

and we find lipomata at the head of the list, both in point of frequency and simplicity. Next, in the same double order, come the fibromata, a little more difficult of production, less frequent, but more dangerous, then the myomata or unstriped muscle tumors, and the more complex but much less common adenomata, with their astonishing mimicry of healthy glandular tissue, and last and rarest of all, because most highly specialized and most difficult of imitation, the neuromata and rhabdomyomata or striped muscle tumors.

The apex of the pyramid is reached by the processes of physiological or compensatory hypertrophy and surgical regeneration, where the reproductive product is not only perfect in itself, but in accurate harmony with the needs of the whole system, the whole series varying in its benignity or malignity in proportion to the remoteness, so to speak, of its reversion. Between the almost universal and fearfully disastrous tubercle, with its mere possibility of caseation, to the gloriously beneficent physiological hypertrophy of the uterus or heart or the every-day miracle of surgical regeneration, it is merely a question of the vital perfection of the daughter-cells.

Would time permit I should like to take up the still more individualized action of the cells in the various forms of leucocytosis in its bearing upon this theory. The whole process of fever and inflammation would appear to be a genuine battle of cells begun by a skirmish-line of leucocyte mounted police and continued by serried ranks of macrophage militia, recruited from the sturdy citizen-cells of the fixed tissues. The wonderful and fascinating process of phagocytosis is a complete epic poem of more than Homeric interest. The extraordinary facts of the immunity-problem prove the eminent ability of the cells of the body to defend themselves against all comers, however evilly disposed, while the singular rhythm of weeks, or lunar months, displayed by the reproductive process, the menstrual functions, the intermittences in the malarial fevers and even by the period of lysis and crisis of various diseases, would appear at least to suggest an impress upon the fixed cells of our body which has been stamped upon them from the time that their ancestors lay upon the sea-beach and depended upon the rhythmic rise and fall of the tides, for their very existence.

I have no doubt that to the most of you this will appear merely a matter of possibly interesting, but utterly impracticable and useless theory. But, to my mind, the practical teaching of the suggestion is its most valuable part. Not by a search for specifics or germicides or by efforts to extinguish germs which are a million times as numerous as the human family and in their proper place quite as useful—our best friends instead of our deadliest enemies—but by an untiring and intelligent watchfulness to grasp every means which can improve nutrition, elevate the standard of vitality, increase the beauty and symmetry of and in every way possible strengthen and develop these wonderful bodies of ours is our noble aim to be attained. A healthy stomach or bronchus is the hottest place a disease germ can drop into. The most powerful enemy of death and disease is life in its most vigorous form and our mission, as already beautifully paraphrased in religious imagery, is that our patients "might have life and that they might have it more abundantly."

Dr. Herrick, of Cleveland, expressed gratitude to the

author of the paper. It looks, he said, like getting back to solid ground, and I heartily commend its contents.

Dr. Eckert, of Iowa, stated that the paper met his approval in several ways. He thought it broke down the popular misconception of Darwinism. He thought that it also harmonized modern views of anatomy and pathology.

Owing to the lateness of the hour, and the happy anticipation of an excursion on Detroit river, under the auspices of the local profession, the papers remaining on the program were read by title, and the Section adjourned.

EUROPHEN, WITH CLINICAL REFERENCE TO EUROPHEN AND EUROPHEN-ARISTOL.

Read by title in the Section of Practice of Medicine at the Forty-third Annual Meeting of the American Medical Association, held at Detroit, Mich., June, 1892.

BY JOHN V. SHOEMAKER, A.M., M.D.,
OF PHILADELPHIA, PA.

Europen results from the action of iodine upon isobutylorthocresol in a solution of iodine of potassium.¹ The product, as prepared and sent out by the Farbenfabriken, formerly Friedrich Bayer & Co., of Elberfeld, appears in the form of a fine, soft amorphous powder, slightly resinous to the touch, of a light yellow color, destitute of taste and having a faint, not unpleasant odor which recalls that of saffron. This odor is almost entirely lost when europen is made into a mixture or solution. Europen is insoluble in water and glycerine, soluble in alcohol, ether, chloroform and fixed oils. When exposed to a heat of 160° F., europen thickens and at 230° F. is converted into a clear brown fluid. The specific gravity of europen is five times less than that of iodoform and half that of iodol. The body is easily decomposed by light and heat. It should, therefore, be kept in a dark, dry and cold place and its solutions be made at a low temperature.

The average proportion of iodine contained in europen is 27.6 per cent. A small precipitate, consisting of an organic iodine compound and soluble in water, forms from solutions of europen. It is likewise present in the dry powder. A very small percentage of free iodine, formed during the drying and which cannot be removed from the product, is present in europen. Solutions of europen in alcohol and ether slowly liberate small amounts of iodine. Europen should never be mixed with fat combined with starch. It is incompatible with metallic oxide and the salts of mercury. Fats free from starch are good excipients for europen, and lanolin is particularly appropriate, since the large amount of water which it is capable of taking up promotes the liberation of the soluble iodine compound.

Siebel has determined that the presence of europen in culture-media prevents the development of pathogenic microorganisms by a chemical action and arrests the formation of products of decomposition.

Europen adheres firmly to cutaneous and mucous surfaces with which it is brought in contact. Under the influence of liquid pathological products, it is believed to slowly give off small quantities of iodine which entering into immediate action, form the soluble organic compound of iodine to which reference has been made. When taken by the mouth, europen undergoes but little change as it passes through the system. A very small proportion of iodine appears in the urine after its administration. It is removed from the body with the feces for the

¹ The physical and chemical properties of europen have been carefully studied by Dr. F. Goldmann and are described in the *Pharmaceutische Zeitung*, July 15, 1891.

most part unchanged. The alteration is scarcely greater when dissolved in oil and it can be subcutaneously injected. Europhen is, consequently, a non-toxic substance. Two or three drachms have been given to dogs without any ill effects and fifteen grains have been taken by the human subject with no more serious result than a slight sensation of weight in the stomach.

The first clinical experiments with europhen were undertaken by Dr. P. J. Eichhoff of Elberfeld, who published in the *Therapeutische Monatshefte* for July, 1891, the results of its employment in a series of cases. A chronic and obstinate ulcer of the leg, which had resisted the action of many other remedies, healed in six weeks under the application of a ten per cent. ointment of europhen. A deep and sluggish ulcer, dependent upon a marked varicose condition of the limb, was almost entirely cicatrized in five weeks by the same method of treatment. Several chancres were healed and their induration removed by the insufflation of europhen upon their surface in periods of from two to four weeks. The application of the powder removed, in three cases, large condylomata of the anus and genitalia in 10, 17 and 28 days. A case of syphilitic papules with leucoderma and marked thickening of both labia majora was relieved in the same manner. At the end of two weeks the papules had disappeared, but slight pigmentation remained and the labia were reduced nearly to their normal size. An ulcerated scrofuloderma of the arm in a girl of fourteen years cicatrized under a europhen ointment in 19 days. A ten per cent. salve was first used but giving rise to irritative eczema of the surrounding skin, was after three days, replaced by a five per cent. ointment. The irritation persisting in the same degree, however, at the end of three more days, a one per cent. preparation was applied. The healing process continued at an undiminished rate, and the eczema soon subsided. In a case of lupus vulgaris, after scraping the softened nodules with a sharp spoon, europhen powder was dusted upon the surface and a firm smooth scar was obtained by the eighteenth day. A burn of the third degree was cicatrized by a one per cent. ointment in 20 days. Chancroids were rapidly healed by application of the powder. In several cases of parasitic eczema europhen occasioned little or no improvement and was discontinued. The result was the same in a case of impetiginous eczema. Europhen in the form of a ten per cent. ointment, was less beneficial in a case of psoriasis than either aristol or tar. In a case of favus, likewise, europhen proved of no avail. An injection of europhen in olive oil and acacia was disadvantageous in two cases of acute gonorrhœa. It gave rise to pain and was abandoned. In a case of gonorrhœa of the urethra and cervix uteri, however, under the care of Dr. Siefert, of Wurzburg, a tampon impregnated with europhen caused speedy diminution of the discharge and disappearance of the gonococci. In a case of endometritis with erosions of the os uteri and a copious seropurulent discharge, a decided improvement followed. Dr. Petersen, of Wurzburg, reports satisfactory results from the insufflation of europhen in the rhinitis of scrofulous children, attended with profuse discharge and eczema of the nares. He thinks from his experience in three cases, that the same method of treatment will probably be found useful in acute rhinitis. Europhen was also of value after operative procedures within the

nose. A ten per cent. ointment of europhen was, in the clinic of Dr. Siefert, extremely efficacious in the treatment of both the simple and fetid forms of atrophic rhinitis. The preparation was introduced upon cotton tampons, which were allowed to remain in place for about half an hour. The dryness gradually lessened, secretion increased, crusts and offensive odor disappeared. From one of the clinics of Heidelberg, Dr. von Szoldrski reports favorable influence in three cases of laryngeal tuberculosis with abundant muco-purulent secretion. This writer also testifies to its worth after operations upon the nose and larynx. Dr. Lowenstein has obtained good results from the use of europhen in perforating ulcer of the septum of the nose and in epistaxis dependent upon erosion of the septum. Dr. A. Nolda, has successfully used europhen in three cases of suppurative otitis media, in leg ulcer, chancre and chancroid. In the last named affection, a comparative study led him to esteem europhen as being more efficacious than iodoform. On account of its lightness, a given quantity of the former will cover five times as much surface as the same amount of the latter substance. Dr. Vulpius states that in the clinic of Professor Czerny, in Heidelberg, europhen has been employed with satisfaction in the treatment of accidental and surgical wounds, osteomyelitis and tubercular ulcers. A communication has been made by Dr. Juan Santas Termandez in regard to the value of europhen in ocular affections. He has employed this remedy in conjunctivitis, keratitis, traumatism and after operations, generally in the form of a one per cent. ointment.

Dr. Eichhoff has made experiments with hypodermic injections of europhen on constitutional syphilis. He injected from one-half to one and one-half grains dissolved in olive oil once daily and states that while in some cases the results were decidedly encouraging he is not able to recommend the method for general adoption. Dr. Gaudin, of Paris, has written favorably of the effect of hypodermic injections of europhen in tertiary syphilide in which he considers it more effective than in the secondary form of the disease.

Both aristol and europhen are prepared by the same firm of manufacturing chemists and have similar therapeutic powers. Both substances are proposed as substitutes for iodoform, over which they possess the decided advantage of comparative absence of odor. It has been thought that the sphere of activity of each product may be enlarged by combinations and with this view, a mixture of equal parts is offered under the name of europhen-aristol. The mixed product is an impalpable powder, of a buff color, a rather more pleasantly aromatic odor than europhen and somewhat more resinous to the touch. It will probably be found superior in adhesiveness to europhen. The properties and uses of aristol I have already described. (*Medical Bulletin*, June, 1891.)

Specimens of europhen and europhen-aristol having been placed in my hands, I have carefully studied their effects in a number of cases to which they seemed applicable and believe that europhen, like its predecessor, aristol, is entitled to rank as an acquisition to the list of therapeutic agents. My experience relates especially to accidents or diseases involving the integument.

Primary union promptly takes place in incised wounds when, after being cleansed and approximated,

powdered euophen is kept applied to the surface. This substance, like aristol will, no doubt, prove efficient as a dressing to many forms of operative wounds. In contused and lacerated wounds, inflammatory action is abated and destruction of tissue is minimized. The surface is maintained in a dry and aseptic condition and the loss of tissue is solely dependent upon the extent of interference with the capillary circulation of the injured part. The devitalized tissue is protected from the action of pathogenetic organisms, which so often and so seriously complicates the case in these varieties of traumatism. Chronic ulcers of the leg were favorably influenced by both the pure and mixed powder. One case in particular, I may cite by way of illustration. A large and indolent sore, of unhealthy appearance, had long been seated upon the lower third of the left leg of an old man. The veins of the limb were enlarged, tortuous, prominent and engorged. The granulations were feebly organized, the surface was covered with sanious pus, was sensitive and prone to bleed. The edges were callous and the lesion was surrounded by a zone of lividity. Many remedies had been used with little or no effect, and the patient, discouraged by ill success, had perhaps, neglected scrupulous and constant attention to cleanliness. As a preliminary measure, I directed the surface to be cleansed with a weak lukewarm solution of carbolic acid and when the inflammatory products had, as far as possible, been removed, to be strewn with euophen-aristol powder, covered with a layer of borated absorbent cotton and moderate compression exerted by means of a roller bandage carried from the foot to above the knee. Together with this local therapy, appropriate dietetic and constitutional measures were instituted and the patient was directed to rest his limbs, as much as possible, in the horizontal position. A highly gratifying effect was produced. In the course of ten days, the character of the surface completely changed. Healthy granulations made their appearance, a course of repair was inaugurated which thenceforward proceeded steadily without interruption and at the end of four weeks, the surface was soundly cicatrized. An elastic bandage was ordered for the sake of supporting the toneless and dilated veins and the patient dismissed.

A young girl, 19 years of age, presented, upon the left side of the neck the characteristic and unsightly ulcer resulting from the degeneration of a scrofulous gland with destruction of the overlying integument. The patient was of fair complexion, pale and rather delicate in appearance, but free from any sign or symptom of pulmonary disease. A cicatrix upon the right side of the neck indicated the presence of former ulceration. The surface of the sore was uneven, covered by a grayish deposit and from it issued a thin puriform discharge. The edges were undermined and of a dull red color. Constitutional treatment was ordered and the ulcer was dressed with powdered euophen held in place with a pad of borated cotton. Improvement soon began, the suppuration diminished, the grayish exudation disappeared, the granulations took on a healthy aspect and at the expiration of about three weeks, I was able to discharge the patient with a freshly formed and healthy scar occupying the site of the lesion.

A woman, aged 26 years, long the subject of lupus vulgaris, upon whose face both nodules and ulcers were present, who had been treated by many physicians

and by almost every known method, was chosen as an excellent case by which to test the virtue of the new remedy. Twice or thrice daily, euophen in powder was freely dusted over the ulcerated surface which was, in addition, irrigated every day with a carbolized solution. Amendment was manifest by the end of a week and in three months' time, the patient was discharged cured, at least for the present. Whether relapse shall occur remains, of course, for the future to decide. In another case, of still greater chronicity and obstinacy, an equally favorable result was obtained though the progress of repair was more tardy.

A man, aged 68 years, of good habits, came to the Medico-Chirurgical Hospital on account of a superficial ulcer, situated upon the upper third and toward the outer border of the right thigh, about five inches below Poupart's ligament. The disease had begun as a hard papule which was the size of a buckshot when first observed. After some months the skin had cracked and given exit to a thin, blood-stained fluid. This discharge soon dried and formed a thin, brown scab. Subsequently a roundish ulcer, with hard edges and a red base had formed. The patient was undoubtedly afflicted with the superficial form of epithelioma. The ulcer, which had been cauterized and curetted to no avail, was the seat of pain. Euophen in powder was at first applied but not being followed by much improvement, the ointment form was resorted to and after several trials, a preparation containing from three to four drachms of euophen to the ounce of a fatty base, was adopted as the most suitable to the morbid condition. Under this medication, the pain subsided and healthy granulations slowly sprang up, gradually spreading until the raw surface was entirely cicatrized. The ulcer was healed at the end of about four months after beginning the course of treatment. In another case, that of a woman, fifty years of age, a small epithelial ulcer was seated upon the left ala of the nose. It had seemed in the beginning, to be nothing more dangerous than a wart, sometimes a stinging, darting pain would be felt in the growth. At length the skin broke, a little sanious discharge escaped, dried into a brown crust which the patient picked off, exposing a deep red, raw but dry surface with hardened edges. This ulcer grew gradually and slowly in extent, and when the patient applied for relief, involved nearly all the surface covering the ala and the cartilage. Aristol was first used upon this lesion but although some improvement was observed, the ulcer still remained open and irritable. Euophen was next employed with about the same result. The sore manifested a slight disposition to heal but no decided gain could be detected. For some weeks the two remedies were then used alternately but still the condition remained comparatively unchanged. Finally the mixture of equal parts of euophen and aristol was used, when the ulcer began to gradually but steadily heal from the bottom and in about ten weeks a well marked cicatrix had formed.

The upper lip of a young man was invaded by sycosis, was red, swollen, surmounted by papules, pustules, scales and crusts. The lesions were numerous and had coalesced. Some of the pustules had freshly ruptured when he first came under my care, and the hair, which he had as closely trimmed as possible, was matted together in places. The patient suffered considerably from the sensations of heat,

smarting and tension in the affected part. After the crusts had been removed by the oil of ergot, I directed the part to be thoroughly cleansed by a weak lotion containing hamamelis, after which a 10 per cent. ointment of euophen was placed upon the surface. The hair being closely cut, no difficulty was experienced in making the application. The subjective symptoms were rapidly alleviated and the objective manifestations soon began to improve. The ointment was placed upon the surface several times during the day, and its use was eventually followed by a complete cure.

After the necrosed tissue has been expelled, euophen powder, dusted upon the surface of a carbuncle, accelerates the work of repair. I made use, in carbuncle, of the mixed powder, euophen-aristol, with the same good result.

A young man, aged 18 years, consulted me on account of papular acne upon the face and back, from which he experienced great annoyance. The lesions were abundant upon the cheeks and chin, were interspersed with comedones, and the patient, not otherwise ill-looking, was indeed sadly disfigured. Many external remedies had been used upon his face with little or no benefit; the red and indurated papules remained. The employment of a suitable diet, with some attention to the digestive organs, combined with euophen ointment, soon effected a change. The strength of the ointment varied from 1 to 2 drachms of euophen to the ounce of excipient. Under this treatment the lesions soon began to decrease in size and number, and at length disappeared under the use of the external treatment.

A middle-aged woman was sent to me, whose face exhibited a typical example of the second stage of rosacea. Upon the forehead, nose, cheeks and chin, the injected capillaries could be seen as bright red streaks, running parallel to each other in some situations, as upon the ala of the nose, while in other regions, as upon the cheeks and chin, they were arranged in tortuous curves. Some of the vesicles were of considerable size. The skin was rough and thickened, and here and there upon the face were scattered papules and pustules. Locally, I directed the following lotion to be used:

- R. Euophen, ʒij.
Glycerini, ʒij.
Spir. odorati q. s. ad., ʒj.
M. Sig. For external use.

By the persistent employment of the measures recommended, the papules gradually retroceded, the pustules disappeared and the capillary injection in great measure subsided. Altogether the improvement was gratifying alike to physician and patient.

In several cases of facial erysipelas notable amelioration attended the use of an ointment containing from 10 to 20 grs. of euophen to the ounce. The smarting and burning was soon relieved, the swelling diminished and the eruption ceased to spread. The absence of offensive odor is an undoubted advantage which this substance possesses over ichthyol, which has of late been highly recommended and widely used as a topical agent in the treatment of erysipelas. In dermatitis caused by contact with rhus toxicodendron, the application of an ointment beginning with 10 grs. and gradually increased to 1 drachm of euophen is well adapted to serve as a dusting powder upon the surface, after the vesicles have been ruptured. I made use of this remedy, likewise, in

several cases of herpes zoster which came under my care. The pain, or at least, the distressing burning and smarting sensations produced by the lesions of zona, are generally mitigated by the use of a dry powder. It is difficult, however, to keep the lesions covered, and for this reason, the slight stickiness of the euophen powder, enabling it to cling closely to the surface upon which it is placed, renders it an excellent medicament in herpes zoster when situated, as it so often is, upon the side of the chest. In the form of a powder, I have also found it of advantage in seborrhœa oleosa. In this condition, I have directed my patients to wash the affected region, before going to bed, with a lukewarm solution of chamomile or boro-glyceride soap, and after thoroughly drying the skin, to cover the surface thoroughly with powdered euophen. The result has been quite satisfactory. The powder remains in place, absorbs the greasy discharge and exerts a tonic and corrective effect upon the affected glands. The simultaneous internal exhibition of the tincture of hoang-nan in the dose of 15 to 30 drops, three times a day, will coöperate in bringing about a cure.

An ointment of euophen appeared to be of assistance in a case of alopecia circumscripta. The patient was a middle-aged merchant of good physique and a vigorous growth of hair, but who had been subject for more than a year to the double strain of keen anxiety and overwork. The hair suddenly fell out in spots, leaving several denuded and unsightly patches upon the scalp. In this instance, the origin of the affection was evidently the perverted action of the nervous system. A certain number of cases are seen which lend probability to the view that alopecia circumscripta sometimes depends upon the growth of a parasite. In the case of which I write, the euophen salve was conjoined with the local use of galvanism, and I insisted strongly that as far as possible, the tone of mind and habit of thought should be changed.

As a rule, no instant effect will follow the application of euophen powder upon an unbroken surface. That in certain conditions in which the vitality of tissue is lowered, it may give rise to an irritative eczema, is shown by one of Dr. Eichhoff's cases. It has, however, sometimes appeared to me to exert a stimulant effect upon the integument and its glands. I have seen several cases of hyperidrosis in which the excessive secretion was manifestly restrained by frequently dusting the surface with euophen powder. To the unfortunate sufferers from bromidrosis of the feet, the euophen-aristol powder has given decided relief, arresting the discharge and removing its offensive odor. At night the feet should be bathed in a slightly stimulating bath, containing mustard-flour, salt or alum, and after being dried by brisk rubbing with a towel, the powder is sprinkled liberally upon the surface and between the toes. By day the powder is strewn in the stockings.

I have derived benefit from the use of euophen or the compound powder in a number of cases of eczema of different forms and stages. In acute vesicular eczema, euophen powder combined with subnitrate of bismuth has reduced the local inflammation, absorbed the serous exudation, allayed the heat and itching. A case of chronic eczema affecting the hands and feet was cured by the persistent use of an ointment composed of 1 drachm increased to 2 drachms of euophen to the ounce of lanolin. Ec-

zema of the hands and feet is an obstinate affection. The fissures which form are kept open by manual occupation or in the act of walking, the skin becomes thickened and the fissures are the seat of pain. A case illustrative of this condition was markedly benefited by the application of euophen-aristol. The patient was a man, aged about 40 years, who had long been afflicted upon the soles of both feet. The surface was painful, long and deep fissures had formed, from which issued a blood-stained serum, vesicles and fissures also existed between the toes. The patient was teased with constant itching, and locomotion was impossible. The treatment adopted was the dusting of euophen-aristol powder between the inter-digital spaces, and the application to the plantar surface of an unguent containing from 1 to 2 drachms of the same powder to the ounce of rose water ointment. The pain and itching soon began to decrease and the fissures to heal. In the course of a week, the patient could endure shoes, and a few days later he was able to go to his place of business. At the end of eight weeks he returned, free from the least trace of eczema. A distant rheumatic diathesis was present in this case, and an internal treatment was addressed to this underlying condition.

A woman, aged 37 years, sought my advice on account of a psoriasis from which she had suffered since girlhood. Patches were to be seen upon various parts of the body. At times the condition would improve, either as a result of medication or spontaneously, the disease would remain quiescent, but after an interval of uncertain periods, an exacerbation would occur. It was during one of these relapses that I first saw the patient. Small patches were interspersed with large oval areas, upon which the characteristic grayish scales were seated. Here and there patches had coalesced, giving rise to fantastically shaped lesions. In some places the scales had become detached, and a thickened, reddened and slightly elevated surface was exposed. The case, in fact, presented a typical picture of psoriasis. A uric acid diathesis was evidently present in this instance, and probably accounts for the inveteracy of the malady. To the constitutional condition an appropriate therapy, which will not here be discussed, was given, while the local medication consisted in the application of a euophen-aristol ointment, the scales having been previously, as far as possible, removed by the usual methods. The ointment was at first made in the proportion of 1 drachm to the ounce of fat, but the strength was gradually raised to 3 drachms. The local measures obviously exerted a favorable influence upon the lesions. The amount of infiltration was markedly lessened, and she was dismissed with directions to continue the use of the ointment at any time that redness appeared. Aristol I had found beneficial in psoriasis, but the euophen-aristol seemed to produce a more decided as well as a more rapid effect.

In syphilis, my experience with euophen and aristol has been principally confined to the open lesions of the late secondary period. Upon ulcers and upon syphilitic rupia, after the latter had been cleared of its accumulated crusts, both the euophen powder alone and the mixture with aristol stimulated the work of repair. I have every reason to regard them as valuable adjuncts to the constitutional treatment. Upon ulcers, often of considerable size, found upon the limbs in late syphilis, especially in those patients

who lead dissipated lives, the mixed powder was of advantage. Chancres, chancreoids and open buboes are also benefited by the same application.

In the foregoing summary of cases in which euophen has been employed with advantage, the aim has been to record the facts which I have personally observed. The cases briefly glanced at have been selected from a number as being suitable tests of the power of euophen. The solubility of euophen in olive oil renders it well adapted for injection into pus cavities, sinuses and fistulæ. The freedom from offensive odor is a point in its favor. An excellent property of euophen is that it will not harden into compact cakes upon the surface to which it is applied. As an antiseptic dressing, euophen is of value, and the absence of toxicity is another point in its favor. The harmlessness and not unpleasant smell commend this substance in the surgical affections of children and in gynecological practice. That the mixture of euophen and aristol adds something to the efficiency of each, is shown by a case of epithelioma, in which first one and then the other substance were used alone without effecting much benefit, while the mixed products speedily instituted a course of improvement. In some patients the powder acts more beneficially, while in others an ointment is productive of more favorable results. It may be necessary to increase or decrease the strength of the ointment according to the circumstances of the case. I have generally found that a proportion of 1 drachm of euophen to the ounce of excipient makes an efficacious ointment.

A FEW NOTES ON THE MECHANICAL THERAPEUTICS OF OSSEOUS AND MEDULLARY LESIONS OF THE SPINE.

Read by title in the Section of Practice of Medicine at the Forty-third annual meeting of the American Medical Association, held at Detroit, Mich., June, 1892.

BY THOMAS H. MANLEY, A.M., M.D.,
OF NEW YORK.

Perhaps in no department of medical science during the latter half of the present century has there been any greater, or as great advance, as in that which embraces within its scope the relief or permanent cure of physical infirmities by mechanical measures. The enormous progress in modernly applied physics, has completely revolutionized pathology, and rendered in many instances, precise accuracy in the diagnosis of disease possible. In nothing, however, have the practical, beneficent influences of these advances been so conspicuous or happily appreciated as in the treatment of disease.

Very naturally, we Americans feel a just pride in the share which members of our profession have contributed; for, although this must go into history as the greatest inventive century that the world has ever witnessed, it must likewise be conceded by the impartial historian, that Americans have, in this direction, occupied the foremost rank, and given to posterity such discoveries and inventions as will endure as long as time itself.

Little time was lost in utilizing and appropriating those principles of mechanics, in the surgical art, which were first mainly limited to the arts and industries. In fact, to-day one can scarcely conceive how it is possible, for the art of mechanical therapeutics to be much further extended. Thus, we thought,