

Program for Our Monthly Physiotherapeutic Meeting

Monday, August 10th, 1925

CHAS. E. STEWART, M. D., Battle Creek, Mich.

"Physiotherapy in a Sanitarium"..... 10:00 to 11:00 A. M.

BASIL M. TAYLOR, M. D., Portland, Ind.

"Common Sense in Diathermy"..... 11:00 to 12:00 A. M.

C. W. WESTERMAN, M. D., St. Louis, Mo.

"The Use of Light Therapy by the General
Practitioner" 1:30 to 2:30 P. M.

CHAS. E. STEWART, M. D., Battle Creek, Mich.

"Physiotherapy in Nervous Disorders"..... 2:30 to 3:30 P. M.

How to Get Here:

DRIVING—Follow Washington Blvd. west to Oakley Blvd., north on Oakley to Wabansia Ave. and one block west, or

BY ELEVATED — Take the Humboldt Park "L" to Western Avenue Station, walk one block north to Wabansia Avenue and a short block east to Claremont, or

BY SURFACE CAR—Western Avenue to Wabansia Avenue, and one block east to Claremont.

Experience at the Battle Creek Sanitarium, of which he is Associate Medical Director, gives Dr. Stewart a wonderful background for his discussion of the subjects he has chosen. Dr. Taylor's talk on Common Sense in Diathermy will be illustrated by a number of cases recently treated by him with very satisfactory results. In his talk on The Use of Light Therapy by the General Practitioner, Dr. Westerman brings to bear his practical experience, which physicians will find most instructive and valuable.

Ample lecture-hall facilities have been provided, and physicians and

surgeons are assured of proper facilities for getting the most out of this splendid program. There is, of course, no fee—just come to the main office and accommodations will be provided for you.

H. G. FISCHER & CO., Inc., Phone Armitage 0323
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FISCHER'S MAGAZINE



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370

JULY, 1925

"WE HOLD THESE TRUTHS TO BE SELF-EVIDENT: THAT ALL MEN ARE CREATED EQUAL; THAT THEY ARE ENDOWED BY THEIR CREATOR WITH CERTAIN INALIENABLE RIGHTS; THAT AMONG THESE ARE LIFE, LIBERTY AND THE PURSUIT OF HAPPINESS."

—From the Unanimous Declaration of the Thirteen United States of America, in Congress, July 4, 1776.

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.

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Vol. IV.

JULY, 1925

No. 7

Does Fischer's Magazine Reach YOU Every Month?

Not long ago, a physician said to us, "Why is it that I don't receive your little magazine every month? I read every issue that comes to me, but about every other month you pass me up!"

We investigated—and found that, according to our records, our friend the physician had not been skipped in the mailing of the magazine since his name first went on our list, some two years ago. Our records on this point were quite positive; so we asked him to investigate a little at his end.

He discovered, much to his surprise, that the girl in the outer office who received the mail for several physicians, had been "holding out" Fischer's Magazine! Because it is not mailed under first class postage, which would be quite expensive in the case of a list as large as ours, she had classed it with "advertising" matter, and the doctor was the loser.

It occurred to us that perhaps here might be the answer to a great many of the complaints that come to us from time to time concerning non-receipt of some particular issue or issues of the magazine. Without doubt, the same system of mail distribution obtains in many of the offices to which it is mailed; and the same error might well occur.

The remedy, in that case, is to issue instructions that Fischer's Magazine is to be placed on your desk without fail, every month, the moment it arrives!

The Physiotherapeutic Treatment of Keloid and Keloidal Growths

By CURRAN POPE, M. D.

Medical Director, The Pope Sanatorium and Consulting Neurologist
and Physiotherapist, St. Anthony's Hospital
Louisville, Kentucky

Keloid is a new growth, or tumor of the skin, consisting of whitish nodules or ridges and plates of dense tissue. The ridges tend to recur after removal. They are sometimes tender or even painful. The condition is extremely prevalent in the colored race, and is believed to be dependent upon traumatism. Cicatricial or false keloid resembles a true keloid but is due to a hypertrophy of a cicatrix. Some we have seen resembled a coxcomb; others present brush or fringe like appearances, and still others broad, flat, raised places in the cicatrix. Their color is usually pinkish-purple. They are rather hard to the touch and when they are so located as to cause the collar or clothing to catch upon them, and produce friction, they grow more rapidly and are mechanically annoying. They should never be excised, unless they mechanically interfere with a part. Local applications generally recommended such as ichthyol, creosote, salicylic acid and others are valueless. The same may be said of plasters and internal medication.

Four physiotherapeutic measures are of value. They are x-ray; actinic light, watercooled; galvanic ionization; and diathermy treatment. In our hands the best results have been obtained from the first two. The same objection may be urged against dessication by the indirect method or the heavy spark fulguration that was said of surgery. A very trifling experience with fulguration in small keloids and keloidal cicatrices has taught us that nothing is to be gained by this method, and we therefore never use it. The only value of diathermy is in its medical, or internal heating, form. This may precede the use of the actinic light and seems to enhance its activity. The water cooled lamp should be employed with an applicator large enough

to cover a section or the entire keloid and pressed upon the scar so as to dehematize the growth. It should be pushed to the point of producing an active dermatitis.

The *galvanic current* should be employed as follows: The large indifferent pad should be placed upon some adjacent area of the skin and attached to the positive pole and the active electrode placed over the keloid itself, and attached to the negative pole. With this latter electrode I prefer to bring the metal in direct contact with the keloidal cicatrix itself. Under this treatment ordinary, hard cicatrices as well as keloidal cicatrices will disappear. This result is, in my opinion, the result of an arrest of development and prevention of further growth followed by retraction rather than an actual absorption of the keloidal cicatrix. If the galvanic treatment is used, an excellent plan is to use diathermy or radiant heat to the growth first and then ionize it with 2 per cent of sodium chloride or sodium salicylate or 2 per cent sodium iodide solution, remembering that all of these are electro-negative and should therefore be applied to the cicatrix with the negative pole.

The sheet anchor, however, of the treatment is the x-ray. The technic employed by us is as follows: With a proper cone covering the areas involved, and with the keloidal cicatrix exposed to the ray, we set the machine with a 5-inch spark gap; anodal distance 10 inch, aluminum filter 2 millimeters, meter reading 5 to 10 M. A. A dosage of 50 to 100 milliampere minutes is given. These applications are given usually twice a week; sometimes three times weekly. We have found it of great advantage to distribute the treatment over several months.

When the scar begins to lose its color and to retract it is well to cease treatment for awhile and allow the effect of the treatment to continue. Frequently the retraction and decoloration continues to take place until the scar assumes a normal and soft appearance. In the old days before diathermy and the x-ray, I have seen a keloidal cicatrix disappear under heavy static sparks and the static wave current. If at the end of a course of treatment there still remain some adhesions in or around the location of the keloid it is an excellent plan to use manual massage or the sinusoidal current to loosen up the scar tissue.

Advanced Hypernephroma Treated by Medical Diathermy

By WALTER B. WALLACE, M. D., and
G. VAN AMBER BROWN, M. D.

Detroit, Michigan

On March fifth, Mr. Mc.— was referred to the writers by Dr. Brown for treatment. The doctor asked what could be done for the patient by means of physiotherapy and was told that it did not seem that there was anything encouraging to offer. Dr. Brown, who is familiar with the treatment by diathermy, said, "Well, try! He is past surgical aid." With that understanding, electrotherapy treatment was commenced. The man had the appearance of one who was very sick, the veins of the head and face were prominent, the skin had a sickly lemon tint, he was irritable, he had dizzy attacks and had given up work some time previous to consulting Dr. Brown. In fact, his appearance was that of one in a severe toxic condition.

On simple inspection, an immense tumor of left kidney filled the whole left side of the abdomen and at its apex bulged the anterior abdominal wall markedly.

The first three treatments, using autocondensation, may be objected to on the ground of the high blood pressure being considered compensatory. However, as he was having high pressure symptoms, it was given and with beneficial results, both as to the lowering of high pressure and its symptoms.

On March 5th he received his first treatment. Previous to the treatment his blood pressure was 185 over 110. After one-half hour of autocondensation of 400 m. a. it was 160 over 90.

March 7th. The second treatment was given. Immediately previous to this treatment the systolic pressure was 175 and the diastolic was 105. The time of treatment was one-half hour of 400 m. a., and following the treatment the pressure was reduced to 160 over 95.

March 10th. Complained of severe pains in lumbar muscles of both sides and was tender to pressure in the same region.

This pain and tenderness did not seem to have any reference to the tumor mass. Before treatment the pressure was 160 over 105. Following autocondensation of one-half hour's duration of 400 m. a., the pressure was 160 systolic over 90 diastolic. After the autocondensation, he was treated with a large non-vacuum body electrode over the lumbar regions for a period of twenty minutes, which gave immediate relief.

March 12th. Patient received first diathermy treatment through left kidney tumor mass. Block tin electrodes were used for one-half hour at 1600 milliamperes.

March 14th. Diathermy was given through region of tumor for one-half hour, using 1200 milliamperes current.

March 17th. Patient complains of pain in lumbar region, also has tenderness in same location. At this time we used a non-vacuum body electrode over painful area with considerable relief. The tumor was somewhat smaller. Gave diathermy through the mass, one-half hour, using 1600 milliamperes.

March 21st. Diathermy given through mass one-half hour for 1600 Milliamperes.

March 24th. Previous to treatment blood pressure was 158 over 100. Tumor is receding in size. Diathermy was administered through growth, one hour, for 400 milliamperes. No blood was to be found in the urine at this time.

During the interval between March 24th and May 8th an acute illness leading to the death of his wife, prevented any further treatments.

Between the dates May 12th and May 26th, five treatments of diathermy were given, an average of one every three days, time varying from 40 minutes to one hour, milliamperage from 1700 to 2000.

On May 26th the blood pressure was 136 over 90.

Between the dates May 29th and June 16th, six treatments of diathermy were given, averaging a treatment every second day, time varying from 45 minutes to one hour, and the milliamperage varying from 1850 to 2350.

June 16th. No blood found in urine either macroscopically or microscopically.

Between the dates July 28th and August 27th, five treatments

of diathermy were given, with time varying from 40 minutes to one hour and the millamperage varying from 1700 to 1900.

On August 27th the treatment of diathermy was followed by one with the quartz air cooled lamp, time two minutes, target distance 40 inches, voltage 70. The radiation was made over the entire front and back of the body. The reason for using the quartz light was that I had already read an article by Dr. A. J. Pacini in which attention was called to the point that certain tumors grow less rapidly when the blood is high in calcium and low in potassium. Also it has been proven conclusively that the quartz light aids in producing an increase in cellular calcium content.

September 4th. Gave ultra-violet treatment, air cooled lamp, time 4 minutes, target distance 40 inches, voltage 70, over entire front and back of body, followed by diathermy through the mass. Time of administration was one-half hour, using 1700 milliamperes.

September 11th. Diathermy administered for one-half hour from a 1500 milliamperage current. Mass still decreasing and almost imperceptible by palpation.

September 18th. Growth is still receding in size. Diathermy applied for 45 minutes, 1700 milliamperes, followed by ultra-violet, air cooled lamp, time 4 minutes, target distance 40 inches, voltage 70, to front and back of body.

October 10th. Tumor is steadily growing smaller, diathermy used for 30 minutes at 1500 milliamperes, followed by ultra-violet, air cooled lamp, time five minutes, target distance 40 inches, voltage 70, to front and back of entire body.

November 6th. Following cystoscopy with a catheter in the left ureter, very little urine was excreted from the kidney. Phenolsulphonephthalein output from this side was in 14 minutes nil and was less than 1 per cent at end of half hour. At this time the patient was examined by several physicians, including one of the writers, and none were able, by manual examination, to find any evidence of the tumor. The x-ray showed an enlarged kidney, but no additional mass.

Conclusion

While in the diseased kidney functional end results are practically nil, the right kidney has compensated to such an extent as to give a normal urinary output as shown from time to time by a careful urinalysis. The patient has gained in weight, his cheeks are ruddy, blood pressure is down to within limits of normal and he says he feels well. He certainly looks well and for some time has been following his vocation.

This case has not been reported as a cure nor with the idea of supplanting surgery in operable cases, by diathermy, any more than we would wish to supplant surgery in a case of appendicitis. However, the object of this report is to stimulate a further trial of this treatment in inoperable cases, giving to the sufferer a chance for relief without toxemia as one of the results and without doing damage to any of the other tissues, both of which are prone to follow certain other methods of treatment, added to all of which is the hope of cure.

Coming—The October Physiotherapy Convention—Don't Miss It!

The Fourth Annual Physiotherapeutic Convention, which will be held at the Drake Hotel next October, bids fair to outclass any meeting of the kind ever before attempted. The program is shaping up in a manner that indicates the visitor will have the opportunity of hearing lectures by a combination of professional talent whose combined efforts might well produce an authoritative library of physiotherapy. There will also be a series of elaborate clinics, many demonstrations of latest developments in technic by experienced and successful physicians and surgeons. Every practising physician and surgeon will be welcome at the Convention and no effort will be spared to make his stay a pleasant and fruitful one for him. Those interested are urged to make early arrangements to be there, and to communicate with this office as to details.

Watch this Magazine for Further Announcements

Electricity in the Practice of Medicine

By WILLIAM MARTIN, M. D.

Formerly President American Electro-therapeutic Association

Many physicians who are not conversant with the uses of the various currents naturally wonder in what types of disease they are used. Many question whether there is any result therapeutically other than that which is purely psychic.

Since we have definite effects from electrical currents as shown by their physical qualities, we can hope to secure results from their use when we know these effects and the pathology upon which we are to work. We have in a general way, three important physical effects of current applications to the body—chemical, thermal, and mechanical. The first is illustrated by the constant current, as its effect is electrolytic, or, as sometimes termed, ionic. The high frequency illustrates the second, as its passage through tissues produces heat. The mechanical is best illustrated by the static. Therefore, when we have a pathology that requires certain effects such as are produced by the constant current, we naturally select that for the purpose. If hyperemia of an active nature is wanted, the high frequency current will "deliver the goods." When a mechanical effect is desired, the static currents stand out pre-eminently. We have in the latter class the faradic current, but of late years this is used for little other than nerve testing. We have modifications of all these current effects produced by the modifications of old apparatus or the production or invention of new, so that in this day of advances we have a large armamentarium which enables us to cope with many pathological conditions.

We have always been taught the value of sunlight, so now we have artificial sunlight under our absolute control as well as other forms of light, each with its own particular value.

There is no guesswork about the application of these various measures, if one is trained and skilled in their uses as well as in the pathology of disease. It is the height of absurdity for anyone to make the statement that they have psychic value only. The fact is, this plays the least part in the whole matter. No

one expects to secure cures or favorable results in every case that comes to his attention, but he does logically expect results from his scientific application of physical measures in the large variety of chronic metabolic conditions in which drugs have always failed. Here is his field of labor, and it is a large one. What is needed in this work is some knowledge and a lot of common sense.

Electricity is not a cure-all, and no sensible physician will consider it to be or advocate it in every case that comes to his notice. Drugs are not cure alls as will be conceded, therefore we must use judgment in our prescribing, using either or both as called for, and discarding either when not indicated. In prescribing electrical measures we follow along the same lines as with drugs—we use one current if it is alone indicated, or a combination of two or more if judgment so decides. This is where experience counts, and where common sense dictates.

In conclusion, the summing up of the whole matter is, that we must encourage a greater devotion to proper investigation of present-day methods of therapy, doing this with an open mind, and not be blinded by prejudice. If then, conditions warrant a use of the methods that have made their appeal, the physician must take the time necessary for acquiring an education sufficient to fit him for this particular work.

(Abstracted from New Albany Medical Herald)

Dr. Edwin E. Leman, Radium Expert, Dies

Dr. Edwin E. Leman, radium expert, died June 7, 1925, in his home at East Orange, N. J. The rays of the mineral, to the study of which he had devoted 13 years, had slowly destroyed the corpuscles of his blood.

Since 1911, when he was a senior chemistry student in the University of Chicago, Dr. Leman had been interested in penetrating the secrets of radium.

Dr. Leman was considered a leader in the field of recovering pure radium from the ore.

(From The Boston Daily Globe)

Diathermy in a Case of Apparent Middle Ear and Nerve Deafness

By SAMUEL J. RUBLEY, M. D.

Britton, Mich.

I desire to report a case now nearing completion of treatment, in the hope that this report will inspire others to efforts of a similar nature and result in an exchange of useful ideas.

Case History

American, male, 52 years old. Family history is unimportant.

Personal History—Frequent attacks of earache with purulent discharge. Usual diseases of childhood without serious sequelae. At age of 30 he had a severe attack of Iritis and Keratitis which resulted in complete blindness. Nearly all his life he has had "Nasal Catarrh," with a copious discharge. May 1924 he noticed that his hearing was beginning to fail. It had never been acute but now the deafness was so pronounced that he could not distinguish the tones of a piano. This condition progressed rapidly up to the point of where shouted voices could be heard only at 18 inches in the left ear and not at all in the right ear.

Examination

Nose—Right nares occluded by a severe septal deviation. Ulcer on left side of septum. Turbinates about normal. Eustachian tubes patent; Bellae not enlarged.

Ears—Canals free. Tympanic membranes show old perforations filled in by thin pliable scar membrane. There is marked retraction of the drums and prominence of the processus brevis. Numerous opacities in the membrane. Both malleoli firmly fixed.

Functional Examination—Bone construction is not localized to either ear. Tuning fork tests give negative results in either ear with both air conduction and bone conduction. Shouted voice heard only in left ear. Prognosis was naturally very gloomy. No help was promised.

Treatment

Surgical—Submucous resection April 13, 1925, with the usual postoperative care.

Medical—Potassium Iodide M-X, T. I. D. Intramuscular injections of Fibrolysine (Merck) every third day. General tonic measures.

Diathermy—Following a suggestion in the April number of your magazine I made ear electrodes. Daily treatments were given consisting of 350-450 m. a. for 30 minutes followed by inflation of ears and massage of drums.

Results After Three Weeks' Treatment

Left Ear—Whispered voice at three feet. Conversational voice at twelve feet plus. Malleus freely movable. Thin scar tissue is thickened and vibrates with surrounding drum membrane and whole ear drum improving. Processus brevis less prominent.

Right Ear—Malleus movable on massage. Adhesion back of drum still present. C 2 fork heard for 8 seconds when producing over tones. Spoken voices heard at four feet.

Conclusion

(1) In cases of apparent nerve deafness combined with middle ear deafness diathermy is definitely indicated.

(2) In cases of middle ear deafness the prognosis is definitely bettered by diathermy.

(3) Other treatment, both medical and surgical, must not be neglected.

(4) While diathermy must not be considered a specific, it adds a most valuable agent to our armamentarium.

An Especially Interesting Meeting for Physicians and Surgeons

Members of the Medical Profession who are interested in Diathermy will find the next regular Monthly Meeting and Clinic at 2335 Wabansia Avenue, Chicago, on Monday, August 10, of special interest. Well-known speakers—actual demonstrations.

See Back Cover for Program

Ultra Violet in Alopecia

If the hair follicles have not progressed in their atrophic change to a point beyond redemption; if *anything* at all could be made to benefit the condition, then the proper use of ultra violet will do it more certainly, quicker and safer than anything else that could be used.

The quartz ray alone will stimulate vigorous hair growth (when properly used) in many cases, but in the advanced cases other treatment is necessary to prepare the scalp for the ray. It is an unfortunate clinical fact that if a skin has been chronically inflamed long enough or has been undergoing a progressive atrophy, that after a certain stage has been reached, it is impossible to drive an actinic ray reaction through this fibrositic area. This is the reason for failure when repeated applications of actinic ray erythemas do not clear up the condition.

It is a popular fallacy that germs destroy the hair and a majority of the highly advertised "cures" stress this point. Germs seldom or never attack a healthy, fully nourished hair. When the nutrition of a hair has been cut down to a certain point the germs will get it, but if they did not it would make slight difference. It would fall out of its own accord a few months later anyway.

How can we restore vigor to a scalp, the hair of which is falling out or has already passed on? In one way only. Markedly increase its blood supply and, if necessary, as very often is the case, increase the quality of the blood supplied. For both these purposes there has never been known anything that could fairly be compared to the ultra violet ray. *Locally*, you may safely, and with positive benefit to the skin, produce many times as intense an erythema as you dare to try to produce with heat, mechanotherapy, chemotherapy, x-ray or any other form of erythema producing agency and the more intense the actinic erythema and the more often it is produced, the more beneficial it is. So far from damaging the skin, it does the very opposite. It raises the resistance of the skin to *all* sorts of irritants including violent chemical irritants and the x-ray.

Generally, (that is for the so-called tonic effects) for the pur-

pose of raising the reactivity of the blood, raising its resistivity and giving it its highest value as a nutritive medium, the general application of the ultra violet ray produces such prompt and marked increase in these qualities that it is positively unfair to the ray to compare the best possible chemical "tonic" to it. They are not even in the same general class.

Now, let us take an advanced case of alopecia and follow through its treatment. Less advanced cases might not require the preliminary treatment, but even these cases would benefit markedly if subjected to the whole routine. Advanced cases may not respond when it is used but if they do not the only place the recipient is ever going to get hair upon his head is at the toupee makers. First, it is up to us to break up and remove as much as possible of the fibrositic (or atrophic) changes in the scalp. Intense heat from the 1500 watt therapy lamp all over the affected area for twenty or thirty minutes, followed immediately by some form of mechanotherapy, such as vigorous massage, rolling and pinching the scalp or lateral vibration (that is, with a vibrator having a lateral movement and not a concussion stroke) should be used every day for some weeks.

Then, once a week spray an ionizing dose of *soft* x-ray (5 milliamperes minutes of a 4½-inch back-up-spark x-ray, at an 8-inch target skin distance through one millimeter of aluminum filter) over the affected area. Not more than a five-inch back-up-spark is wanted or must be used. To save time this ionizing dose of x-ray can be administered every other day for the first three (3) doses only, and then once a week thereafter.

After some weeks of this preliminary treatment, the scalp is ready for and will react much better to the ultra violet ray. Shave or clip the hair very close and give a heavy third degree dermatitis reaction over the scalp with an air cooled ultra violet lamp. (A third degree actinic ray reaction is as violent a reaction as can be produced and not blister.) The amount of exposure necessary to produce this reaction will vary with different lamps, voltages, age of burner, etc., but as we want to produce extreme stimulation we should use a short target-skin distance—eight or ten inches from burner to skin. Let this reaction come up to its height and recede and then repeat the

third degree ultra violet reaction at intervals of ten days or so apart for two or three more reactions. If this course of treatment will not grow hair then nothing else has a chance. Lighter doses of the ultra violet, of course, will stimulate hair growth in many cases but the treatment outlined is for a stubborn case.

(From *The Quartz Lamp*, May, 1925)

The Book Which Has Superseded all Others In Its Class

HIGH FREQUENCY PRACTICE

BY BURTON BAKER GROVER, M. D.

Profusely Illustrated—About 400 Pages Extra Cloth, \$4.00, Postpaid

There is no other means at the command of the physician so potent in correcting deranged metabolism as the high-frequency current.

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Medical Herald and Therapist for 6 months	1.00

\$11.00

These Three Books, Postpaid, and the Magazine for 6 Months for \$7.00

Supplied by H. G. Fischer & Company
2335 Wabansia Avenue
Chicago, Illinois

A Price Correction on the Type "G" Hospital Unit

An error in the printing of the advertisement of Type "G" Hospital Portable Diathermy Unit, in *Fischer's Magazine* for June, has caused some misunderstanding. To clear this up, we submit herewith the correct prices of the Type "G" Unit and the Hospital Cart:

No. 1250, Type "G" Hospital Portable Diathermy Unit, without accessories or cart	\$250.00
No. 1251, as above, complete with accessories but without cart	275.00
No. 1255, Hospital Cart	40.00

The Treatment of Carbuncles by Electrocoagulation

By A. DAVID WILLMOTH, M. D.

Louisville, Kentucky

Having had extensive experience with the D'Arsonval bipolar current in the treatment of cancer cases, its use in carbuncles naturally suggested itself. The work could be done without anesthesia, as a rule, save hyoscine, morphine and cactin; there was no cutting operation, hence no bleeding to staunch; no shock; and a shorter stay in the hospital. The further advantages were: no hot cauteries to handle, or to cool down while in use, the heat and destruction of tissue being entirely under the control of the operator at all times. Any amount of tissue destruction can be had, depending on the amount of current used and the length of time of its application.

When it is definitely determined that a carbuncle is present, it is the proper time to institute radical measures for its immediate relief. Like acute appendicitis, the time to operate is when the patient is first seen, as the work will be less then and the patient's chances better than at any later period.

Technic of Electrocoagulation

The technic is as follows: Assuming that, for some reason or reasons, the patient should not, or will not, take either a local or general anesthetic, and the amount of tissue destruction is not too great, the area involved can be anesthetized by using the same type of current as will be used in operating. Attach the indifferent electrode of the high-frequency machine to any part of the patient's body that is most convenient; or, what is a very good method, use the autocondensation handle and attach the indifferent cord from the machine to this and tell the patient to grasp it with both hands, not so tightly as to cramp the hands, but firmly. This will give the patient something to do with his hands and prevent his taking hold of you, and is an easy way to make the desired connection.

To the other cord of the machine is attached the handle of the

active electrode which is to be used with the needle point in destroying the pathology. Start with a very light current—just enough to make the so-called “feather spark”—allowing this to come in contact with the skin about one-fourth inch or little more from the margin of the area to be destroyed. By passing this in a circular manner around the carbuncle for three to five minutes and having your assistant gradually increase the spark up to the point of tolerance, and at the same time increasing the speed of revolutions, the entire area will be numbed, and, without telling the patient, the needle is pushed into the infected tissue as deep as is necessary to reach the deepest points of infection and allowed to remain there, increasing the current if needed until the tissue is blanched white. The amount of current will usually be about 250 to 500 milliamperes and the time 20 to 30 seconds.

When the tissues become white, the needle is removed and inserted into another adjoining area and the current applied by the foot switch until the tissue is again blanched. By repeating this procedure, the entire pathology can, in a few minutes, be entirely destroyed and only healthy tissue remain. When all infected tissue is coagulated, the major portion can be removed at once with a large spoon curette, leaving only a healthy base. Any bleeding points are controlled by allowing the current to arc for half-inch spark distance, when all bleeding will instantly stop. The wound is now clean and ready to be dressed with plain sterile gauze. Pain will not be experienced after the treatment is over, for the reason that small terminal nerve endings are obtunded by the current.

Severe Cases

If much destruction is going to be needed, the patient should be in a hospital and given a full strength hyoscine, morphine and cactin tablet two and one-half hours before the time of the expected operation. This should be further augmented by the half strength tablet of the same, one-half hour preceding the operation.

The patients usually come to the operating table either in profound sleep or, if not, in that state of “twilight sleep” where

they can converse with you, while experiencing no pain, nor remembering anything that happened at the time.

Where an ether anesthesia is used, great care must be exercised to prevent explosion by getting the ether can at safe distance before the treatment is begun. If the operation is about the face or neck, time must also be allowed to get the ether vapor out of the patient's lungs and, as a further precaution, lay a wet towel or gauze over patient's face during the time the current is on. The operator can control any of these dangers, if experienced in the use of the current, by not allowing any sparking to occur on the surface. This is done by keeping the needle in the tissue during the entire time the current is on, and by keeping the needle clean and free from charred accumulations at the tip that is exposed for the first inch or two for contact. No sparking can occur from the portion of needle that is covered by the rubber tubing and away from the tissues.

These cases, being more extensive, will require from 750 to 1250 milliamperes of current to work fast and avoid any hemorrhage, and should have the indifferent electrode applied to some portion of the body, either the thigh, back or abdomen.

This indifferent electrode should be of block tin, 6 by 8 inches in dimensions, and must always have round corners. It should be thoroughly soaped and should be maintained in direct contact either by an assistant holding it firmly against the skin or bandages or sandbags may be used to maintain the contact. Perfect contact must be kept up at all times, else a burn will be produced by the current arcing across from the tin plate when the current is on. The operator should always use a foot switch so that he may be in perfect control of the current at all times. This insures instant application and likewise instant breaking of the contact when necessary.

The machine should be grounded to a cold water-pipe to take care of any stray currents. Remember, you are using a current of potential danger, both in volts and milliamperes.

If the slough that is going to occur produces much odor, this can easily be cared for by the application of powdered sugar to the wound. The sugar should be moistened enough to form a paste and spread on gauze large enough to cover the wound.

The paste should be spread on sufficiently thick to make a smooth dressing when applied, and placed in direct contact with the wound. This dressing can be used exclusively if desired, or an oil dressing can be substituted when the wound has become perfectly clean and free from odor. The separation of the slough can be hastened by the use of pepsin which will rapidly digest out all tissue destroyed by the current, leaving a clean, granulating wound.

The electrocoagulation of these conditions is not only more rapid but much safer than surgical removal, there being no bleeding to annoy or cause shock. It seals all lymphatics, thereby preventing any further danger from metastasis; is painless after the work is done; has no mortality from shock of operation and leaves a smaller and more pliable scar. The scar can further be lessened and the healing process made more rapid by the use of the water-cooled ultra-violet lamp one to two minutes each day, with open lamp at six-inch distance. The use of peroxide to cleanse the wound will not only favor the cleansing process but will act as a photosensitive agent enhancing the therapeutic action of the lamp.

A word of caution should be given in those cases where local anesthesia is used. Remember tissues infiltrated with fluid generate heat much more rapidly than normal tissues. At least one-third less current and time must be used, or else, by the generation of steam, a much wider destruction will take place than was intended.

Electrocoagulation in carbuncles so far surpasses the old treatment of knife or cautery as to make them obsolete.

(Extracted from Clinical Medicine, May, 1925)

An Acknowledgment

Credit for the excellent article on "Physiotherapy Now an Established Part of the Hospital," published in Fischer's Magazine for May, should have been given to the author, Arthur E. Schiller, M. D., 1207 Kresge Building, Detroit, Mich.

It gives us great pleasure to make this correction at this time, for we feel that Dr. Schiller's name adds weight to the statements which we were glad to endorse by publishing them.

Electro-Coagulation of Epithelioma

By W. B. CHAPMAN, M. D.
Carthage, Mo.

T. E., Neosho, Missouri, age 50 years, (Fig. 1). Epithelioma of lower lip produced by smoking. Seven months' duration. This was removed by electro-coagulation with the perfect results shown in Fig. 2.

The diathermy machine was set to deliver between 2000 and 2500 M. A. of current at lowest tension. By this, I mean that the meter registered that amount when the two electrodes were in contact. For the active electrode I used a needle from the standard operating set, while for the inactive electrode, I employed a large piece of block tin, 5x12 inches in size, which was placed against the back, the upper edge extending above the patient's collar. No soap-lather was used to insure contact.

The lip was anesthetized by two per cent novocain-adrenalin solution. Using the foot-switch and the pointed electrode the current was applied at various points on the lip until the entire malignant process was dessicated. (You will note that the healed scar extends across two-thirds of the lip.)

The slough came away after five days and the lip was healed in three weeks' time. A series of x-ray treatments were given over the cervical region to prevent the possibility of metastasis.

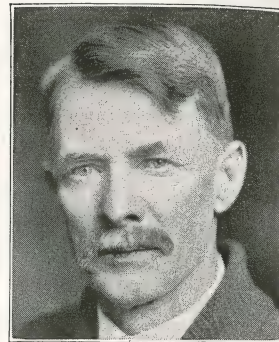


Fig. 1

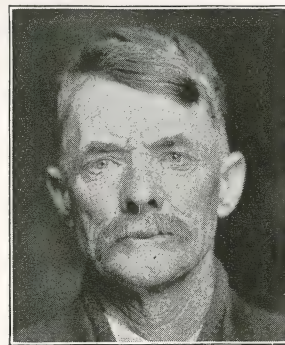


Fig. 2

Physiotherapy in the Treatment of Industrial Injuries

By GUY E. BARR, M. D.

Sioux City, Iowa

The treatment of industrial disabilities has become an important and vital factor in the health and prosperity of the general public. It concerns not only those who are actually disabled, but those who are dependent on the product of their labor. Any means, therefore, which is conducive to the conservation of the health and physical fitness of the individual so that he may do his part and do it well, is certainly deserving of our utmost efforts.

Physiotherapy, as imbodyed in the use of electricity, light, x-rays, heat, cold, water, massage, and exercise, offers us a powerful armamentarium of therapeutic value, and to achieve the greatest measure of successful results our equipment must include several, if not all, of those means for producing the desired mechanical, chemical and heat or thermal effects.

Mechanical action is produced by the interrupted galvanic, the plain or interrupted faradic, the sinusoidal and static wave currents, or the high potential resonator discharges; also by vibration, massage, and exercise. These various agents have their particular indications for use, being stimulating, reconstructive, and eliminative in their effects.

No injury, whether traumatic, chemical, thermic, or bacterial, can be recovered from except through the agency of heat, whether the heat originates within the system or is induced by external agents.

Diathermy is a physiological agent. It increases the temperature of the tissues themselves, it dilates the blood vessels by direct influence, and increases the supply of the area treated, and thereby quickens the chemical processes of metabolism, and thus aids nature in making a cure. It relieves pain and tenderness by relieving pressure from exudates. It softens tissues making them better conductors of low frequency currents and

more susceptible to mechanical treatments such as vibration and massage.

Sprains and contusions with their attendant congestion, swelling, and local rise of temperature, are treated with the most gratifying results with diathermy, heat, massage, and exercise. The early treatment of sprains with diathermy, resulting in the relief of pain and prevention or removal of stasis, is one of the noteworthy achievements of this valuable agency. The daily treatment of these cases is followed by rapid restoration to normal function, and the patient may meanwhile pursue his accustomed activities.

Dislocations

Massage and exercises should be started at once after reduction, under the care of the surgeon. In fact, all joint motions in a recently reduced dislocation should be done by the surgeon himself, after baking and massage of the injured joint. The greatest care is essential lest the dislocation recur; therefore, motion should be gradual and not at too great an angle before a week or ten days have passed. The function of a joint is motion and a joint not moved will become stiff; also, the muscles moving the joint are usually supplied by the same nerves as the joint itself, and there is a reflex atrophy of these muscles. This can only be prevented by massage, electric stimulation and proper motion. This is especially important in the shoulder joint, as the stability of that joint is dependent upon the surrounding muscle tone.

Stiff and painful shoulders, uncomplicated by calcified bursæ, are best treated by some combination of radiant light, diathermy, sod. chloride ionization, sinusoidal currents, and massage.

Ankylosis of Joints

In all treatment of stiff joints, cases of bony ankylosis and those cases where there is some contra-indication by a pathological process, such as tuberculosis, should be excluded; where there is a bony obstacle it is useless to attempt, without surgery, to gain motion beyond the bony blocking. So we have to treat by physiotherapy stiffness caused by adhesions inside or out-

side the joint, by inflammatory changes or by reaction of scar tissue.

Fractures

For fractures, our therapy is after reduction: first, radiant light for the production of active hyperemia; second, diathermy for hastening callus formation; third, gentle massage for its circulatory effect. Where there is a slight nerve involvement, the Bristow coil or the slow sinusoidal current applied over the motor points with gentle contraction are also a help in retarding or preventing atrophy.

Arthritis and synovitis, and other joint and bone conditions, are quickly relieved and permanently improved by the use of the remedies which produce heat and mechanical effects.

Inflammation of the muscles and tendons produced by strains and direct violence are very promptly relieved by radiant light, diathermy, and surface electrodes. Follow this up by static wave currents or sparks, or the slow sinusoidal current and you will get very rapid and satisfactory results.

The restoring of active circulation and improvement in the nutrition of muscles and the relief of pain and inflammation in the early stages of nerve injuries, with their resulting paralysis, is best secured by the combined treatment of baths, massage, suitable forms of electricity and exercise.

Amputations

Physiotherapy is of great assistance in relieving edema, hastening the shrinking of the stump, stretching contractions, hardening the stump to make it weight bearing, and restoring muscular tone.

Muscular Atrophy Following Injury

Anything that will promote the nutritive changes in the muscle is indicated and in physiotherapy modalities we have by far the best and most efficient means of attack against this trouble. All treatment should be preceded by the thorough warming or heating of the part by radiant light and diathermy, then the Bristow coil or sinusoidal current, followed by massage and exercise. Muscles which show the reaction of degeneration do not

respond to the faradic current, in which case it becomes necessary to employ the interrupted galvanic, the rhythm of which must be regular, with a period of rest. The sensation of pain produced by electrical currents depends upon the height of the current wave, the higher and longer the wave the greater degree of pain. Care should be taken not to tire or tetanize the muscle.

Burns

Radiant light and actinic light relieve pain, stimulate the quick healing process, and are bactericidal, and under this treatment burns will invariably heal without any subsequent infection. For x-ray burns no agent known today can compare with actinic light, either preceded or followed by radiant light.

Infections

Superficial types of infections are very successfully treated by radiant light and heat, combined with actinic light. You will be agreeably surprised to find how quickly these infections and ulcerative conditions will respond to this treatment. I do not use very much of the so-called antiseptics, but am depending more and more upon the use of radiant light and actinic light to control infections and injuries and find I get much better and quicker results than can be obtained by any other method.

Bruises

From a medical standpoint every bruise should be regarded as serious, and every effort made to restore normal circulation at the earliest possible moment. So I repeat: treat all mild bruises as if serious consequences are to be expected; apply radiant light and heat, diathermy, actinic light, or vacuum electrodes as soon as possible after the trauma.

Back and Sacro-Iliac Strains

Probably the greatest number of cases are the back strains and sacro-iliac conditions, where the muscles and ligaments have been stretched, torn, or bruised, with possibly a slight rotation of the lumbar vertebrae. These cases often cause the most prolonged disability and should be given attention immediately, as the longer physiotherapy is withheld from these cases the harder

they are to treat, and they often lose weeks and months from work which is unnecessary.

Proper manipulation, and in obstinate cases stretching by traction tables, and the application of radiant light and diathermy, followed by galvanism, give wonderfully rapid and permanent results.

Conclusions

Statistics gathered by some of the foremost authorities and verified in my own practice to my satisfaction, prove that physiotherapy applied to industrial injury cases—

First, reduces the period of disability 30 to 40 per cent, in some cases more.

Second, reduces the amount of total disability 30 per cent or more.

Third, conserves labor by putting the man back on the job in a shorter period of time.

Fourth, restores the injured skilled employee to his maximum working efficiency, thus keeping production up to the highest possible point.

Fifth, creates good will of the employee.

I sincerely hope that more use of physiotherapy methods will be made by the physicians in these cases.

References

- Magnusen and Coulter: Industrial Clinics.
McFee, Wm. D.: Journal Electrotherapy & Radiology, 1921.
Snow, Mary: Journal Electrotherapy & Radiology, 1921.
Granger, Frank: American Journal Electrotherapy & Radiology, 1921; Grover's Electrotherapy Practice.

(From the Journal-Lancet)

Applying Electrodes to the Back

When applying diathermy electrodes to a hollow back, a rubber water bottle partly filled with water will be found of the utmost value.

Just place the bottle between the table and the metal electrode—whether it be sheet block tin or of mesh material. The water in the bottle will adapt itself instantly to the curves of the body and ensure firm contact at all points. This is a very practical method.

Physiological Effects of Electricity

By WILLIAM L. CLARK, M. D.

Electricity, though always the same force, is manifested in many ways, and when modified and applied with knowledge, intelligence and skill, may be made to produce different physiological effects. It is upon this variability that the whole superstructure of electrotherapeutics rests. The known effects produced by electricity may be classified as follows: 1, mechanical; 2, electrolytic or chemical; 3, thermic; 4, counterirritant; 5, actinic; 6, psychical. These effects may be postulated, and it requires but simple logical deduction to reveal their application to rational therapeutics.

Mechanical

Mechanical contraction of nerves, muscles, ligaments, and viscera may be produced by the interrupted galvanic, the plain or interrupted faradic, the sinusoidal, the static wave, static sparks, static induced current, and the high-frequency resonator discharge. These contractions may be general or local, slow or rapid, superficial or deep, irregular or so rhythmical that they may be made exactly to synchronize with the heart beat. The correct employment of electrical contractions, alternating with relaxations, accomplishes exercise without fatigue, with the incidental stimulating, developmental, eliminative and metabolic effects. All these currents have some particular indications, although there are conditions in which they may be used interchangeably or in combination.

Electrolytic or Chemical

The *electrolytic* or *chemical* action of the galvanic current is utilized to advantage in medicine, and offers a fruitful field for future research work. The destruction of growths and treatment of hypertrichosis by electrolysis is well known. By a method known as ionic medication, various drugs may be introduced into the tissues. Copper, zinc, silver, mercury, magnesium and other metals may be separated from their salts and driven into the tissues from the anode, as may cocaine, mor-

phine and aconite. Iodine, the salicylates, and other useful drugs are driven in from the cathode. The advantage of ionic medication over introduction of the drug through the alimentary tract is that the direct application of drugs insures a maximum effect, while, when introduced by the stomach, chemical changes and distribution of action may materially lessen the local potency of the remedial agent. The opposite poles have opposite chemical reactions, the positive being acid in reaction, while the negative is alkaline; the positive contracts, the negative dilates; the positive is sedative, the negative is stimulating.

Thermic

Heating of tissue is produced by the various forms of high-frequency currents and from carbon, tungsten and nitrogen electric lamps. The effect produced by a high-frequency current may range from a slight irritation of the skin and the production of a simple hyperemia to coagulation, desiccation or incineration. The action may be localized in one area or generalized over the surface of the whole body. The current may penetrate the body at given points; a joint may be heated, as may the liver, lung, kidney, or, indeed, any organ. This heat may also be distributed equally through every portion of the organism with a consequent elevation of the body temperature. The heat from electric therapeutic lamps, as far as is known, is comparatively superficial, although the lamps furnish a convenient method of applying surface heat, and are of undoubted value.

Counterirritant

All degrees of *counterirritation* may be produced by the application to the skin of the galvanic and high-frequency currents, the static brush discharge, heat from therapeutic lamps, and the ultraviolet rays. The counterirritation from the ultraviolet rays is more lasting in effect than that obtained by the other method.

Actinic

Actinic effects are produced by some of the spectral and extraspectral rays generated by electrical currents. Blue rays are known to be sedative and red rays stimulating. The action of

the other spectral rays is not so well determined. Very little is known of the action of infrared except that of heat. The ultraviolet rays are strongly actinic and are bactericidal in action to a marked degree, very stimulating and irritating, even to the point of producing the destruction of superficial tissue. Under modifications of application, consisting of filtration of irritating wave lengths—red, yellow and green—by interposing cobalt blue ultraviolet glass, and compression of tissue for the purpose of producing ischemia by quartz lenses while the rays are passing through, these rays may be made less irritating. The rays cannot penetrate any substance colored red, hence the necessity of producing a temporary ischemia to insure penetration by the rays. Under ischemia, the penetration is from one to four millimeters. The ultra-violet rays may be used with success in some skin lesions and in such systematic conditions as are benefited by sunlight. The X-ray and radium are usually associated with electrotherapeutics, but because of the wealth of literature upon this subject, they will not be discussed here.

Psychical Influence

The beneficial *psychical* influence of electricity upon some impressionable patients is undoubted, and is welcomed in the treatment of such conditions as hysteria and hypochondriasis, but this is the least of the beneficial effects of electricity, and not the greatest, as some of us have been taught to believe. There is an influence aside from the psychical one. It may be safely asserted that the individual who comes in contact with a live wire does not die from the psychical effect; conversely the therapeutical application of a selected current benefits the recipient.

Electro-diagnosis and Prognosis

The value of the galvanic and faradic currents and the more recently studied condenser discharges for nerve and muscle testing in peripheral and in some central nerve lesions for the determination of changes in electrical response leading to the reaction of degeneration is proven, and the method should be in more general use by the profession, as often a diagnosis and

prognosis may be given promptly, malingerers exposed, guess-work eliminated, and reputations for ability enhanced.

Resume

Electro-therapeutics should be studied from the standpoint of cause and effect rather than by outline of indications. Success depends upon an adequate knowledge of physiology and pathology as related to the human body; upon a mastery of the laws that govern electricity; upon the possession of efficient apparatus, the achievement of good technic by practice, and the good judgment to apply all these acquirements to the best advantage.

Electro-therapeutics is not a system to be used to the exclusion of other therapeutic measures, but is a worthy additional unit to any physician's armamentarium. Competence in this as well as in other methods of physical therapy will do much to discourage irregular practitioners who are thriving on charlatanism.

(Abstracted from "True and False Teaching in Applied Electricity," in *Medical Council*.)

Fulguration of Hunner Ulcers

H. Dawson Furniss, *American Journal of Obstetrics and Gynecology*, March, 1924, concludes as follows: (1) All possible foci of infection should be removed. (2) Resection is a formidable operation with at times spectacular and at times dismal failures. (3) Fulguration is a simpler method of dealing with the problem and should be tried first. (4) The results are frequently most gratifying. At least, temporary relief can be counted upon, and if there is recurrence the ulcer can be fulgurated again. The willingness of the patients to submit to second and third fulgurations is a convincing testimonial of the relief they receive. (5) Until something better is discovered fulguration should be continued. (6) The greatest relief and best looking bladders are those in which fulguration was the most thorough, and performed under sacral anesthesia through the air distended bladder. (7) With increased experience and perfection of the technic even more satisfactory results may be anticipated.

Diathermy in Cardiovascular Disease

By FRANK THOMAS WOODBURY, M.D.

New York

May I invite attention to an error of assumption in the otherwise excellent paper of Dr. Last on the Use of Diathermy in Cardiovascular Diseases, published in your issue of Feb., 1925?

In two places he speaks of the blood as being more heated than the rest of the tissues by diathermy and speaks of auxillary temperature being higher than rectal in general diathermy as a proof. First, high potential currents pass through substances resistant to low voltage currents. Then Joule's law cannot be set aside even in living tissue. The heat generated is always proportional to the resistance of the circuit; hence bone will heat up more than muscle and muscle than blood. The heat generated is equal to the square of the amperage, double the amperage and you quadruple the heat, and the heat generated is proportional to the time of current flow.

If the two terminals of the d'Arsonval or Tesla coils be attached to electrodes on separate ankles, a thermometer in the rectum will show a decided rise in temperature.

The reason the blood is hot is because it is draining a heated area, just as water from a boiler is hot (it is conducted heat), and so it circulates giving off its heat by radiation through evaporation of perspiration and lung vapor and by conduction to other organs. If the blood did not circulate through the heated area the tissues would remain hot and be damaged. For this reason diathermy in scar and fibrotic tissue which has poor circulation that cannot be increased, and in anesthetic areas where reflex hyperemia cannot be excited, is to be used with extreme caution and in small doses. The greatest heat in Dr. Last's technic would be near the back. The relief of tension is evidently due to the relief of spasm of the vasa vasorum which may result from the same cause or the analgesia or may be due to the effects of heat.

(From *Med. Jour. and Rec.*)

Diathermy Treatment of a Complicated G. U. Case

By A. N. TREADGOLD, M. D.
Detroit, Mich.

Patient had the following history: Twelve years ago, following a case of gonorrhea, a double stricture occurred. Patient was operated, had it incised, and following the operation, was unable to pass his urine, having to have it drawn. Later this could not be done and the bladder was punctured (trocarized). Two years later he was in John Hopkins Hospital and had another operation. Results, able to urinate only by small spurts. Went to a Genu man and had him force a small sound under an anesthetic. Result unsatisfactory. Patient's condition grew gradually worse, necessitating the wearing of a urinal pouch and an oilcloth or rubber pad on his bed.

When I saw him first, December 23, 1924, he had epididymitis, right testicle swollen five times its natural size with marked tenderness. Urine was loaded with bacteria. Bladder distended due to retention of urine; mucopurulent discharge.

Treatment: Glass urethral electrode was passed into the urethra to the seat of the first stricture. 200 M. A. was gradually increased to 400 for first six treatments. Then gradually increased to 800. Mesh electrode applied to the scrotum and the rectal electrode to the prostate gland via rectum.

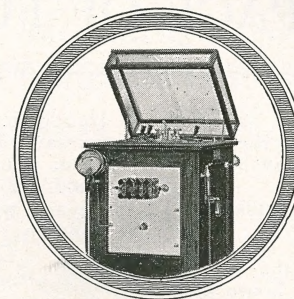
In treating the prostate I connected one pole of diathermy to the autocondensation pole and, of course, the high-frequency to the rectal electrode. In this way I learned that I could get much better heating of the gland with less discomfort to the patient.

This patient is now a well man. Has perfect control of his bladder, and his sexual powers are now perfectly normal. Can pass a No. 17 sound easily.

Contraindications to Diathermy

Where there is a walled-off abscess within the pelvis, such as an old pyosalpinx, diathermy should not be used as it causes these to break down and rupture internally.—*W. B. Chapman, M. D.*

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A PAGE OF FUN

"Before we were married George used to kiss me when we went through tunnels."

"And now?"

"Now he takes a drink."

□ □ □

"Jones," ordered the farmer, "all the clocks in the house have run down, wish you'd hitch up and ride down to the junction and find out what time it is."

"I ain't got a watch. Will you lend me one?"

"Watch—watch! What d'ye want a watch fer? Write it down on a piece of paper!"

□ □ □

Kindly Old Lady: "You say you've been on the force eight years? Why haven't you some service stripes on your sleeve?"

Cop: "I don't wear them. They chafe my nose."

Daughter: "I bet, dad, you never saw swell dancing like this back in your days."

Dad: "Yes, I did, often—but the place was raided before 10 o'clock."

□ □ □

Doctor: "You have acute appendicitis."

Fair Patient: "Oh, doctor, don't flatter me."—L. A. Times.

□ □ □

He—"I had a good joke to tell you this evening, but I see you are not in a condition to hear it."

She—"Why?"

He—"Because if your face lights up the powder will go off."

□ □ □

Fond Mother: "Yes, Genevieve is studying French and algebra. Say 'good morning' to the lady in algebra, Genevieve."



This young man asked the young lady to take a walk with him and pick flowers. The young lady's little brother decided to come along. So they picked flowers.

Last Call for the July Meeting and Clinic for Physicians and Surgeons

Monday, July 13th, 1925

H. W. BAU, M. D., Chicago, Ill.

"Zinc Ionization in the treatment of chronic Suppurative Otitis Media"..... 10:00 to 11:00 A. M.

J. C. ELSOM, M. D., Madison, Wis.

"Physiotherapy in a State Hospital"..... 11:00 to 12:00 A. M.

J. C. ELSOM, M. D., Madison, Wis.

"Technic in Ultra Violet Therapy"..... 1:30 to 2:30 P. M.

MEL R. WAGGONER, M. D., Cedar Rapids, Iowa.

"Electro-coagulation of Hemorrhoids"—Clinic.... 2:30 to 3:30 P. M.

Dr. Bau covers an interesting and important subject in a most thorough and informative manner. Physicians and surgeons will find his description of treatment exceedingly valuable.

Wide experience and a thorough knowledge of physiotherapy as employed in a State Hospital qualify Dr. Elsom to speak authoritatively on his subjects as announced above. Those interested in institutional work are especially urged to take advantage of this meeting.

Dr. Waggoner's success with surgical diathermy in the treatment of hemorrhoids is due, without doubt, in large measure to the perfection of his technic for this type of operation. Do not fail to plan to attend his clinic.

Ample space has been provided so that every visiting M. D. will be assured of a good seat at all the lectures and clinics.

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