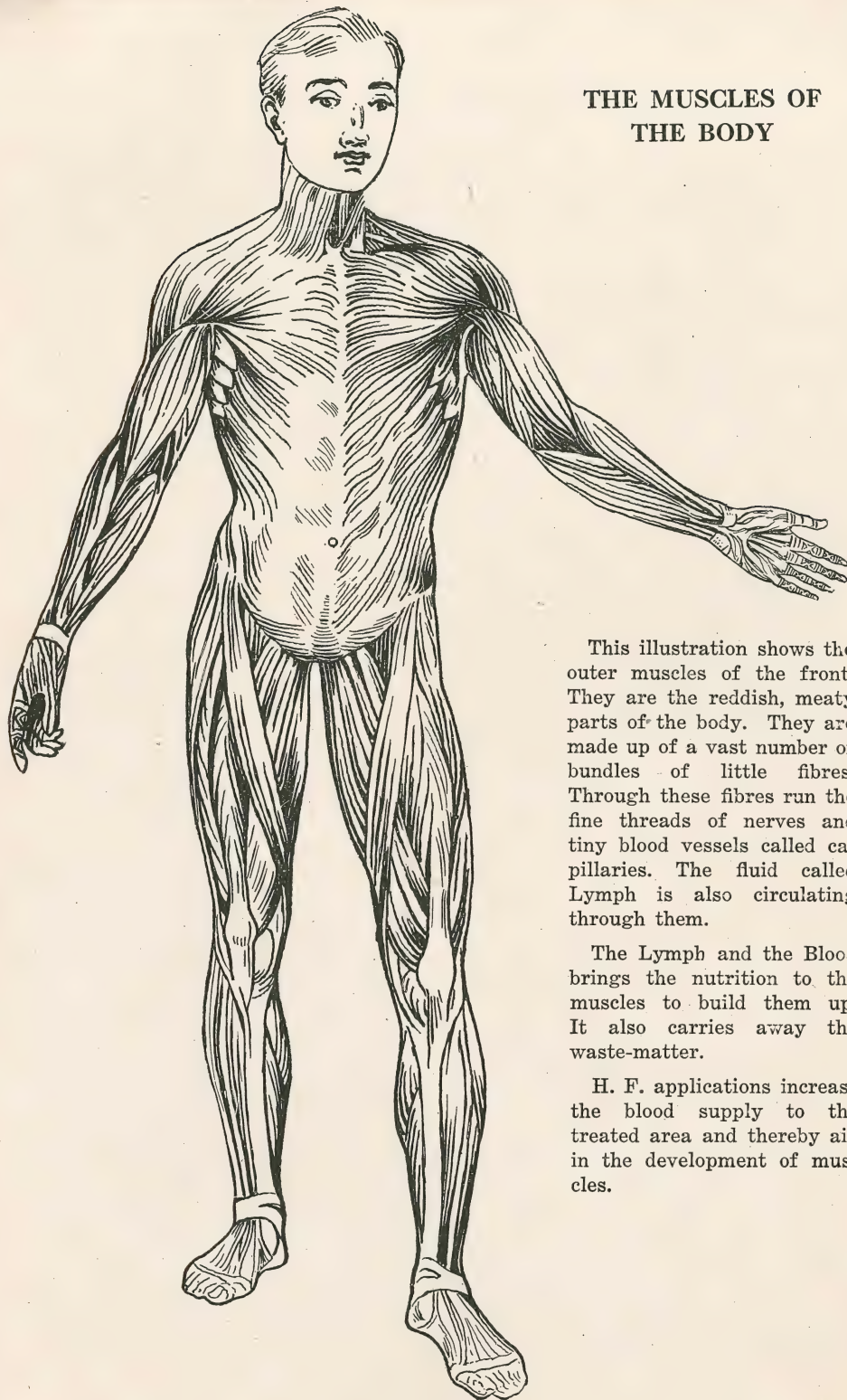
PNEUMONIA—Ozone inhalation, repeated often with the Ozone Generator (see Electrode Catalogue) is very beneficial. Otherwise apply the same treatment as given under Pleurisy. Remember that High Frequency as an adjunct can help greatly and often do wonders but in all grave diseases the consultation of an authoritative physician should and must be resorted to.

POISON IVY—Apply High Frequency lubricant first. Use No. 1 or No. 4 and No. 5 electrode edgewise so as to cause plenty of sparking over the whole affected area. Lift the applicator here and there and treat with a strong current for 3—5 minutes. Relief is sure and surprising.

PYORRHEA—Applications with any suitable electrode as shown on page 7 of the electrode catalogue with a weak or medium current help greatly to re-establish a healthy condition of the gums. A removal of deposits is necessary however by mechanical and surgical means in order to fight this disease. A dentist must be consulted. High Frequency treatments promote proper nutritional improvements and in addition to this have antiseptic and antitoxic properties.

RED NOSE (Acne Rosacea)—Use preferably electrode No. 2 and apply for only short periods, say about 2 minutes, small sparks by holding the electrode edgewise or lifting it somewhat about 1/8 of an inch. The object is to destroy the en-

THE MUSCLES OF THE BODY



This illustration shows the outer muscles of the front. They are the reddish, meaty parts of the body. They are made up of a vast number of bundles of little fibres. Through these fibres run the fine threads of nerves and tiny blood vessels called capillaries. The fluid called Lymph is also circulating through them.

The Lymph and the Blood brings the nutrition to the muscles to build them up. It also carries away the waste-matter.

H. F. applications increase the blood supply to the treated area and thereby aid in the development of muscles.

VIOLET RAY TREATMENTS

29

larged veins. The treatment must not be carried too far at one time. It should be repeated as the condition permits. Several days' rest between treatments may sometimes be advisable.



Painful Shoulder Is Quickly Relieved

RHEUMATISM—Strong currents have to be used in all cases of Rheumatism. This disease responds quickly, especially cases of the muscular and chronic articular form. In acute cases of this ailment the results are slower but nevertheless satisfactory. The affected parts should be treated until all pain ceases. Changing the position of parts or extremities being treated will likely expose other parts requiring treatment. Put muscles on the stretch and use High Frequency current long enough to dispell all discomfort. Applicators No. 4 and No. 5 are especially recommended for these treatments. Repeat these applications as often as pain reappears. 10 minutes' use of the instrument at

one time is usually enough. The applicator can be used in close contact but most cases require treatment through clothing or several layers of a towel.

RINGWORM—Use Electrode No. 1 and apply short sparks for several minutes two or three times every other day. A medium current is sufficient. Move the electrode so as to cover all the affected area.

SCALP TREATMENT — Dandruff, falling hair, gray hair, baldness, itching scalp, etc., are very successfully benefited by Violet Rays. There is no question that the Violet Ray represents the most scientific method of treating the scalp. Its beneficial value is beyond all doubt.

Violet Rays produce a normal and healthy scalp, revitalize impoverished hair, restore its natural lustre and fullness. They bring in new hair by causing additional nourishment to flow to the dormant papilla.

Use Electrode No. 6 or No. 7 every day one to three times for several minutes. Do not use any hair tonic. Violet Rays constitute the best hair tonic themselves.

In baldness the Violet Ray proves to be of a very welcome and effective assistance to restore the natural growth of hair. The results are very satisfac-



Scalp Treatment for Dandruff, Gray Hair, Premature Baldness and all other Scalp Diseases

tory. Conscientious use of Violet Ray High Frequency Current and patience have here as in many other instances surprised many people.

Gray hair has been restored to its original color and beauty in many cases. We do not claim too much by saying that scalp applications with electrode No. 6 or No. 7 are the only reliable means at the present time to stimulate and assist natural growth of hair.

SCARS. The object is to destroy the scar tissue so that new tissue may form. Use therefore a strong spark. Apply either electrode No. 1 edgewise, or still better use electrode No. 23 with the necessary care. A few minutes, sometimes only seconds, will suffice in certain cases where the scar is small and not too old. Judgment should be used. See article on Fulguration on page 4.

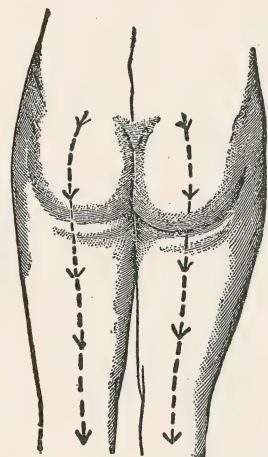


Illustration Showing the Location of the Great Sciatic Nerves

SCIATICA is an affection of the great sciatic nerve trunk. Its cause is found in neuralgia and also sometimes in rheumatism. The sciatic nerves run down the thigh from hip to knee. They lie near the bones deep under the heavy muscles. Sometimes they become so inflamed and tender that even the slightest pressure causes an extreme pain. A counter irritating discharge applied through the clothing or over the painful area with electrode No. 1 or No. 5 will bring quick relief.

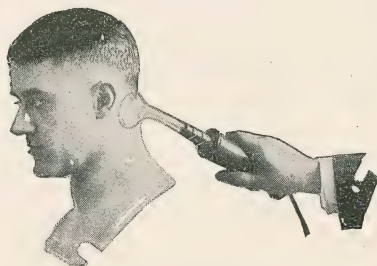
SKIN DISEASES—In all skin diseases the High Frequency spray (small sparks) is most successfully applied. Electrode No. 1 is sufficient in nearly all cases. It should be passed rapidly back and forth over the affected area for several minutes. If the skin is moist, talcum powder should be used so that the electrode will not stick. Another easy method is to spread gauze over the part to be treated. This will enable the user of the instrument to

move the electrode smoothly and at the same time does not remove it far enough to cause an unpleasant spark.

Where itching is very marked longer and sharp sparks are best. Apply these only for short periods. Epithelioma, Lupus and Chronic Ulcers can be treated in the same manner.

STIFF NECK AND JOINTS—Apply in the same manner as explained under "Neuritis." Use a longer treatment if necessary. In cases of Torticollis (stiff neck) rub the No. 1 electrode frequently along back of ear and down the neck on both sides for 3—5 minutes.

SORE FEET AND STONE BRUISES—Applications with any suitable applicator in close contact with the skin bring quick relief. Use High Frequency lubricant and treat for several minutes.



Relieving a Stiff Neck

SORE THROAT—Electrode No. 8 is best suited for external throat applications. High Frequency lubricant should be used and the electrode moved up and down the throat in close contact covering all parts well for 5 or 6 minutes with a medium or strong current; repeat 2 or 3 times a day in some obstinate cases.

SPRAINS—Close contact applications with a surface applicator prove helpful. Use a medium current and in cases of long standing use small sparks or treatment through towel. 4 or 5 minutes usually suffice. Repeat as circumstances indicate.

TONSILITIS—Use No. 8 electrode and apply in the same manner as explained under "Sore Throat." Physicians use electrode No. 32 internally with fine success. Ozone inhalation with Ozone Generator (see Electrode Catalogue) assist greatly.

TUBERCULOSIS—(See Consumption).

ULCERS—Apply a strong current with No. 4 or No. 5 electrode for 5 minutes in contact, lifting the applicator once in a while to produce sparks of at least ¼ inch. Repeat this treatment every day.

WARTS—Take electrode No. 1, hold it about ¼ or 3-16 inch from warts and allow sparks to pass from the edge of the glass. For the best results use electrode No. 23. Let the platinum point rest directly on top of the wart and use a weak current. Pass a stronger current through the deeper crustation. A few seconds are usually sufficient. Wait 2 or 3 days for results and repeat operation if necessary. (See article on "Fulguration" on page 4).

WHOOPING COUGH—Apply No. 1 electrode in the same way as explained under "Asthma" and use also Ozone Inhalation with the Ozone Generator. (See Electrode Catalogue).

WRITER'S CRAMP—Apply No. 1 electrode with medium current for about 6 minutes from finger tips along back of hand and arm to shoulder and spine. This treatment can also be made through a towel if it can be tolerated.

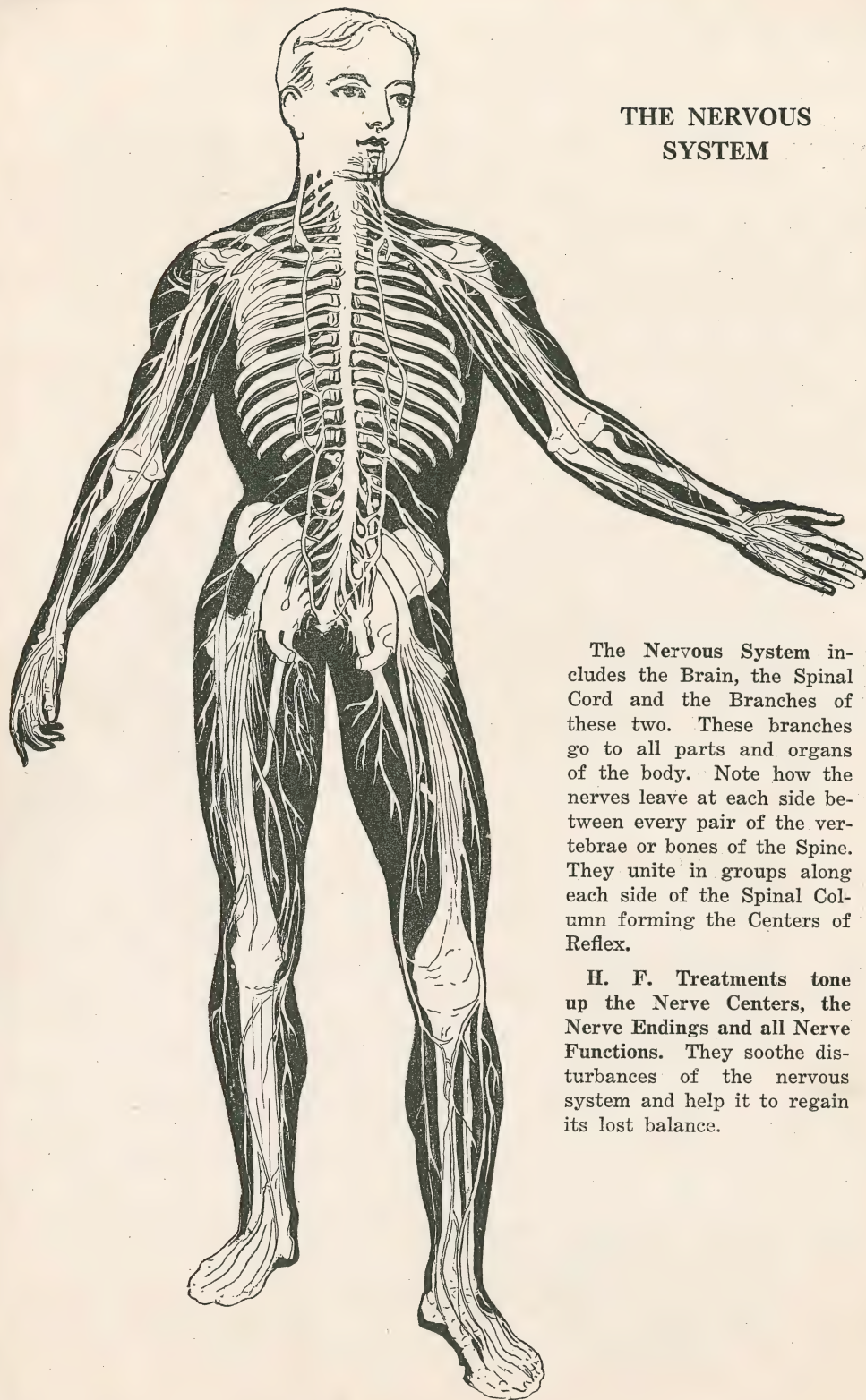
WRINKLES are commonly caused by using a given set of facial muscles more than normally. They can be removed by applying electrode No. 1 right over them with a rotary, massaging movement. High Frequency current revitalizes tired muscles and arrests the blighting marks of time.

For those who desire more exhaustive information on High-Frequency currents we recommend:

N. M. Eberhart, M. D., Ph. D., D. C. L., Manual of H. F. currents, \$2.50.

S. H. Monell, M. D., High-Frequency Currents in Medicine and Dentistry, \$4.





THE NERVOUS SYSTEM

The Nervous System includes the Brain, the Spinal Cord and the Branches of these two. These branches go to all parts and organs of the body. Note how the nerves leave at each side between every pair of the vertebrae or bones of the Spine. They unite in groups along each side of the Spinal Column forming the Centers of Reflex.

H. F. Treatments tone up the Nerve Centers, the Nerve Endings and all Nerve Functions. They soothe disturbances of the nervous system and help it to regain its lost balance.

WHAT PROMINENT PHYSICIAN'S SAY ABOUT THE VIOLET RAY H. F. CURRENT

S. H. Monell, M. D.:

"Their value in many acute and chronic conditions which are common in medical practice has become so marked that mere acquaintance with the results obtained by others should prompt a desire to employ them by all who read of their work."

"If the equivalent of this great pain reliever, antiseptic, and promoter of metabolism had been a new serum or anti-toxin, or some psychic fad, half pseudo-science and half quack religion, the fame of it would have swept around the world in three months. But this remedy—more far reaching for good than exploited catarrh and cough cures, and vaunted 'vegetable compounds,' and all the combined 'best sellers' of patent medicine factories, in which the American public invests some hundred million dollars and twenty per cent of its health per year—happens to be only one phase of an electric current, modest, reticent, and conservative, the study of skilled men, the subject of a decade of scientific investigation; and so it has patiently crept into quiet recognition during the past ten years, tested by progressive physicians here and there, and more in Europe than here, yet never losing ground once made, ever gaining increased confidence and now slowly coming into its own."

(Professor Monell is regarded as one of the foremost thinkers of the medical world, and in electro-therapeutics has done more for electricity than any other living man. "His voluminous writings have made for him a living history," writes a prominent Medical Journal)

Frederick Finch Strong, M. D.:

The use of High Frequency Currents for therapeutic purposes produce remarkable curative effects, many of which can be satisfactorily explained only by the assumption that we have in these currents a rough counterfeit or substitute for the peculiar nutritive flux transmitted through the nerves to all tissues of the body to which we give the name "Trophic Influence." It is this trophic power which enables the cells to absorb their quota of nutriment from the blood, to maintain their vital resistance, and to perform their various functions. The exact manner in which the High Frequency currents replace or regenerate the trophic influence, has not been definitely determined. That they really act in the above manner is credent from results of treatment.

(Dr. Strong is one of the most illustrious teachers of Electro-Therapeutics in America. He is instructor in Electro-Therapeutics at Tufts College, Medical School, Boston).

Noble M. Eberhart, M. D., Ph. D., D. C. L.:

"I have expressed my individual opinion on many points—it is based upon 15 years' practical experience involving the daily use of High Frequency Currents and upon 13 years' experience in teaching the subject." Dr. Eberhart recommends the use of the Violet Ray High Frequency current in over 200 human maladies and ailments. His work is a reliable reference.

Dr. Eberhart is the head of the Department of Physiologic Therapeutics, Medical Department of Loyola University; Professor of High Frequency, Illinois School of Electrotherapeutics. Formerly Head of Department of Electrotherapy, Chicago College of Medicine and Surgery; formerly Attending Physician Cook County Hospital; formerly Professor of Electrophysics Post Graduate Medical School, Chicago, etc.

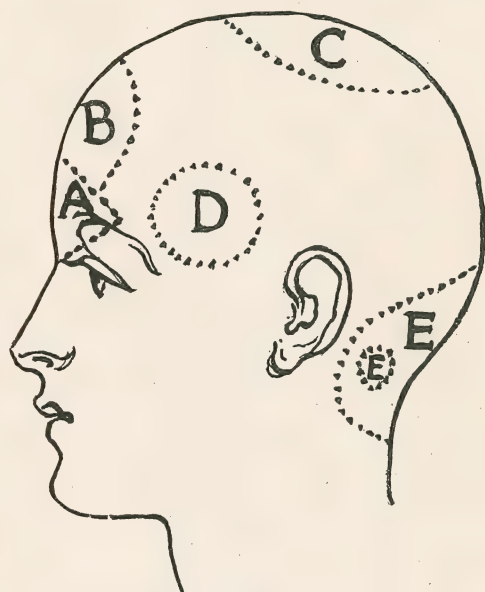
Member of Chicago and Illinois State Medical Societies; American Medical Association; American Medical Editors' Association; Victoria Institute or Philosophical Society of Great Britain; etc.

C. J. Murray, M. D., D. D. S.:

High Frequency Currents produce a vitalizing, harmonizing effect in the human body. I hope that they will become more popular. I am inclined to accuse anybody of neglect who, knowing about their existence, disregards their employment in treating disease.

Aspinwall Judd, M. D.:

The increase of general glandular activity obtained by High Frequency Currents is marked, and it is a great aid toward an improvement by producing proper functioning of the organs and the increased elimination of poisonous products from the tissues.

ABOUT HEADACHES

Where Headaches Occur

Headaches at A or B are congestive or frontal. At A they may come from errors in refraction; frontal sinus disease or nasal disease. Stomach diseases also frequently cause pain at A. Constipation A-B. Decay of front teeth A-B. Anemia; endometritis; bladder disease, C. Middle ear disease; throat disease; eye disease; decayed teeth; D-E. Womb disease; spinal irritation; nervousness, E. Ovarian reflex pains usually at C and E. Neurasthenic headaches involve the back of the neck.

According to N. M. Eberhart, M. D., Ph. D., D. C. L.

Apply the Violet Ray not only to the area of the head where ache is felt but also to the underlying cause by treating the involved parts.

SPLENDID SUCCESS

"I am having splendid success with my 'Vi-Ray-O.'"

Columbia City, Ind.

DAVID SWAN LINVILL, M. D.

GIVES EXCELLENT SERVICE

Washington, D. C.

"The 'Vi-Ray-O' purchased from you some time ago is giving excellent service."

DR. ROBERT G. BLAINE.

VIOLET RAY HIGH-FREQUENCY GENERATORS

The Violet Ray Generators made by the Western Coil & Electrical Company, Racine, Wis., are designed on new, different and distinctly improved lines. Profiting by many years of successful manufacture and exhaustive experimentation and utilizing all the advance in the knowledge of the Violet Rays, this company produces today instruments of admitted superiority. All the disadvantages and annoyances of the old style machines have been done away with. The following illustrations show the most popular types of the large family of H. F. Generators. They are the best made anywhere in the world and protected by a one-year guarantee. They are exclusively manufactured by us under our own patents. All are simple to operate, light in weight, handy and efficient in treating disease. They are well constructed of the best materials and cannot give any shocks; they are perfectly safe for operator and patient. The medical profession as a whole has adopted the Western Coil & Electrical Company's High Frequency Generators as the standard instruments because they are more efficient, more reliable than any other known apparatus. On account of their simplicity they can be used by anyone with ease and perfect safety.

THE VI-RAY-O

The one-piece "VI-RAY-O" High Frequency Generator is a splendid apparatus of marvelous efficiency. It is the instrument for the home as well as for the professional man. It is the most convenient Violet Ray machine ever made. It can be carried around easily as it weighs but one and one-half pounds. The strength of the Violet Ray is regulated by a little knob at one end of the housing. To use this "VI-RAY-O," simply attach it to any electric lamp socket. It has now been on the market for five years and many thousands of them are in daily use. Its standing-up quality is unexcelled. It is fool-proof in construction, is perfectly safe and consumes very little energy, hardly enough to register on the meter. It has a highly polished hard rubber housing and looks beautiful. It is guaranteed for one year against any defects. With average care it will give faithful service for many years.

**VI-RAY-O NO. 1**

Includes the Virayo, Applicator for surface treatment (No. 1), handsome cloth-lined carrying case and guarantee

**VI-RAY-O NO. 2**

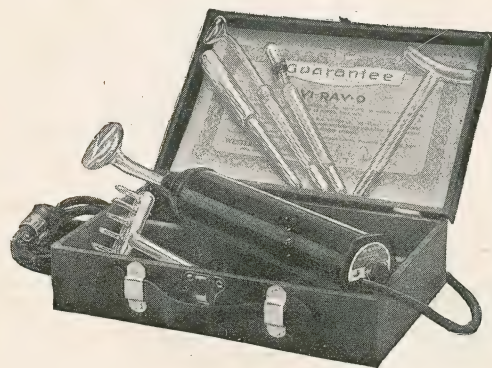
Includes the Virayo Surface Applicator No. 1, Scalp Applicator No. 6, handsome cloth-lined carrying case and guarantee

VI-RAY-O NO. 3

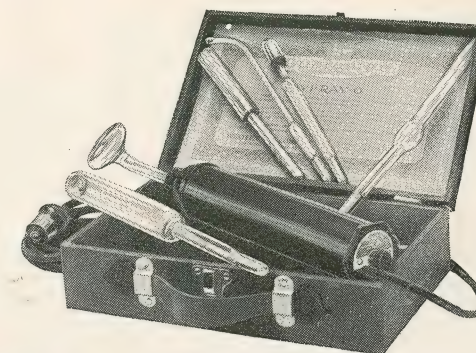
Includes the Virayo, Surface Applicator No. 1, Scalp Applicator No. 6, Eye or Corn Applicator No. 10, Metal Handle No. 28, handsome cloth-lined carrying case and guarantee

**VI-RAY-O NO. 4**

Includes the Virayo, Surface Applicator No. 1, Scalp Applicator No. 6, Eye or Corn Applicator No. 10, Metal Handle No. 28, External Throat Applicator No. 8, Fulguration Applicator No. 23, handsome cloth-lined carrying case and guarantee

**PHYSICIAN'S VI-RAY-O NO. 5**

Includes the Virayo, Surface Applicator No. 1, Plain Vaginal Applicator No. 18, Rectal Applicator No. 19, Fulguration Applicator No. 23, Plain Urethral Applicator No. 17, Metal Handle No. 28, handsome cloth-lined carrying case and guarantee

**PHYSICIAN'S VI-RAY-O NO. 6**

This outfit contains Insulated official Applicators exclusively. These are more efficient in action and are preferably used in all official treatments.



Includes the Virayo, Surface Applicator No. 1, Metal Handle No. 28, Insulated Urethral Applicator No. 33, Insulated Prostatic Applicator No. 34, Fulguration Applicator No. 23, handsome cloth-lined carrying case and guarantee

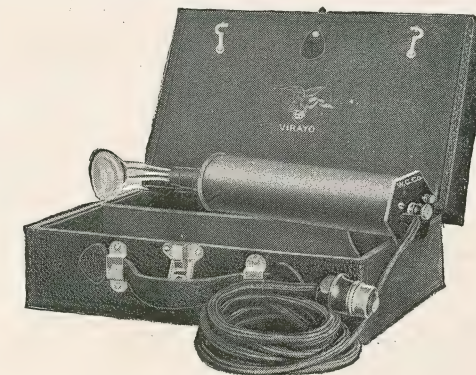
NOTE: The Insulated Urethral Applicator can be used for internal throat work and the Insulated Prostatic Applicator for vaginal treatments.

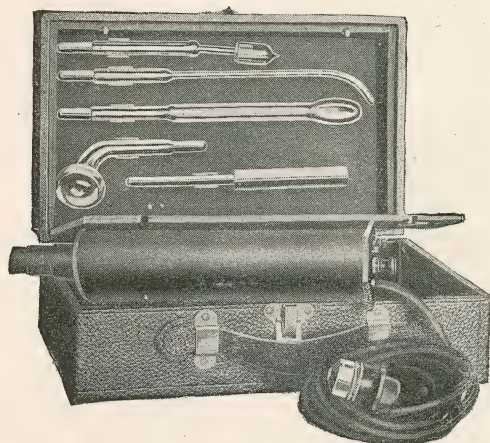
VI-RAY-O TYPE "E," "G" AND "H"

The "Virayo" types "E," "G" and "H" are made more especially for professional use. They are very powerful instruments, giving excellent service. The housing is made of hard vulcanized fibre which is indestructible and is beautifully finished. The back-end of these types is hexagonal in shape, preventing the instrument from rolling when laid down on a table. The type "E," "G" and "H" carrying cases are velvet-lined and have a separate compartment for applicators which are held in place by clamps. In general, the type "E" Virayo is a little more luxuriously equipped than the Virayo No. 1.

OUTFIT "E,"

Includes the "Virayo" Generator, surface electrode, velvet lined seal-grain carrying case and guarantee. Weight complete, 3½ pounds; measures 12x7x5½ inches.

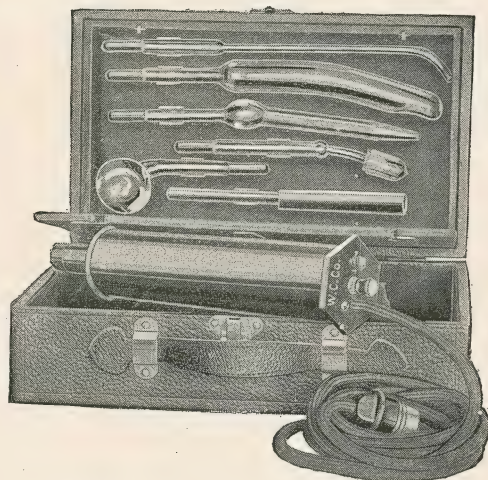




PHYSICIAN'S OUTFIT "G"

This equipment is regarded as very practical and efficient. It contains insulated electrodes. The prostatic electrode may also be used for vaginal work and the urethral electrode for the ear, throat and nose.

Includes the "Virayo" Generator, surface, insulated prostatic, insulated urethral, fulguration, metal electrode and guarantee, all contained within a handsome velvet-lined, seal-grain carrying case.



PHYSICIAN'S OUTFIT "H"

Includes the "Virayo" Generator, surface, vaginal, rectal, urethral, fulguration, metal electrodes and guarantee, velvet-lined, seal-grain carrying case.

SO PLEASED—CANNOT BE WITHOUT IT

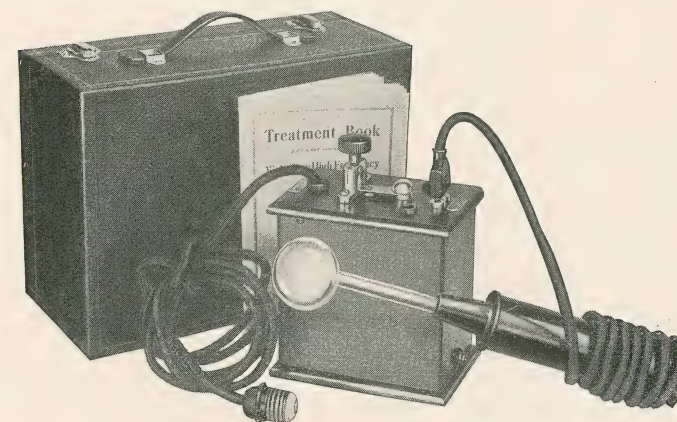
Dallas, Texas.

"I am very much pleased with the High Frequency coil, which is giving fine results and beats any coil I have ever used.

"I am of the opinion that electricity is yet in its infancy and by proper study and use of your High Frequency much good can be accomplished; I am very much pleased with the instrument bought from you and don't see how I could get along without it now.

"Thanking you for recommending this particular coil to me."

C. W. BAYNHAM, M. D.



RELIANCE OUTFIT

This outfit has been especially designed to give not alone a wide range of high frequency but to work constantly under continuous use without breakdown or diminution in current.

Especially adapted for the use of Physicians, Chiropractors and Barbers who require more or less constant use from an outfit. The outfit has a remarkably adjusted condenser which gives a strong and uniform flow of current. The kicking coil and resonator are actually oversize for a machine of this type, thereby insuring ample carrying capacity at all times. The handle is the non-sparking type. The cord has our patent plug which allows easy and quick detachment from the machine proper. The working parts are encased in a neat mahogany box with ebony finished top. All metal parts nickered. The carrying case is leatherette and plush lined. The entire outfit presents a neat and attractive appearance which anyone can be proud to possess. *Comes with one surface applicator and bottle of our specially prepared lubricant.

DELIGHTED WITH IT

Mt. Pleasant, Mich.

"My 'Vi-Ray-O' instrument is O. K. in every respect and I am certainly delighted with it. My wife and I make great use of it. I took it to the office of our local osteopath who was much pleased with it. He has two of another make, but they are so unpleasant to use. I am sure his next machine will be the 'Vi-Ray-O.'"

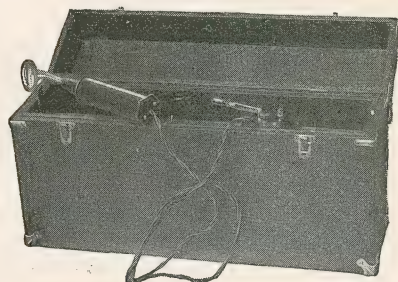
J. N. GOODRICH.

Violet Ray Battery Outfits for the Country and Other Places where No Electric Current of Standard Voltage Is Available

The Only Efficient Battery Outfits Made Today

The battery outfits as described below are a very much welcomed innovation. So far have people without electric current supply in the country and other districts been unable to avail themselves of the wonderful health-giving benefits of the Violet-Ray because no suitable and satisfactory apparatus were on hand. We have now produced two types of battery outfits which are very compact and give excellent service and satisfaction. They deliver a very good High Frequency Current for all the different treatments which can be regulated from a powerful stimulating discharge to a fine effluve for the eyes and other sensitive parts of the body. A battery outfit often proves to be a great help to doctors who desire to give treatments in homes where there is no electric current.

There are two types of battery outfits. One carries its own cells within the box; the other one is furnished without cells. It often happens that there are already dry cells or storage batteries at hand which are used for some other purpose. These could be conveniently connected to outfit No. 8.



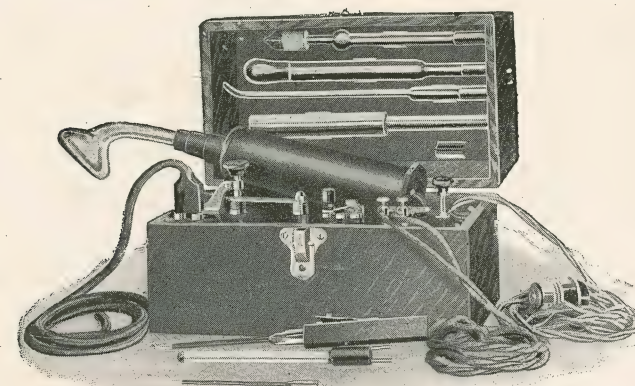
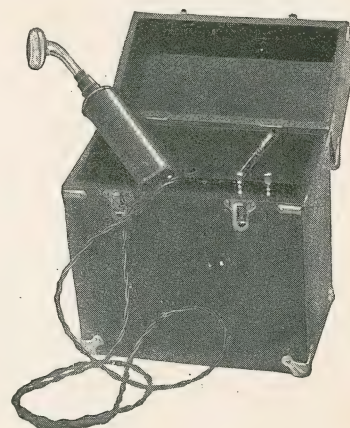
BATTERY OUTFIT NO. 7

This outfit runs from its own battery. It has a number of powerful dry cells which last under ordinary circumstances and with average daily use of several minutes from 6 to 8 months' time. If entirely run-down they can be renewed at a small cost. The old cells can be removed and replaced by new ones in a very short time. You can do the changing yourself and do not have to return the instrument to us.

Outfit No. 7 includes the Battery, very substantial carrying case, Surface applicator No. 1, Violet Ray Generator and instructions.

BATTERY OUTFIT NO. 8

Battery Outfit No. 8 can be connected to any number of dry cells or any storage battery having at least 6 to 8 volts. From 4 to 6 dry cells series connected are sufficient. Price complete, including surface applicator No. 1 and instructions—



"STANDARD" HIGH FREQUENCY OUTFIT

For alternating and direct current. By exercising great mechanical ingenuity the entire outfit has been made to occupy about one-half the space of other box-type machines. It measures only 10x5½x8 inches and weighs, fully equipped with all attachments (nine in number) six and one-half pounds. Put up in a quarter-sawn, highly finished golden oak case. All parts nickel-plated; elaborate in appearance.

The "Standard" outfit represents the most improved and perfect portable High Frequency instrument on the market today. It differs greatly from the common make of box-type generators. Additional features, as for instance a selective switch for different condenser capacities allowing a successive increase in current strength and a "faradic-sensation," enabling the physician to meet every indication for treatment, a cautery handle with two platinum electrodes (needle and knife), a diagnostic lamp, etc., widens its range of usefulness and makes it a more valuable asset. It is superior in workmanship, design, efficiency and reliability.

For the last six years High Frequency Generators of whatever design they may have been, have shown no revolutionizing improvements. It was left to our years of experience, study and consultation with prominent Electro-Therapists to produce this new apparatus. It embodies in a very compact form the advantages of very expensive instruments.

The vibrating spark gap allows a great range of the current intensity. By regulating the precise contact screw a pleasing mild flow of High Frequency current for eye, ear, nose and throat work to a powerful stimulating spark for Lumbago, Partial Paralysis, etc., can be obtained, yet the apparatus will not consume more current than an ordinary sixteen candlepower lamp.

Special attention has been given to the different High Tension discharges. By a special and unique arrangement of capacities, windings and resistances, the standard electric current of 110 volts A. C. or D. C. is transformed to a great variety of high pressure currents at varying frequencies. Since the science of High Frequency has become of such importance a certain classification of the different High Frequency discharges which vary in wave-form, pressure and volume was made. The "Standard" besides giving the plain High Frequency

current in form of a beautiful soothing spray suitable for all treatments with the glass vacuum electrodes allows by means of a selective switch the production of so-called Multi-Frequency Currents causing a "Faradic Sensation" variable from slight to strong muscular contraction. These "Pseudo-Faradic Unipolar" discharges are of the greatest importance in treating partial paralysis, chronic muscular rheumatism and causing reflex action by spinal applications. They feel like an irregular faradic effect and are a profound stimulant to circulation, elimination and secretion. Owing to the High Frequency oscillations carrying the motor-waves this form of electric current possesses great advantages over either the plain High Frequency or plain induced Faradic current. It finds its application as a substitute for massage (High Frequency oscillations cause a "cellular massage") as an aid in the absorption of exudates resulting from fractures or sprains, in the relief of acute rheumatism, neuralgic pain, etc.

To sum up we present in the "Standard" a most perfect fool-proof High Frequency Generator giving a dependable and safe apparatus which has proven its success and demonstrated its great value in bringing quick results in all cases where High Frequency Current in its different phases can and should be used.

THE "STANDARD" CONTAINS THE FOLLOWING ATTACHMENTS

High Frequency Vacuum Electrodes—Special insulated prostatic electrode can be used for general rectal and vaginal treatments; special insulated urethral electrode, also for bladder, ear, nose and throat; fulguration electrode; surface electrode and metal handle for indirect treatment.

A valuable addition is the cautery handle with the platinum cautery knife and needle. The results obtained with this cautery attachment are of equal value to the expensive cautery transformer selling at \$30.00 and more. The platinum part of the electrode is heated to a cherry-red incandescence and employed for the removal of diseased growths from various parts of the body (Adenoids, proud flesh, etc.) The heating effect is regulated by adjusting the vibrator screw.

Diagnostic Lamp—The Diagnostic lamp represents a new invention being put into a separate opaque glass tubing with intensifying lens in front. It is easily sterilized and adapted for examination of the nose, mouth and throat especially. It has a special drawn heavy filament giving a bright white light and keeps perfectly cool during use.

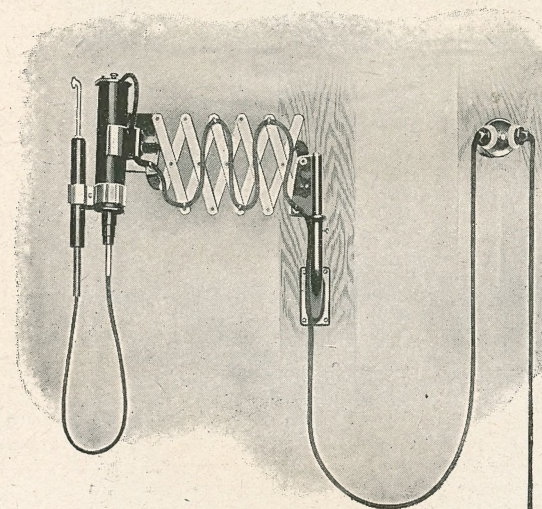
CANNOT GET ALONG WITHOUT IT

Harrisburg, Ill.

"The 'Vi-Ray-O' has never disappointed me in a single instance. I could hardly practice medicine again without the 'Vi-Ray-O.' There is never a day but what I have occasion to employ it and many days I use it numbers of times."

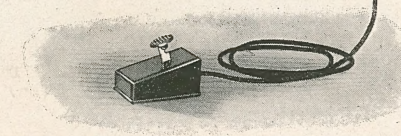
LOUIS M. PARISH, M. D.

HIGH-FREQUENCY BRACKET EQUIPMENT



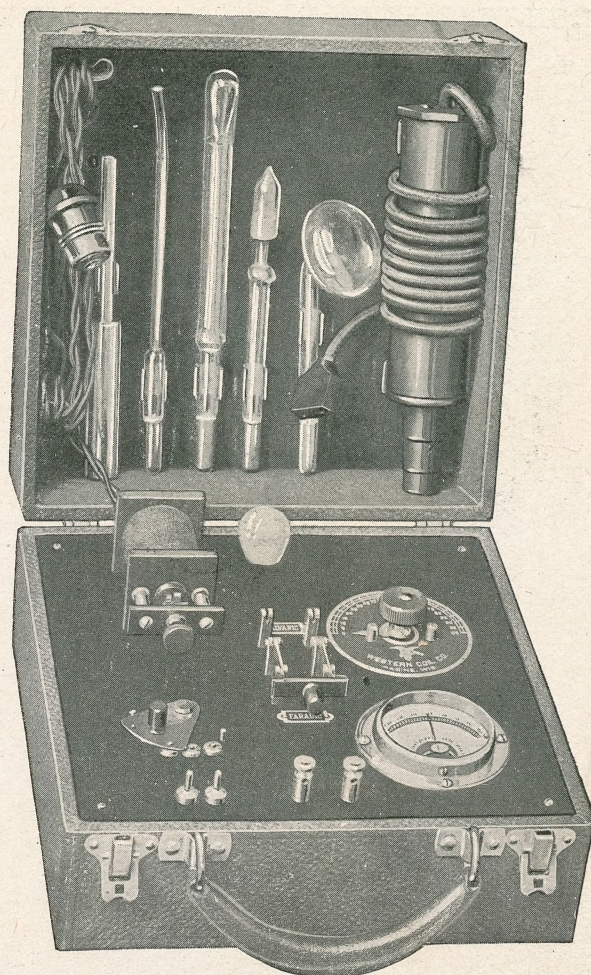
MOST COMPACT
MOST CONVENIENT

OUT OF YOUR WAY
WHEN NOT IN USE



Above illustration shows the complete outfit, consisting of High Frequency Generator, wall bracket with extension arm, special attachment, foot switch, series-cluster, connecting cord and plug and one vacuum glass Electrode.

Additional applicators extra as per Electrode price list. The apparatus is under perfect control of the operator. The foot switch is of great convenience because it leaves the hands free for other manipulations. It also allows the operator to bring the Applicator in contact with the part to be treated and then to turn on the current so that the patient does not have to receive the initial High Frequency spray discharge which usually occurs with other appliances of this nature whenever the applicator is brought near the point of contact or removed from it.



COMBINATION EQUIPMENT FOR GALVANIC, FARADIC AND HIGH FREQUENCY APPLICATIONS

This is the most up-to-date combination outfit. It gives all phases of electricity needed. You can put it on a table or hang it on the wall. It only weighs 8 lbs. complete. It measures closed 11x11 inches, being 4½ inches high.

It is extremely simple to operate this splendid apparatus, one single switch controls the different forms of electricity. It is the latest and improved model of any electrical instrument of this type. The High Frequency Current can be obtained in three steps, from a gentle effluve to a penetrating discharge for the indirect method of treatment. The High Frequency handle is fool-proof against sparking. The Galvanic current can be regulated very fine for Ionic-medication

or Electrolysis and increased gradually without any painful sensation to the patient. The Faradic current is obtainable in any desirable strengths and is also adjusted by a rheostat. The rheostat controlling both, the Galvanic and Faradic current is a special feature of this cleverly arranged equipment. It works so perfect and allows such delicate regulation of current strength that the patients are delighted with all applications. There are no sudden shocks. Any dosage can be applied with the same ease. The milli-ammeter is of a new condensed type and permits accurate and dependable reading. Its scale comprises 0-25 milliamperes but it can also be furnished with other readings upon request. This outfit can be operated on alternating or direct current. If to be used for Ionic-medication and other Galvanic applications on alternating current it is, however, necessary to use our motor-generator set in connection with it. The outfit can be furnished for other voltages than 110 and also for battery service.

The complete instrument is a very handsome looking equipment. It adds greatly to the appearance of any office. All parts are highly finished and nickel plated. They are mounted on a fine polished black composition plate, and arranged in a seal grain case with nickel trimmings. The complete equipment contains 4 High Frequency electrodes. Electrodes and such for Galvanic or Faradic treatments are extra. Write for list of extra attachments.

NEVER FAILS TO GIVE RELIEF. TREATS EVERYBODY IN COMMUNITY

Carmi, Ill.

"I have been using a therapeutic light for ten years and was getting good results with it, but I find your High Frequency Coil gives me much better results. I average a patient a day the whole year around and I certainly get results where the other doctors without a High Frequency Coil have failed.

"John S. came to my office last September with complete paralysis of the left hand—could not move a finger—had been this way for four years. I gave him three treatments a week as he lived in the country and could not come oftener. In two weeks' time, he could feed himself and in four weeks he was running his automobile again. To say that he was pleased, is putting it mildly. He is so enthusiastic that he sends everybody in his community with an ache or pain of any kind to me and so far I have not failed to give relief.

"Another man who had cramps in his legs for three months, the pain and discomfort of which were so great that he could not sleep after midnight. He came to me for treatments and four treatments have completely relieved him, and now after four months, he has had no return of the cramps.

"I could tell you of dozens of others that I have helped. This is the honest truth and I hope that you will be able to place an instrument in every doctor's office."

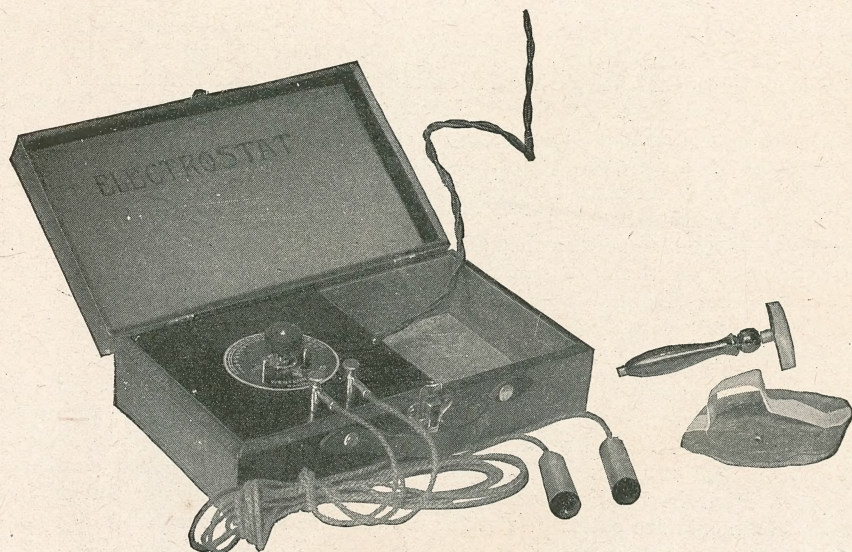
J. A. BOYER, M. D.

QUICK RESULTS

West Frankfort, Ill.

"The instrument is O. K. Results are quick."

J. F. HARRIS, M. D.



THE ELECTROSTAT

The "Electrostat" is a small, inexpensive but very convenient and reliable instrument to supply the so-called 'sinussoidal' current. The sinussoidal current has remarkable healing properties and proves its greatest value in chronic diseases. It is an electric current consisting of a series of waves; each wave rises and falls and thereby causing a gentle contraction and relaxation of muscle and nerve tissue. Sinussoidal currents develop and strengthen muscles greatly; they help to reserve normal circulation, relieve pains, are a great help in constipation, rheumatic troubles and stimulate a sluggish liver to new activity.

The Electrostat outfit comes complete with two metal electrodes, a sponge pad and a sponge disc with handle, two connecting cords and instructions.

SCORES ANOTHER VICTORY

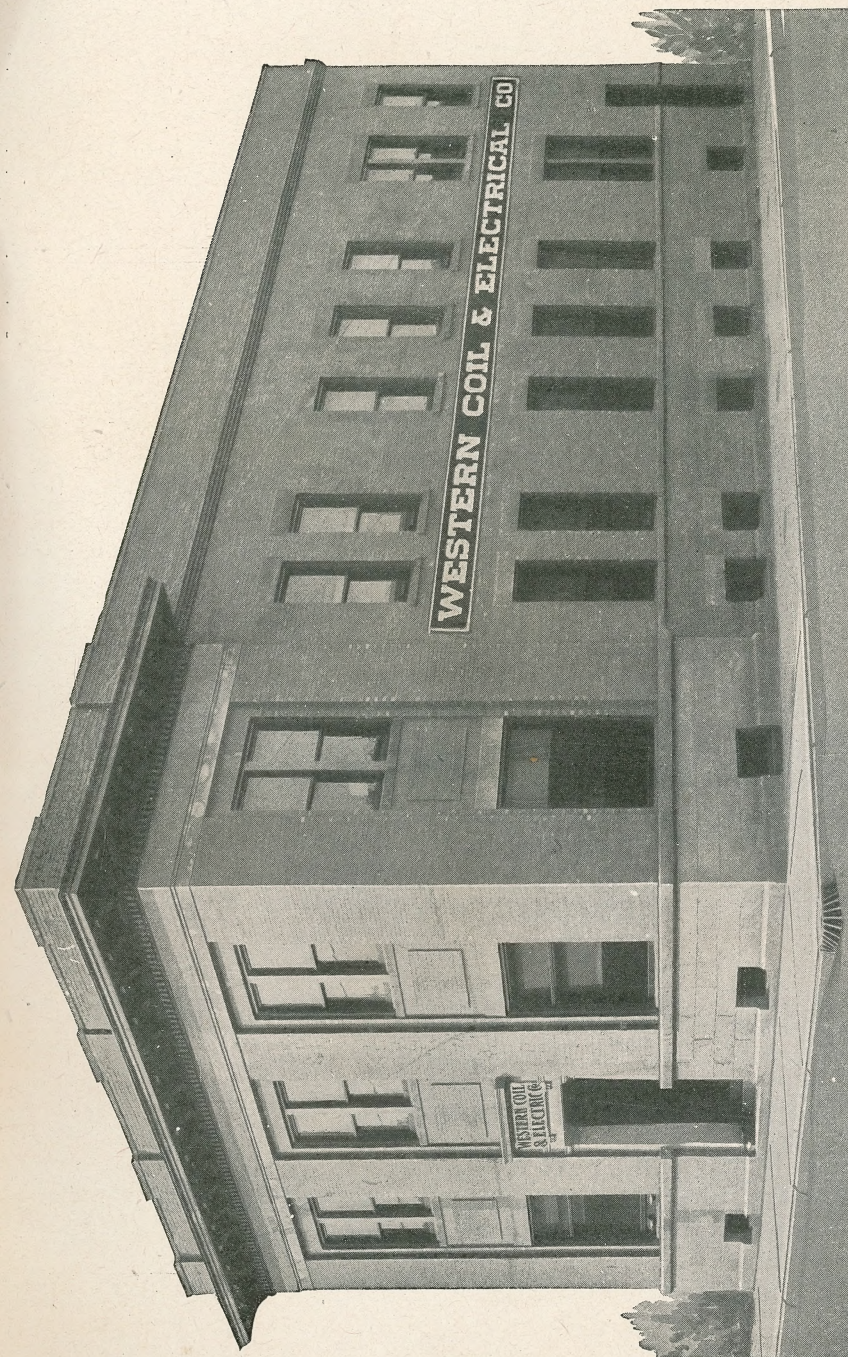
Carmi, Ill.

"I am scoring another victory with my High Frequency Coil. T. H. L. had complete paralysis of the left side and has been unable to move either his hand or foot of the left side for twenty-two weeks or more. I have given him eleven treatments so far and now he can grasp my hand and move his foot and leg. He had been very restless at night but after two or three treatments he has been resting good all night. The nurse says that she sees a decided improvement in his condition all around.

"I thought it was in justice to you that I should tell you about this case and let you pass it along and help someone else.

"It is certainly doing me good service."

J. A. BOYER, M. D.



OUR NEW HOME

The steady increase in our business compelled us to move into larger quarters. We now occupy our own new factory, a splendid structure, containing 40,000 square feet and fully equipped with latest improved machinery. It is here where all the Violet Ray and X-Ray instruments and other electro-therapeutical appliances are made.


Western Printing & Lithographing Co.
Racine, Wis.