See Pages
8 and 9

for further announcement
of the

Annual Fall Physiotherapeutic Convention

at

Chicago

FISCHER'S MAGAZINE

SEPTEMBER, 1924

BE PLEASANT.

YOU HAVE NOT FULFILLED EVERY DUTY UNLESS YOU HAVE FULFILLED THAT OF BEING PLEASANT.

Fischer's Magazine

Devoted to the advancement of the Science of Electro-Physio-Therapy and to the interests of those earnest and enlightened medical men who are practicing it.

H. G. Fischer & Co., Inc., 2333-43 Wabansia Ave., Chicago, Ill.

Vol. II SEPTEMBER, 1924 No. 10

OUR MONTHLY "MONDAY" PHYSIOTHERAPY MEETING has been CANCELLED for the month of OCTOBER because of the close proximity of our **ANNUAL FALL CONVENTION**—the dates of which have been definitely set for the week of October 20th to 24th, 1924, and the place, the Logan Square Masonic Temple, at Logan Square, Chicago. **See page 8 and 9 this issue for further details.**

Just a brief comment on our meeting of Monday, August 11th—we had only one clinician, Mel R. Waggoner, M. D., of Cedar Rapids, Iowa—and over a hundred and fifty physicians to entertain—but our speaker of the day proved himself more than equal to the task!

YOU probably attended; but for those who did not have the opportunity, we must say that splendid enthusiasm was constantly in evidence. There were 32 patients to handle—Dr. Waggoner treated every one, and on direct questioning most of the patients were quite agreed that the methods employed were both painless and effective. Dr. Waggoner will be invited to address our audience again in the near future; watch for announcements in this publication.

(All of the correspondence relative to Physiotherapeutic subjects is not of the most agreeable nature, as is evidenced by the two following letters. The first is copy of letter received by one of our distributors, and the second is their response thereto. The writer of the first letter is very skeptical, but he is just the type who, when he has a more thorough understanding of electricity in medicine becomes a very ardent booster.) THE EDITOR

_____, ____.

_____, July 18, 1924.

_____, ____.

Gentlemen:

Answering your letter of the 10th inst., allow me to remark that the medical literature giving reports of successful treatments with Diathermy are doubtless numerous and interesting, but do you ever get the other kind? While writing these letters do you ever pause to think of the wonders of Diathermy? E. G. "In cancerous conditions and vascular tumors it seals the blood and lymph channels" and yet it dilates those same vessels in Arteriosclerosis? What a wonderful machine, or in other words "Ain't Nature Wonderful?"

Yes, I had a patient on whom the great Dr. ———— operated for many long weeks in the ———— Hospital. The patient had Gangrene from Arteriosclerosis and was doubly assured by the celebrated Dr. ———— that the leg would be saved. Well it was saved until my patient nearly died from exhaustion, but common sense finally prevailed and the leg was amputated.

No this isn't all. The other leg was treated as a prophylaxis against a similar fate and on his return to ———— he was treated several weeks more with Diathermy. This was about a year ago and at present the patient is suffering from all the symptoms of on-coming "Gangrene" and looks forward to another amputated leg before many months.

Yes, I agree with you. It has (in the hands of unscrupulous men) vast financial possibilities. I have seen this fact demonstrated to my entire satisfaction.

Well I guess this will be all for today. This letter is really a "Testimonial," but of course you needn't feel compelled to publish it unless you really feel that you must. Electricity is possibly of some use in selected cases, but if there is anything under Heaven "faked" as much, then I haven't heard of it.

Very truly yours,

_____, M.D.

Dr. ———— ————, July 26th, 1924.

————, ————.

Dear Doctor ————:

Replying to your somewhat effusive commentary on Diathermy, which no doubt was prompted by the fact that one of our circular letters came to your office, permit me to say that I agree with you, "Nature is wonderful;" but strange and baffling as she may seem, she is no less interesting than some of her products, E. G. some physicians I have known. While for many years our sole business has been dealing with doctors, yet every now and then we see new and strange things happening. For instance a physician who is presumed to be an educated man, expressing opinions concerning things with which he has had no experience or knows nothing about, as freely as the uneducated bigot who sits whittling on a soap box in a cross road country store down in the Ozarks, with an opinion for every question that reaches his ears, no matter what the nature of the question may be—political, sociological, scientific or what not, again we remark, "Ain't Nature wonderful."

Our old friend "Bill" Shakespeare said many years ago that "a little learning is a dangerous thing," and this we see exemplified over and over again. And it would seem that some of our doctors at times, feeling the urge of expounding some mighty truths concerning Diathermy, testify to the correctness of "Old Bill's" statement. For it is a fact, Doctor, if the statements contained in your letter are to be taken as an index of your knowledge of Diathermy you would pass with a grade of zero plus, because you know how to spell the word and that is all.

No one recognizes the paucity of knowledge among the rank and file of the medical profession with reference to some of these new modalities better than we, yet some of the biggest men in the profession have taken up this line of work and are beginning to write books and reporting results through the medium of the leading medical journals. So, Doctor, if you feel constrained to comment further on some of these newer phases of medicine, permit me to suggest the perusal of some of the newer medical books, or any of the leading medical journals.

For your information, I may say that a school will be conducted in ————, one day each month, starting in September, for the benefit of physicians interested in this kind of work. If you are really interested we shall be glad to advise you further in this regard.

Further, let me say we always welcome criticism, knowing that it will not all be favorable or constructive, yet if it comes from someone with experience, or one who knows, it is gratefully received.

If we can be of help in furthering your knowledge along these lines, we stand ready to serve you.

Sincerely,

_____

Electro-Coagulation of Hemorrhoids

J. B. H. Waring, in the Virginia Medical Monthly, presents the following treatment of hemorrhoids:

Operation is performed under local anesthesia. About three-quarters of an hour prior to operation, morphin sulphate, grains 1/4 to 1/3, is given by mouth, together with atropine sulphate, grains 1/100, and strychnin sulphate, grains 1/30. This may be given by hypo if desired.

Bowels should have been emptied prior to operation, preferably by a simple enema or glycerin suppository. Operative field is now cleansed with mild soap and water, followed by irrigation with a weak potassium permanganate solution, say 1 to 3,000 or 1 to 5,000; this largely eliminates fecal odor for the time being, and renders field more satisfactory to work in from an olfactory standpoint anyway.

An appropriate spot of rectal mucosa is swabbed with 10 per cent cocain and through this preliminarily anesthetized area, the entire operative field is successively anesthetized in a practically painless method by successive injections of 1 or 2 per cent novocain solution. If a glass suction cup of sufficient size to cover the anus is now applied, internal piles will be drawn down and temporarily converted into interno-external piles; likewise, all pile masses will be congested up and made prominent to inspection, so that the operator is not so likely to miss a budding pile or two, and have his patient return in six months after operation with the lament that his piles are coming back on him, etc. Individual pile masses may now be taken up one by one and held in the grasp of an appropriate sized suction tube of glass; or they may be drawn out with seizing forceps, and then held across their base with a regular pile clamp, merely for convenience of attack. The suction tube holds the hemorrhoid out prominently, and serves the purpose of a steadying forceps, without the crushing and lacerating effect of a pile clamp.

An electro-coagulation needle in an insulated handle is now brought into play, using the bipolar d'Arsonval high-frequency electric current directly on the pile mass. The indifferent electrode, usually about a 5 or 6 inch plate of diathermy metal, is strapped over one leg or over the shoulder or abdomen, care being taken to have good contact by means of a cloth wrung out of saline, damp felt or special electrode metal with soapsuds for better contact or patient may grasp the regular auto-condensation handle instead.

The electro-coagulation needle in an insulated handle is now connected by flexible insulated wiring to active pole, and the needle carried through base of hemorrhoid under edges of suction tube holding pile out prominently. With foot-switch usage, just enough current is sent through the needle to coagulate, but not to carbonize or burn hemorrhoidal tissues; this process is repeated with several injections of the needle until a layer of tissue at base of pile proper is entirely coagulated, thus destroying blood and lymphatic supply to the pile proper. A little experience will quickly determine for the operator just about the right amount of current to employ.

If there are, as is usually the case several pile masses to be removed, each successive pile is taken up and treated in the same manner; only a few minutes is required for the entire procedure. If care is taken to handle the pile masses gently and proper anesthesia obtained, the entire operation is painless. The tissues at base of each pile are simply coagulated in a manner similar to the poaching of an egg. Pain following the operation would be indicative of some sparking and some degree of carbonization on the active electrode, which is to be avoided.

This completes the operation proper; we have strangulated each pile mass far more effectively than if we had the stoutest ligature encircling its base, and this has been accomplished without any pain, bleeding or use of the knife; no raw surfaces have been left to cause the pain, which follows

the usual surgical treatment of piles. Coagulation of its base destroys blood and lymphatic supply of the pile mass, and in a few days this sloughs away in a painless and bloodless manner, skin and rectal mucosa involved healing over the operated area very rapidly. Our patient has not been subjected to hospitalization, with its attendant fright to the average patient; he is not upset and miserable in mind and body after reaction from a general anesthetic; further, he is not troubled to any extent with irritation around the anus. The treatment is admirably an office procedure, and at its conclusion our patient is ambulant, and able to go home under his own steam as it were. Nervous or weakly patients are instructed to take it easy for a day or two; one old lady of 80 summers, I kept in bed for three days; but most of them are up and about in short order.

We do not have to make any radical change in the patient's dietary, but instruct him to eat a trifle less for a few days until full activity is restored. Liquid petrolatum, or preferably petrolagar, in full dosage for a few days, is very helpful in rendering the bowel passages bland and easy; our patients do not dread the first bowel passage after operation; this gives them practically no discomfort, and we have the bowels move the next morning as usual. This is radically different from major surgical attack on hemorrhoids, where often the bowels are purposely restrained for "healing" purposes; and after a number of days the first bowel action is usually looked upon as a formidable adventure, fortified by large dosage of oleum ricini.

□ □ □

To the Readers of FISCHER'S MAGAZINE:

Those of us who are convinced that physiotherapy is of real value in the practice of medicine, deplore the fact that there are so many prominent men in our profession who are skeptical or cynical, or even sarcastic about physiotherapy.

Some of the big men to whom we look up as authorities are still prone to consider the work somewhat in the light of quackery. Men who are well established in medicine look askance our apparatus and our claims for what it will do. We know that it is because they have not yet been sufficiently informed; we are sure that if they once gave it a fair trail, they would be with us. But, they won't listen when we talk to them.

These very same fellows, when insulin came out, accepted it instantly and implicitly. Why the difference? The whole thing hangs on the source from which they got their information. The announcements of insulin first appeared in the classical media of medical literature. It was a scientific news item first of all.

But, just because a large amount of the information on physiotherapy is being disseminated by the manufacturers in their own private literature, many of our conservative colleagues assume *ipso facto* (as I did before I became convinced by several years of personal study) that the whole business is a commercial scheme, and therefore valueless.

The facts in the matter are, that a large amount of careful scientific work has been done on physiotherapeutic subjects. But, the general run of medical men does not know of it, because the reports of it have not appeared in the current medical literature. There is a certain set of medical periodicals which are accepted as gospel by the great mass of medical men.

Physiotherapy is the most fertile field today, for original clinical observation. The editors of this same class of classical medical journals will be only too glad to get such material from any of us, if the observations are accurate, and the papers are scientifically worked up. The work would not even have to be new; a series of cases confirming or disproving the effect of autocondensation on blood pressure or of quartz light on carbuncles—accurate, logical, conserva-

(Cont'd on page 10)

SPECIAL ANNOUNCEMENT!

Annual Physiotherapeutic Meeting

At Chicago, Illinois

October 20th to 24th, 1924

The Convention of Physiotherapeutists at the Logan Square Masonic Temple, Chicago, last fall was heralded as such a decided success that it has been decided to make this an annual affair.

These meetings, where all manner of subjects pertaining to Physiotherapy may be discussed openly and informally, are the direct result of numerous requests, due to the difficulty experienced by physicians in obtaining practical information from reliable sources in the efficient application of these measures.

The following physicians of note will participate:

E. C. Henry, M. D., Omaha, Nebraska, *Chairman*
Miles J. Breuer, M. D., Lincoln, Nebraska
W. B. Chapman, M. D., Carthage, Missouri
Wm. L. Clark, M. D., Philadelphia, Pa.
Maurice H. Cottle, M. D., Chicago, Ill.
Leo C. Donnelly, M. D., Detroit, Michigan
Emile C. Du Val, M. D., Chicago, Illinois
R. F. Elmer, M. D., Chicago, Illinois
Chas. H. Fredrickson, M. D., Chicago, Illinois
Dean W. Harman, M. D., Ames, Iowa
Abraham R. Hollender, M. D., Chicago, Illinois
Wm. E. Howell, M. D., Chicago, Illinois
D. Frank Knotts, M. D., Chicago, Illinois
Disraeli W. Kobak, M. D., Chicago, Illinois
Gustav Kolischer, M. D., Chicago, Illinois
Arthur La Roe, M. D., Newark, New Jersey

Ellis G. Linn, M. D., Des Moines, Iowa
Frederick H. Morse, M. D., Boston, Mass.
Roswell T. Pettit, M. D., Ottawa, Illinois
Curran Pope, M. D., Louisville, Kentucky
A. L. Smith, M. D., Corry, Pennsylvania
Harry M. Thometz, M. D., Chicago, Illinois
Norman E. Titus, M. D., New York, N. Y.
Albert F. Tyler, M. D., Omaha, Nebraska, and
Mel. R. Waggoner, M. D., Cedar Rapids, Iowa.

Several other physicians skilled in physiotherapy have promised to be present and to lend their assistance. These meetings will be open to all physicians of standing. There will be no charges, and no obligation incurred by attending.

The complete program, which will appear in these pages in a subsequent issue, has been arranged with but one object in view—to promote greater efficiency in this work, and the entire proceeding will be strictly informal; allowing the greatest freedom for questions and answers.

THE DATES—OCTOBER 20th to 24th, 1924—Inclusive

THE PLACE — THE LOGAN SQUARE MASONIC TEMPLE, at the terminus of the Logan Square Metropolitan Elevated Line, CHICAGO, ILL.

It is earnestly requested that registration be made at once. While Auditorium facilities are almost unlimited, certain preparations must depend upon the number in attendance. This meeting to be held under the auspices of

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Address the Secretary of Arrangements at
2333-43 Wabansia Ave., Chicago, for further details.

tive, scientific—would be gladly accepted. And, among the ranks of workers in physiotherapy, there must be plenty of men who are capable of making such observations and writing them up. What is wanted in this field, is not enthusiasm, but systematic work and rigid reasoning.

A few such articles from time to time, appearing in our State and District Medical Society publications, would very quickly attract the attention of the medical world to physiotherapy, and change the tone of its voice in speaking of this work. And, until systematic and accurate clinical observation begins to be reported in reputable current medical literature, physiotherapy will always be a cinderella.

Let us all get to work, we who are convinced of the value of these methods, and discuss them in our favorite medical journals and meetings, with the same scientific attitude that we hold toward the rest of medical knowledge.

Respectfully,

MILES J. BREUER, M. D.
LINCOLN, NEB.

Treatment of Paralyzed Muscles in Hemiplegia

(The following, from F. H. Morse, M.D., of Boston, Mass., is his reply to a letter received by us from one of our Magazine readers.)

Dear Doctor:

"I received a letter from H. G. Fischer & Co. of Chicago, asking me to write to you direct about the treatment of paralyzed muscles in hemiplegia. I am receiving many similar letters from doctors all over the country and it makes me wish I had more time to quickly finish my book on 'Galvanism and Wave Currents.' However, that is in the future.

"The treatment following hemiplegia resolves itself into maintaining the highest degree of nutrition over the paralyzed areas, and at the same time maintaining sufficient passive muscle exercise to prevent atrophy and functional inactivity. The book, 'The Therapeutics of the Morse Wave Generator,' which you have, will give you the information on the treatment of paralysis in general, but which might not apply to the case in question.

"The average case where nature is making an attempt at restoration by showing some improvement in muscle movements, use a mild current of galvanism; if the arm to be treated, one electrode at the occiput (positive) and the negative on the wrist using Cam No. 1, resistance three, 3 to 5 M. A. In about ten minutes the arm will have become warm from the passage of the current, and in a better condition for exercise. Leave the wrist electrode in place and put one electrode (about 4x5 inches) in the upper dorsal region, using Cam No. 2 on the alternating current up to the point of reasonable toleration. Exercise not over five minutes for fear of local exhaustion. A similar procedure can be used down the paralyzed leg from the lumbar nerve to the ankle by using, possibly, Cam No. 6, 7 or 8 for the exercise part on the A. C. This would be routine technic in the average case, all of which may be varied according to existing conditions."

The Treatment of Pyorrhea Alveolaris

(The following letter was written by W. B. Chapman, M.D. of Carthage, Mo., in response to an inquiry from one of our good customers.)

Dear Doctor:

"I have your inquiry addressed to H. G. Fischer & Co., relative to the treatment of pyorrhea alveolaris by Diathermy. As advised by Mr. H. T. Fischer, the location and nature of the disease is such that it cannot be treated to advantage by Diathermy. However, pyorrhea alveolaris is greatly benefitted by actino-therapy, and where the gums have not receded too greatly, the condition can be cured.

"The technic is as follows:

"Remove all tartar, fragments of food, etc., from the teeth, passing silk between them, and rinsing the teeth and gums thoroughly before beginning treatment. All abscessed teeth, crowns, roots, and other sources of infection must be removed.

"Charge the water-cooled quartz lamp and allow it to run for five minutes before beginning treatment. The water should be turned on so that it flows steadily, but without force, through the lamp. Never allow it to flow with enough force to raise a column of water more than one-inch above the end of the drain.

"Using a straight quartz glass tooth applicator treat all diseased areas on the gums in front of the teeth allowing the ray to penetrate between the teeth. Give from one to two minutes to each spot. More than two minutes will irritate the gums and make the condition worse. After all of the diseased areas in front of the teeth have been treated, take the

bent quartz tooth applicator and treat the gums behind the teeth in the same manner. It is better to treat the gums every day using a one-minute time exposure than to give a more severe treatment with longer intervals in between.

"The patient should be given minute instructions regarding the care of the teeth, and should use a very mild toothpaste and a soft brush. Too vigorous rubbing with a stiff brush tends to break down the peridental membrane and encourage the spread of the infection. As a mouth wash, I recommend ordinary salt water."

Very truly yours,

Auto-Condensation Treatment

(Here is another splendid contribution from our good friend, Dr. W. B. Chapman, also written in answer to inquiry direct to us, and which we felt should be answered from a medical source.)

Dear Doctor:

"I have your inquiry directed to H. G. Fischer & Company of Chicago, relative to auto-condensation treatments, etc. I find that Mr. Fischer has answered all of the questions very fully with the exception of the cause of the oppression observed by patients after auto-condensation treatments wherein the plate was applied directly over the precordium.

"The heat energy that is generated within the tissues of the body due to the very rapid transmission of electrical impulses through same, stimulates automatically the vaso-dilator nerve endings within the walls of the smaller blood vessels. This is what causes the fall in blood pressure that is observed during such treatments.

"In applying the smaller electrode directly over the precordium, you concentrate a great deal of electrical energy within a small area that contains the cardiac plexus which is rich in vaso-dilator nerve fibres. These nerve fibres are distributed to the heart, and other highly vascular organs, and when stimulated, cause an immediate congestion of the splanchnic region with a consequent fall in blood pressure. This disturbance to the cardiac plexus is transmitted automatically to the gaval system and sets up similar reactions within the brain so that a feeling of lassitude or oppression results. I can explain this reaction in detail but it would take too long. I will say, however, that the reaction is not without danger, and I seldom apply the plate electrode above the heart except in strong robust patients, and then I watch them very carefully. I have had a few patients break out in a profuse sweat and require cardiac stimulation where this treatment was carried out too vigorously".

DIATHERMY IN INTERNAL MEDICINE

In an article entitled "Diathermy in Internal Medicine" published in The Journal of the American Medical Association, July 26, 1924, p. 266, Edward W. Jackson, M. D., Rochester, N. Y., says that many persons complain of heart pains. He believes that a large percentage of these pains are diagnosed erroneously as angina pectoris. His examination frequently discloses the cause of the pains to be a neuralgia or myalgia of the chest wall. The slow and often unsatisfactory results obtained in treating these conditions with rest, medicines, conductive and convective heat, and other time-honored remedies, led Jackson to investigate diathermy, the only method he knows of whereby it is possible to apply physiologic heat to tissues beneath the surface. Jackson emphasizes the fact that a proper technic is as important in diathermy as in any other therapeutic measure. In fact a better judgment and a broader general knowledge of medicine are required in the proper application of diathermy and in the selection of cases for treatment, than in most other therapeutic measures.

In all, 1,470 treatments were given by Jackson to sixty-one patients, divided among the various body systems as follows: circulatory, 526; nervous, 266; respiratory, 54; joints, 352; muscular, 223, and urogenital, 39. Full use of the various diagnostic measures was made in the study of these patients. When found, foci of infection were removed, but diathermy was not withheld pending a clearing up of the foci of infection. This, Jackson says, is important, since during the treatment prompt relief was obtained in many painful conditions, thereby proving diathermy of diagnostic value, and lastly, when successful, of economic value in curtailing further diagnostic and therapeutic expense. Thirteen selected hypertensive patients, who had been under Jackson's care for three or more years, agreed to cooperate for the purpose of investigation for more than one year. The treatment for a year or more had been a simple general diet; rest, including a midday rest period, and care in

avoiding emotional disturbances; good elimination, and hygiene. During this period of what Jackson terms rational treatment, the patients had been seen every month or two and the blood pressures had averaged remarkably uniform for each case.

The types into which these cases fall are: (1) climacteric, five; (2) essential hypertension, three; (3) nephritic, three, and (4) arteriosclerotic, two cases. To avoid unfavorable emotional and physical disturbances, these patients were treated in a quiet, darkened room; tight clothing was loosened and they reclined comfortably on the dielectric pad. The office type Tycos instrument was used, the sleeve being left in situ during the treatment. Before starting the treatment, blood pressures were taken at intervals of from one to three minutes until no further lowering was recorded. This usually required from five to ten minutes. The treatment was then given. Until the final pressure reading was made, every precaution was taken, so that the patient was not disturbed. The d'Arsonval circuit was used.

The length of treatments varied from one-half to one hour, mostly the latter; the frequency of treatments varied from one to five weekly. Jackson found that too prolonged treatments with high milliamperage were weakening. Under ideal conditions of the application of diathermy to reduce hypertension, the patient should rest in bed for several hours directly after treatment. The retention of the heat in the body tissues would thus be aided and its physiologic action prolonged and augmented. Jackson's investigation had now been carried on for more than a year. It had been determined that, with careful attention to details, diathermy would reduce arterial hypertension, and, as long as the treatments were continued, would keep the pressures within safer limits.

Properly applied, the treatments were time consuming and harassing. Therefore, Jackson entered into anagreement with eight of these patients, whose home conveniences were such that sedative baths could be taken at their pleasure, to compare the action of baths with his records of diathermy in reducing their pressures. The physiologic effects of such a bath, under the prescribed conditions, followed by noctural bed rest for from eight to twelve hours, were superior to other methods of hydrotherapy in the treatment of hypertension.

Invariably the reduction of pressures following these baths compared favorably with diathermy. Restlessness, insomnia and weakness followed over-treatment, as with diathermy, and it was necessary to adjust the frequency and duration of the baths and to caution that the proper temperature of the water be observed. In time, these baths prove irksome and are likely to be indifferently performed by the average patient. Even with this selected group, frequent observation and evidence of the physician's deep interest were necessary to encourage them. There is a minimum to which any given case of compensatory hypertension may be reduced without provoking symptoms and signs of circulatory failure. As long as the fall of the pressures is unaccompanied by circulatory or nervous discomfort, whatever the method used, it is safe to proceed cautiously with attempts to lower them.

Baths and diathermy, singly, or when wisely combined and adjusted to fit the particular patient, are equally efficient in reducing hypertension. This reduction persists as long as the treatments are continued, provided the other important factors—rest, diet and hygiene—are faithfully observed. When baths and diathermy are stopped or indifferently performed, the pressures gradually creep up. A proper application of diathermy is but half the treatment; the other half is the after-care. Five patients with organic angina, all men in late middle life with a chief complaint of substernal pain, believe that diathermy has been of definite value to them, their attacks being less frequent and severe. Jackson is convinced that the symptomatic relief obtained has justified its use. If complete relief

is not obtained from diathermy, a source of infection must be located elsewhere in the body and removed. The results obtained from 1,470 applications of diathermy to sixty-one patients suffering from various conditions common in internal medicine have convinced Jackson that diathermy is of value for the reduction of arterial hypertension, but sedative baths under carefully prescribed conditions are equally helpful. Diathermy has given symptomatic relief in many painful conditions more promptly than was obtained under usual treatment, and it is an addition to other therapeutic resources Jackson recommends that diathermy be studied in hospitals and large clinics to define its scope, indications and limitations.

Blind Radioist Recovers Sight While at His Set

SYDNEY, N. S., July 24.—Hugh Roper, 87, totally blind, experienced an almost complete recovery of his sight for a period of 48 hours as a result of electrical vibrations received while listening in on a radio concert.

On the morning following, Mr. Roper was able to distinguish the hour of day on a small clock placed some distance away.

□ □ □

Physiotherapeutic Lectures at Omaha

A splendid program has been arranged for October 6th, 1924, in the Lecture Hall, 1118 Farnam Street, Omaha, Nebr. The speakers of the day will be:

B. B. Grover, M.D., Colorado Springs, Colo.,
Disraeli W. Kobak, M.D., Chicago, Ill.,
R. W. Fouts, M.D., Omaha, Nebr.,
G. A. Fleischman, M.D., Des Moines, Iowa,
Norman C. Prince, M.D., Omaha, Nebr.,
M. Wood, M.D., Tekamah, Nebr.,
W. L. Ross, Sr., M.D., Omaha, Nebr., and
W. D. Chessney, M.D., Milton, Wis.

This meeting will be followed with a banquet and a very interesting evening session.

All physicians are invited to attend; no cost, no obligation.

The Role of Physiotherapy in Low Back Conditions

By FRANK B. GRANGER, M.D.
Boston, Mass.

That the diagnosis and treatment of disabilities of the low back type is unsatisfactory, goes without saying. You have had excellent papers on their etiology and pathology, yet in many cases the diagnosis is difficult to make and consequently to institute the proper treatment is still more perplexing.

In traumas of the back the victim usually falls into the hands of one or more of the following classes:

1. The casual treatment of the casual physician where chloroform liniment and a few strips of adhesive suffice, whether the pathology be a crushed vertebrae, hypertrophic spine, ligament or muscle injury.

2. The osteopath or chiropractor who in a few cases succeed, but who in many others increase the disability and perhaps add their share to the existing trauma.

3. The orthopedist whose idea of support, rest and fixation are good and who links the X-ray with careful physical examination, but who in some cases is obsessed with the idea of rest and fixation to such a degree that atrophy and loss of muscle tone markedly retards recovery.

4. The physiotherapist who, too frequently, knows little and cares less for proper fixation and rest and who attempts often with success to relieve muscle spasm, to produce an active hyperemia, with consequent tissue drainage, but who also at times unduly stimulates structures needing for a short time rest and sedation.

It is evident, therefore, that success in treatment depends on: first, a careful and correct diagnosis; second, intimate team work between orthopedist and physiotherapist.

In all traumatic cases, with which I suppose this meeting is chiefly concerned, it is presupposed that there has been excluded postural defects with their consequent relaxation, congenital anatomical defects, and all abdominal pathology which might cause a somewhat similar clinical picture.

The traumatic cases which come to the Department of Physiotherapy at the Boston City Hospital exhibit muscle spasm as their predominant factor.

Relieve the spasm, add what fixation is necessary, if necessary, for a short time, institute what may be called general tonic measures, and as soon as possible employ proper voluntary muscle exercises not only to restore muscle tone but also to relieve the mental inhibition that exercise or work is impossible.

Many of the cases we see are found, on X-ray examination to have had an old hypertrophic spine, which the trauma cause to flare up. Once in a while, we find the classical hitherto unrecognized vertebral crush. Rarely indeed, but still quite definitely, we find a true sacroiliac.

Treatment.

1. Hypertrophic spine aggravated by trauma. In these cases diathermy (internal baking) seems to give the quickest relief. This is due probably to the active hyperemia which it produces locally with consequent tissue drainage, and to the marked muscular relaxation it induces muscle spasm which is not of central origin.

Technic. Place a metal electrode, generally 2x10 inches over the lumbar region of the spine, while anteriorly there is held on the abdomen by means of a sandbag or the hands of the patient a 10x12 inch metal electrode. Treat for at least 20 minutes with whatever current strength the patient can stand without discomfort. This will usually register on the meter from 800 to 1200 milliamperes. Of course if there is the slightest degree of pricking it means that good contact has not been secured, and poor contact may mean a burn.

If pricking does occur the area where it exists should be firmly pressed against the skin. If this does not remedy it, the electrode should be reapplied. At times when the pain is severe, galvanism, with the positive pad posteriorly and the negative anteriorly for 25 to 30 minutes, 15 to 40 milliamperes, will accentuate the effects of diathermy. In some cases, betimes, a low back brace insures a certain degree of physiological rest. If the process is fairly old, and the exacerbation not too acute, deep massage, vibration, the static wave current or the slow sinusoidal will shorten the time of disability. At times, also the application of radiant heat will, by dilating the cutaneous capillaries, deplete the enlarged deeper muscle and relieve pain and stiffness. By some of the above methods the classical six months minimum may be materially lessened. Here again it is assumed that all possible foci of infection have been eliminated such as teeth, tonsils, sinuses, gall bladder, prostate or pelvic infection, etc.

2. Sprain of the lumbo-sacral or lower lumbar joints. These are the so-called "lifting strains" where the patient feels that something gives way and perhaps hears a snap. These are generally ligamentous or muscle tears. The ligamentous ones are characterized by soreness and tenderness which are deeper situated. Here again, muscle spasm stares us in the face. Pain is elicited by lumbar movement. The erector spinii muscles, deep spinal ligaments or the ligaments which are inserted about the sacrum or sacro-iliac joint, are chiefly involved. The muscle spasm is naturally a reflex one due in part to nerve pressure, which pressure is caused by the resultant edema or possibly hemorrhage into the soft tissues. Physiological rest, an adequate back support and immediate physiotherapeutic measures should and do lessen the duration of disability. Again diathermy with larger electrodes than hypertrophic arthritis, but with the posterior one appreciably smaller than the anterior; followed by the sinusoidal or the static wave current, has given us the best results.

3. *Sacro-iliac strain often associated with sciatica.* Here, manipulation followed by short *adequate* strapping, diathermy or baking, sinusoidal or static wave current, and deep massage or vibration, should achieve quick results.

4. *Myositis.* Though this diagnosis has been overworked at times, yet inflammatory processes do occur in muscles; and true myositis is quickly relieved by radiant heat, deep vibration, massage, and static sparks. At times diathermy or the slower heating process of galvanism, with a positive pad over the contracted muscle will also achieve the same result.

5. In spinal infections, such as tuberculosis or osteomyelitis, in addition to appropriate orthopedic and surgical measures, ultra-violet light therapy given both locally and generally, at least deserves a trial.

6. *Periostitis.* A few cases have shown under X-ray examination, a definite periostitis which has persisted and which has caused severe pain. Either because of or in spite of diathermy, a fair percentage of such cases have promptly recovered.

7. *Malingerers.* We get them at times. It is hard to say a man hasn't a pain in his back just because we can find no objective evidence. In most of these cases, the greenback has all other therapeutic measures beaten by a large margin.

From *The Industrial Doctor.*

□ □ □

WHY?

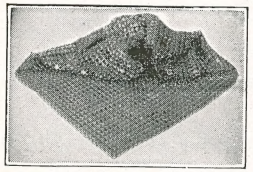
I like my dentist. He's a friend I would not do without.
How quickly he relieves my pain! He knows what he's about.
My doctor, too, is surely good at curing human ills.
He always knows just what I need of poultices and pills.
Their offices they have equipped with up-to-date Fischer machines;
But tell me why will they display such ancient magazines?

(With apologies to A. D. Ihrie.)

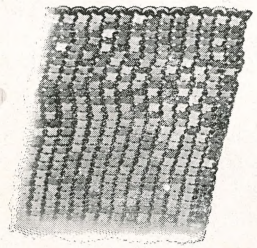
Smooth-Link Mesh Electrode Material

It is quite significant to note that while nearly three-quarters of a million square inches of our German Silver Mesh Electrode Material are in use throughout the country, most of the recent orders are "repeats." It seems that "once tried, always used" fits exceptionally well in this case, as those who are using Mesh continue to buy more of it.

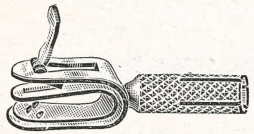
We feel very sure that a number of our readers would be glad to look through our latest No. 14 Accessory Catalog in which this is only one of hundreds of interesting items. Just send a card, and we will mail catalog at once.



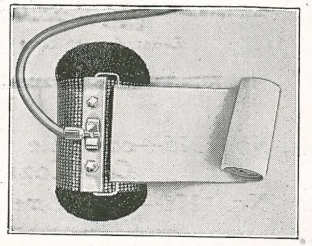
A Mesh Electrode



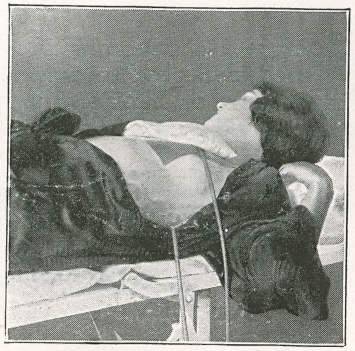
Section of Electrode showing exact size of links



Mesh Electrode Clamp.



Combination Mesh and Rubber Sponge Electrode

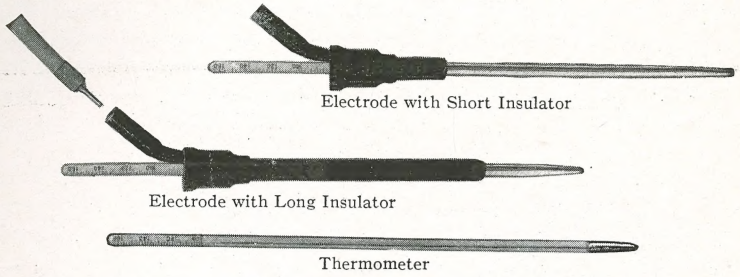


Application Mesh Electrode

The Corbus Endocervicitis Electrode

For the treatment of Gonorrhoeal Endocervicitis with Diathermy. Thermometer registers degree of heating obtained, Fahrenheit.

Instrument consists of four pieces.



Electrode with Short Insulator

Electrode with Long Insulator

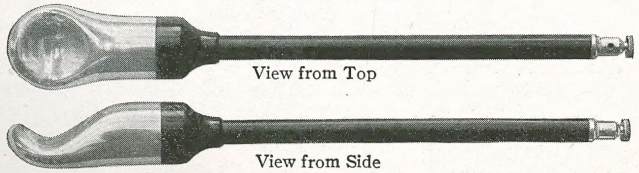
Thermometer

Cat. No. 1275—complete with thermometer $12.00
Code COREND

Cat. No. 1276—thermometer only *Code* COTHER . . . 2.00

The Fischer-Chapman Endocervicitis Electrode

Designed along scientific lines, with size and shape of polished metal end to properly engage the lips of the cervix. The shank, or handle, is made of hard rubber. This electrode is to be used with Diathermy Current.



View from Top

View from Side

Cat. No. 1885—as illustrated . . . *Code* CHAPEL $6.50

The Waggoner Physiotherapeutic Lecture Courses

By Mel R. Waggoner, Cedar Rapids, Iowa

There will be two such classes held in the month of September

KANSAS CITY, MISSOURI
September 15th to 20th
CHICAGO, ILLINOIS
September 22nd to 27th
and
MINNEAPOLIS, MINN., Sept. 29th to Oct. 5th

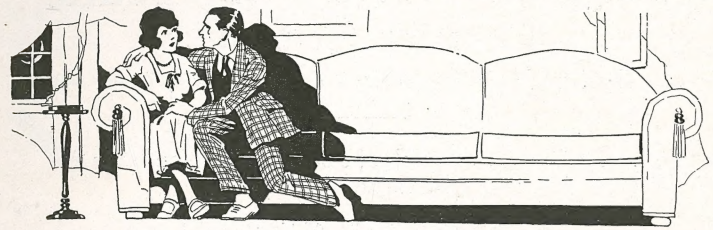
Personally Conducted Courses, Clinics, Lectures
on
Rectal, Colon, Pelvic and Abdominal Diseases

For Details, Fee, Etc., Etc., write
MEL. R. WAGGONER, M. D.
Cedar Rapids, Iowa

DOCTOR WAGGONER will also appear during the balance of 1924 at
Chicago, Illinois, October 20th to 24th.
Chicago, Illinois, October 27th to Nov. 1st.
Charlotte, North Carolina, November 10th to 15th.
New York, New York, November 17th to 22nd.
Cleveland, Ohio, December 8th to 14th, etc.

—Watch for Announcements in "Fischer's Magazine"

A PAGE OF FUN



Jock and Janet were sweethearts and were sitting together one night in the front parlor. Jock was silent for a long time.

"A penny for your thought," said Janet.

"I was thinking I would like a kiss," said Jock.

Janet gave him one.

Again he sat in silence for a long time.

"Were you thinking you would like to kiss me again, Jock?"

"Na, I was thinking you didna gi' me the penny."

□ □ □

A dairy maid milked the pensive goat,
And, pouting, paused to mutter
"I wish, you brute, you'd turn to milk,"
And the animal turned to butt her.
A teddy bear sat on a cake of ice,
'Twas cold as cold could be.
He soon got up and walked away,
"My tale is told," said he.

□ □ □

Wifie: "I suppose now you wish you were free to marry again?"

Hubbie: "No—just free."

□ □ □

Bride (consulting cook-book): "Oh, my, that cake is burning and I can't take it out for five minutes yet!"

□ □ □

She: "Your new furs are magnificent, my dear; what did they cost you?"

Her Friend: "Three fits of hysteria."

□ □ □

The teacher was examining a class in physiology: "Lucy, will you tell us what is the function of the stomach."

"The function of the stomach," the little girl answered, "is to hold up the petticoat."

□ □ □

Conductor: "Watch your step, Miss."

Flapper: "It's not necessary; there are several sapheads behind doing that!"

BELIEVE IN YOUR OWN ABILITY TO DO BIG THINGS.

ONLY BY HAVING FAITH IN YOURSELF CAN YOU COMPEL OTHERS TO HAVE FAITH IN YOU.