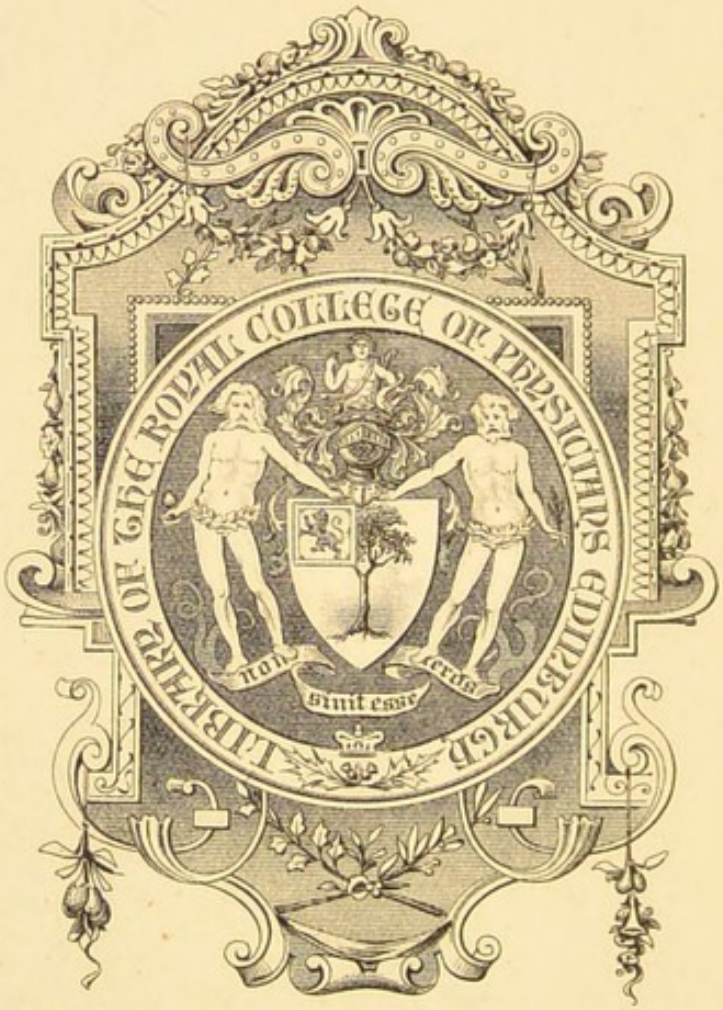
Lectures on cosmetic treatment : a manual for practitioners / by Edmund Saalfeld ; translated by J.F. Halls Dally ; with an introduction and notes by P.S. Abraham.

LECTURES ON COSMETIC TREATMENT

SAALFELD



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LECTURES ON COSMETIC TREATMENT

Lectures on Cosmetic Treatment

A Manual for Practitioners

BY

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OF BERLIN

TRANSLATED BY

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PREFACE TO THE SECOND EDITION

THE first edition of "Kosmetik" has been sold more rapidly than I could have expected. I trust that I may take this as a sign that my presentation of the subject has found favour with my readers. Consequently, I have made only such additions as were required for its completion, besides those which are rendered necessary by progress in the domain of Cosmetic Science during the past year.

Five illustrations which had been reproduced from microphotographs, have been replaced by original drawings of microscopical preparations, and I hope thus to be able to give a clearer representation of the anatomical picture.

May the Second Edition meet with the same kindly reception as the First.

SAALFELD.

PREFACE TO THE FIRST EDITION

In the year 1892 I published in the *Therapeutisches Monatsheft* a series of articles on Cosmetics, which later appeared separately in pamphlet form. Since then I have given my undivided attention to this special department of dermatology, and on various occasions have laid stress on the right of Cosmetics to form a part of scientific dermatology.

I therefore thought it advisable to hold courses of lectures for doctors on Cosmetic Treatment. I have been frequently asked by my hearers to publish my lectures in book form. I have complied with this request in the shape of the small book which is now before you, and hope that it will meet the needs of the practitioner.

SAALFELD.

TRANSLATOR'S PREFACE

ONLY within recent times have physicians attached due significance to the practice of Cosmetic Art. Most people probably will agree that it is high time that this specialised branch of dermatology, with its attendant dangers in unskilled hands, should be definitely raised to its proper sphere. With this object the present book, which is the first of its kind, has been written by the well-known cosmetic physician, Dr. Edmund Saalfeld of Berlin, to whom my thanks are due for his kind authorisation of this English translation. The usefulness of the work is attested by the fact that in Germany it has already reached its Second Edition, whilst the book has also been rendered into Dutch by Dr. Trenité.

In the translation of "Kosmetik" into English it has been my endeavour to follow the author's language as closely as possible, without omission or alteration.

For the convenience of those to whom the metric system is unfamiliar, corresponding approximate equivalents in Imperial weights and measures have been added to the original prescriptions. My

thanks are due to Mr. Pearson, dispenser to the St. Marylebone General Dispensary, for his kind assistance in verifying the Imperial equivalents.

J. F. HALLS DALLY.

11 Devonshire Street,
Portland Place, W.,
April 1910.

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INTRODUCTION

THE average medical student leaves his hospital, and obtains his diploma, with a very scanty practical knowledge of diseases of the skin. His time, perhaps, has been occupied with more important subjects, and even if he has been able to get in three months' "dressing" in the skin department of the hospital he can have acquired but little more than a small acquaintance with the main principles of dermatology, and much less, indeed, with the practical treatment of superficial blemishes. When he goes into practice he rarely troubles himself with, or pays much attention to, such—to him—trivial matters as "bad complexions" and the like.

If a young lady, for instance, is brought to him with "pimples," some "placebo" may be given, but her parents are probably told that it is nothing to worry about, and that she will grow out of it. Well, the young lady does sometimes lose her spots without any definite treatment, but very often she does not. After a more or less prolonged period of "pottering" with the increasing affection, the patient drifts into the hands of the advertising "beauty specialist" or other quack, and when, as

is commonly the case, she is made still worse, she ultimately has to seek the advice of the legitimate dermatologist.

If this is true of many cases of acne, it is still more so in regard to several other minor affections of the skin and congenital or other blemishes. In point of fact, a great many patients who should and could be treated by the general practitioner, if he only knew how, drift away from him, and waste their time and money on various advertised nostrums or on other quackery.

When Dr. Saalfeld sent me his little book, and asked me to find him an English publisher, if I thought it suitable for translation, I must confess that I was at first a little staggered at the title "Kosmetik." But when I had looked through the work, and realised that it was written on strictly scientific and professional lines, and in no way meant for the perusal of the lay public or vulgar advertisement, I at once acceded to the request.

It seems to me that it fulfils a real want: the information that it contains is nowhere, as far as I am aware, presented in so compact and comprehensive a form; and I believe that it will be useful to medical men in general, as well as to those whose work lies chiefly in connection with diseases of the skin.

Dr. Halls Dally was good enough to undertake the translation, and he has closely followed the German text. At the suggestion of friends, I have added a few notes in reference to methods of treatment which

I have myself found useful. I may say that I can to a great extent endorse Dr. Saalfeld's views and methods; but, as will be seen, I have ventured in a few cases to suggest other explanations, and to recommend some other measures not alluded to by him.

P. S. A.

COSMETIC TREATMENT

CHAPTER I

BAD COMPLEXION—SEBORRHŒA, COMEDONES, AND ACNE

Only a short time has elapsed since the Art of Cosmetics has obtained recognition in medical circles. This special branch of Dermatology has indeed been left too long in the hands of quacks, and even to-day in many newspapers one is able to see how much mischief is done in this department. How many advertisements of remedies for a bad complexion are daily to be seen in the papers, and yet of what value are these? It is really impossible to attempt to recommend one certain remedy for a bad complexion.

This is evident, without going any further, as soon as we proceed to reply to the question, "What constitutes a bad complexion? Of what pathological details does a bad complexion consist?" On the one hand, an excessive secretion of fat causes a bad complexion; on the other hand, the

contrary, *i.e.* a greatly diminished fat-secretion. In the latter case we must increase the fat-content of the skin; in the former, we must endeavour to lessen it. Hence in cosmetics just as in general medicine we must treat each patient individually.

In the first place, as the most frequent complaint, let us take excessive fat-secretion—seborrhœa—which, speaking generally, is brought about by an increased activity of the sebaceous glands. It lies outside the scope of our inquiry to discuss the question as to whether and how far hypersecretion of the coiled (sweat) glands is added to that of the sebaceous glands.

We may distinguish two varieties of seborrhœa, namely, seborrhœa oleosa and seborrhœa sicca, which indeed at times overlap. The first shows itself, so far as cosmetic art is concerned, especially upon the face; the latter, in addition to the face, favours the hairy scalp. In well-marked cases of the former variety you find the face oily and shiny, the nose with its numerous sebaceous glands being strikingly conspicuous by its glossiness. In order to verify the diagnosis, a piece of tissue-paper may be pressed upon the affected part of the face, when a grease-spot will be clearly seen on the paper. This phenomenon manifests itself also, though to a less extent, in seborrhœa sicca of the face; later on in the discussion of premature alopecia we shall have to deal with seborrhœa of the hairy scalp. In the dry form of seborrhœa—which Unna claims as belonging in most cases to

his eczema seborrhoicum—there appear on the face yellowish or yellowish brown aggregations which, in marked cases, after their removal leave a slightly inflamed and somewhat moist spot. Dilated sebaceous glands are seen and, correspondingly with the exudation, stalactitiform processes are found on the under surface of the scales.

As a further accompaniment or consequence of seborrhœa, just as much indeed of seborrhœa oleosa as of seborrhœa sicca, not infrequently we find the development of comedones (blackheads) and of acne papules. The former exhibit the familiar small black dots, which are scattered more or less over the whole face, but especially on the nose, forehead, chin, and on the inner portion of the concha of the ear. Comedones consist of a mixture of fat and horny lamellæ. In proportion as the one part exceeds the other, we have to do with softer or harder structures. The latter are of a yellowish or yellowish brown colour, 1 to 3 mm. in length by $\frac{1}{2}$ to 1 mm. in breadth, and are in shape oval. In comedones one frequently finds a small parasite, *Acarus folliculorum*, to which, in the light of our present knowledge, we are unable to assign any pathogenetic significance. The anatomical appearances of an acne papule are shown in Fig. 1.

The sebaceous gland is seen to be dilated; its lumen is almost empty, and only in part occupied with a small amount of debris; moreover, around the gland a small-celled infiltration is present as

evidence of the inflammatory process, and, besides this, excessive cornification may be observed.

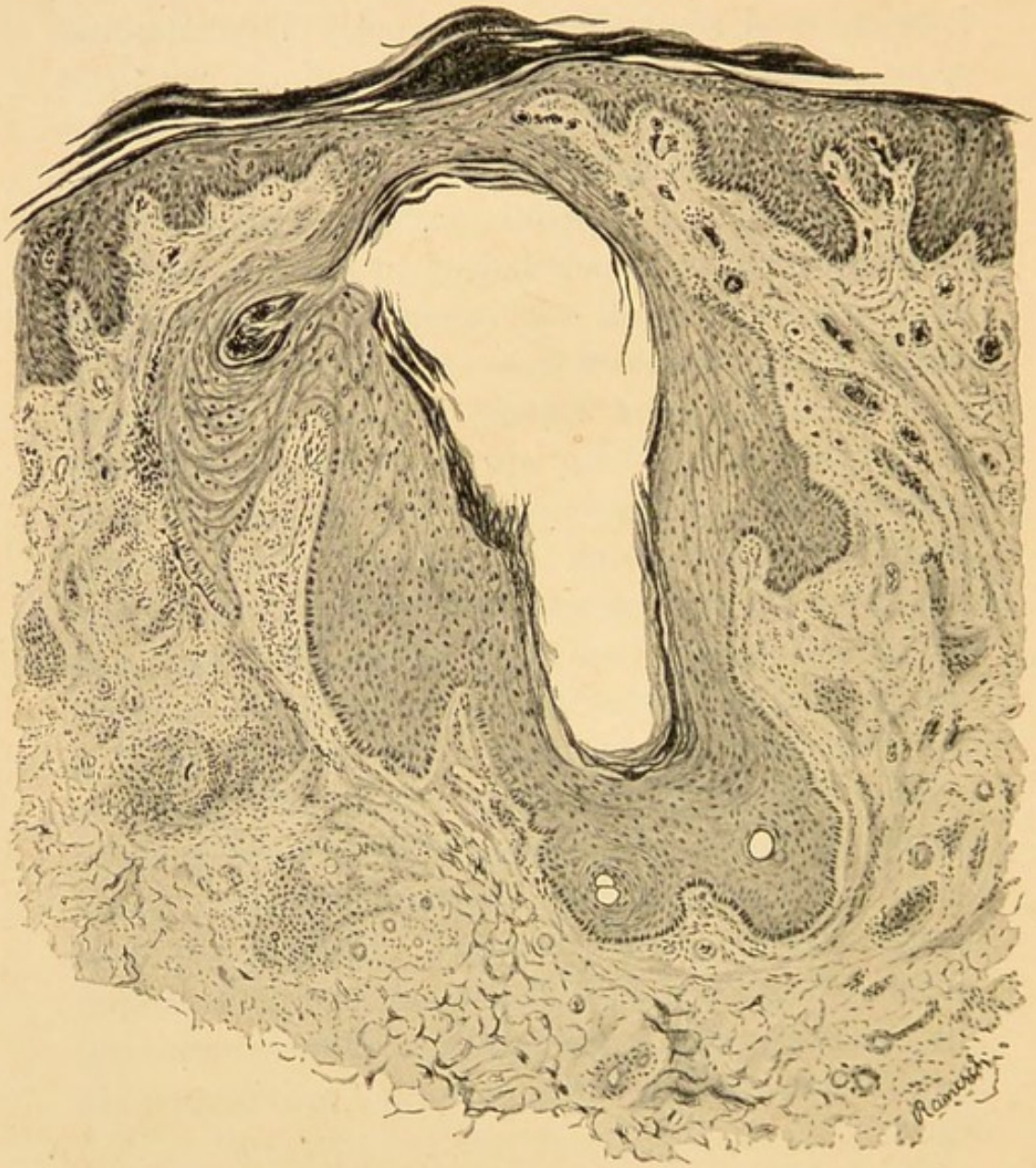

FIG. 1.

Some authors, and in particular Unna, regard certain microbes as the exciting cause of acne;

on the other hand, however, their specificity has been denied.

The distinguished researches of Unna have taught that, in the development of comedones and acne, the question is not simply one of changes in the sebaceous glands, but rather that a "superficial hyperkeratosis of the epidermis exists, which, by its development at the mouth of the follicle, leads to the formation of comedones." The accuracy of Unna's observations is vouched for not only by his own valuable microscopical discoveries, but still more by the good results which are produced by the desquamating methods of treatment of which we shall have occasion to speak later.[1]

The prognosis of seborrhœa and acne is for the most part to be regarded as favourable, since by our therapeutic measures we can usually effect an improvement or cure of these conditions, which, nevertheless, after persisting for some years, tend to disappear spontaneously. We ought

[1] The old view that the comedo or "blackhead" was simply sebaceous secretion mixed with epithelial detritus and with extraneous matter which occluded the mouth of the duct, and that the dark colour of the protruding end was due to dirt, must now be abandoned. It must, however, be admitted that the normal exit of the sebaceous secretion must be hindered not only by this collection of epithelial debris, but also by the immature lanugo hairs, often curled up, which can frequently be demonstrated in the distal part of the comedo. As Dr. J. F. Payne observes (Article "Acne" in Allbutt's *System of Medicine*, vol. viii. p. 753): Comedones "arise in connection with rudimentary or imperfect hairs; . . . in parts of the surface quite destitute of hairs, such as the palms and soles, comedones never occur." (P. S. A.)

not to be blind, however, to the fact that many cases are extremely resistant, and that in spite of all our endeavours—particularly when we are unable to remove the causal factors—one relapse follows on another. In such cases by our treatment only partially can we limit the intensity and duration of the fresh crop. In very rare cases, following upon healed acne spots, a keloid-like thickened scar develops.

Only exceptionally does acne vulgaris cause subjective symptoms, that is to say, when larger pustules exist, which, as is the case in every abscess, cause a feeling of pain and tension.

Concerning the cause of seborrhœa, in other words, those factors which induce an over-production on the part of the sebaceous glands with consequent dilatation of their lumina, it is difficult to make a definite statement. It is a well-known fact that a certain connection exists between this anomaly and abnormalities of the intestinal tract, as well as between the female sexual sphere and chlorosis which is so frequent.

Were I fully to enter into the subject of the formation of comedones and acne, which is brought about by external, industrial, or drug injuries, it would transgress the limits of my thesis, since these affections are unsuitable for specialised cosmetic treatment, but may be regarded as belonging to dermatology in general.

In cosmetic affections—and I will say this at the outset—we shall do well not to neglect ex-

amination of the urine. If much indican appears in the urine one may assume that the digestive faculties are impaired, and an auto-intoxication probably acts as a favourable factor for the acne. Further, we must bear in mind that frequently strongly acting external applications are prescribed, by the use of which, as we know by experience, at times an irritation of the kidneys is set up. If in the given case the renal activity is not absolutely normal, in our prescriptions we must take corresponding precautions.

In each variety of acne, but especially in acne rosacea, the interior of the nose must be examined, if a complete therapeutic result is to be obtained. Frequently in the interior of the nose alterations occur, hypertrophic as well as atrophic in nature, conditions which, through circulatory disturbances (hyperæmic or anæmic), bring about or increase the already-mentioned affections of the exterior of the nose. Hence in these cases one is sometimes in a position, by treatment of the nasal mucous membrane, simultaneously to increase the effect of treatment of maladies of the exterior of the nose.

If it be an accepted fact that a connection exists between seborrhœa, the development of comedones and acne, and an internal complaint, one must endeavour, by improvement or cure of the latter, to exert a favourable influence upon the excessive secretion of fat, together with its sequelæ. In this case the cure of chlorosis is to be aimed at.

Accordingly we should prescribe preparations of iron, and in addition arsenic or a combination of both drugs. For my own part I can testify to the results of öophorin in chlorosis, and after improvement of the general state of health in women with seborrhœa by its means I can effect an amelioration of this condition. Where external conditions exist one should prescribe suitable spa treatment. This tonic treatment also appears judicious from the point of view that, according to Kaposi, through the retention of fat there exists a lessened tonus of the skin muscles, arrectores pilorum, which send branches to the sebaceous glands as well as to the wall of the gland itself.

If we think that an intestinal malady, an auto-intoxication, is responsible for the acne, the digestion must be regulated by means of a suitable diet, and also by means of an aperient. The following is specially recommended :—

℞ Sulphuris præcipitati } āā ℥vj gr. xxvj āā 25·0 [1]
Sacchari albi . . }
Misce, fiat pulvis.
Signetur.—Half to one teaspoonful to be taken thrice daily.

If the taste of this mixture be disagreeable to the

[1] In Germany the quantities of the ingredients in prescriptions are written in decimal proportions, the gramme being understood to be the unit ; the name of the integer is generally not mentioned, thus : rhubarb, 35·0 means 35 grms. of rhubarb, 0·035 means 35 milligrammes. (Martindale.)

patient, the powder can be taken in the form of cachet.

Of intestinal antiseptics, menthol, salol, and ichthyol may be mentioned. Salol is given in the form of powder or tablets up to 1 grm. three to four times a day. Menthol may be prescribed three to six times daily up to 0·1 grm. in pills, or dissolved in oil in gelatin capsules.

℞	Menthol	gr. xlvj	3·0
	Sacchari albi . }		
	Gummi acaciæ } .	āā gr. xxiij	āā 1·5
	Aq. dest. q.s. ut f. pil.	nr. xxx	
	Obduc. gelat.		

S.—Three to six pills to be taken daily.

(Langgaard.)

Or

℞	Capsul. gelatin.		
	Menthol	gr. jss	0·1
	Ol. olivæ	♏ v	0·3
	Replet.	nr. xxx	

S.—One to two capsules to be taken three times a day.

Ichthyol is given either in aqueous solution or in gelatin capsules.

℞	Ichthyol		
	Aq. dest.	āā ℥ijss	āā 10·0

S.—Ten to twenty drops to be taken two or three times a day.

Or

℞ Capsul. gelatin.

Ichthyol	gr. iv	0·25
Replet.	nr. xxx	

S.—Two to four capsules to be taken daily.

The gelatin capsules may be replaced with advantage by the so-called "gelodurat" capsules, which do not dissolve until they reach the intestine.

In place of an aperient a laxative mineral water may be prescribed.[1]

It should be mentioned here that recently from

[1] In my experience a large majority of the subjects of acne suffer from constipation or some digestive trouble, and a great many from anæmia or some defect in circulation; and there are frequently exacerbations at the menstrual period in women.

In many dyspeptic cases, especially when there may be flushing, discomfort, or flatulence after meals without constipation, a bismuth mixture is very useful. A favourite mixture of mine is:—

℞ Bismuthi carb.	gr. xv
Soda bicarb.	gr. x
Tr. nucis vomicæ	♏ 5
Spt. chloroformi	♏ 10
Aq. menth. pip.	℥ss
Pulv. Tragac. co. q.s.	

M. ex aqua t.d.s. ¼ hor. a.c.

To this may be added, if necessary, mag. sulph., ℥ss to ℥i.

A still more useful mixture, particularly when there is constipation with anæmia, is:—

℞ Ferri sulph.	gr. 1–2
Acidi sulph. dil.	♏ 5
Tr. nucis vomicæ	♏5
Mag. sulph.	℥ss–i
Syr. aurant.	♏ 10
Aq. menth. pip.	℥ss

M. ex aq. t.d.s. p.c. (P. S. A.)

various quarters favourable results have been reported with the yeast treatment. Sometimes brewer's yeast is prescribed, sometimes baker's yeast. Since these preparations, however, are frequently inconstant, it is worth while to try to replace them by a stable preparation. Of these I mention cerolin, which is to be given in pills of 0·1 grm. (three pills up to three times a day), and furunculin, from the use of which I have seen good results. I should begin with a teaspoonful of the latter three times daily before meals, and increase to three or four dessert-spoonfuls per day. The effect of the yeast should be regarded as that of an intestinal disinfectant.

As regards local treatment, prophylaxis takes a prominent place. In acne caused by drugs (iodine, bromine, tar, and the like), these remedies, as far as practicable, should be exhibited. Taken by themselves, these cases come but little under consideration for cosmetic treatment. More frequently, as a rule, one of the above-mentioned internal causes is found in the patient, or no definite cause may be demonstrated. We must now pay attention to the proper care of the skin. For the purpose of removing the excessive secretion of fat, the patients must always wash with soap and water as hot as possible. The face is to be rubbed with flannel or similar rough material, and the patients, especially in the so-called better classes, must not be satisfied with the frequent customary washing with bran of almonds. Further, it is of importance

that patients, especially ladies, must not indulge too much—preferably not at all—in the use of powder and paint. The superfluous fat, which is deposited in the dilated sebaceous glands and upon the skin, and is conspicuous by reason of its gloss, on the one hand is increased by paint, and on the other favours the formation of comedones and acne by the combination of the fat with the powder. It should also be mentioned that a composition containing lead or mercury must not be prescribed, as is sometimes done, for patients who a short time previously have been treated for their acne with a preparation containing sulphur. This results in the formation of sulphides of lead or mercury, compounds which are dark in colour. It thus happens that in a patient treated in this way the whole face becomes covered with small black points, which correspond with the comedo-heads which occupy the follicles of the sebaceous glands. Such a disagreeable surprise may be brought about by the patient having previously used paints which contain lead or mercury, without saying anything about it to the doctor.

The local treatment of comedones and of acne vulgaris is again divided into two parts, mechanical and chemical.

It is absolutely necessary that comedones should be mechanically removed and acne pustules emptied of their purulent contents. As a preparation for this, as well as a remedy in seborrhœa, I make the patient use the dermothermostat, a representation

of which is given in Fig. 2. This consists of a funnel with double walls, which, except for a small section below, is surrounded with a coating of asbestos. This funnel is filled with hot water in order to maintain or increase the high temperature, and a spirit-lamp is placed under the part of the funnel uncovered by asbestos. At the back of the funnel you notice an inhalation apparatus in the small medicine glass of which you put warm water mixed with a little alkaline spirit soap or toilet vinegar. After having lighted the two burners the patient puts his face into the funnel; in order to heighten the effect the face may previously be rubbed with alkaline spirit soap. The water which flows from the face runs into a small tube and thence is received into a vessel. The thermometer attached to the top of the funnel indicates the temperature of the water inside. If it reads 55° C. it corresponds to a temperature of about 45° C. in the interior of the funnel, a degree of warmth which can easily be borne, as may be also a much higher temperature. According to the intensity of the complaint the apparatus is used daily or several times a week, and correspondingly with this the length of each application varies from five minutes to a quarter of an hour or longer. It is well to protect the hairy scalp from moisture by covering it with a towel, and, moreover, in order not to allow the patient's clothing to be damaged by the water, a large indiarubber sheet reaching to the feet should be tied round his neck. The patients

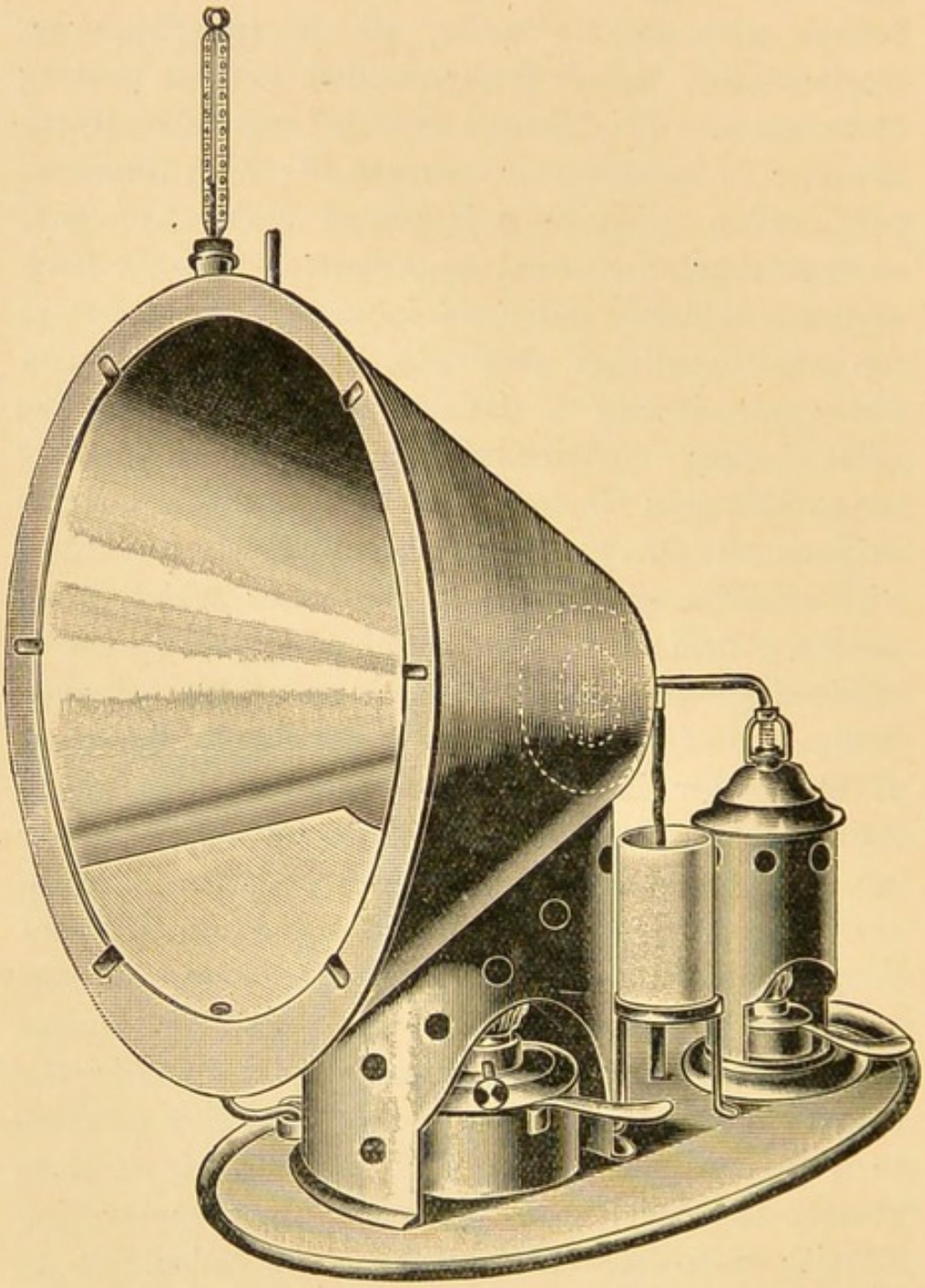

FIG. 2.

must be directed to close their eyes tightly during the process, in order to avoid irritation from the spirit soap. After the employment of the apparatus, which for the sake of comfort has been placed upon a small table which is capable of being raised or lowered, the patients, in cold weather, must remain for a little time in the room, so as to avoid catching cold. If, after the use of the dermothermostat, the face has been dried, the comedones are removed mechanically. For this purpose the patient sits on a chair, at the back of which there is a support for the head, which each time must be covered with a small clean towel or paper serviette, or it may suffice for the patient to rest his head against the chest of the doctor.

In all these slight operations on the face, in order to avoid infection, one must quietly observe whether the patient has pediculi capitis, an event which, without the patient's knowledge, may occasionally occur even in the best society. When the comedones are softened by the action of the vapour you can remove a great number at the same time by pressure with the fingers. For this purpose lateral pressure is exercised with both index-fingers upon the place in question. In order to prevent the fingers from slipping and to preserve the greatest possible cleanliness, it is advisable to cover the fingers with a linen cloth (handkerchief). For this removal *en masse*, comedones of the nose, forehead, and chin are most suitable; but if the comedones are too deeply seated they will have to

be removed with a so-called comedo-extractor. Fig. 3 represents the one which has been used for many years by myself, and consists of a small rod-shaped instrument which has at one end a spoon bent almost to a right angle and perforated in the middle. At the other end there is a small double-edged knife. By perpendicular pressure of the spoon upon the comedo the latter is caused to project from its follicle, but if the comedo is too deeply seated in the follicle you scratch the skin at one point with the lancet-shaped blade and press with

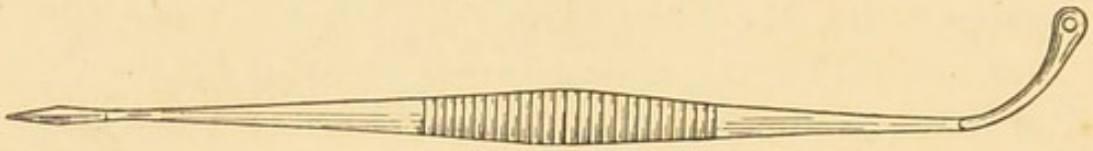

FIG. 3.

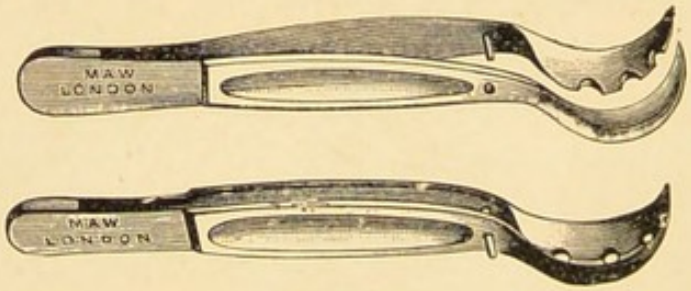

FIG. 3*a*.

the perforated spoon. In this way the acne papules and pustules are removed after incising their heads.[1]

[1] The "comedo-extractor" used by me (Fig. 3*a*) is convenient, insomuch as the patient can stand before a looking-glass and—before closing the blades—herself accurately place the opening over the comedo and then press. It is so constructed that it can be used for comedones in the angles of the nose, or even for those in the concha of the ear.

In the case of large pustules or the subcutaneous abscesses

In the case of larger nodules it is advisable to empty them completely by the use of a Bier's small suction apparatus. This possesses the advantage that the incision need only be very small, and so possible large scars are avoided. The opened acne pustules, which may bleed more or less freely, are covered with an antiseptic powder, and pressure is then applied by means of small pieces of cotton-wool. In the manipulation which I have briefly outlined the doctor must always hold his hand in such a way that, should the patient involuntarily turn his head, neither the comedo-extractor nor the fingers of the doctor must come in contact with the eyes of the patient. It goes without saying that, in using the comedo-extractor, one must be completely aseptic. It is necessary to boil the instrument after each application. Should the patients, after this little operation, feel a slight burning sensation in the face, a compress of aluminium acetate[1] may be applied. Too many comedones should, of course, not be removed at one sitting,

which are developed in severe cases of "acne indurata," I treat each one as a surgeon might do a large abscess, by washing out with a 1 in 20 carbolic solution or other antiseptic, by means of a small hypodermic syringe with a blunt-pointed needle similar to that used in dental work.

After pressing out a comedo or pustule I apply, by means of a sharpened match or other instrument, the smallest drop of either pure phenol or "Phenocamph," following the method introduced by Dr. Walter Smith of Dublin. (P. S. A.)

[1] Liquor aluminii acetici (*Pharmacopœa Germanica*, ed. iv. 1900), the formula for which is also given in Martindale's *Extra Pharmacopœia*. (J. F. H. D.)

nor should too many acne pustules be opened, since otherwise the burning and redness may be very unpleasant.

If a few sebaceous glands, chiefly on the nose, are dilated as a result of seborrhœa so that their mouths are patulous and appear as little holes, these follicles can be destroyed by treating them with a fine-pointed blunt galvano-cautery, thus rendering them less conspicuous.

When we have sensitive patients to deal with in all the various manual cosmetic operations upon the face, it is advisable by means of eau-de-Cologne to disguise the odour clinging to one's hands after the use of disinfectants (carbolic acid, lysol, etc.).

Some time ago the use of rotatory instruments was recommended for the removal of comedones and acne pustules. I have been unable to find any advantage in the use of this method over comedo-extractors, especially since the purchase of the whole of the instruments which are necessary is costly and out of proportion to the benefits which may ensue and which I have never observed. To this must be added the fact, that the use of these instruments is not unattended by certain risks, as, in consequence of an involuntary movement of the patient, they may penetrate to a greater depth than the doctor intends, and thus undesirable consequences may ensue.

If it is impossible for the patients to see the doctor as often as necessary, they can continue the treatment with the dermothermostat at home.

Under the heading of mechanical treatment of seborrhœa, as well as of the formation of comedones and acne, belongs massage, the usefulness of which, according to my experience, cannot be over-estimated. By means of massage the sebaceous glands will be emptied of their abnormal contents; in the second place, you must try to bring back to the normal their excessive activity; and, in the third place, the dilated follicle must be caused to resume its normal size. With reference to the direction in which massage should be performed, most authors who recommend it do not agree. I have personally found it best to massage the region of the nose, directing the movements from below upwards parallel with the vertical direction of the nose; besides, one can combine massage with expression of the gland contents. In seborrhœic conditions, for purposes of massage, one must not use any grease; non-greasy lubricants too have, in my experience, proved superfluous, particularly when massage is employed following the application of the dermothermostat.[1]

[1] I do not recommend massage where there are pustules or subcutaneous purulent collections, which may be thereby spread and inoculate the neighbouring follicles. It is especially useful—vibratory or by the older methods—in removing scars of old or former acne. (P. S. A.)

CHAPTER II

BAD COMPLEXION (*continuation and conclusion*)

Asperities Faciei—Milia

Let us next turn our attention to the drug treatment of seborrhœa of the face. In the first place, we must lay stress on the fact that patients suffering from this complaint must always wash with water as hot as possible, and that the use of soap is absolutely necessary. In prescribing soap, however, you must give definite directions. Coal-tar soap is here injurious, because acne and folliculitis not infrequently follow the use of tar. We should therefore recommend either a purified green soap or sulphur soap or a soap which contains a sulphur equivalent, such as ichthyol, which, however, has the disadvantage of an unpleasant odour. In place of these we may preferably employ soaps of thiol, thigenol, or thiopinol or "marmorsand" soap, or a fluid soap such as Hebra's alkaline spirit soap, which according to the original formula has the following composition :—

R	Sapon. mollis . . .	℥vij	200·0
	Spirit. rectificati . . .	℥iijss	100·0
	Digere per horas xxiv		
	filtra		
	adde		
	Spirit. lavandul. . . .	℥iij	10·0

S.—The alkaline spirit soap.

A mixture consisting of equal parts of soap and spirit is in my experience more liquid and more efficacious.

The above-mentioned soaps are of service not only for the hygiene of the seborrhœic skin, but also at the same time constitute remedies for this condition. These soaps have the advantage that their dosage can be fairly accurately estimated and proportioned; further, that their application is more agreeable than that of ointments. Washing with soap produces the mildest effect. A stronger action is produced by allowing the lather to dry on the face, the effect varying with the length of time during which the soap-suds remain on the face. In proportion to the sensitiveness of the skin and the severity of the complaint the lather may be left upon the face from half an hour to several hours. The effect can furthermore be increased by placing an impermeable material over the part covered with soap-suds. Furthermore, it is obvious that alkaline spirit soap and green soap when undiluted have an essentially greater effect than when rubbed into a lather with water. The undiluted green soap is a very efficacious remedy, so

that its use is only advisable in very well-marked cases, and then only for a short time. Another preparation which I can thoroughly recommend is the sodium dioxide soap (pernatrol soap), which can be obtained in five different strengths—1 per cent., 2½ per cent., 5 per cent., 10 per cent., and 20 per cent. It is used in the following manner. A little of the pernatrol soap is placed by means of a wooden spatula or a horn, bone, or silver spoon on a moistened cotton-wool pad, and with the help of this it is vigorously lathered on the parts of the skin to be treated for some minutes or until the application is felt to become painful. The lather is then thoroughly washed off with water and the skin gently dried with a towel.

Of face washes in the treatment of seborrhœic conditions, Kummerfeld's lotion must first be mentioned, which has been used for some long time :—

℞	Sulphuris præcip. . . .	℥iij	12·0
	Camphoræ . . .	gr. xv	1·0
	Gummi acaciæ . . .	℥ss	2·0
	Liq. calcis ⎫ Aq. rosæ ⎭ . . .	āā ℥v ℥ij	āā 150·0

S.—Kummerfeld's lotion.

Instead of this I frequently prescribe, on account of its more effective action :—

℞	Sulphuris præcip. . . .	℥ijss	10·0
	Spirit. saponis kalini .	ad ℥iijss	ad 100·0
			Misce.

S.—The lotion.

or 2·5, 5·0, or 10·0 grms. of camphor may be added, so that the prescription now runs as follows :—

℞	Camphor. .	gr. xxxviij–℥j	gr. xvij–℥ijss 2·5–5·0–10·0
	(Spirit. lavandul. in better class practice) . .	℥j mxxiv	5·0
	Lact. sulphuris . . .	℥ijss	10·0
	Spirit. saponis kalini .	ad ℥iijss	ad 100·0

S.—The lotion.[1]

The effect, too, may be varied by the mode of application. Either the clear fluid is applied, or the mixture is shaken, or else, in order to produce the strongest action, the sediment is painted on with a paint brush. Further, to the alkaline spirit soap in place of sulphur one can add remedies which are soluble in alcohol, as ichthyol, thiol, and thigenol, of which the first has the disadvantage of possessing an unpleasant smell. These drugs can be added in strengths of 10 to 30 per cent.

For slighter cases of excessive fat-secretion and its sequelæ it is sufficient to allow the face to

[1] In inflammatory cases where a lotion is called for, and especially for use in the daytime, I often order :—

℞	Sulph. præcip. Calaminæ .	. . . . .	āā ℥ss
	Spt. camph. .	. . . . .	℥ii
	Aq. calcis Aq. rosæ	. . . . .	āā ℥ii
	Glyc. boracis .	. . . . .	℥ii

M. f. lotio. (P. S. A.)

be rubbed thrice daily with Phillipson's mixture, which is:—

℞	Acidi acetici glacialis Tinct. benzoin. . Spirit. camphor. .	āā ʒj ɱ xl	6·0
	Spirit. rectif. . . .	ad ʒiijss	ad 100·0

S.—The lotion.

The above-mentioned drugs contain no fat, a fact which is of advantage in the treatment of excessive fat formation; notwithstanding this, in many cases we are unable to forego the use of ointments. In the first place, there come under notice those made with sulphur, to which for some considerable time a beneficial influence has been rightly ascribed in controlling seborrhœa. It is universally supposed that the sulphur first shows its activity when it has entered into combination with an alkali. The alkaline serum which is intermingled with the fat separated off from the altered skin in slight cases is sufficient for this purpose. The alkaline sulphide thus formed favours the peeling of the horny layer and, through its reducing action, promotes the formation of new epidermis and contraction of pathologically dilated vessels of the skin (Kobert). With the object of producing a greater effect, the ointment of potassium carbonate may be added in the proportion of one to ten of sulphur. One should not forget, in writing the prescription, to add water in order to dissolve the potassium carbonate, since otherwise

the small particles of this substance which are undissolved may produce a caustic action on the face. A prescription of this kind would run thus :—

℞	Sulphuris præcip.	gr. xlvj–℥j gr. xvij	3·0–5·0
	Pot. carb. . .	gr. v–gr. viij	0·3–0·5
	(Solve in aq. dest. q. s.)		
	Paraff. moll. . .	ad ℥vij gr. xlv	ad 30·0

M. f. unguentum.[1]

The effect may be increased by the addition of salicylic acid, resorcin, or β-naphthol, inasmuch as these preparations, as regards their peeling action, have a keratolytic effect.

The keratolytic as well as the desquamating property of these remedies is, however, suited to the purpose, if we consider that in the formation of comedones and acne besides the hypersecretion of the sebaceous glands an abnormal keratinisation takes place. The prescriptions should run thus :—

℞	Acidi salicylici .	gr. xv–xxx	1·0–2·0
	Sulphuris præcip. . .	gr. xlvj	3·0
	Paraff. moll. . .	ad ℥vij gr. xlv	ad 30·0

M. f. ungt.

[1] The well-known "Ung. sulphuris co." of Blackfriars is a very efficacious application in most cases of acne. I use this modification, replacing the black by the red sulphide of mercury :—

℞	Sulphuris præcip.	℥ss
	Hydrarg. sulphureti (rubr.)	gr. v
	Hydrarg. ammoniati	gr. x
	Paraffini mollis	℥i

To this may be added salicylic or carbolic acid, or zinc ointment if there be much inflammation. (P. S. A.)

Or

R	Sulphuris præcip.)		
	Resorcini . ∫	. āā gr. xlvi	āā 3·0
	Paraff. moll. . .	ad ℥vij gr. xlv	ad 30·0

M. f. ungt.

Or

R	β-naphthol . . .	gr. xxiij	1·5
	Sulphuris præcip. . .	gr. xlvj	3·0
	Paraff. moll. . .	℥vij gr. xlv	ad 30·0

M. f. ungt.

The ointments referred to are applied to the face with a brush in the evening, and are allowed to remain on one or more hours. If, however, the changes in the face are well marked, and the ointment is not too strong, it may remain on the whole night. The ointment is removed by washing with soap and warm water.

A few days after the application of one of the above-mentioned compositions an inflammation of the skin — an artificial dermatitis — usually appears. A slight manifestation of this disappears of its own accord a short time after the exhibition of strong remedies; in the case of a more severe inflammation, however, washing with soap and water must be forbidden for a few days. The patients must either use an unirritating powder, such as zinc oxide or talc, or a bland ointment such as boric acid ointment.

Of late years in strongly marked cases of acne exfoliation treatment has been tried with a paste advocated by Lassar. Its composition is as follows :—

R	β-naphthol . .	gr. xxxviij	2·5
	Sulphuris præcip. .	. ℥iij gr. xij	12·5
	Saponis mollis Paraffini mollis	āā ℥j gr. xvij	āā 5·0

M. f. ungt.

S.—The scaling paste.

This thick mass is to be spread over the diseased portion of the face for half to one hour, and then removed with dry cotton-wool. This procedure is repeated for three or four days in succession. In the meantime, on account of the increasing dermatitis, the patient must not wash, but in case of need may apply a neutral powder to relieve the excessive tension. After the peeling action has begun a mild unirritating ointment may be used for several days in the manner indicated above. The exfoliation treatment may be repeated several times at intervals of one to two weeks.

Into another scaling preparation recommended by Unna resorcin is introduced as an effective ingredient. In order to render elastic the membrane which is formed, an addition of 10 per cent. ichthyol and vaseline to the resorcin paste has proved serviceable.

℞	Terræ siliceæ . . .	gr. viij	0·5
	Resorcin . . .	ʒijss	10·0
	Zinci oxydi . }		
	Ichthyol . } .	āā gr. xxxviij	āā 2·5
	Paraffini mollis }		
	Adip. benzoat.	. ad ʒvj gr. xxvj	ad 25·0

M. f. pasta.

S.—The resorcin scaling paste.

The above should be applied twice daily with a paint brush to the face, which on the third or fourth day is covered with a brown, adherent mask-like layer. Within the next three or four days the peeling off of the resorcin layer proceeds under the application of bland ointments and lotions. For skins which are very sensitive the use of a paste containing 10 to 20 per cent. resorcin is recommended. Immediately after the completion of one scaling treatment a fresh one may be instituted, which, according to the severity of the case, may be frequently repeated. If one desires to spare the patient the brown colour of the portion treated, which persists for several days, the ichthyol must be omitted. A feeling of lassitude may possibly arise through absorption of resorcin, which soon passes off, and to which no importance need be attached. Before beginning a peeling cure it is advisable to render the skin free from fat by rubbing it with benzene.

Both the above-mentioned peeling treatments are best carried out clinically by the doctor himself or in his presence, so that he can satisfy himself daily as to the effect of this heroic treatment.

If the closely packed, large, and cyanotic soft nodules lead to the formation of abscesses, which sometimes communicate with one another, after a small incision a cautious trial of Chlumsky's mixture is permissible.

℞	Alcohol. absolut. . . .	♏ l	3·0
	Acidi carbolici . .	ʒij gr. xviij	9·0
	Camphoræ . .	ʒss gr. xxxvij	18·0

S.—For external application.

This solution must be painted on the part affected, or in well-marked cases should be employed in the form of a slightly moistened compress, particular care being taken in the neighbourhood of the eye.

Zeiszl's paste is to be recommended for the chemical treatment of isolated and particularly indurated acne nodules :—

℞	Sulphuris præcip. } Spirit. rectif. . } Glycerini . }	āā ʒjss	āā 5·0
	Pot. carb. . . .	gr. xv	1·0

D. in vitro amplo et optime clauso.

This paste should be applied to the separate nodules for the night with a glass rod or wooden stick (*e.g.* a match). Instead of this paste an emollient and absorbent plaster has been used, of which the plaster mull of mercury and carbolic acid, a 5 per cent. salicylic soap plaster mull, a 5 per cent. salicylic acid soap tricoplast, or a

nafalan plaster mull are especially suitable. Since patients often make mistakes in the use of plaster mulls, it is necessary to give precise directions as to the details of treatment. One should never forget to tell the patient that first of all the gauze found on the plaster mull must be removed before use. In case the gauze adheres too firmly to the plaster, it may be moistened with cold water and then lifted off. The plaster, however, should not be moistened with water to increase its adhesiveness, as the public frequently do, but if necessary it can be gently warmed over a spirit-flame. Finally, no hole should be made in the middle of the plaster. For the removal of a plaster which adheres very tightly, benzene is, as a rule, to be recommended.

In order to remove the brown discoloration from places on which previously strongly developed acne nodules have been situated, trial with an ointment containing hydrogen peroxide or zinc perhydrol may be recommended.

℞	Hydrogen. peroxydi .	ʒj ℥xxiv	5·0
	Lanolin	ʒvj gr. xxvj	25·0

M. f. ungt.

Or

℞	Zinc perhydrol. . .	gr. xlvj	3·0
	Lanolin	ʒvij	27·0

M. f. ungt.

In no respect does the treatment of seborrhœa sicca differ from that of seborrhœa oleosa.

With reference to the treatment of acne by opsonins, up to the present there is not sufficient evidence on which to base a definite opinion. Still, from my own personal experience I think that one may take it that this method, when further improved, will render good service in the treatment of acne. Latterly, seborrhœa and acne have been successfully combated by means of the Roentgen rays. That in this direction good results have been attained appears undoubtedly true when we consider that the epithelial layer of the skin, which is notably influenced by the X-rays, plays a great part in the changes under discussion. In these affections the technique of itself is so difficult that in the near future this method will not be of general utility to practitioners. In addition to this there are the objections which I specially entertain against Roentgen treatment in cosmetic practice, and which I will explain in greater detail when I come to the treatment of warts and hypertrichosis.[1]

As to the treatment of seborrhœa and acne with the mercury quartz lamp, I can unfortunately give no opinion from personal experience.

[1] I quite agree with Dr. Saalfeld as regards caution in the case of vaccines and X-rays in acne cases. I have seen excellent and rapid results by both methods ; on the other hand, some of the most extensive cases of acne that I have come across within the last year or two have not only not benefited, but have been made far worse by one or other of these treatments—at the hands, too, of recognised experts. At this date, in my opinion, it is not safe to recommend either of them as "routine" treatments. (P. S. A.)

In the above-mentioned keloidal thickening, which occurs but rarely after the healing of large acne nodules, in one case I was able, by the use of the flat burner of a thermo-cautery, to attain a fairly good cosmetic result.

Up to the present we have been obliged to deal with conditions the chief factor of which is excessive fat-secretion. We must now turn our attention to anomalies of the complexion in which the exact opposite takes place. I refer to asperities faciei, or excessive dryness of the face, which occurs, as a rule, in the form of discrete plaques. This condition may be either primary or secondary. In the former variety Nature has supplied an insufficiency of fat-secretion; in the latter the complaint occurs through pursuance of an unsuitable hygiene for the face. If, by means of vigorous ablutions, or the use of strong spirit lotions employed as beauty washes, still more fat is removed from a skin which is in this respect already deficient, the skin becomes dry and cracks or peels. In such cases not infrequently there exists a feeling of irritation, burning, or stretching. In marked cases the use of soap and water must for a short time be forbidden, and in its place cleansing with olive or sweet almond oil must be substituted. Patients abandon their opposition to this advice as soon as they perceive that cleansing can be carried out perfectly well by means of swabs dipped in oil. The excess of oil is removed with cotton-wool. If the cause be removed and the application

during the night of a bland ointment such as lanolin or boric lanolin does not suffice, white precipitate ointment may be applied, beginning with a strength of 2 per cent. and increasing to 10 per cent. if it acts well. For a skin which is not too sensitive the application of tar may be recommended, or, better still, anthrasol, which is prescribed either as a 10 per cent. ointment, to be well rubbed in, or as a 10 to 20 per cent. alcoholic solution, which, according to experience, is well borne, followed by the application of lanolin or zinc oxide paste. If the tar causes no irritation, but the process of healing is slow, the quantity of tar may be increased. Oil must be used, as you are aware, for the removal of the zinc paste. In many cases an ointment which contains both the above-mentioned effective ingredients has proved successful. Such an ointment should be prescribed as follows :—

R	Hydrarg. ammoniati gr. xxiij–xlvj	1·5–3·0
	Anthrasol . gr. xlvj–ʒj gr. xvij	3·0–5·0
	Lanolin . . ʒvij gr. xlv	ad 30·0

M. f. ungt.

If an improvement is manifested, and you can dispense with the oil ablutions, you may recommend the patient to wash with soft, lukewarm water, previously boiled, to which glycerine has been added, using 1 to 2 tablespoonfuls of best purified glycerine to a small toilet basin.

Borax may also be prescribed in the strength

of about a 5 per cent. solution as an addition to the toilet water, which it makes slightly alkaline and has the property "of dissolving the layer of fat and dirt without injury to the skin" (Liebreich). Further, for a tender skin, bran of almonds may be added to the boiled water—about 1 to 2 teaspoonfuls to one basinful.

The following soaps are to be recommended:—Marseilles, Nafalan, Heine's Children's Soap, Beierdorf's Nivea, Mielck's Albumose, and Schleich's Wachspasta Soap. To make the soap more attractive, Schleich's Wachspasta may be added to the soap-suds. A warning is necessary in the case of a sensitive skin against all so-called medicated soaps, as well as in general against the dearer French soaps, the perfume in which is at times harmful, for the reason that these soaps contain volatile oils which irritate the skin.[1] It must be made clear that a tender skin should not be rubbed, but must be dried by careful dabbing, just as in the case of those persons who dare not leave the skin damp but must perform the act of drying completely and carefully. Later on we shall have to deal fully with the rules to be observed for protection from rough weather, the sun, and other causes of injury.

Milium sometimes comes under treatment as a

[1] I prefer soaps made with an olive oil basis for delicate skins,—especially those which do not contain resin or excess of alkali. In dry or chronic eczematous conditions the Spanish "La Toja" soap is often well borne. (P. S. A.)

blemish of the complexion. By the term "milium" we understand white or yellowish papules, small as a millet-seed (hence the name), which are situate on the face, most frequently on the eyelids and around the eyes. Milia are cysts covered by epithelium composed of many layers. If the milia are very numerous this epithelium can be destroyed by a scaling application such as sapo kalinus. This treatment is but rarely used because of the reaction which is unavoidably vigorous. It is preferable to scrape the investing layer with a fine scalpel, and lift out the milium with a comedo-extractor. The place, which sometimes bleeds profusely, is then dusted with an antiseptic powder and covered with a tiny dressing. The fine knife must be very sharp and pointed, so that only the surface is incised and not the milium. Moreover, in this little operation, when the milia are situate on the eyelids, special care should be taken that the knife does not slip. It is advisable to stretch the skin very carefully with two fingers.

CHAPTER III

ANOMALIES OF CORNIFICATION—CALLOSITY FORMATION, CORNS, WARTS

To-day, gentlemen, we have to consider certain affections that are produced by anomalies of cornification. The only ones, however, with which we are directly concerned are the hyperkeratoses. We may distinguish those in which the papillary body is involved from those in which it is not. This is not the place to enter into the question, which is not yet fully elucidated, as to the nature and origin of cornification, and I can only hint at the formation of callosities which appear as trade affections, and which, as you know, occur on various parts of the palms of the hands. On the other hand, callosities on the feet interest us. By tyloma or callosity we understand a circumscribed hyperkeratosis which merges gradually into the surrounding skin.

Callosities have usually a yellowish brown hue, the normal skin marking over them being lost. They occur in places where, as a result of improperly fitting shoes, excessive pressure has been maintained for a long time. Not only shoes

which are too narrow, but also those which are too wide, are at times the cause of callosity formation, which may follow a blister due to excessive friction. Callosities on the hands, as we have said, are produced by various trades, partly through pressure, partly by chemical injuries, *e.g.* through acids or brine. They also occur—and this comes within the sphere of cosmetic treatment—in athletes, such as gymnasts, rowers, tennis and cricket players, cyclists, etc. If, on the one hand, the thickened places on the hands in some measure form a protection against external irritants, they have, nevertheless, the disadvantage that the sense of touch over the parts affected is diminished, and also that not infrequently in these situations painful cracks occur.

The foregoing ætiological factors afford an indication for prophylactic treatment, at any rate as regards callosities on the feet. A well-fitting boot should be worn regularly, and if a callosity has actually appeared the faulty boot must be rectified.

In the case of more severe callosities care must be taken that a deformity of the foot, such as pes planus or pes valgus, does not occur. These irregularities must naturally be corrected as far as possible by corresponding alteration in the shape of the boots, which alteration is frequently sufficient to remove the trouble. If the callosities, however, are more pronounced other measures will be necessary, which are partly included under the treatment of

corns, and will therefore be referred to together with these.

In contradistinction to callosities the corn (clavus) appears as a circumscribed thickening of the horny layer. It presents a central deeply projecting core which obliterates the papillæ at this spot, whilst in the vicinity the papillæ are hypertrophied and exhibit inflammatory infiltration (Fig. 4). We may put aside corns on the fingers, which seldom occur and do not here concern us. As regards the formation of corns on the feet, the same source of injury is to be guarded against as in tyloma, namely, unsuitable shoes. There exists a difference between the two affections, inasmuch as corns almost exclusively occur over bony prominences. The troubles which corns produce are often considerable. Apart from the fact that the local disabilities in walking are very troublesome, at times it happens that the radiating pains extend to the knee, and many so-called gouty affections of the knee-joint have been caused to disappear by the removal of a corn, particularly if the inconvenience of a flat or hollow-foot which exists simultaneously has been alleviated by a suitable pad.

In order to remove the thickened epidermis, apart from the replacement of badly fitting shoes by those which are well fitting, in the first place keratolytic measures should be employed. For this purpose warm footbaths containing one to two tablespoonfuls of potash should be used. If, however, the

FIG. 4.

callosity does not soften of its own accord it can be removed mechanically by rubbing with a friction cloth or by means of a corn file. After this are used liquor potassæ 15 per cent. or strong acetic acid, with which the limited area of the callosities or corns is vigorously rubbed. The keratin of the thickened horny layer is dissolved by the liquor potassæ, and converted into a greasy pulp.[1] The use of concentrated acetic acid cannot so well be recommended on account of its greater painfulness. The keratolytic, however, *par excellence* is salicylic acid, which is used either in the shape of a plaster or as salicylic collodion. A 33 or 50 per cent. salicylic acid plaster mull, cut according to the size of the callosity or corn, is applied. In order to make them adhere these plasters are covered with a larger piece of zinc plaster or leucoplast. After three or four days the callosity can usually be removed; in a similar way one can paint on twice daily a corn collodion which is known by the name of collodium contra clavos pedum—

℞	Extracti cannab. Indic.	gr. xv	1·0
	Acidi salicyl. cryst.)	āā ℥ijss	āā 10·0
	Terebinth. Venet.)		
	Collodii	℥ijss	79·0

or salicylic acid collodion with the addition of resorcin or lactic acid.

[1] Strong acetic acid must be used with caution, and not allowed to touch the surrounding skin. (P. S. A.)

℞	Resorcin . . .	gr. xlvj	3·0
	Acidi salicylici . .	ʒj gr. xvij	5·0
	Collodium flexile . .	ad ℥j	ad 30·0
S.—To be applied with a small brush.			Misce.

℞	Acidi salicylici . .	gr. xlvj	
	Acidi lactici . . .	♏ l	āā 3·0
	Collodium flexile . .	ad ℥j	ad 30·0
S.—To be applied with a small brush.			Misce.

Although this usually suffices for the treatment of callosities, a corn, on the other hand, is but seldom removed entirely in this way, since part at any rate of the deeply penetrating central core remains behind. This latter must be removed by means of a circular incision with Cooper's scissors. The surrounding hypertrophied papillæ, which are thus exposed at the edges, must be painted at once with a 50 per cent. solution of silver nitrate or a 10 per cent. solution of chromic acid or with liquefied carbolic acid. The bleeding having been stopped in this manner, an antiseptic dressing is applied. If for any reason the patient is unable to make use of one of the above salicylic acid preparations, you can pare away the corn layer by layer with a scalpel and remove the core as stated. Since this involves a surgical operation, it is obvious that you must proceed antiseptically. We physicians should in no way shrink from undertaking this small operation; many a person has died of sepsis in consequence of a corn which has been neglected or unskilfully treated.

How often, indeed, diabetic gangrene of the foot, which with such extraordinary frequency terminates fatally, springs from a neglected or badly treated corn! But apart from this, the relief which one experiences after the removal of a corn is often marked, and our efforts as physicians must always be directed to alleviate the sufferings of our patients, of whatever kind they may be, hence we must not consider it beneath our notice to undertake corn operations. The corn- and bunion-rings so frequently exposed for sale have at best only a palliative value. In patients who are afraid of the knife, however, you can often attain some degree of success by their means. A corn-ring is placed over the corn in such a way that the latter projects into the aperture of the ring. The ring is now attached by means of a strip of adhesive plaster, and through long-continued pressure the corn is as it were detached from its base, and its upper part with a portion of the core can subsequently be removed.

In the formation of warts (verrucæ) there occurs a hypertrophy of the whole epidermis, especially of the stratum mucosum. There is, moreover, and this is the most essential point, a hypertrophy of the papillary layer accompanied by dilatation of the enlarged vessels. Alteration of the papillary layer occurs first, and changes in the epidermis manifest themselves only secondarily. The difference between the structure of a callosity and that of a wart is readily seen in the accompanying illustration

(Fig. 5). The wart presents a small, more or less elevated structure, varying in size from a lentil to a pea, with a smooth or rough surface. Its colour either corresponds with that of the surrounding skin or is more deeply pigmented. The latter

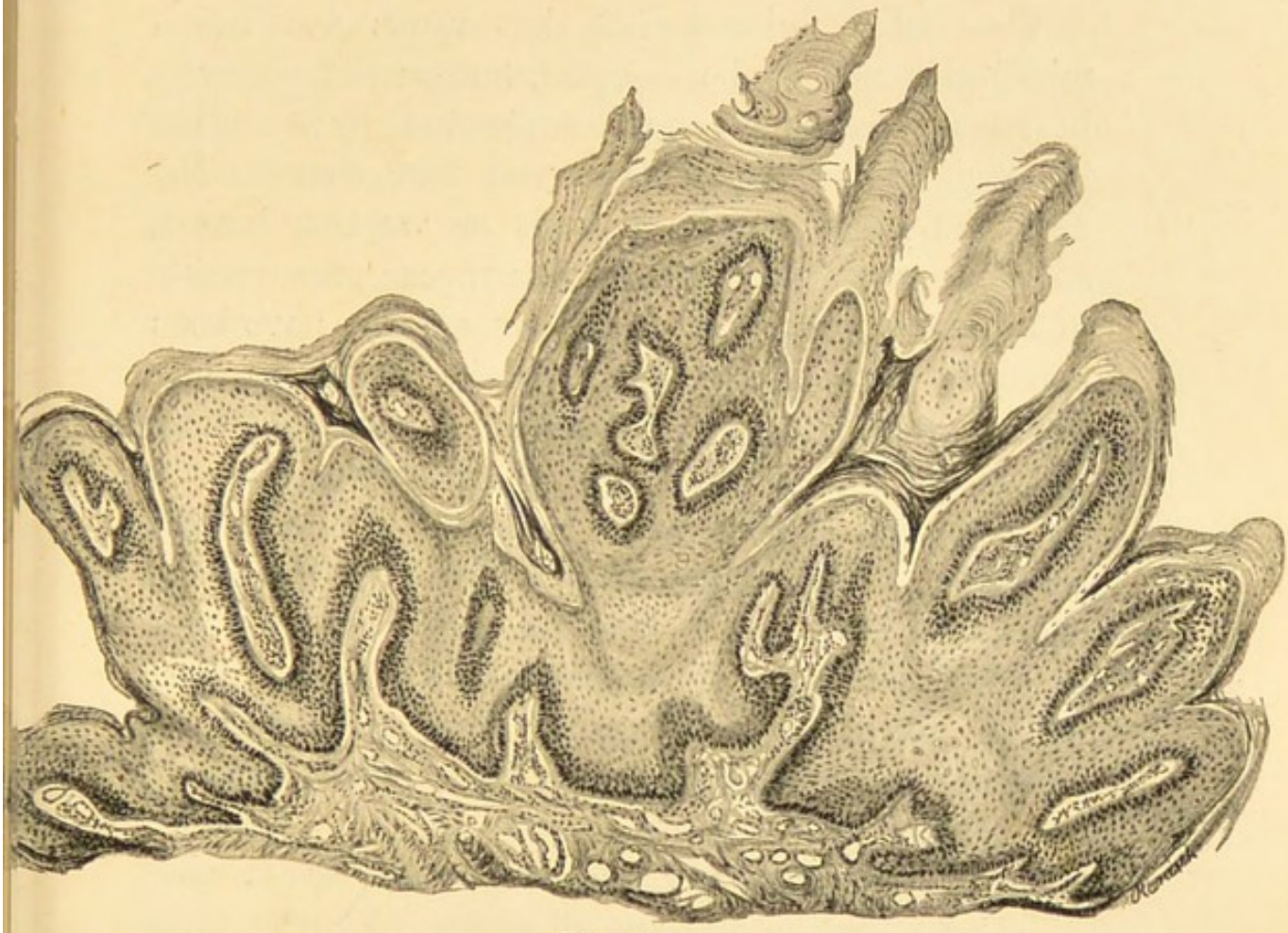

FIG. 5.

variety is for the most part congenital, and is to be classed under the heading of nævi, whilst the generality of warts usually occur only in later life.

Verrucæ planæ juveniles deserve special

attention. These are small flat structures, which mostly occur from fifteen to twenty-five years of age, and seldom earlier or later than this. They are found on the back of the hands and on the face, and do not exhibit the hardness and papillation which characterise common warts.

The old popular belief that warts are transmissible is not to be rejected, but on the contrary in recent times has been supported by scientific investigations. Apart from the fact that in the neighbourhood of a large wart or "mother" wart, smaller ones or "daughter" warts appear, experiments in the transplantation of ordinary warts have been made with positive results. In the case of verrucæ planæ juveniles I have observed that several young women who were employed at the same table in a woorkroom contracted warts from a single patient. It seems to me out of the question that this could have been accidental. Seborrhœic warts, to which attention has been directed only within recent years, can only rarely become the object of cosmetic treatment, since they occur almost exclusively in advanced age.

In no affection, perhaps, does superstition play so great a part as in that of warts. By the most varied means, amongst which "sympathy" assumes a special importance, warts are said to have been caused to disappear. This superstition is explicable when one considers that warts, in fact both verrucæ vulgares and verrucæ planæ juveniles, often quite suddenly disappear of their own accord.

In the treatment of warts one must remember that, as a rule, only the removal of a blemish is concerned, and that the appearance after the removal of the new growth should be more pleasing than before. Unfortunately, this result has not always been attained.

Of the numerous remedies and methods for the removal of warts, the chemical ones should first be mentioned. The wart is lightly touched several times with fuming nitric acid by means of a pointed glass or wooden rod, with the result that it shrinks visibly. In this small operation the greatest care has to be exercised, on the one hand, to cauterise to a sufficient depth to prevent recurrence; on the other hand, to avoid unsightly operation scars by not going too deeply. The less experienced practitioner will do well to repeat the cauterisation at one or two later sittings rather than to go too deeply at the first attempt. Weaker cauterising agents are trichloracetic acid or liquefied carbolic acid. I have learnt to give up cauterising with formalin; apart from the penetrating odour, which so easily causes headaches, the reaction is at times most unpleasant, since the cauterised spot and its surroundings exhibit evidences of marked inflammation. Cauterisation with liquid air, which is very effective, is unfortunately still so expensive that it can only be used in exceptional cases. In the above-mentioned cauterisations, in order to protect the surrounding skin one covers the places if necessary with a piece of adhesive plaster from

which you have cut a piece corresponding to the size of the wart. In patients afraid of the knife, who shrink from any operative interference, even cauterisation, you can apply once or twice daily the following :—

℞	Hydrarg. perchlor. . .	gr. xij	0·75
	Collod. flexil. . .	ad ℥ss	ad 15·0

D. cum penicillio, sub signo veneni.
S.—For external application.

You can also apply salicylic collodion or salicyl-lactic acid collodion in the compositions previously given, or you can put on one of the above-mentioned salicyl-plaster mulls or a mercury-arsenic plaster mull.

A very popular procedure, when the wart is pedunculated, is to ligature it with a thread. If the thread is renewed several times, and at each application is drawn tighter, at times the wart may chance to dry up and fall off.

Of surgical measures the first to be named is that of snipping off with Cooper's scissors. For the destruction of the hypertrophied papillæ, cauterisation of the base with one of the above-mentioned remedies or with 10 to 20 per cent. chromic acid is then necessary ; so too, after freezing the spot with ethyl chloride, the wart can be readily removed with a scalpel, and afterwards the cautery applied. In the case of the extremities it is better to perform a bloodless operation, since the dilated papillary vessels bleed copiously. You

can also employ Dreuw's extirpation pen (Fig. 6). The wart, which has been lifted up by means of hooked forceps, is well sprayed with ethyl chloride; then you stick the point of the pen, which has been fastened in a penholder, under the wart, which thus lies in the hollow of the pen. I cannot recommend scraping the wart with a sharp spoon or its extraction with tweezers or the use of the punch, since all of these are somewhat rough measures, the danger of these methods being that, should the patient flinch a little, the instrument might go too deep, and thus most undesirable complications

Fig. 6.

would ensue. In larger groups of warts one may sometimes seize the opportunity to excise them by a circular incision, bringing together the edges of the wound with very fine silk sutures, whereby a fine scar is left.

You can employ ferrum candens in the form of the red-hot Paquelin or galvano-cautery. For somewhat pedunculated warts one may employ the latter as a galvano-cautery loop. The base, however, even then must be cauterised with a small button-cautery. In the use of the former, as well as in the use of a button-cautery alone, one must be careful not to burn too deeply, since otherwise very disfiguring scars may result. This little

operation should be performed under local anæsthesia, by which method one obtains complete insensibility to pain.

By the use of electrolysis one attains a very good cosmetic result. A needleholder used for electrolytic purposes to which an interruptor is attached is armed with a medium-sized English sewing-needle and is connected with the negative pole of a constant-current battery provided with galvanometer and rheostat. At the beginning of the operation the rheostat is set to the greatest resistance. The patient holds in one hand the large positive electrode, which has been moistened

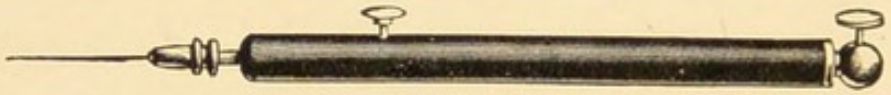

Fig. 7.

with salt water. The needle is then inserted beneath the wart parallel with the skin surface, and by moving the rheostat the current is allowed to become gradually stronger until a white foam forms on the needle, for the production of which a current of one-half to two milliampères suffices. After half to one minute one slowly withdraws the needle and begins the procedure in another place. The number of needle-pricks to be made at one sitting depends upon the sensitiveness of the patient. The somewhat troublesome make and break of the current can be avoided if one knows by experience the strength of current which is necessary for a given patient. After having introduced the needle

with the current open, it is closed by removing the finger from the button of the needleholder; the procedure being finished, the needle is withdrawn with the current open. Instead of sewing needles one can also use platinum-iridium needles; these are, however, fairly expensive and on the whole superfluous.

A very useful instrument for electrolysis is the wart extirpator, which encircles the base of the wart, and the application of which is evident from the illustration (Fig. 8).

The pain in electrolysis is slight. In very

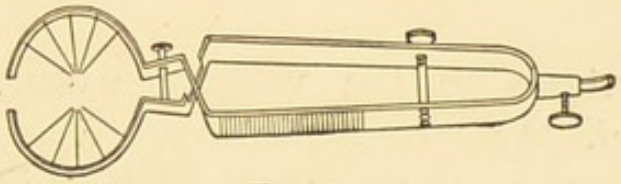

FIG. 8.

sensitive people it can be materially lessened by cocaine kataphoresis, which I will explain in dealing with the treatment of Hirsuties. It goes without saying that in all the above-named slight operations asepsis must not be neglected.

I must now refer to two quite modern methods of treatment, namely, the use of radium and of the Roentgen rays. By the application of a radium-containing capsule I have actually seen isolated warts disappear. In the case of multiple warts on the back of the hand, I have noticed the same result when I brought the X-rays to bear upon

them. I have, however, abandoned both of these methods of treatment, and should like to give a direct and strenuous warning against the use of these methods for cosmetic purposes. Long afterwards, even up to three years after the termination of Roentgen treatment, one has seen permanent atrophy of the skin develop along with the formation of new blood vessels, and following the application of radium a few months later I had the opportunity of observing new vessel formation on the place which had been treated. Therefore treatment by X-rays and radium, from a cosmetic point of view, ought to be instituted only in quite exceptional cases.

In contrast to the verrucæ vulgares already spoken of, the above-mentioned verrucæ planæ juveniles nearly always react promptly to internal administration of arsenic, and only in very rare cases, where, contrary to expectation, this effect fails, you must be very careful in the use of external remedies, especially when one considers the fact that verrucæ planæ juveniles not infrequently show a tendency to spontaneous disappearance. In a given case you would order one of the above-indicated plasters or salicylic collodion, or cause the following to be painted on twice daily :—

℞	Resorcin . . .	℥j gr. xvij	5·0
	Spirit. rect. . . .	℥jss ♏ xl	45·0

M. fiat lotio.

S.—For external application.

Such external treatment should also be employed for stout young individuals, in whom there is the fear that, through the administration of arsenic, they would put on flesh and increase in weight in undesirable fashion.

CHAPTER IV

NEW VESSEL FORMATIONS—TELANGEIECTASES, ANGIOMATA—ROSACEA

With regard to new vessel formations, in cosmetic treatment we are concerned only with the formation of new blood vessels, but not with that of lymph vessels. Telangeiectasis and angioma simplex must be distinguished from angioma cavernosum : the latter is usually congenital, the former appears as a rule only in later life. These new vessel formations may occur in various parts of the body, their size varying from that of a pin's point up to aggregations which occupy a large area. So too the colour varies from light red to a dark bluish red according to the more superficial or deeper position of the vessels, and according to the thickness of the overlying epidermis. The telangeiectasis, anatomically speaking, presents a new formation situate in the cutis and subcutis, consisting of capillaries, venules, and sometimes also arterioles branching in intestinal fashion. Removal of blood moles as a rule is required only when they present themselves on a part uncovered by clothing, or in other places if they rapidly increase in size. As regards the

removal of telangeiectases in infants one should wait, since these telangeiectases sometimes disappear spontaneously. But if this is not the case, one can endeavour to remove the telangeiectasis by vaccination, in cases where the new formations are not situate on the face, or in girls on the neck and arms, as one can never tell how deep the vaccination mark goes, and as the latter may eventually present a worse appearance than the original affection.[1] For the removal of small telangeiectases in new-born children systematic paintings with ichthyol-collodion 10 per cent. have been recommended, but of these methods I have no personal experience.

Concerning caustics, all those mentioned in the treatment of warts can be employed here, as well as 5 per cent. chloride of zinc collodion. Besides these electrolysis may be used with good results, in which case one should try to destroy the separate vessels which are visible by the direct introduction of a needle into them. The operation of electrolysis takes place in the same way as described for the removal of warts. In rather extensive new vessel formations several needles may be inserted at the same time, for which one uses an instrument most suited to the purpose, such as is represented in Fig. 9. In multiple

[1] I once heard of a case in which vaccination was employed for the removal of a large nævus on an infant's scalp. The fontanelle was not closed, and the inflammation extended within the cranium with a fatal result. (P. S. A.)

scarification we have a further means for the removal of telangeiectases: the individual tiny vessels are scarified as far as practicable with quite a fine scalpel. If the telangeiectasis has attained greater dimensions, and especially in the case of the so-called nævus flammeus, a close meshwork of numerous parallel cuts should be made, and then again a second series of cuts which are placed at right angles to the first, so that the part treated presents the appearence of a chess-board (Fig. 10).

With a sharp knife the pain is slight, so that

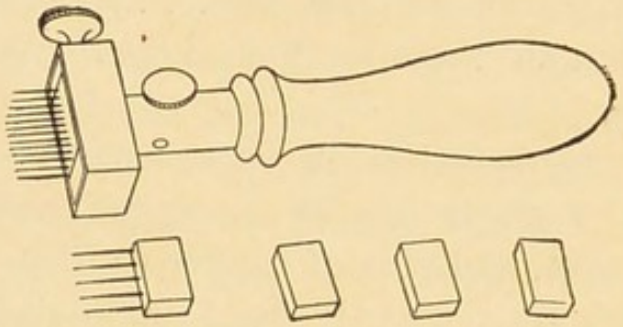

Fig. 9.

neither local nor general anæsthesia is necessary. The most profuse hæmorrhage can be stopped by compression with cotton-wool pads sprinkled with antiseptic powder. As soon as the scarification wounds are healed the operation is repeated. For this method Vidal's scarifier may be used, an instrument which has a row of parallel blades by which with one incision twelve cuts are made at the same time. In most cases, however, the use of this instrument is not necessary. Wide-spreading telangeiectases can be successfully removed by the method of scarification, leaving a beautifully smooth scar. It

must be admitted, however, that this procedure takes a very long time and puts the patience of both doctor and patient to an equally severe test. If the new vessel formation is very strongly marked, but the spot itself not too extensive, it can be excised by an oval-shaped incision and the wound sutured with very fine silk. The fine scar resulting from this gives a good cosmetic effect.

The galvano-cautery mentioned in the treatment of warts can likewise be employed for the removal

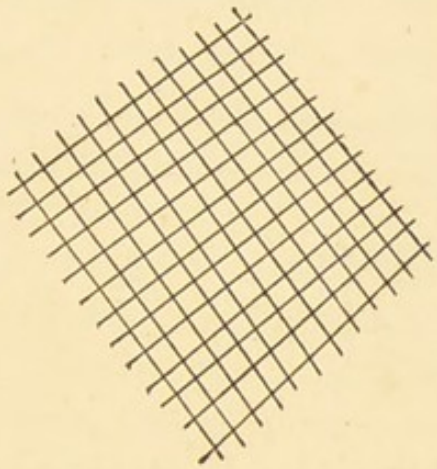

Fig. 10.

of telangeiectases. In this connection the use of the hot-air cautery has proved advantageous. In most cases local anæsthesia suffices; general narcosis is necessary only in the case of small children. For the destruction of fine single vessels the use of Tänzer's or other fine-pointed galvano-cautery is recommended (Fig. 11).

In all the above cauterisations and operative measures it is advisable by means of a pressure-glass to obtain an idea of the distribution of the

vessels. In an angioma of small size one generally notices that the skin becomes ischæmic with the exception of a small spot which lies in the middle. From this central vessel the rest of the new vessels spread out. In each application, therefore, the central mother-vessel should in the first place be removed, after which the branches soon disappear. What has already been said in the case of warts holds good in the treatment of telangeiectases by radium. Radium is successful in bringing about the disappearance of telangeiectases, but I have seen small vessels reform after the skin had for some

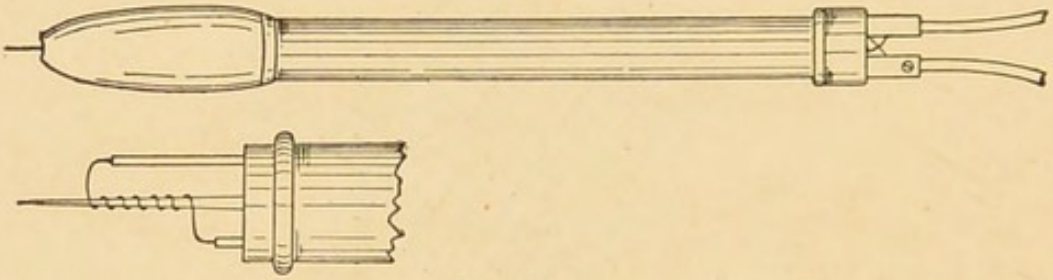

Fig. 11.

time appeared white. However, it will be permissible in desperate cases of very widespread telangeiectases to make a trial, since single vessel dilatations which have appeared afresh can be destroyed by galvano-cautery, electrolysis, or scarification, and the final result, in spite of eventual atrophy of the skin, will be a better one than the original appearance of the affected spot. But I would lay special stress on the fact that this method should be reserved for only quite extreme cases.

With reference to the treatment of extensive telangeiectases with the Finsen or mercury quartz

lamp, we possess too little experience to permit of a final opinion being given. On the other hand, the results of the treatment of angioma with liquid carbonic acid recommended by Pusey appear sufficiently encouraging to warrant further trial of this method.[1] The same may be said of the treatment of this affection given by Dreuw—effective freezing with ethyl chloride, followed by vigorous cauterisation of the affected part with crude hydrochloric acid as far as the margin, until considerable hæmorrhage takes place. Years ago I succeeded with liquid air in removing telangeiectases with good cosmetic results, but unfortunately up to the present its high price contra-indicates the general use of this very effective method.

In contrast to angioma simplex, angioma cavernosum, which is usually congenital, presents itself as a swelling in the subcutaneous tissue; this swelling is in most cases prominent, presents a bluish colour, and is compressible. Angioma cavernosum, as its name implies, consists of cavernous tissue, which in most cases is partly divided off from the surrounding parts by a connective tissue capsule. These new growths must be removed surgically, *i.e.* by extirpation and subsequent suture. Only in the case of very small tumours will the above-named measures be successful.

[1] The cautious application of a pencil of solid CO_2 is most efficacious in removing nævi of all kinds, and I shall be surprised if this method will not soon supersede most of the above. (P.S.A.)

In slight connection only with this chapter stands Rosacea, an affection in which numerous vessels are newly formed on the face, especially on the nose, and in which single indurated red papules are found on the nose, cheeks, chin, and sometimes on the forehead. Hyperæmic processes, both active and passive, play the chief part in the origin of rosacea. At the outset a temporary light redness, resulting at first from external causes as aforesaid, as well as from high external temperature, and becoming permanent after longer duration, appears on the above-mentioned spots. Either associated with this variety or independent of it, the other form of the affection, namely, passive hyperæmia, develops, in which the coloration shows a darker bluish red tint, and in which the vessels are as a rule better developed than in the first kind. The factors which have been adduced in the case of acne are to be considered in part as the cause of this change, namely, internal causes, disturbances in the intestinal tract and in the feminine sexual apparatus. Further, one must take into consideration that people who live much in the open, for instance, gardeners, as well as persons who have lived a long time in hot climates, frequently suffer from this complaint; hence it may be assumed that under certain conditions air and sun are injurious. For the sake of completeness I may mention that sometimes tightly fitting eyeglasses or too heavy spectacles may cause congestion of the skin of

the nose, and as a result a dilatation of the vessels.[1]

The old idea that drinkers not infrequently suffer from rosacea is to some extent justified, since any congestion of the face, particularly if frequently repeated in the case of a seborrhœic skin, is sufficient to convert a temporary into a continuous plethora. But not only wine and beer produce such a harmful influence, but also hot drinks, such as coffee and tea, and too hot foods, particularly if they are strongly salted or seasoned.

The subjective symptoms of the patients are slight, and consist only in temporary burning sensations. In well-marked cases the disfigurement of the nose is greater, and the bulbous nose, rhinophyma, develops. Under these circumstances the nose is enlarged as a whole, and shows bulbous flabby excrescences together with comedones and acne pustules. Without entering into the more exact histological details of rhinophyma, I will only mention that it involves an excessive development of normal sebaceous glands as well as of an overgrowth of the connective tissue. The mouths of the glands are either obliterated or have become too narrow to permit of the free exit of the secretion. Many newly formed capillaries are often present.

The treatment of rosacea should, in the first place, be directed to the cause. Apart from the avoidance or removal of the sources of injury already men-

[1] The bismuth mixture [see Note on p. 10] is especially useful in rosaceous acne. (P. S. A.)

tioned, the digestion especially must be regulated, and in certain cases plentiful use must be made

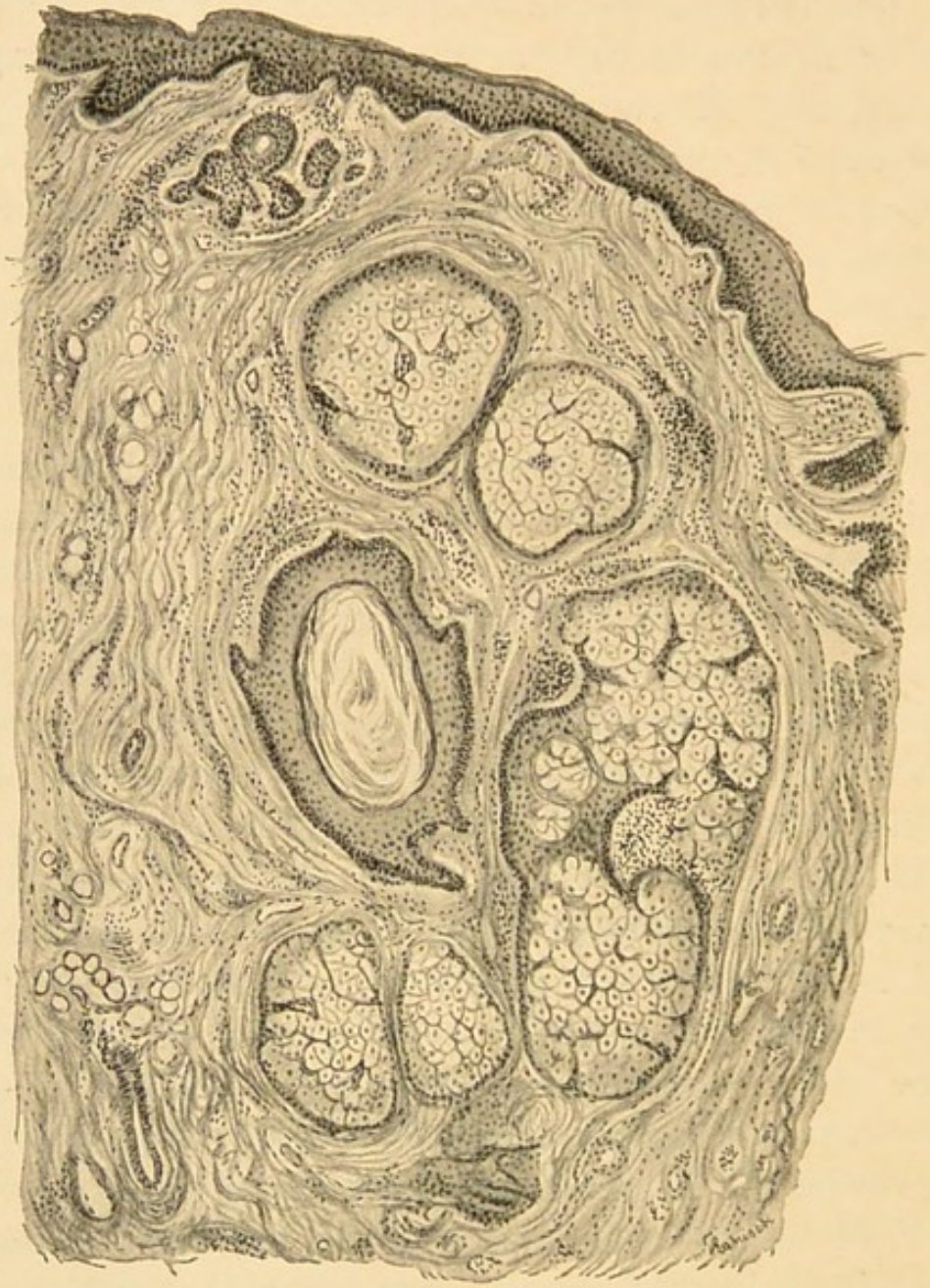

FIG. 12.

of yeast. Furthermore, it is necessary to remove any troubles in the feminine sexual sphere. In

the external treatment of rosacea, the use of the dermothermostat renders good service, after which the dilated sebaceous glands must be emptied of their contents by expression. Amongst external remedies are particularly to be recommended—ichthyol, thigenol, and thiol. The former three are applied either as a lotion or ointment, whilst resorcin is prescribed together with one of the three former in the form of an ointment.

℞	Ichthyol vel {Thigenol {Thiol.	℥j gr. xvij–℥ijss–℥ss	5·0–10·0–15·0
	Glycerin. . .	℥j ♏xxiv	5·0
	Spirit. rectif. . .	ad ℥j ℥vj	ad 50·0

S.—For external application.

℞	Ichthyol vel {Thigenol {Thiol.	℥j gr. xvij–℥ijss–℥ss	5·0–10·0–15·0
	Resorcin . .	℥j gr. xvij	5·0
	Paraff. moll. . .	ad ℥j ℥v	ad 50·0 [1]

M. f. ungt.

In addition to the above, surgical measures in the form of scarification, galvano-cauterisation especially with the fine-pointed cautery, and electrolysis are employed. Multiple scarification is employed in the manner already shown in Fig. 10. Hæmorrhage is usually quite as severe as in the like treatment of angioma, therefore the patients

[1] The compound sulphur lotion and ointment [Notes on pp. 23 and 25], but weaker or with more zinc, are very useful in rosaceous cases. (P. S. A.)

should hold a large pad of cotton-wool beneath the nose, and it is also necessary to protect their clothes by surrounding the neck with a thick towel.

Particularly prominent papules should be treated in the same manner as indicated in the case of acne vulgaris.

In slighter cases of rhinophyma by means of this treatment, if it be followed up, fairly good results may be attained.

In more severe cases of rhinophyma decortication is to be employed. By this means the protuberant new growth is evenly taken off with a scalpel, whilst the left little or index-finger inserted into the nostril presses the affected place against the knife, and thus affords a hold for the thickness of the remaining layer. The bleeding is stopped by compression with a cotton-wool pad after dusting on an antiseptic powder. Transplantation is only necessary in exceptional cases, since epithelial growth proceeds from the mouths of the remaining glands.

CHAPTER V

HYPERTRICHOSIS

HYPERTRICHOSIS, or hirsuties, implies that a normal constituent of the body whose luxuriance in the right place is regarded as particularly beautiful, in the wrong place constitutes a cosmetic evil. Excessive and abnormal growth of hair may occur in various places on the body. The female beard is almost exclusively a subject for cosmetic treatment. Moreover, the removal of superfluous hairs on the lower part of the legs is at times desired by ladies who seek recreation at the seaside and there make use of so-called "mixed bathing," *i.e.* in common with gentlemen. Not infrequently, too, ladies ask for the removal of superfluous axillary hairs. Several times I have come across excessively vain men who desired to be freed from a condition of hypertrichosis. Thus one gentleman wished for the removal by electrolysis of hairs which grew downwards too strongly on to the forehead. On account of the great trouble, and the absence of prospects of a perfect result, I declined the treatment of this case. Another case concerned a gentleman whose eyebrows, after many years'

residence in the tropics, had grown extraordinarily both in length and thickness. Here I was able to achieve a successful result, but cases of this kind only exceptionally occur.

In the treatment of hirsuties we must distinguish those remedies which are temporary from those which aim at permanent epilation. The number of the first is great as compared with that of the second.

The simplest method for the temporary removal of hair is to cut it off with scissors, a measure which is often practised and does no harm. The contrary, however, happens as regards shaving, which is not infrequently resorted to by ladies. In consequence of shaving, the unpleasant result follows that later on the hairs are replaced by still stronger ones. Dark hair stumps are then even more conspicuous. In addition in dark-haired people the neighbourhood of the separate hairs becomes slightly pigmented.

Cilia forceps too are frequently used by ladies for the temporary removal of hairs on the face. By this means an irritation of the hair papilla is set up, in consequence of which the next hairs take on stronger growth. Through lack of antisepsis and through clumsiness in this operation folliculitis sometimes appears as a result. Singeing with glowing nut-shells, which in olden times frequently took the place of shaving, comes into use in our time only in the axillæ and on the legs. Rubbing of the hairy part with pumice-stone can often be done also with success. There is hardly

a lady nowadays who determines on the removal of superabundant hairs by means of a pitch-plaster; on the other hand, the use of the resin-pencil seems quite reasonable for the removal of isolated and thicker hairs. This pencil is slightly warmed at one end and pressed upon the hair; by a quick movement it is then pulled away and the hair clinging to it is in this way removed.

Chemical measures have the advantage over the preceding in that by their use a greater number of hairs can be removed at one time. For this purpose the following are specially used: the hydrates and sulphides of the alkalis and alkaline earths, besides yellow arsenic, which is also used in combination with quicklime.

Yellow arsenic, orpiment, As_2S_3, should be regarded as probably the oldest depilatory. Nowadays, however, it is little used, on account of the large amount of arsenious acid which it contains. Rhusma turcarum (Turkish hair remover) has the formula:—

℞	Orpiment	ʒss	2·0
	Calcii hydrat. . . .	ʒijss	10·0

S.—For external application.

Plenck's depilatory is also compounded with orpiment:—

℞	Orpiment . . .	gr. xv	1·0
	Calcariæ ust. . . .	ʒijss	10·0
	Amyli	ʒjss	6·0

S.—For external application. Misce.

Immediately before use each of these remedies is to be rubbed into quite a soft paste with water, and then applied with a wooden spatula to the area to be epilated. As soon as they are dry, or at any rate as soon as caustic action begins, the dry mass is wiped off. The part is then washed, an ordinary fat applied and, over this, powder. Orpiment takes from two to five minutes as a rule to achieve the desired effect.

The depilatory action of sulphides, *i.e.* hydrosulphates of the alkalis and alkaline earths, notably calcium sulphide, was first recognised by Boettger.

Calcium sulphide, which must always be freshly prepared, is formed by saturating lime paste with sulphuretted hydrogen, and is almost insoluble in water, whereas sodium sulphide is easily soluble in water. Anhydrous barium sulphide is also used as a depilatory.

The action of the above substances corresponds in the main with that of the caustic alkalis, and, since orpiment is used exclusively in conjunction with quicklime, the depilatory action is to be ascribed to the sulphide of calcium, which results from the interaction of lime and orpiment. This action is brought about by the horny substance becoming dissolved into a gelatinous mass. Since the arsenious acid present in orpiment has a caustic action, it may at times destroy the follicle and consequently bring about complete epilation, a result which cannot be reckoned upon with certainty, and

which still less frequently occurs with the rest of the chemical depilatories.

For finer hair Boettger's depilatory is often used, which is made as follows. Sulphuretted hydrogen is passed through a thin paste made up of quicklime and water, until the mixture is entirely saturated and has assumed a leaden-grey colour. Boettger's depilatory is applied in the thickness of 1 to 2 mm. to the affected spot, and is washed off after 10 to 30 minutes. The after-treatment is the same as for the two mixtures with orpiment. The same holds good for the two following depilatories :—

℞	Sodii sulphidi . .	gr. xlvi	3·0
	Calcii hydrat.		
	Amyli	āā ʒijss	āā 10·0
S.—For external application.			(Boudet.)

This powder should be rubbed up into a thin paste and then applied; the following stronger preparation, which is therefore only to be applied for a few minutes as a very thin layer, must likewise be rubbed into a paste with water :—

℞	Barii sulphidi . .	ʒj gr. xvij .	5·0
	Cretæ præparatæ . . .	ʒijss	10·0
S.—For external application.			

Clasen's depilatory is used in the same way.

℞	Barii sulphidi . .	ʒvj gr. xxvj	25·0
	Zinci oxydi		
	Amyli . . .	āā ʒiij grs. xij	āā 12·5
S.—For external application.			

Redwood's hair remover must be made afresh for each application, since it decomposes easily. This prescription runs as follows :—

℞ Solut. concentrat. barii sulphidi ℥i ℥vj 50·0
Amyli q. s. ut f. pasta.
S.—For external application.

Calcium sulphide as well as Clasen's and Redwood's remedies, which contain barium sulphide, have a less intense action than those made with sodium sulphide, and are therefore chiefly used for finer hair, while those preparations made with sodium sulphide are used for the removal of stronger hair, and are left only for a few minutes on the places to be epilated.

In prescribing any depilatory you must call your lady patients' attention to the fact that the result is only a temporary one, and that therefore the procedure must be repeated after a certain time. Furthermore, each remedy must be allowed to take effect for a short time, in order to ascertain the tolerance of the skin, even if the risk is run of causing only an incomplete depilatory effect. If you explain these points to your lady patients they will experience no unpleasant disappointments.

Just lately hydrogen peroxide has been recommended by Gallois for the purpose of epilation. Experiments performed by myself on the skin of animals in vitro showed that 30 per cent. hydrogen peroxide (Merck's perhydrol) is able to dissolve hair. By these investigations it was shown that this un-

diluted preparation has the effect on human skin of a strong irritant or caustic (compare Anomalies of Pigment, Nævi), so that I cannot call this treatment suitable, since even by the most skilful manipulation it is impossible to moisten only the hair with the hydrogen peroxide without at the same time touching the skin, unless an attempt be made to bring the hair into contact with the remedy over a comb, without allowing the skin to suffer at the same time. Up to now I have been unable to decide upon making personal experiment of this. On the other hand, a trial seems justifiable with a view of tinting dark hair by perhydrol in order to make it appear lighter and therefore less conspicuous. For this purpose the following ointment (see Hair Dyes) can be recommended :—

℞	Perhydrol	ʒijss	10·0
	Adipis lanæ	ʒv	20·0

M. f. ungt.

With regard to other means of epilation, last but not least I have to discuss electrolysis. In the year 1875 electrolysis was first used by Michel of St. Louis for the removal of hairs in trichiasis, and was then introduced by Hardaway into dermatology. The advantages of removal of hair by electrolysis as compared with other methods of epilation are so great that electrolysis may well be regarded at present as the best for the removal of hypertrichosis. Certainly the practice of electrolysis in hirsuties is fatiguing and wearisome, producing as a

rule during the sitting a certain degree of nervous exhaustion in the physician, and sometimes too in the patient; but when one considers how a woman's face, otherwise beautiful, is disfigured by a luxuriant growth of beard, when one further considers that here through the medium of our art we are enabled effectually to free the patient from an affection which is in the highest degree inconvenient, we should spare ourselves no pains or efforts which are necessary to attain a complete result.

The apparatus for electrolysis in the case of hirsuties is the same as was described for the electrolytic removal of warts. There are only a few additional desiderata with which I must deal on account of their practical importance. In the first place, a good light is necessary. When the weather is somewhat dull you illuminate the spot to be treated with the light of an electric or other lamp concentrated by means of a condenser. For this purpose you can also employ a forehead lamp, such as is used in laryngology, only you must bear in mind that this lamp soon becomes very warm, so that you may find the heat uncomfortable to the head. Preparatory to operation the skin is washed with alkaline spirit soap, then rubbed with ether and finally with a 3 per cent. solution of carbolic acid, which is wiped off with sterile wool. In lady patients who are sensitive one can essentially diminish the sensibility of the skin to pain by means of cocaine kataphoresis. For this purpose the terminal of the conducting wire from the

positive pole, the anode, is covered with a piece of cotton-wool which has been dipped in a strong solution of cocaine. This wool is pressed upon the part to be epilated, and the current is then allowed to flow for one minute at a strength of 1 to 1½ or 2 milliampères. The excess of cocaine is wiped off. I cannot myself agree with the recommendation of making the skin insensitive by means of ethyl chloride for the electrolytic removal of hair. In the first place, the skin becomes irritated and inflamed by the frequently repeated sprayings with ethyl chloride; in the second place, the ethyl chloride produces a condition of hardness, so that when you insert the needle you are unaware whether it has reached the follicle or glided into the surrounding tissues. The preparations having been completed, epilation may begin. The patient is seated upon a chair with a head-rest, with the head well bent back. The head-support mentioned in the treatment of acne or a chair similar to that used by dentists may be employed. If none of these are available it is sufficient to hold the patient's head firmly against your chest. The skin is then put on the stretch by two or three fingers of the left hand, and, the current being turned on, the needle, preferably a fine sewing needle fixed in its needleholder, is introduced into the hair follicle parallel with the hair with the current open (Fig. 13). As soon as the needle glides without meeting any obstruction it will reach the papilla.

By releasing the pressure on the interruptor

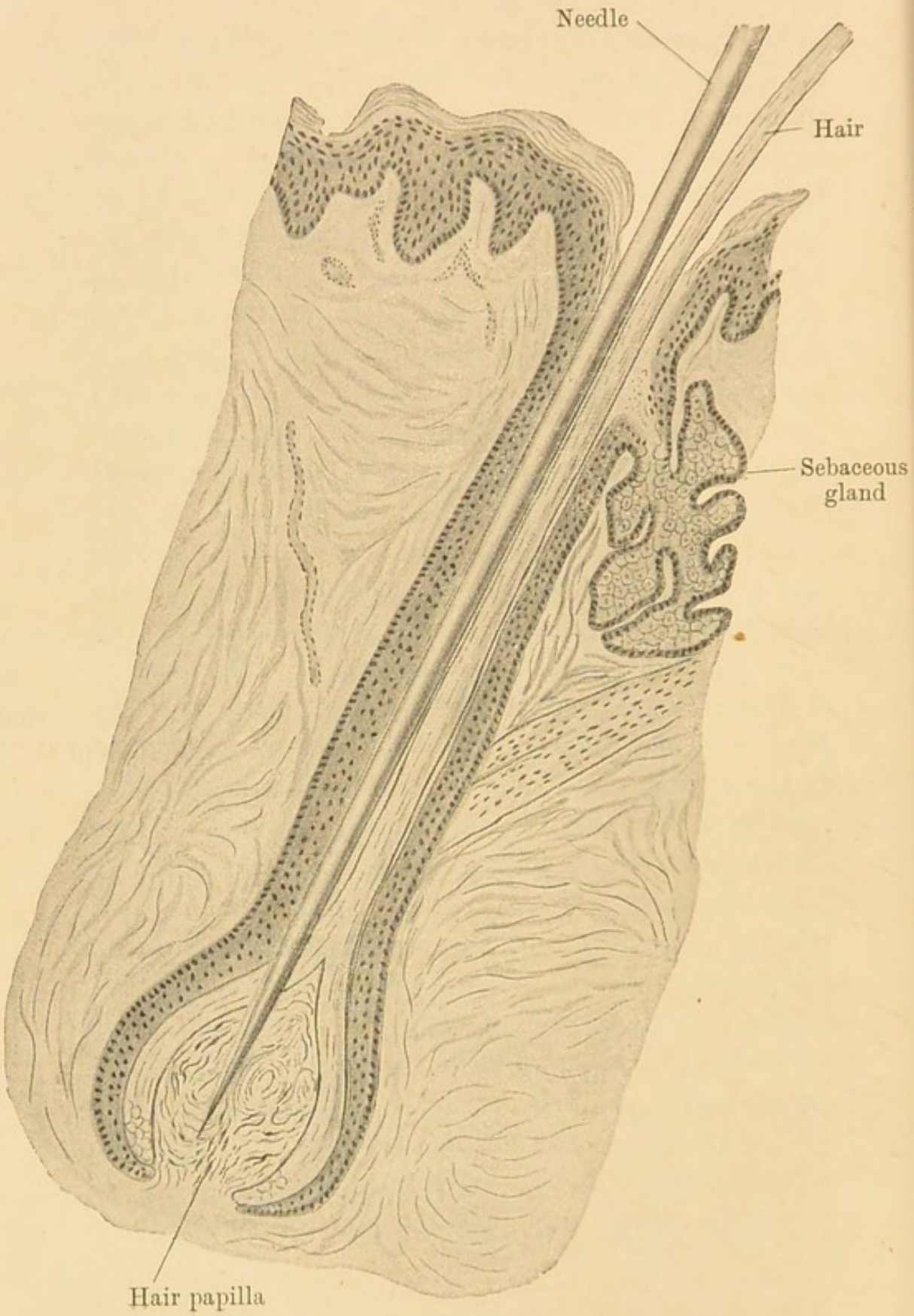

FIG. 13.

which is attached to the needleholder you close the current, and by using the rheostat allow it to rise from $\frac{1}{2}$ to 1 to $1\frac{1}{2}$ to 2 milliampères according to the strength of the hair. Upon the strength of the hair depends also the length of time during which the current runs. Thirty seconds suffice for weak hairs, but in the case of stronger ones you must continue for one minute. It is seldom that a current of longer duration is necessary. At the end of the time you put the rheostat at the greatest resistance and remove the needle. During the running of the current a white froth rises from the follicle. This is the hydrogen which is set free by decomposition of the water as a result of electrolysis. The skin surrounding the hair becomes red for a second, then pale, and usually rises like a wheal. Immediately after the withdrawal of the needle the hair, together with its swollen root-sheath, comes away on gently pulling with cilia forceps, thus one can be sure that the hair is radically removed. If otherwise, the operation must be repeated, preferably at a later sitting. Sometimes, through lengthy passage of the current, one or more hairs in the immediate neighbourhood of the part originally treated will be loosened. Extraction of the hair by cilia forceps facilitates the determination as to whether the hair has been really removed from its papilla, *i.e.* is destroyed, but one can also leave the hair in the follicle, from which it is detached by washing or by accidental contact. Often a small scab forms upon the epilated patch,

which after a few days dries up and falls off. After the sitting, at which from 10 to 20 hairs may be removed—but only a few at the commencement of treatment—usually a slight redness and burning appear on the face, but in most cases only for a short time (two to three hours), and if necessary this can be alleviated by powdering or cold compresses of aluminium acetate. In cases where the patient wears an artificial denture it is advisable that this should be removed during the electrolysis, because the metallic portion of the denture serves as a conductor, and the current causes pain in more remote parts which it thus reaches. By a certain amount of skilful handling and foresight (not too strong a current, asepsis, dipping the needle in 3 per cent. carbolic lotion before each insertion, and a fresh needle at every sitting) conspicuous scars never develop or any other skin eruption. If, however, these do appear, such an untoward event is ascribed to the unskilfulness or inexperience of the physician, a fact that must not be lost sight of in view of the attacks upon these methods. The occurrence of a hæmatoma in immediate proximity to the small puncture is very infrequent and of no further importance, since after a little time the effusion of blood is reabsorbed. At a sitting it is always advisable to remove the hairs which are at some distance from one another, preferably in patches as symmetrical as possible on both sides of the face, by which means reaction at one spot will not be so marked,

and the patch which is relatively bald will not stand out so strongly from its surroundings. By the adoption of this method the result of treatment is naturally not so apparent as if a smaller region thickly covered with hairs were epilated at one sitting. One must abandon such a procedure solely in the patient's interest, the reason being that, although a quicker result is not apparent, the confidence of the patient in the method is not disturbed.

If all the hair be radically removed from one part, after some time an occasional further growth of hair appears upon this spot. Before treatment is begun one must draw the patient's attention to the fact that a hypertrichotic skin possesses the tendency to increased growth of hair, so that after termination of the epilation treatment the hair may manifest new growth close to where the former growth had been definitely removed. This new growth in turn must be done away with.

There are still other methods which may be recommended for the radical removal of hair. By older writers the galvano-cautery is mentioned. This method is painful and uncertain, causing ugly scars, and is nowadays hardly ever used. Amongst the later and most up-to-date methods the Roentgen rays take first place, from the employment of which one hoped for considerable results. You know that the changes in the skin accidentally discovered in people who worked with active Roentgen-ray apparatus gave rise to the introduction of the

Roentgen rays into dermatotherapy. Amongst other changes loss of hair was observed.

If by use of the Roentgen rays one actually succeeds in obtaining permanent epilation, one must reckon with the possibility that owing to the continuous and intensive radiation which is requisite for our purpose, after some time Roentgen-ray burns may appear, which render the cosmetic effect illusory, and may even produce a result as far as cosmetic art is concerned which is worse than the original disfigurement. Besides other secondary effects of radiotherapy, in the first place atrophy of the skin may appear with formation of new blood vessels and pigmentation, sometimes indeed after a period of three years, as I understand from a friendly personal communication from Herr Holzknecht of Vienna, an investigator who holds an absolutely authoritative position. Hence a warning against this procedure appears not unjustifiable, since we have to reckon with such undesirable sequelæ of the X-rays. The great expectation that Roentgen irradiation would, in consequence of its simplicity, convenience, and safety, be the remedy for choice in the treatment of hirsuties, has unfortunately proved deceptive.

The punching method of epilation recommended by Kromayer I should only recommend for quite exceptional cases, where one has to deal with isolated thick stubbly hairs. I have been unable to state from personal experience that the use of the punch facilitates our methods of removing hair.

I have already mentioned that the help of the cosmetic physician is only occasionally desired by men in the case of hypertrichosis. This is not, however, quite so rare when excessive growth of dark hair occurs on the back of the hand and fingers. For practical reasons we must desist from their radical removal by electrolysis. Apart from the somewhat troublesome cutting with scissors and the chemical depilatories, for temporary removal we have to consider singeing of the hairs with a spirit flame. Whether subsequently the hand has really a better and more delicate appearance must be left to the judgment of the client. In such a case, where the skin of the back of the hand and fingers in a man appeared quite bare, I was involuntarily reminded of the appearance of the skin of a singed goose.

CHAPTER VI

PREMATURE LOSS OF HAIR

At our last meeting I had occasion to mention a considerable number of remedies and methods which enable us to remove hair with certainty, although in most cases only temporarily, but to our sorrow we must confess that we cannot with like safety promise beneficial effects as regards the opposite condition, namely, defluvium capillitii. It is true, however, that the prognosis of this affection is now not so much despaired of as in former years.

From the scientific standpoint only a proportionately short time has been attentively devoted to the study of premature loss of hair, alopecia præmatura seu præsenilis. It is chiefly the fundamental work of Pohl-Pincus that has procured for this subject due medical dignity. By exceedingly painstaking and exact observations he has thrown light upon the subject of the growth of hair, its duration of life, and its pathological relationships. We have to thank him for the possibility of stating quite early in a given case whether the loss of hair is to be regarded as normal, or whether it exceeds the ordinary limits. It is not solely the quantity

removed by daily combing which decides this factor, considering that the physiological falling-out of the hair in different individuals varies within a wide range. As Pohl-Pincus' remarks still possess full value, I should like to give them verbatim by reason of their importance in diagnosis as well as for control in treatment: "The fact that the first stage of chronic disease of the hair does not in any way attack its thickness, nor materially affect the strength of the entire crop, causes the patients to have no idea of the existence of the disease. They do not notice the shortening of the hair, nor do they know that, a certain time after the shortening, a thinning of the individual hairs follows. They only become aware of the existence of the malady when the second stage has already begun. Then, as I said before, it is usually too late to stop the onset of baldness. Everything therefore depends upon early recognition of the complaint.

"The best means for earliest possible recognition is afforded by the previously mentioned law of development of the hair: on three consecutive days you must collect the hair which has fallen out as a result of the morning and evening combings, and, in the case of long hair, divide the hairs more than 6 inches (16 centimetres) in length from the shorter ones; if it is found that the number of the shorter ones forms one-third of the total number which fall out, there is a disease of the hair which requires immediate medical attention. In the case

of short hair (men or women who have had the hair cut short), you must separate those hairs which show traces of the scissors from those which have a point. The number of these pointed hairs must only be one-fifth or one-fourth of the total in hair which is 4 to 5 inches (11 to 13 cm.) in length."

After some experience this procedure is easily carried out, and the doctor as well as the patient find in its performance a standard by which to gauge the success or failure of a certain method.

At this juncture I should like to mention a circumstance which is not only misinterpreted by patients, but not infrequently also by doctors. At a consultation with reference to premature loss of hair the patients generally bring a sample of the hair which has fallen out, and show with considerable sadness the numerous hairs which have fallen out with the "root." The term "root," which represents the small swelling situated at the lowest part of the shaft, *i.e.* the bulb, gives rise to the idea that the root of a hair is analogous to the root of a tree. This is, however, not the case, since the conditions are essentially different. The part from which the hair grows is, as you know, the hair papilla, and this, as a glance at the section of a hair shows at once (*v.* Fig. 13), can never fall out. If a hair has fallen out with its "root," this is a sign that its life is ended, supposing, of course, that the hair possesses its normal length. The first stage of hair loss, as Pohl-Pincus (see above) has proved, shows a diminution in the length of life of

the hair, and corresponding to this a shortening of the hair itself. In the condition which he terms the "second stage," in addition to the general shortening of the hair there is a thinning and wasting of the individual hairs.

Of the causes which have from olden times been held responsible for premature alopecia, heredity takes the first place, and indeed this supposition must be considered to hold good. If now we inquire into the more detailed causes as to how heredity is able to manifest its influence, we must go back to the anatomical relationships of the scalp to its underlying tissues, to the epicranial aponeurosis, and to the skull. Whilst the skin on the sides of the head as well as on the lower portions of the occiput even in considerably advanced cases of loss of hair is easily movable on its substratum and can be lifted in folds, the latter is impossible in the parts uncovered by hair. The mobility of the skin on its underlying tissues is also in great measure reduced. The close adherence to the underlying parts diminishes the nourishment of the area from which the hair springs, so that an insufficient blood supply is brought to it; and the researches of Sigmund Mayer, the accuracy of which I have been enabled experimentally to prove, show that in places, which have been for a long time hyperæmic, the growth of the hair is increased, whilst in anæmic ones it is diminished. Without entering into details concerning the effect of the close adhesion of the scalp to the epicranial

aponeurosis, the significance of which was first shown by Pohl-Pincus, we must cling to the fact, that hereby an important factor is afforded for the premature loss of hair, particularly when we consider that the growth of muscles of the scalp makes special progress at the exact time when premature loss of hair begins. In the hereditary transmittance of the shape of the skull as well as in the relationship of the muscles of the head to their investment and to the epicranial aponeurosis lies an explanation of the inheritance of premature falling out of the hair.

But this factor alone is not sufficient to explain the ailment in question. Apart from those cases in which the latter has been caused by an infection or an intoxication, cases in which after removal of the fundamental illness there appears a *restitutio ad integrum* of the scalp, people were for some time inclined to assign bacterial causes for alopecia præmatura. In a former work I was enabled to prove that the researches, which originated from the early period of bacteriological research, could not withstand later criticism, and that the therapeutic results, which had been recorded in a series of cases treated on antibacterial lines, could easily be explained in a different manner.

A further factor, which had already for a long time been made responsible for the origin of premature loss of hair, is seborrhœa of the hairy scalp. Two forms were distinguished: seborrhœa oleosa and seborrhœa sicca. In the former, which

appears more rarely, the grease adheres for a long time as an oily coating on the scalp or on the hair; in the latter, it also is secreted in fluid form, but manifests a greater tendency to condense into scales soon after its discharge from the hair follicles. Finally, there occurs a third form, which may be regarded as intermediate between the two.

The part which seborrhœa plays as the causal factor of loss of hair is explained in the following way. "If in abnormally secreting sebaceous glands chemically abnormal epidermic scales are produced rapidly and incompletely for their physiological purpose, and are separated off, so also the root-sheaths which are in continuity with the cells of the glands are loosened and detached. . . ." Further, I should like to point out the relationship of the hairs to the sebaceous glands. These latter, with a few exceptions which need not trouble us, are to be found over the whole body in connection with hairs; in fact, there exists in their mutual relationship a certain antagonism. Where the hair takes the chief place, as is the case in the full-grown hair (*v.* Fig. 13), the sebaceous gland forms the appendage; and *vice versa*, where the latter forms the prevailing element, the hair represents the appendage, as is the case in lanugo (Fig. 14). As is shown in seborrhœa, the more the sebaceous gland secretes, *i.e.* works, and correspondingly through its over-activity increases in length and breadth, the more the hair recedes into the background. And thus finally (in premature loss of hair) the

relationship is reversed, the sebaceous gland constituting the chief element, whilst the hair forms the appendage, and this condition is seen to the

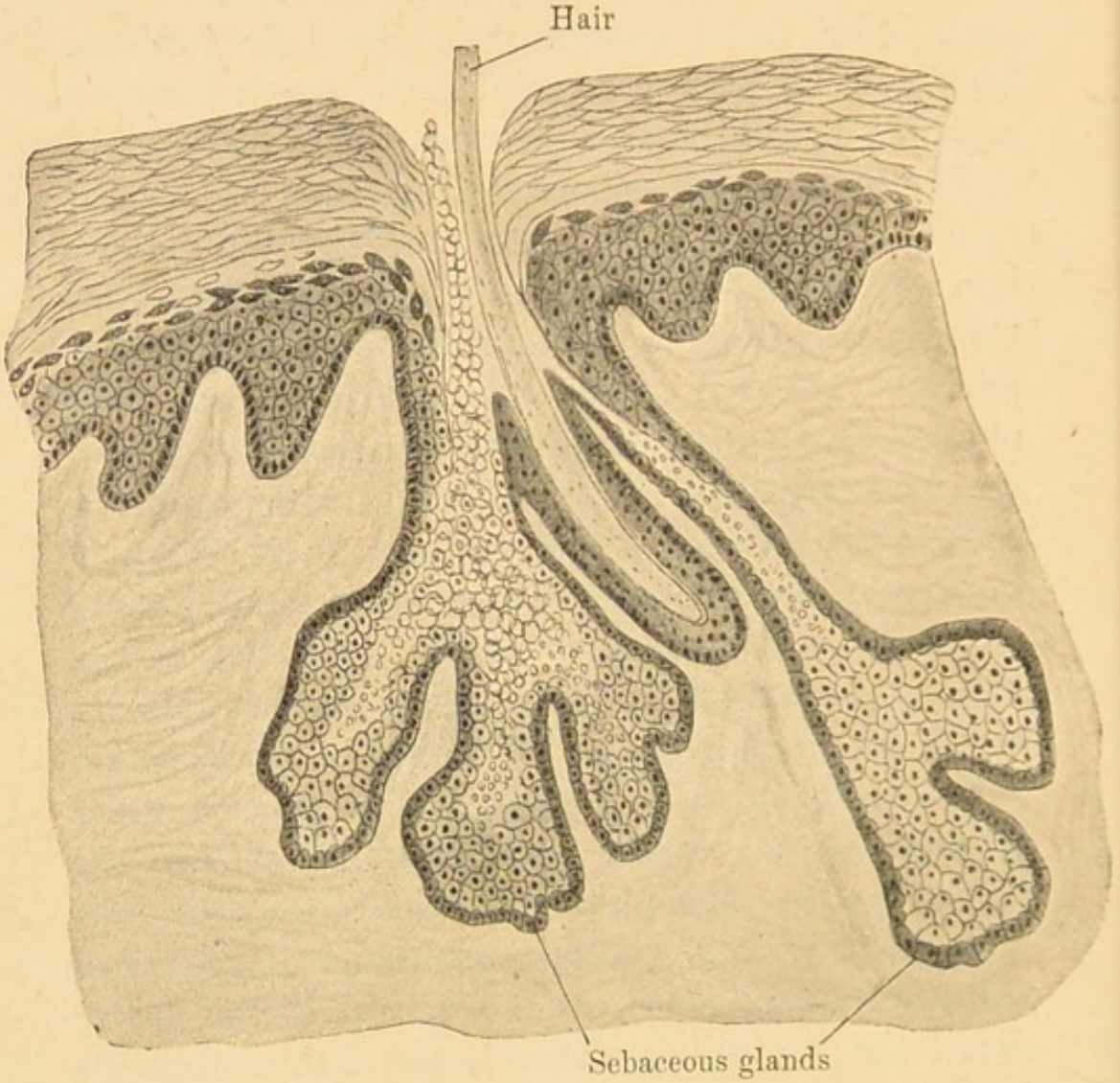

FIG. 14.

fullest extent in complete baldness. It is often wrongly supposed that in the existence of lanugo there is still hope of fresh growth of hair.

The opinion prevails, that if hairs are still at all

visible their energy for growth can be stimulated, and thus a complete new growth can be obtained. From the explanation, however, which I have just given of the anatomical relationships it is perfectly clear that this deduction is false.

In the treatment of patients with premature alopecia I have been struck with the difference in the amount of fat in the hairs, and with the extraordinary diversity in the size of the scales, and that the clothes of many patients were covered with scurf whilst others were free; then with the fact, that some of the patients complained of irritation, whilst others had no symptoms referable to the scalp. Concerning these differences in individual manifestations almost all authors up to the present have been silent, a fact which clearly shows the insufficiency in many cases of ordinary treatment. The statement of Pincus also, that the scales consist three-fifths of fat and two-fifths of epidermic substance, did not seem to me to be correct in its generalisation.

In order to make a further advance, it seemed therefore necessary to submit the fat-content of the hair as well as of the scales to a closer investigation. Whereupon I found to my great astonishment that nowhere were any statements to be found concerning the quantitative fat-content of the hair. In consequence of this I examined, with reference to their fat-content, a great many specimens of hair of people with normal as well as with pathological loss of hair. Without going into detail concerning these

investigations, I should like briefly to mention the following points. The investigations were thus conducted. The people concerned were told to omit any application of oil or washing of the scalp or of the hair during one week after the last washing, and during the following week to collect the hair. Taking into consideration the measures just mentioned, the hair which has been cut off was examined. The result was that under normal conditions the fat-content in children was found to be less than in adults. In the former it varied from 1 to 3 per cent.; in the latter, from 5 to 6 per cent.

Only rarely has the fact been pointed out by earlier writers that—speaking generally—for pityriasis capitis, a condition which is produced by excessive cornification and the resulting excessive shedding of the epidermis, not only seborrhœa, but also the lack of fat is a causal factor. My researches concerning the fat-content of the hairs and scales were able to corroborate the accuracy of this statement first made by Auspitz and Unna. This lack of fat, as my observations have shown, may be either a primary or a secondary condition, the latter not infrequently being produced by unsuitable treatment of the scalp, namely, by excessive washing and through the too frequent injudicious use of cognac and other hair washes which contain alcohol in greater or smaller quantity. That the common use of these as well as the employment of certain forms of hair treatment is wrong, is at once shown by my explanations, and the result of

such an investigation into the fat-content must invite criticism of previous measures for the treatment of loss of hair.

As in all treatment, so also in the matter of premature alopecia, prophylaxis has an important significance. Even in childhood in the care of the hair great attention must be paid to its quality, and especially when formation of scurf appears, suitable treatment should be instituted. Under normal circumstances, a child's scalp should not be washed too frequently, and especially should daily washing of the scalp be avoided. As the normal scalp of a child is usually fairly free from fat, in order to prevent excessive dryness, the head after washing should be greased with an ordinary fat, the best one being good olive oil. If, on the other hand, the beginnings of scurf formation manifest themselves, a more exact investigation is necessary in order to elicit whether the hair appears dry and dull or excessively greasy. In the first case we must add grease, in the latter seek to diminish the hypersecretion of grease. This principle holds good also as a foundation for the treatment of premature alopecia in adults. Since this complaint is usually insidious in onset, and the patient as a rule only comes to the doctor when the loss of hair has become excessive and the hairy region more or less thinned—a period, which Pohl-Pincus designates as the second stage of alopecia præmatura—too much importance cannot be attributed to prophylaxis in childhood and at the time of puberty.

In the treatment of excessive formation of scurf we have to fulfil two indications. First of all, the scales which are present must be removed, and after that their recurrence must be prevented. Speaking generally, washing with soap meets the first requirement. Only in rare cases where thicker layers have formed is it necessary to soften them by oil-compresses and then to remove them by washing with soap. In accordance with the nature of the scales, corresponding care must be exercised in the choice of the soaps. Hence in that variety of scale formation which is produced by seborrhœa the use of coal-tar soap is unsuitable;[1] in this case sulphur soap is to be recommended. If, however, the formation of scurf is produced less by grease than by the separation of excessively cornified epidermis, tar soap is to be prescribed. In many cases the use of Hebra's spiritus saponis kalinus is to be recommended instead of sulphur soap. In the case of lack of fat, washing is only requisite for the removal from the scalp of the scales and also of the ointments to be mentioned below. For this purpose one weekly washing with soap is as a rule sufficient. In excessive cases we shall have to apply ointments to the head, which will diminish the excess of cornification. As the condition improves we lessen the frequency of the applications.

In oily seborrhœa of the head the conditions are otherwise. In this case more frequent washing

[1] See Addenda, p. 178, note 1.

with soap is necessary, not only for the purpose of removing the ointments which have been applied, but also to do away with the scales which reappear. It is obvious that in this form of seborrhœa of the scalp the use of ointments must be reduced to a minimum. Since by their use fresh fat is added artificially to the fat already produced in excess, in such cases we must, if possible, have recourse to remedies which, without containing grease themselves, decrease the greasiness of the scalp.[1]

Premature loss of hair is to be treated according to this principle, and here I should like to emphasise that in every "Haarkur," if any result of note is to be attained, continuity of treatment must be the first and foremost essential. At the outset of every course of treatment you must draw your patients' attention to the fact that at first, as a result of washings or applications consecutively performed, whether of ointments or fluids, more hair seems to be lost than before. It results from this, therefore, that the hairs which are loose, and therefore doomed, are removed by this mechanical manipulation. The greater loss of hair at the beginning of the treatment is therefore only apparent.

With respect to the fat-content, in every treatment it is, in the first place, necessary, as I have mentioned, that we obtain a clear insight into the condition of the soil from which the hair grows and of the hair itself. In each case it has been found most expedient to conduct the examina-

[1] See Addenda, p. 178, note 2.

tion with chemical exactitude in the manner detailed above. The time element only is wanting, since about two to three weeks are necessary for an investigation of this kind, for the patients as a rule consult the doctor with the head recently washed, so as not to create an impression of uncleanliness.

One must therefore, in great measure, rely upon the statements of the patients, if one cannot induce them to return after a week—during which all manipulations are to be omitted; in other words, if the patients can be persuaded to spare time, before beginning the treatment, to have the hairs and scales examined with reference to their fat-content.

Let us suppose that we have to do with a patient in whom there exists an excessive dryness together with inordinate separation of epidermic scales, in this case we should remove the scales by washings with solid or liquid tar soap, and then prescribe a remedy which is capable of removing the excessive cornification, besides diminishing the inordinate dryness of the scalp. On the whole, one attains one's object in this condition as well as in seborrhœa with few remedies. Sulphur is here of considerable service, as also are its substitutes ichthyol, thigenol, and thiol in weak concentration. In the treatment of loss of hair we should, as a rule, prefer the two latter to ichthyol on account of its unpleasant smell. One can add salicylic acid as a keratolytic agent to the sulphur; besides this a small addition of tannin increases the effect of the

two drugs mentioned. Further, tar may be used as a remedy which diminishes the formation of scurf. For some years for the same purpose I have also turned to good account a preparation known by the name of tannobromine; this presents the formaldehyde combination of dibromtannin.

It goes without saying that in advanced cases of the various forms of loss of hair, improvement, but not complete cure, can be attained by our treatment, for in seborrhœa no chemical remedy—as seen from the above anatomical explanation—is capable of bringing back the excessively dilated sebaceous glands to their original and normal condition, and to change again lanugo hairs which have once appeared into full-grown hairs. Whether this postulate can be completely and entirely fulfilled by vigorous scaling treatment, or through scarification of the sebaceous glands in accordance with the proposition of Morell-Lavallier, or by frequent shaving, is more than I can say. The practitioner will hardly employ these methods for some time to come; he must for the time being, therefore, limit himself to a simpler form of treatment.

I now give you some prescriptions for cases of premature loss of hair in which there exists a diminution of the fat-content.

℞	Sulphur. præcip. .	. gr. xxiij	1·5
	Paraffinum molle .	ʒvij gr. xlv	ad 30·0
M. f. ungt.			

Or

℞ Ichthyol . . . . . ℥ss 2·0
vel { Thigenol / Thiol
Paraff. moll. . . ad ℥vij gr. xlv ad 30·0
M. f. ungt.

Or

℞ Tannobromine . . . . gr. xv 1·0
Paraff. moll. . ad ℥vij gr. xlv ad 30·0
M. f. ungt.

Or

℞ Tannobromine . . . . gr. xv 1·0
Balsam. Peruv. . . . . ℥ss 2·0
Adip. colli equini . ad ℥vij gr. xlv ad 30·0
M. f. ungt.

Or

℞ Acidi salicylici . . gr. viij–xij 0·5–0·75
(Solve in spirit. rect. q. s.)
Sulphuris præcip. . . gr. xv 1·0
Paraff. moll. . ad ℥vij gr. xlv ad 30·0
M. f. ungt.

Or

℞ Acidi salicylici . . gr. viij–xij 0·5–0·75
(Solve in spirit. rect. q. s.)
Ichthyol . . . . . ℥ss 2·0
vel { Thigenol / Thiol
Paraff. moll. . . ad ℥vij gr. xlv ad 30·0
M. f. ungt.

Or

℞ Ol. cadini . . . ℥ xvij 1·0
Paraff. moll. . . ad ʒvij gr. xlv ad 30·0
M. f. ungt.

Or

℞ Ol. cadini . . . ℥ xvij 1·0
Paraff. moll. } āā q. s. ad ʒvij gr. xlv ad 30·0
Fetron. }
M. f. ungt.

Or

℞ Empyroform . . . gr. xlvj 3·0
Paraff. moll. . ad ʒvij gr. xlv ad 30·0
M. f. ungt.

Or

℞ Anthrasol . . . ʒss 2·0
Fetron. . . ad ʒvij gr. xlv ad 30·0
M. f. ungt.

Or

℞ Sulphuris præcip. . . gr. xv 1·0
Empyroform . . . gr. xlvj 3·0
Paraff. moll. . ad ʒvij gr. xlv 30·0
M. f. ungt.

Or

℞ Ichthyol . . . . ʒss 2·0
vel { Thigenol
vel { Thiol
Empyroform . . . gr. xlvj 3·0
Paraff. moll. . ad ʒvij gr. xlv ad 30·0
M. f. ungt.

Or

℞	Sulphuris præcip. . .	gr. xv	1·0
	Anthrasol . . .	ʒss	2·0
	Fetron. . .	ad ʒvij gr. xlv	ad 30·0
M. f. ungt.			

Or

℞	Ichthyol (vel Thigenol, Thiol)	āā ʒss	āā 2·0
	Anthrasol . . .		
	Fetron. . .	ad ʒvj gr. xlv	ad 30·0
M. f. ungt.			

Or you apply tar in liquid form mixed with oil. In some cases you may also prescribe a spirituous solution. You neutralise the injurious effect which the alcohol may have in such a mixture by applying one of the ointments indicated immediately afterwards. Oil of cade and empyroform can only be used for dark hair, whilst anthrasol[1] as white tar may be used in any case. The latter, like the rest of the tar preparations, as well as the oil of cade, has the disadvantage of a tarry odour, while this odour does not adhere to empyroform. The two newer preparations, anthrasol and particularly empyroform, have the advantage of acting mildly and of not so easily producing irritation of the skin and folliculitis.

Of prescriptions in which different remedies are ordered conjointly, apart from those which I have

[1] Anthrasol is a preparation which is distilled from coal tar, and which resembles olive oil both in appearance and consistency. In skin affections it is useful for many conditions as a substitute for coal tar, since it will not stain the skin or clothing. (J. F. H. D.)

already given above, I should like to mention the following:—

℞	Acid. salicylici . .	gr. viij–xij	0·5–0·75
	Tannobromine . . .	gr. xv	
	Tinct. cantharid. .	♏ xvij	āā 1·0
	Adip. benzoat. recent. parat. . . .	ad ℥vij gr. xlv	ad 30·0
M. f. ungt.			

Or

℞	Acid. salicyl. . .	gr. viij–xij	0·5–0·75
	Tannobromine . Sulphur præcip. .	āā gr. xv	
	Tinct. cantharid. . .	♏ xvij	āā 1·0
	Balsam. Peruv.. . .	♏ l	3·0
	Adip. colli equin.	ad ℥vij gr. xlv	ad 30·0
M. f. ungt.			

Or

℞	Acid. salicyl. . .	gr. viij–xij	0·5–0·75
	Tannobromine . . .	gr. xv	
	Tinct. cantharid. . .	♏ xvij	āā 1·0
	Ichthyol	℥ss	2·0
vel	Thigenol / Thiol		
	Ol. ros. gtt. I		
	Medull. ossis bovin.	ad ℥vij gr. xlv	ad 30·0
M. f. ungt.			

The otto of roses in the last prescription is added as a perfume when prescribing in better class practice. Balsam of Peru serves the same purpose, and at the same time fulfils the object of preventing the adips colli equini from turning rancid.

The latter, *i.e.* fat from the neck of the horse, like beef-marrow, medulla ossis bovini, from time immemorial has been a very popular remedy by reason of its favourable influence on the growth of hair.[1]

The tincture of cantharides is added to the last prescription on the one hand in order to dissolve the salicylic acid, and on the other hand from the long-standing belief that cantharides exercises a favourable influence upon the growth of hair.

We cause the patients to rub in one of these ointments three times a week, and they must also be directed to divide the hair with a large-toothed comb into a great number of partings, and to apply the ointment to the exposed scalp either with a stiff brush or better still with the finger, or to make another person rub it in. In order to render pliable the underlying tissues which are closely attached to the scalp, and at the same time to provide them with a greater blood supply, it is recommended to combine the rubbing with gentle massage of the scalp, for which purpose the finger is used instead of a brush.

As to whether vibration massage can be turned to good account as a means of causing hyperæmia of the scalp, there is not yet sufficient evidence; nevertheless a successful result must not *a priori* be denied to this method. In suitable cases one may have recourse to it, but the hair must be covered with a towel, so that the instrument does not become entangled in the hair.

[1] See Addenda, p. 178, note 3.

Since the chemical measures already dealt with are usually carried out at bedtime, in order to avoid soiling the pillow, the patients must be careful to cover the head in a suitable manner, preferably with a bathing cap. After some time we can observe a diminution in the falling out of the hair, which reveals itself on counting the combings; hence we proceed with the application less frequently, perhaps twice a week. The counting of the hairs is performed by tying them together about two centimetres from their ends after the fashion of a nosegay. It is recommended that this enumeration should take place on an average once a fortnight. If improvement is shown the exact counting may be dispensed with, and one may then give a rough estimate as to the amount of the loss of hair.

In fair-haired persons the application of tannobromine or of ichthyol, thigenol, thiol, tannin, and empyroform must of course be given up, since darkening of light hair easily results from their use. In these cases we can only prescribe, in the ointments, the other constituents mentioned above, namely, salicylic acid, sulphur, and anthrasol.

In greater concentration sulphur and tannobromine alike prove beneficial in conditions of alopecia attended with excessive fat-secretion, namely, in seborrhœa capitis. Sulphur here is extraordinarily useful, the only disadvantage being that it cannot be given in solution. It was therefore an advance when people succeeded in making preparations containing sulphur which could be employed in solution.

To these preparations belong, as stated, ichthyol, thigenol, and thiol.

Besides these we use β-naphthol, resorcin, camphor, and chloral hydrate. Patients with seborrhœa of the hairy scalp are advised to wash the scalp frequently either with sulphur soap or Hebra's alkaline spirit soap. According to the state of the particular case washing is to be performed daily at the outset, and after that less frequently. After the scalp and hair have been dried we prescribe antiseborrhœic remedies; for dark-haired people a lotion such as the following:—

℞	Ichthyol (vel Thigenol)	gr. xxxviij–ʒi gr. xvij	2·5–5·0
	Spirit. rect.	ad ʒiijss	ad 100·0

Or

℞	Thiol	ʒi gr. xvij–ʒiiss	5·0–10·0
	Spirit. rect.	ad ʒiijss	ad 100·0

Or

℞	Tannobromine	gr. xxxviij–ʒi gr. xvij	2·5–5·0
	Spirit. rect.	ad ʒiijss	ad 100·0

Or

℞	β-naphthol	gr. viij	0·5
	Spirit. rect.	ad ʒiijss	ad 100·0

Or

℞	Resorcin	gr. xxxviij	2·5
	Spirit. rect.	ad ʒiijss	ad 100·0

Or

℞	Camphoræ	ʒj gr. xvij	5·0
	Spirit. rect.	ad ʒiijss	ad 100·0

Or

℞	Tannobromine Ichthyol (vel Thigenol)	āā gr. xxxviij	āā2·5
	Spirit. rect.	ad ℥iijss	ad 100·0

Or

℞	Tannobromine	gr. xxxviij	2·5
	Thiol	℥i gr. xvij	5·0
	Spirit. rect.	ad ℥iijss	ad 100·0

Or

℞	β-naphthol	gr. viij	0·5
	Camphoræ	℥j gr. xvij	5·0
	Spirit. rect.	ad ℥iijss	ad 100·0

NOTE.—Each of the above prescriptions should be labelled, "For external application only."

In lesser degrees of seborrhœa or in partly cured cases the spirit in these prescriptions can be replaced by diluted spirit. The conditions are similar with regard to the concentration of the solutions as well as to the frequency of their application.

In milder cases of seborrhœa capitis the application of a 5 per cent. solution of chloral hydrate and spirit (equal parts) in water is sufficient. In some cases chloral hydrate can be added in similar strength to the tannobromine solution.

℞	Chloral hydrat.	℥j gr. xvij	5·0
	Aq. dest. Spirit. rect. āā	ad ℥iijss	ad 100·0

S.—For external application.

Or

℞	Tannobromine	gr. xxxviij–℥j gr. xvij	2·5–5·0
	Chloral hydrat.	℥j gr. xvij	5·0
	Aq. dest. } āā	ad ℥iijss	ad 100·0
	Spirit. rect. }		

S.—For external application.

β-naphthol should never be prescribed in a solution stronger than ½ per cent., otherwise it may give rise to renal irritation. For this reason it is also advisable not to allow this remedy to be used continuously for too long a period. Moreover, it should only be prescribed for dark hair, as in fair-haired people an unpleasant reddish-brown tint may ensue.

For purposes of perfuming, a third of the spirit or dilute spirit is replaced by spiritus melissæ compositus or eau-de-Cologne (aqua coloniensis). At the same time, of course, it must be remembered that this is not a constant preparation.

In the following prescription you will find a perfume which meets the requirements of better class practice.

℞	Spirit. resed. }	āā ℥j	¡āā 4·0
	Spirit. jasmin. }		
	Ol. flor. aurant. }	āā gtt. ij	
	Ol. rosmarini . }		
	Ol. ros. gtt. I }	gtt. v	
	Æther. acetic. }		
	Spirit. rectif.	ad ℥iijss	ad 100·0

S.—Cosmetic spirit.

This mixture can also naturally be used as a basis for the various alcoholic fluids.

In cases of progressive improvement, which manifests itself among other things by cessation of the frequently occurring hyperæsthesia of the scalp, the number of washings can be diminished as well as of the applications of ointment.

The fluids are used in the following way. The hair is divided with a broad-toothed comb into a number of partings. By means of a drop-bottle the fluid is poured upon the scalp thus exposed. This is best done by using the stopper of a scent bottle which allows the liquid to flow out drop by drop. If now, as a result of these fat-removing processes, a certain amount of dryness of the scalp and harshness of the hair occurs in the intervals between the application of the lotions and fluids we should rub in a 10 per cent. tannobromine or sulphur ointment. The latter treatment may also be considered in the case of people with light hair. In order to lessen the harm which is caused by the fat as such in seborrhœa, more frequent washings must be prescribed than would be otherwise necessary when using spirit lotions.

As the condition improves we allow a change to be made, as I have said before, in the strength of the remedies as well in the frequency of their application.

In cases in which loss of hair is caused by seborrhœa, the cause of the latter is not infrequently chlorosis, and this complaint we find particularly in young girls during the period of development.

In this case we must endeavour to combat the seborrhœa by internal administration of preparations of iron, arsenic, and öophorin, as in the treatment of acne.

The same holds good also for cases of pityriasis capitis, which affect pale, badly nourished individuals.[1]

I should like to draw your attention to a further alteration of the general state of health. Many patients state that loss of hair began after an attack of influenza. This statement is often true, as we know that alopecia occurs after various infective diseases. But if you find that the loss of hair is patchy, the suspicion of lues is justified. This variety, the "alopécie en placards," does not manifest itself so clearly in women as in men. In spite of this, in many cases you will have to be cautious in diagnosing "Loss of hair following influenza," since so many cases of lues have been mistaken for influenza. The primary symptoms in women are overlooked, as well as the exanthem; the osteocopic pains are mistaken for the disagreeable and persistent headaches and pains in the limbs accompanying influenza. If there occurs a case which in its appearance and history bears only a faint resemblance to lues, it will often be difficult without being tactless to verify the diagnosis of lues in the case of a lady. Anyhow, in such a case you will have to take into consideration what has been said.

[1] Iron and arsenic with nux vomica are to be recommended in such cases, or the newer hæmoglobin or organic iron preparations. (P. S. A.)

I must mention, besides, that in many people there occurs a greater loss of hair in the spring, which perhaps may be regarded as analogous to shedding of the coat in animals. A very considerable defluvium capillitii, moreover, may show itself at the seaside, an occurrence which I have noticed even in young children.

In concluding this important subject I should like to emphasise the fact that there should be no one routine treatment for all cases of premature loss of hair, and that above all things you must previously gain a clear insight into the conditions of the hair soil. Taking these points into consideration, gentlemen, in the treatment of alopecia præmatura, you will often attain success if at the same time you sufficiently observe the other principles which I have hinted at above, namely, perseverance, continuity, and energy in treatment on the part of the doctor as well as of the patients.

APPENDIX

Care of the Normal Hair of the Head and Beard—Hygiene of Shaving—Hair and the Nervous System in Women

I have already indicated above what an important part is played by prophylaxis in the prevention of premature alopecia. It may therefore be not unwelcome to you if in this place I make a few brief remarks concerning the care of the normal hair.

The comb should not be too narrow. It should be made of horn, vulcanite, or similar substance; in any case, combs made of steel as well as brushes with steel bristles are to be avoided. The hair brushes should have moderately soft bristles. For normal hair in men washing once or twice a week is sufficient, in women the interval should be somewhat greater. In order not to remove too much fat from the normal hair by washing, it is advisable to oil the hair from time to time with pure olive oil, which may be perfumed.[1]

It has been previously mentioned that the impoverished nutriment of the scalp caused by its close adhesion to the underlying tissues is to be regarded as an integral causal factor in premature loss of hair. The wearing of heavy and tightly fitting hats by men must be looked upon in a certain sense as having an analogous effect which, although it may be only temporary, nevertheless is a frequently recurring cause. Hence the lightest hats must be regarded as the most hygienic. Nowadays the heaviness of ladies' hats appears to exert an injurious effect upon the scalp. Although the mass of hair, which in ladies covers the head as it were with an elastic cushion, to some extent is capable of diminishing the pressure of a modern hat, yet by this means the harm caused by large and heavy headgear is not entirely neutralised. But to fight successfully against this unhygienic fashion is likely to prove a vain effort, even if one adds in support of one's view that the weight pressing on the head is liable to produce headaches, or

[1] There is reason to believe that premature baldness in men has became more prevalent since the fashion of oiling or greasing the hair has become obsolete, and also since the habit of more frequent ablutions has been in vogue. (P. S. A.)

at any rate if the latter be present to make them worse. You will probably succeed just as little in doing away with the harm caused by heavy pads of hair or steel (which are always advertised as "feather weight!"), the purpose of which is to make the hair appear greater in quantity. A similar effect is caused by the use of small curls which are attached to the hair. The harmfulness of the pressure which the curls exert is only partially avoided when they are not fastened to the hair, but to the under surface of the brim of the ladies' large hats.

Furthermore, pressure is exerted on the scalp during sleep, and I have often heard patients say that the loss of hair is greater on the side on which they usually sleep than on the other. For this, of course, there is no remedy.

You will sometimes be asked in the course of practice whether curling and waving of ladies' hair is injurious. In both procedures mechanical injury results, in waving too a physical one, that of desiccation. Through tight curling, as well as through crisping and waving with the curling irons, the hair is stretched to too great an extent on one side. This results in cracking of the superficial layer of hair, and on the other side bending occurs which finally also leads to breaking of the hair. Injury is produced to a greater extent by curling with tongs, as here, in spite of all precautions, some hairs are burnt, and others, if not actually burnt, are over-dried.

From all this it is clear that the simplest method of dressing the hair is at the same time the most hygienic. Loose plaiting is to be preferred to tight curling. Indeed, the best thing would be for ladies to wear their hair quite loose in a net. Since this hygienic ideal will be in all probability for the present unattainable, the hair should be worn at night loose or loosely tied.

The injuries just referred to as produced by curling hold good also for the moustache, and many a formerly proud moustache shows later only scanty remains of its former beauty. In order to give a handsomer appearance to the moustache, frequently of late "moustache trainers" (Bartbinden) are employed which only prove mechanically injurious when the moustache is not greased. Since the hairs of the beard of themselves are as a rule dry, it is especially advisable to grease them more frequently than has been mentioned in the case of the hair of the head. That the hair of the beard must be combed or brushed daily—like the hair of the head—need only be referred to for the sake of completeness.

Your advice will also be asked sometimes with respect to the hygiene of shaving. In the first place, you must obviously use absolutely sharp razors. The shaving soap must be very mild, and the lather well rubbed into the skin. Convenient though expensive substitutes for shaving soap are those creams which come into the market ready for use, and without the use of water are applied directly to the skin. After shaving, the lather which is left upon the skin must be removed by washing with water or wiping off. In more sensitive skins the use of an non-irritating or slightly astringent powder is to be recommended.

Finally, just a word with reference to the important heading: Hair and the Nervous System in Women. In many ladies who are constitutionally neurotic, dwelling on abnormalities of the hair becomes a fixed idea; in men this very seldom happens. At times you hear your patients complain even if the loss of hair is not at all considerable, "In four weeks' time I shall have no hair at all," or "My hair is so greasy that I can wash it

daily and yet the unpleasant greasiness does not diminish." You can meet these exaggerated complaints successfully only by psychical treatment in addition to medicinal. But even the opposite condition of premature loss of hair, namely, hirsuties, influences—sometimes to a greater extent—the psychical equilibrium of many a lady. These pitiable individuals believe that even when this abnormal growth of hair is relatively slight, they attract general attention in the street, and that everybody is laughing at them; they feel themselves socially impossible. In order to restore the peace of mind to these people there is only one remedy, and that is the removal of the hypertrichosis.

CHAPTER VII

ANOMALIES OF PIGMENT—NÆVI PIGMENTOSI, LENTIGINES, EPHELIDES, CHLOASMA — ALBINISM, VITILIGO — REMOVAL OF TATTOO MARKS

To-day, gentlemen, we have again to consider affections which are produced by quantitative changes in a normal constituent of the skin, namely, pigmentary anomalies. Increase of pigment interests us more essentially, whilst deficiency of the same is proportionately only rarely the subject of cosmetic treatment.

Amongst the cases of circumscribed increase of pigment we distinguish nævi pigmentosi, which are, as a rule, congenital from those which appear only in later years, lentigines and ephelides.

Anatomically there is increase of pigment in those places which it normally occupies, and also a heaping-up of pigment in the corium (Fig. 15). The shade of colour corresponds to the greater or less extent of pigmentary deposit, so that, roughly speaking, as regards anatomy only slight differences exist between the various hypertrophies of pigment. To enter into the question

of Unna's nævus cells lies outside the limits of these explanations.

Nævi pigmentosi, or pigmented moles, manifest themselves on the most varied portions of the body. Their colour fluctuates between light brown

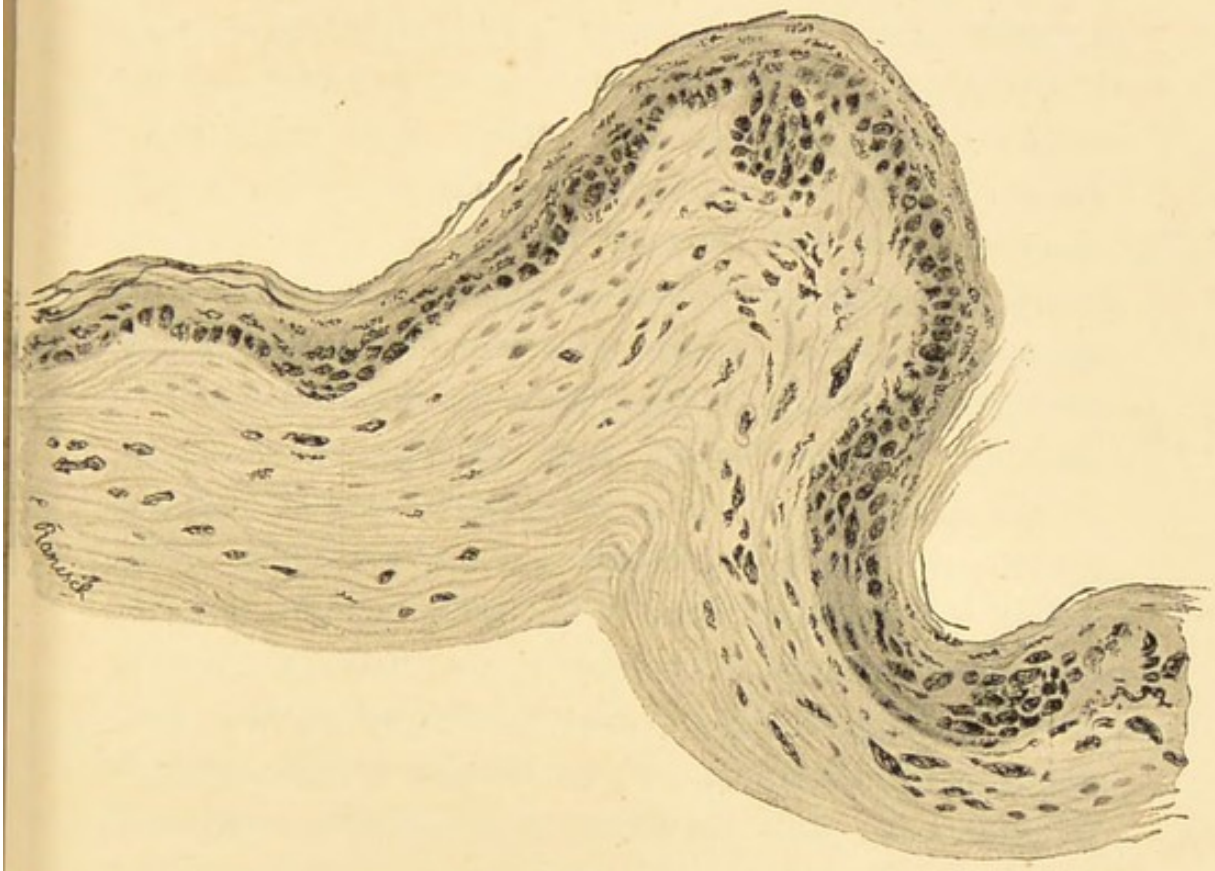

Fig. 15.

and deep black, but their size need not exceed that of a pin's head; on the other hand, large areas of the body may be occupied by nævus pigmentosus, which then, as a rule, is more or less hairy (a nævus resembling the coat of an animal). The pigmented moles are either flat, smooth, and soft (nævus spilus), or elevated like warts (nævus

verrucosus), hairless or covered with hair (nævus pilosus). The pigmented nævus has a significance, inasmuch as from the deep black ones amongst them at times a very malignant melanosarcoma or carcinoma may develop.

Lentigines (Leberflecke, Linsenflecke), which appear after birth, occur as smaller or larger brownish spots about the size of a lentil, as the name implies, which are either flat or a little raised. Like nævi pigmentosi, they are met with anywhere on the body. Ephelides (freckles) are small yellowish to brownish spots, which as a rule appear in greater number on the face, hands, arms, and neck. Besides this they manifest themselves also on the buttocks and thighs. The latter localisation proves that it is not exclusively the action of sunlight which causes freckles. The name "Sommersprossen" is, however, not entirely incorrect, inasmuch as the spots usually fade in autumn and winter to reappear during the next spring and summer. Ephelides, as a rule, occur in persons with delicate skins, especially in those with red hair; in later life ephelides almost invariably disappear spontaneously, whilst the spontaneous disappearance of lentigines is exceptional.

Of diffuse pigmentations the cosmetic physician is interested almost solely in those which appear chiefly on the face, and are known by the name of chloasma symptomaticum. In this case one finds the face of a light or dirty brown tint to a greater or less extent, without the accompaniment

of subjective symptoms. Almost invariably a white streak persists between the margin of the hair and the forehead. At times the backs of the hands show the same colour.

Chloasma uterinum is of the greatest importance. This shows itself in women during pregnancy or the puerperium, but also in association with the most diverse anomalies of the sexual organs. In many cases one is unable in women to trace a connection between chloasma and the genital apparatus; in that case we must consider whether it is not really a chloasma dyspepticum as in men. In diseases of the liver we find chloasma hepaticum; you are also familiar with chloasma cachecticorum, which accompanies the most various cachexias, especially carcinoma.

Toxic chloasma supervenes after the application of remedies which irritate the skin, the irritant having acted for a sufficiently long time to produce the formation of blisters. Since these forms of pigmentation only rarely disappear spontaneously, and we know by experience that they can be influenced but little by external treatment, it is the province of the physician to avoid prescribing remedies with irritating properties, such as cantharides or croton oil, in places uncovered by clothing, or to limit their application to exceptional cases only, in which an absolutely strict indication is manifested.

Traumatic chloasma, which only exceptionally affects the face, develops when the skin is mechanic-

ally irritated, as by frequent scratching in irritative skin conditions, or when through continually exerted pressure a condition of chronic hyperæmia is reached on a portion of the skin, as we may observe in the pressure of a collar-stud upon the neck, also by pressure of corsets or through tight skirts or garters. Pigmentation arising in this manner does not usually remain limited to the part irritated, but rather spreads beyond it into the vicinity.

The term chloasma solare seu caloricum, which follows erythema caloricum, is not quite correct, inasmuch as not only the heat rays of the sun produce the tinting, but also, as more recent investigations, especially those concerning light treatment, have shown, it is also the chemical rays, violet and ultra-violet, which produce an irritation of the skin and finally pigmentation. The rays, too, reflected from glaciers (Gletscherbrand) or from the sea may produce this appearance, just as at the seaside it is caused by combination of the effect of the rays with salt-containing air currents. That an essential influence is to be attributed to ultra-violet rays in erythema caloricum has been shown by observations in Finsen-light treatment, where, as is well known, the heat rays are excluded, and, nevertheless, an irritation of the skin supervenes. Further, it should be pointed out that similar manifestations are observed in lengthy illumination with electric light. Contrary to what takes place in other chloasmas, chloasma caloricum of the face is not infrequently seen to disappear spontaneously

on the removal of injurious causes, or with the onset of colder weather, whilst the chloasma of the neck, chest, and back is infinitely more persistent.

In the removal of circumscribed patches of pigmentation, particularly of nævi and lentigines, one must take care, in the first place, that as a result of the operation no uglier cosmetic effect appears than is produced by the original small brown spot. The latter is less conspicuous than a pigment-free, white, depressed scar. Any cosmetic consideration must, of course, be put aside in the removal of deeply pigmented black nævi, melanomata, where there is the fear that from them later on a malignant tumour may develop. Here the only treatment possible is removal of the nævus by an oval-shaped incision extending widely into the sound tissues with subsequent suture. Excision may also be practised in places which are covered by clothes should the removal of an innocent pigment patch at any time be desired. Failing this, all the methods of cauterisation and other procedures mentioned in the removal of warts and telangeiectases come into use. In small pigmented moles covered with fine hair the use of pure hydrogen peroxide (Merck's perhydrol) promises good results. In this procedure the skin must first be freed from grease by a 1 to 2 per cent. soda solution. Electrolysis is also to be recommended in this condition, since it removes the hairs at the same time. I should like to take this opportunity once again of pointing out the great importance of electrolysis in cosmetic

art. Its employment is convenient, causing relatively little pain—in very sensitive persons the pain can be diminished by cocaine kataphoresis—and besides this, the scars produced by electrolysis are excellent. On the other hand, in using the cautery the patient may move, and so the neighbourhood of the region treated may be burnt. Besides, whatever precautions are taken, it is easy to burn too deeply, by which means white scars may be produced, which stand out conspicuously against their surroundings, and which, as I have mentioned already, are more evident than the original brown circumscribed coloration. In cases of sudden appearance of multiple pigmented spots, which is not very frequent, before employing stronger measures trial should be made with the internal administration of arsenic.

If the ephelides are not too numerous you can best remove each spot separately by limited cauterisation with pure carbolic acid or hydrogen peroxide (Merck's perhydrol). In the case of numerous ephelides, as in chloasma caloricum, prophylaxis is of special importance. Persons with freckles must try to avoid as far as possible disposing causes, and particularly in summer should not expose themselves over much to the rays of the sun. In order as far as possible to minimise their action, and so to prevent the development of chloasma caloricum, certain precautions must be taken. In ramblings amongst mountains, glaciers, and at the seaside, ladies — and these

are the ones who chiefly need our assistance—should wear veils of red, yellow, or brown tint; their hats, moreover, should have a wide brim, the lining of the brim should also be of one of these colours, as well as the sunshade and blouse. The latter should not, as is now frequently the fashion, have an openwork pattern. I have seen the print of the pattern of such a blouse clearly marked on chest and back. Furthermore, considerable use should be made of powder, which should be one tinted brown with ochre, or red with bolus rubra, and you add to the powder 5 to 10 per cent. quinine; instead of this you can also prescribe the following:—

R	Quininæ hydrochlor.	{gr. xxxviij / ℥j gr. xvij}	2·5–5·0
	Zinci oxydi Talci venet.	āā ℥j ℥v	
	Aq. dest. Glycerini	āā q. s. ad ℥i ℥vj	ad 50·0

M. S.—For external application.

If, however, chloasma has developed, or the ephelides are very numerous, desquamating agents are to be employed for their removal. In slighter cases you can count on complete success, whilst in very deep pigmentation only little improvement is to be expected. In the case of remedies which act mechanically one should, *a priori*, determine that in the scaling process the cells which contain abnormal quantities of pigment should be removed. This view is, however, not to be regarded as final; for it is just the basal cells which contain most

pigment, and these cells can only be eliminated through an energetic process of destruction of the skin. It is clear that it is the disturbances of nutrition, *i.e.* the inflammatory processes which appear after the application of the above-named scaling remedies, to which the chemical change is to be attributed (Jarisch).

In slighter cases of ephelides and chloasma, rubbing with lemon juice or 10 per cent. acetic acid or 1 per cent. hydrochloric acid should be applied, and where the coloration is more marked, the more energetic methods which have for the most part been mentioned in the treatment of acne. Thus friction with spiritus sapo-kalinus or a brief application (½ to 3 hours) of sapo-kalinus, or rubbing with the following is to be recommended:—

℞	Sulphuris præcip. . .	℥ijss	10·0
	Spirit. sapo-kalini . .	ad ℥j ℥vj	ad 50·0

M. S.—For external application.

Or

℞	Resorcin .	℥j grs. xvij–℥ijss	5·0–10·0
	Spirit. sapo-kalini . .	ad ℥j ℥vj	ad 50·0

M. S.—For external application.

Here follows a modification of Hebra's ointment for freckles:—

℞	Hydrarg. ammon. . Bismuthi subnitrat.	āā ℥j gr. xvij	āā 5·0
	Olei olivæ	℥j	4·0
	Ung. glycerini . . .	℥jss	6·0

M. f. ungt.

Or after Lang

℞	Acidi acetici		℥ss	15·0
	Sulphuris præcip. \ Lanolini . . /	āā q. s. ad	℥j ℥vj	ad 50·0

M. f. ungt.

or Zeiszl's paste (also mentioned for acne). In the case of the last-named preparations you can vary the desired effect by the method and length of time of the application. Light friction with the finger or a soft brush has a different effect from rubbing the skin energetically for a longer time with the finger or a stiff bristle brush. In the same way, if the ointment remains on the skin only for one hour, the effect is considerably weaker than when the ointment remains during several hours or the whole night.

I must next refer to Hebra's method of treating freckles with a 1 per cent. watery or alcoholic solution of perchloride of mercury, which, according to Kaposi, is carried out in the following manner. The face is symmetrically covered with pieces of linen accurately fitted together, and whilst the patient lies in the horizontal position the rags are moistened with the sublimate lotion and kept damp with it for four hours. The epidermis rises as a blister, accompanied with intense burning and a feeling of tension. The blister is pricked at the lower margin and then collapses. The epidermic crust falls off within a week, the newly formed integument being white and free from pigment.

Personally, I have no experience of this method, and cannot so easily decide upon its employment, when we possess a remedy slower indeed but nevertheless safe.

Amongst other remedies employed is aqua cosmetica orientalis, used by Hebra, the composition of which I have modified for practical use according to the following formula :—

℞	Hydrarg. perchlor. . .	gr. xlvj	3·0
	Aq. dest. . . .	℥xvijss	500·0
	Albumen ovorum No. III		
	Succi citri fruct. . . .	♏x	
	Sacch. alb. . .	℥vij gr. xlv	30·0

S.—For external application.

Of this solution 5 parts are used as a lotion with 100 parts of strawberry water.

I have already had occasion to refer to the use of pure peroxide of hydrogen (perhydrol) as a caustic in the treatment of circumscribed patches of pigment. Since hydrogen peroxide, as is well known, has the property of bleaching, its use should be advocated in the removal of numerous ephelides as well as of chloasma. Applications are made with a 5 per cent. solution of perhydrol, eventually increasing to 10 to 15 per cent. solutions. A convenient mode of employing hydrogen peroxide is afforded by Unna's pernatrol soap, the use of which has already been referred to above (p. 22). In the treatment of anomalies of the hair, I have remarked that a whole series of remedies and

methods are at our disposal for the removal of superfluous hair, whilst our efforts for its restoration are often attended with but little success. In pigmentary deficiency of the skin the conditions are similar. Pigment once vanished is hardly ever replaced. There are at our disposal very few means of causing the light patches to appear less conspicuous against their surroundings. Congenital total albinism, a condition in which, owing to lack of pigment, the skin and hair appear white and the pupil red, is not amenable to cosmetic treatment; on the other hand, the congenital, non-progressive, partial albinism may be thereby ameliorated. Vitiligo, appearing during post-embryonic life, commonly in the middle aged, is a thankless object for treatment,—since, firstly, the affection is usually progressive; and secondly, the periphery of the white patches appears hyperpigmented. At times, nevertheless, a standstill in the spread of the white patches supervenes, and then the hyperpigmentation may lessen. Besides this a spontaneous reappearance of lost pigment has been observed. Concerning the origin of vitiligo we know little that is certain, so that there can be no question of prophylaxis against the affection. Jarisch regards disturbed nutritional conditions of the cells as the ætiological factor, and is of the opinion that causal factors regarded as nervous can be brought into connection therewith. In a young lady I have personally had the opportunity of seeing vitiligo develop in direct association with

well-marked psychical disturbance. For the reasons just mentioned, therapeutics are rather powerless in the presence of this affection. Attempts have been made to make lighter the hyperpigmented patches at the circumference by the use of the above-mentioned remedies, so as in some measure to minimise the differences in appearance. In other respects the treatment is identical with that which is at our disposal for the removal of pigment-free scars. Here come under consideration all remedies which are capable of producing excessive pigmentation, and which have been cited as the cause of chloasma toxicum. The result, however, even if it actually happens, is, as a rule, very temporary. Apart from paints and powders, to which I will return later, only tattooing is left. With the latter I have obtained results which are, to some extent, useful, following the procedure indicated by Paschkis and modified through sterilisation by myself, which is derived from a method in popular vogue. Barium sulphate, cinnabar, and yellow ochre (terra di Siena) are mixed with glycerin in a watch-glass, in such a manner that the colour appears somewhat lighter than that of the surrounding normal skin. For the purpose of sterilisation the mixture is then heated over a spirit-lamp until bubbles arise. Numerous closely set punctures are now made in the portion of skin which has been cleansed with a sterilised sewing needle set in a needleholder such as is used for electrolysis. After this the mixture, when cool, is applied with a small porcelain or wooden spatula

to the scarified spot and vigorously rubbed in. It is necessary, as observed, to make the colour rather too light than too dark, since it is more difficult to remove the dark tint than to make the light colour darker. If the result of the first act of tattooing is not sufficient, the procedure must be repeated on one or more occasions. A first failure should not deter one from repeating the attempt. Tattooing can also be done in such a way that the colouring matter is applied first, and scarification with the needle performed next. The advantage of this lies in the fact that the colour is incorporated with the skin simultaneously with the puncture; the disadvantage, in the fact that the field of operation is hidden. Since pigment-free scars are generally depressed, you can compensate for this after successful tattooing by a paraffin injection.

As regards the light treatment of vitiligo which has been reported of late, we have not sufficient experience of this to permit an expression of opinion.[1]

At times your assistance is required also with reference to stains of the skin, the origin of which is not due to excess of pigment, but to an artificial colouring material, usually the result of tattooing, but which may also be produced by particles of gunpowder which may occasionally be driven into

[1] Leucodermic patches can sometimes be influenced by painting on a solution of hydrarg. perchlor., 1 in 500. I have also had satisfactory results with X-rays cautiously applied; and in addition I advise careful massage. (P. S. A.)

the skin by the explosion of a gun. Up to the present the results obtained by the removal of tattoo marks are not very encouraging. Variot recommends painting the discoloured patches with a concentrated aqueous solution of tannin, followed by one tattooing with a needle. After that the places are energetically rubbed over with the nitrate of silver stick. One waits a moment until the puncture stands out deep black, and then withdraws the needle. Subsequently slight inflammation arises, which subsides in two to two and a half weeks. During this time the crusts, which possibly have formed, have fallen off. In this method one should not take in hand too large a surface at once, since if this be done the reaction is too unpleasant. Two months after the operation, in the place of the original discoloration, is seen a fine cicatrix. Instead of the procedure described, it has also been attempted to remove tattoo marks by electrolysis, which is employed in the same way as for the removal of warts.

If ornaments of gold or silver or sham jewellery are worn for some time on the bare skin a further discoloration of the skin makes its appearance. The places then appear dirty. In the absence of the exciting cause this discoloration after a time usually tends to disappear spontaneously, or can be made lighter or removed entirely by rubbing with benzene. I might, however, mention that this discoloration does not appear after wearing ornaments of platinum.

CHAPTER VIII

ANOMALIES OF SWEAT SECRETION—CHILBLAINS—PAINTS AND POWDERS—HAIR DYES—ROUGH AND RED HANDS—CARE OF THE NAILS—CRACKS OF THE LIPS—SCARS AND KELOID—LICHEN PILARIS—XANTHOMA PALPEBRARUM—REDNESS OF THE NOSE—WRINKLES

To-day, gentlemen, we have first to deal with some affections which come only provisionally within the domain of Cosmetic Art, in so far as the slighter grades of these changes are of a cosmetic nature, whilst the more severe affections caused by them overstep the region of Cosmetics. In the first place, we will consider anomalies of sweat secretion, and here we must distinguish between a local and a general increase or diminution of the secretion of sweat. General diminution, anidrosis, occurs in grave constitutional diseases, notably in diabetes mellitus, and is just as little a subject for cosmetic treatment as is the generalised hyperidrosis of constitutional maladies, *e.g.* tuberculosis. The cosmetic physician is concerned with the local hyperidrosis which manifests itself in very

definite situations, particularly on the feet, hands, axillæ, and face. It would take too long just now to enter into the theory of the secretion of perspiration, especially since our knowledge of the causes which occasion this departure from the normal to which I have alluded is still somewhat deficient.

In the case of perspiring feet, which is of the greatest importance from the point of view of practice, we know that pes planus at times obtains, and that after cure of the flat foot by operation or improvement of the condition by suitable pads the hyperidrosis lessens. By treatment of the hyperidrosis the callosities which simultaneously occur are frequently caused to disappear. Hyperidrosis of the feet represents a complaint which is equally irksome for the sufferer as for those near him. The sweat which is secreted in excess together with the macerated epidermis causes a disagreeable odour, the condition being known as bromidrosis. The cracks produced by maceration give rise to painful fissures or rhagades, which at each movement remind the patient of his sufferings.

It is clear that in the first place the most scrupulous cleanliness must be observed in the treatment of perspiring feet. This cleanliness does not concern the feet only, but is to be extended to the stockings and shoes. The feet must be bathed morning and evening, and, if necessary, during the day. The shoes and stockings likewise should be changed two or three times a day and the shoes

well aired. It is not always necessary to have a prolonged footbath; it is sufficient to wash the feet with lukewarm water, in the same way as one washes the hands. After the ablution the feet are rubbed with an astringent fluid, cognac, eau-de-Cologne, and the like. In order to avoid maceration of the epidermis caused by the excess of perspiration and the painful fissures which thus result, the feet are greased as a prophylactic measure, notably with 2 per cent. salicylic lanolin which does not decompose, and the soles of the feet are covered with a similarly greased soft linen rag. Special care is to be taken of the clefts between the toes, since by reason of the friction eczema intertrigo is apt to develop. The toes are to be protected by fine linen rags or thin pads of salicylic wool so as to avoid contact with one another. Instead of the ointment in suitable cases one can use dusting powder which absorbs the perspiration; for this, salicylic powder with talc is much used. In mild cases—and these constitute the greater number—one attains one's object with these measures; but should the complaint be resistant to this treatment one which is more vigorous must be instituted.

The treatment with chromic acid, which for a long time was customary in the Prussian army, has been abandoned on account of the danger of poisoning. Hebra's methods of treatment for perspiring feet were frequently employed. After satisfactory cleansing and drying each foot is

covered with a single piece of coarse linen, which on the part intended for the sole is smeared to the thickness of the back of a knife-blade with Hebra's ointment; in the clefts are placed small rags smeared with ointment and cut to fit, then the piece of linen is accurately adapted to the sole and secured over the instep. The ointment and linen are changed morning and evening; and each time the dressing is changed the ointment which adheres is removed by wool covered with ordinary powder. This process is continued for about a fortnight without the foot coming in contact with water; subsequently one ceases to apply the ointment and copiously powders the feet, especially the toes and the clefts between them, with salicylic dusting powder. Within the next few days the epidermis peels off in thick layers, and there appears a new white delicate cuticle; only after this should the feet be bathed. To prevent recurrence later the feet must always be sufficiently powdered, pads of wool covered with powder being laid between and under the toes; in addition to this it is expedient to dust the stockings as well with salicylic powder. It need hardly be mentioned that too narrow shoes in any case are to be avoided, particularly by people with perspiring feet. If the result of the treatment described is not complete this procedure must be begun anew. Because of the troublesomeness of this process the introduction of formalin and its preparations in the treatment of hyperidrosis should be regarded as a real advance. In the first

place, mention must be made of tannoform. Concentrated preparations of formalin, however, in addition to their possessing toxic properties, which almost immediately become apparent, are expensive, and militate against the general use of such remedies as tannoform, which, if intended to manifest a decided effect, must be employed pure. At the outset, when it came into fashion, great results were anticipated from the use of formalin. A 10 to 20 per cent. solution was used, which in a proportion of cases effected an improvement. It was discovered, however, that for production of the desired results, *e.g.* destruction of sweat glands, the employment of pure formalin was necessary. Still more defects are attached to this process. As a result of decomposition of the sweat considerable irritation of the skin supervenes, and further formation of rhagades ensues. When applied to these fissures formalin occasions a very unpleasant sensation of burning. Hence it was necessary, before beginning the formalin treatment, to heal the fissures, a requisite which ofttimes could only with difficulty be accomplished, since the cause of the disease, excessive sweat secretion, still persisted. Besides this other factors come into question. The smell of formalin not infrequently causes headaches. Further, formalin during its evaporation frequently irritates the mucous membranes of the eyes, nose, and other air passages, so that the application of formalin must be performed with the window open. If this is done in the winter season

the patient is readily exposed to cold, especially as the action of formalin vapour on the nose cannot be entirely avoided. These drawbacks have essentially limited the institution of this method, which is under other conditions radical in the widest sense of the word. The like fault—irritation of the mucous membranes—according to Fischer, attaches also to the recently extolled formalin-vasenol powder.

The temporary or permanent cessation of sweat secretion, produced or rather intended by the use of pure formalin, or of highly concentrated solutions or preparations containing a considerable amount of formalin, cannot finally be without influence upon the affected portions of skin, a disadvantage which is apparent when we consider that the skin treated with strong formalin preparations becomes as if tanned. In the treatment of hyperidrosis an endeavour should be made not to stop the secretion of perspiration entirely, and not even temporarily; on the contrary, we should strive to bring back to the normal the secretion of perspiration which has been pathologically changed, and to stop the decomposition of the perspiration secreted in excess.

According to my investigations an ointment containing 2 per cent. formaldehyde, which is known under the name of "Vestosol," satisfies these requirements. This preparation entirely lacks the penetrating odour of formalin. The ointment, without previous bathing on the part of the patients,

is rubbed once a day into the feet on two or, in extreme cases, on three or four successive days, after which the hyperidrosis and bromidrosis cease, and the formation of sweat is brought back to the normal. The effect lasts from four to six weeks. The advantage of the vestosol treatment over other methods lies in the simplicity of its application, in the lack of any damage to the epithelium of the sweat glands, in the absence of all troublesome secondary manifestations, as well as in its cheapness, 5 to 10 grammes of ointment sufficing for each application.

Since X-rays exercise a distinct effect upon epithelium, one makes use of them to control hyperidrosis. It had been intended by means of Roentgen rays to diminish the function of the epithelium of the sweat glands and so to do away with the hypersecretion of sweat. Against the extended use of this procedure is nevertheless to be noted the fact that the Roentgen ray injuries mentioned above are to be borne in mind, particularly if the dosage is not very exact.

It has already been stated that attention is to be given to the foot-gear, *i.e.* the shoes and stockings, in sweating of the feet. From this point of view an indirect treatment of hyperidrosis of the feet in a certain sense has been aspired to. For this purpose the stockings are moistened with a 3 per cent. solution of boric acid and then allowed to dry. In order to remove the disagreeable odour from the boots they are filled for some hours with a formalin

solution (a tablespoonful to a litre of water); subsequently they must be vigorously greased. This procedure will not harm the boots, but as a rule ventilation of the boots frequently performed is sufficient to remove the objectionable smell.[1]

In the treatment of analogous hyperidrosis occurring on other parts of the body, speaking generally only milder measures need be adopted. The axillæ must frequently be washed with soap and water and astringent alcoholic fluids of not too strong concentration, or with vinegar (1 to 3) or diluted toilet vinegar. In order to prevent the slight eczema which may appear and the furuncle which finally establishes itself in connection with the sweat glands, one places in the axillæ pads of wool dusted with powder, in some cases salicylic dusting powder. For the sake of practical interest we may mention the injuriousness of the dress shields so much in demand which are sewn into the sleeves of ladies' dresses. The impermeable indiarubber sewn upon their outer sides prevents

[1] Most cases of this disagreeable complaint can be cured or greatly ameliorated by soaking the feet for ten minutes, night and morning, in a warm creolin bath—℥j to about a gallon of water; then drying and freely applying an ointment containing:—

℞	Creolin	℥ ss
	Hydrarg. ammon.	gr. x
	Acidi salicylici	gr. x
	Paraffini mollis	℥j

I also recommend the use of a formalin soap, the stockings to be well dusted with powdered boracic acid. In inflamed acute cases a milder ointment must be employed at first. (P. S. A.)

the perspiration from penetrating the garments, and protects these from being soaked and the consequences of this, but on the other hand hinders evaporation of the sweat, and hence favours its decomposition and the eczema which results therefrom. The offensiveness of this is in some measure overcome by banishing with difficulty dress shields from the wardrobe of our fair sex through the frequent changing of pads of cotton-wool placed in the axillæ. In cases of excessive perspiration in the axillæ, treatment with vestosol should be employed.

Hyperidrosis of the hands, as you well know, represents an exceedingly inconvenient complaint. The hands always feel cold, moist, and clammy. With a view to the improvement or removal of this condition the wearing of tight kid gloves is to be forbidden; these are to be replaced by easily fitting silk or suède gloves. In perspiration of the hands it is nearly always a good thing to abstain from the use of pure formalin; the use of powder is equally futile; on the other hand, the employment of vestosol is advantageous. If these methods do not suffice, in exceptional cases where a high grade is reached a trial of Roentgen-ray treatment in quite small doses appears justifiable.[1]

For the temporary removal of perspiration from the face Japanese toilet-paper or papier poudré are

[1] A mild tarry or creolin bath is also useful, as well as the formalin soap. (P. S. A.)

hands should be washed with water as hot as can be borne. Hot baths of a decoction of nut-leaves are worthy of recommendation for the hands as well as for the feet. Besides these measures, hydropathic compresses of acetate of aluminium (a tablespoonful to half a litre of water) or boric acid (3 per cent.), Goulard water, solutions of alum (2 to 5 per cent.) or sulphate of zinc (1 to 2 per cent.) or borax (2 per cent.) may be prescribed. As regards ointments, the lead and camphor ointment has for ages enjoyed a reputation against cold. Besides this bromocoll-resorbin 10 per cent. has proved advantageous, also frictions with ichthyol, thigenol, or thiol in liquid form as ointment or spirit solution either in full strength or diluted.

Through the agency of the above remedies alleviation of frost erythema in the majority of cases is obtained and not infrequently cured, so that the condition does not go on to the formation of chilblains. If these have once appeared, the prognosis is less favourable.

The large number of therapeutic measures recommended against chilblains indicates that their action is not invariably prompt. For preference the salts of various minerals are prescribed in sufficient dilution, and in addition to these tannin, borax, alum, camphor, oil of turpentine, tar, ichthyol and its substitutes. And next, as of constant recurrence, collodion and iodine are also frequently used. By proper application of flexile collodion to the hands very successful results at times are obtained through

compression of the dilated vessels. The finger must first be made as far as possible bloodless and then compressed. For this purpose the arm is suspended for a short time, until the hand is as white as possible, then the collodion is painted centripetally and longitudinally, but not circularly, upon the affected finger. This procedure is repeated for several evenings. In place of this a compression bandage of zinc oxide plaster mull or lead plaster mull or leucoplast may be applied in like manner.

Tincture of iodine is either painted on alone or in combination with equal parts of tinctura gallæ, or is employed in 10 to 20 per cent. strength together with collodion in the above-described manner. Ichthyol, thigenol, and thiol liquidum are prescribed in the form of 20 to 50 per cent. collodion, or 50 per cent. ointment, or in still stronger concentration and in some cases pure.

Nitric acid in 20 per cent. aqueous solution is painted on the chilblains twice daily, followed by an ordinary ointment. Of the newer preparations tannobromin is worthy of note, mention of which has already been made in the treatment of alopecia. It is best used as chilblain-balsam (*v. infra*). The calcium chloride ointment (*v. infra*) introduced by Binz has also proved successful, the application of which is only uncomfortable in so far as the affected spots should be vigorously massaged with the ointment for five minutes in the evening. As a rule, however, a less prolonged and energetic

rubbing with this ointment suffices. It should never be prescribed except in small quantities, since decomposition of the calcium chloride readily occurs, the ointment becoming inefficient as soon as the pungent chlorine odour fails.

Since chilblains, as stated, frequently oppose a determined resistance to treatment, a few prescriptions have been collected here, one of which may turn out to be useful in a given case if the others fail.

℞	Camphor. . . .	gr. xlvj	3·0
	Lanolin	℥vij	27·0

M. f. ungt. S.—To be rubbed into the chilblains three times a day.

℞	Aluminis		
	Tannin	āā ℥ijss	āā 10·0
	Boracis	℥ss	15·0
	Talci venet. . . .	℥j ℥v	50·0
	Ol. æth. cort. aurant. ♏xxv.		

M. f. pulv. S.—To be applied externally (for frost erythema).

(After Paschkis.)

℞	Aluminis		
	Sod. bibor. . .	āā gr. xxxviij	2·5
	Tr. benzoin . . .	℥iij	10·0
	Aq. dest.	ad ℥iijss	ad 100·0

M. S.—For external application in the shape of friction or as a water compress (in frost erythema).

℞ Ichthyol, or {Thigenol / Thiol}
Aq. dest.
Glycerin
Zinci oxydi
Talci venet. . . . āā ℥ijss āā 10·0
M. S.—To be painted on (in frost erythema or chilblains).

℞ Camphor. . . . gr. xlvj 3·0
Lanolin
Paraffini mollis . . āā ℥ss āā 15·0
Ac. hydrochlor. pur. . ℥ss 2·0
M. f. ungt. (Carrié.)

℞ Alumin. . . . . ℥j 4·0
Vitell. ovi cocti unius
Glycerin . . . . . ℥ss 2·0
M. f. ungt. S.—For external application (in chilblains to be well rubbed in). (Husemann.)

℞ Balsam. Peruvian. . ℥j gr. xvij 5·0
Mixtur. oleosobalsamic. } āā ℥j ℿ xxvij āā 30·0
Aq. coloniens. . . }
M. S.—For external application (to be rubbed into chilblains). (Rust.)

℞ Empyroform. . {gr. xxxviij–℥j gr. / xvij–℥ijss} 2·5–5·0–10·0
Chloroform.
Tr. benzoin . āā q. s. ad ℥j ℥vj ad 50·0
M. S.—The paint. For external application.
(In strong concentration for frost erythema, in weaker for chilblains.)

℞ Anthrasol . { gr. xxxviij–℥j gr. / xvij–℥ijss } 2·5–5·0–10·0
Tr. benzoin . . ℥j ♏xxiv 5·0
Spirit. rectif. . . . ad ℥j ℥vj ad 50·0
M. S.—As the preceding.

℞ Bromocoll . . . gr. xv 1·0
Resorbin . . ℥ij gr. xviij 9·0
M. f. ungt. S.—The ointment (for frost erythema and chilblains).

℞ Tannobromine . . . ℥ss 2·0
Collod. 4 per cent. . ℥v ♏xxxviij 20·0
Tinct. benzoin . . ♏ xvij 1·0
Alcohol . . . . . ℥ss 2·0
M. D. cum penicillio in vitro. S.—The chilblain balsam.
(To be painted on the chilblains morning and evening.)

℞ Calcii chloridi . . gr. xv 1·0
Ung. paraffini . ℥ij gr. xviij 9·0
M. f. ungt. (*vide supra*). (Binz.)

℞ Ichthyol
Resorcin
Tannin . . . . āā ℥ss āā 2·0
Aq. dest.. . . . . ℥iij 10·0
M. S.—For external application. (To be painted on the chilblains at night.) (Boeck.)

℞ Resorcin . . . . ℥ss 2·0
Mucilag. gummi acaciæ
Aq. dest. . . āā ℥j ♏xxiv āā 5·0
Talc. venet. . . . gr. xv 1·0
M. S.—For external application, similarly to the preceding. (Boeck.)

In many cases galvanism of the parts affected by cold has proved serviceable.

That the latest acquisitions to treatment—the congestion method of Bier and the Roentgen rays —have also been brought into requisition against the effects of cold should arouse no wonder in such an obstinate complaint. Those who complain of regularly recurring cold in the fingers towards the end of the summer should begin treatment by means of passive hyperæmia as a prophylactic. The bandage used to produce passive congestion is applied for two hours to the arm. In this way it is sought to obtain better nutrition of the dependent parts. The administration of Roentgen rays will diminish the swelling and irritation of the parts affected by the cold.[1]

If the result of the various treatments indicated be not complete one must, as far as may be, endeavour to conceal the discoloration evoked by cold by the use of suitable powders and paints. These also have their use where from any cause, *e.g.* fear of recurrence, the radical removal of abnormalities of the skin is declined by the patient. To this class belong the anomalies of pigment, unsightly scars, dilatation, and new formation of blood vessels and similar blemishes, as well

[1] Roentgen rays have been successful in some cases of early Raynaud's disease or localised asphyxia of the skin. Of course, at the same time I protect the fingers with suitable ointments—perferably containing lead, zinc, and ichthyol, and prescribe iron, arsenic, and strychnine, or quinine and opium. (P. S. A.)

as lupus, if the radical removal of this condition be abandoned.

The composition of paints and powders nowadays is adjusted both to the colour of the skin as a whole, *e.g.* whether the skin is delicate and transparent or whether it is coarse, whether light or dark, and also according to the purpose in each case for which the covering substance is employed, whether in winter or summer, by day or night, in the room or in the street, whether by the natural light of day or by artificial light, gas or electric.

Generally speaking, an ordinary toilet powder cannot be employed alone, for a sufficiently thick layer of powder cannot be laid on. Accordingly, so-called paint powder must be prescribed which contains a considerable amount of talc and consequently possesses greater adhesive property. The patient must always be told that even so harmless a powder as this, frequently applied over a long period, exerts a pernicious influence upon the skin. The powder should also be applied only temporarily. The same remark applies to the paint, but in this case the harmful effect takes place more quickly.

According to their source we distinguish two different kinds of powders, namely, vegetable and mineral. To the first variety belong amylum tritici, wheat starch, a fine bluish white powder; amylum oryzæ, ground rice, poudre de riz, which possesses a pure white appearance: the flour of the broad bean (vicia faba) has a whitish tint; amylum solani, potato starch — a comparatively

coarse powder—has a more yellow colour, as has semen lycopodii, club moss spores. Orris-root powder, pulvis rhizomatis iridis Florentinæ, is only to be used as a fragrant addition to other powders. Starch powder serves as an absorbent, its advantage being that it is very hygroscopic; its disadvantage, that by its combination with fluid it forms a sticky paste which in some cases, collecting together into small lumps, diffuses a sour smell and causes the skin to itch.

The vegetable powders possess to a great extent an absorbent property, and to a less extent a protective one, so that the latter in reality resembles the mineral powders. I mention as the mineral powders which are most useful, Venetian talc, silicate of magnesium, soapstone powder, a fine white sparkling powder, greasy to the touch; zinc oxide is white, but duller than talc. Magnesium carbonate is a white powder of low specific gravity which is highly absorbent. A description of the rest of the paints and powders in fashion would take too long. In the following details I avail myself of the accounts given by Debays and Paschkis.

Pulvis cosmeticus albus is to be regarded as a simple white toilet powder.

R	Zinci oxydi . . .	℥vss	21·5
	Talci veneti . .	℥vj gr. xvj	34·5
	Magnes. carb. pond. .	gr. liv	3·5
	Ol. millefleures guttas II		

M. f. pulvis. S.—The white cosmetic powder.

In order to lessen the somewhat pale tint of this powder, one can mix with it a small quantity of colouring material, as

℞	Pulveris cosmetici albi .	℥xvj	500·0
	Carmini soluti (scil. in Liq. ammonii caustici) .	♏j	0·05

M. f. pulvis. S.—The rose powder.

Or

℞	Pulv. cosmetici albi . .	℥ijss	80·0
	Carmini soluti . . .	♏j	0·05
	Yellow ochre . . .	gr. xv	1·0

M. f. pulvis. S.—The yellow powder. (Rachel.)

Or

℞	Pulv. cosmetici albi . .	℥v	20·0
or	Amyli . . .	℥j gr. xvij	5·0
	Talci veneti	℥iv	15·0
	Tincturæ croci guttas X		

M. f. pulvis. S.—The light-yellow powder.

One can replace the tinctura croci by 0·1 turmeric yellow,[1] by which means the yellow hue is deepened. A yellow tint is also produced by the addition of 3 to 5 per cent. ichthyol. (With reference to the employment of yellow powder, see below.)

These latter compositions, however, cannot be regarded as coloured toilet powders. In order to

[1] Turmeric yellow has the following composition: an extract of the powdered turmeric root with 5 parts of diluted spirits of wine is precipitated by a 5 per cent. solution of alum; the precipitate is collected and dried. (J. F. H. D.)

produce a red colour carmine must be added to the powder in the proportion of 1 to 2 per cent., as, for example :—

℞	Carmini . .	gr. viij–gr. xv	0·5–1·0
	Talci veneti alcoholisati .	℥j ℥v	50·0

M. S.—Simple red paint.

A useful flesh-tinted powder is presented by Unna's pulvis cuticolor :—

℞	Zinci oxydi . . .	℥ss	2·0
	Magnes. carb. pond.		
	Kaolin . . .	āā grs. xlvj	āā 3·0
	Bol. rubr. . . .	℥ss	2·0
	Amyl. oryzæ . . .	℥ijss	10·0

M. f. pulv. S.—The flesh-tinted powder.

To increase its adhesive qualities, adeps lanæ (lanolinum anhydricum) 3 to 5 per cent. is added to this and like mixtures, also 5 to 10 per cent. spermaceti, or in winter, cacao butter; by this means a grease powder or grease paint will be produced.

We have also :—

℞	Pulv. cosmetici albi seu rosa seu Rachel seu flavi .	℥j ℥v	50·0
	Adipis lanæ hydrosi	gr. xxiij–xxxviij	1·5–2·5
or	Spermaceti or Butyri cacao	xxxviij–℥j gr.xvij	2·5–5·0

M. S.—The grease paint.

As a red grease paint in place of carmine may

In order to lessen the somewhat pale tint of this powder, one can mix with it a small quantity of colouring material, as

℞	Pulveris cosmetici albi .	℥xvj	500·0
	Carmini soluti (scil. in Liq. ammonii caustici) .	♏j	0·05

M. f. pulvis. S.—The rose powder.

Or

℞	Pulv. cosmetici albi . .	℥ijss	80·0
	Carmini soluti . . .	♏j	0·05
	Yellow ochre . . .	gr. xv	1·0

M. f. pulvis. S.—The yellow powder. (Rachel.)

Or

℞	Pulv. cosmetici albi . .	℥v	20·0
or	Amyli . . .	℥j gr. xvij	5·0
	Talci veneti	℥iv	15·0
	Tincturæ croci guttas X		

M. f. pulvis. S.—The light-yellow powder.

One can replace the tinctura croci by 0·1 turmeric yellow,[1] by which means the yellow hue is deepened. A yellow tint is also produced by the addition of 3 to 5 per cent. ichthyol. (With reference to the employment of yellow powder, see below.)

These latter compositions, however, cannot be regarded as coloured toilet powders. In order to

[1] Turmeric yellow has the following composition: an extract of the powdered turmeric root with 5 parts of diluted spirits of wine is precipitated by a 5 per cent. solution of alum; the precipitate is collected and dried. (J. F. H. D.)

produce a red colour carmine must be added to the powder in the proportion of 1 to 2 per cent., as, for example :—

℞	Carmini . .	gr. viij–gr. xv	0·5–1·0
	Talci veneti alcoholisati .	℥j ℥v	50·0

M. S.—Simple red paint.

A useful flesh-tinted powder is presented by Unna's pulvis cuticolor :—

℞	Zinci oxydi . . .	℥ss	2·0
	Magnes. carb. pond.		
	Kaolin . . .	āā grs. xlvj	āā 3·0
	Bol. rubr. . . .	℥ss	2·0
	Amyl. oryzæ . . .	℥ijss	10·0

M. f. pulv. S.—The flesh-tinted powder.

To increase its adhesive qualities, adeps lanæ (lanolinum anhydricum) 3 to 5 per cent. is added to this and like mixtures, also 5 to 10 per cent. spermaceti, or in winter, cacao butter; by this means a grease powder or grease paint will be produced.

We have also :—

℞	Pulv. cosmetici albi seu rosa seu Rachel seu flavi .	℥j ℥v	50·0
	Adipis lanæ hydrosi	gr. xxiij–xxxviij	1·5–2·5
or	Spermaceti or Butyri cacao	xxxviij–℥j gr.xvij	2·5–5·0

M. S.—The grease paint.

As a red grease paint in place of carmine may

be employed carthamine, a pigment which is contained in the flowers of carthamus tinctorius:—

℞	Carthamini . . .	gr. xv	1·0
	Talci veneti alcoholisati	ʒij gr. xviij	9·0
	Spermaceti . . .	ʒijss	10·0
	Olei amygdalarum dulcium	ʒv ♏xxxviij	20·0

M. S.—The red grease paint.

A specification of the composition of the numerous lanolin creams already mentioned may well be mentioned here.

℞	Adeps lanæ	ʒiij	12·0
	Paraffini mollis . . .	ʒj	4·0
	Olei rosæ gutt. dimid.		
	Tinctur. Vanilli gutt. V		
	Spiritus resedæ gutt. X		
vel	Olei limonis gutt. I		
	Olei bergamott. gutt. III		
	Spiritus resedæ gutt. VIII		

M. S.—Lanolin cream.

Or

℞	Adeps lanæ . .	ʒij gr. xviij	9·0
	Adipis benzoati . .	gr. xlvj	3·0

M. S.—Lanolin cream.

Or

℞	Adeps lanæ . .	ʒij gr. xlvj	9·0
	Olei amygdalarum		
	Olei theobromatis .	āā gr. viij	āā 0·5
	Acidi benzoici . . .	gr. jss	0·1

M. S.—Lanolin cream.

If one desires a cream of quite soft consistency one takes equal parts of adeps lanæ and a suitable fat.

The paint itself is applied in the following manner. The face is smeared with a thin evenly distributed layer of unguentum leniens or lanolin cream made up with benzoated lard or cacao butter. Upon this is spread white powder, the excess being lightly wiped off. Then the rouge in suitable concentration and quantity (the simple red paint, *v. supra*) is applied to the cheeks near the nose and mouth, and from there is spread in a curve evenly towards the ears. The procedure just described is particularly appropriate for lady patients in whom chloasma and ephelides have assumed a very pronounced brown tint. Grease paints should be employed, especially in the winter out of doors, whilst in summer and during great heat the tinted powders are suitable.

For artificial illumination, particularly when this is very bright, only red grease paint should be applied in the case of a pale face, best of all with the finger, the skin being previously greased. The simplest method is to mix the finest carmine with glycerin, to rub this mixture upon the cheek with the finger, and to remove the excess by wiping with a fine cloth.

It is obvious that in each individual case one must adjust the composition of the powder and paint to the extent and intensity of the affection; some lady patients of their own accord, with some

aptness and practice, soon find out for themselves the requisite combination if one has only given them the indications.

Warning must be given against the use of numerous manufactured preparations in the way of paints and powders, which, introduced into the market under high-sounding names, possess poisonous properties, the white paints and powders containing lead and the red ones cinnabar. By the use of these poisonous substances very unpleasant effects, by reason of their combination with sulphur, may rapidly manifest themselves to the lady concerned. Thus combination with sulphuretted hydrogen will induce the formation of sulphide of lead, as a result of which a darkening of the face occurs which is not exactly pleasing. A further caution may be given, as mentioned above, against the use also of the supposed non-poisonous beauty remedies which, applied too frequently for a short or long time, exert an injurious influence upon the skin.

Seeing that we have just had the opportunity of considering methods which cause temporary alterations in the colour of the skin, so now we must deal with the tinting of a certain skin appendage which will occupy us for a longer time. I refer to the tinting of the hair. I will omit all those substances which previously were in frequent use, the harmful nature of which has been proved, some of which like lead and copper being prohibited in the manufacture of cosmetic remedies in

accordance with the Prussian law of July 5, 1887, § 3, touching the employment of colours injurious to health in the manufacture of food-stuffs, etc. Here I will only give a few useful combinations in practice.

Before the dye is applied to the living hair, by way of experiment it is advisable to apply the dye on a probe to hair which has been cut off.

Before each tinting (except in a few cases into which I will not enter here) the hair must be freed from grease by washing with soap or 1 to 2 per cent. soda solution; next, after having been thoroughly dried, the dyeing may be undertaken. The fluid is applied with a soft tooth- or nail-brush to the separate locks of hair from tip to root, by which means the dye penetrates between the inbricated coating of epithelium. If, after tinting, the hair is dry it must be oiled in order to further the recovery of its natural gloss. Since the dyes leave behind them stains upon the skin, it is advisable to smear the forehead with glycerin or any ordinary fat, and further to surround the neck with a well-closed dressing-jacket. The operator wears gloves.

The public in need of dyes, women as well as men (including colleagues), seldom as a rule—at least as far as Germany is concerned—seeks the dermatologist, but turns much more often to the hairdresser or chemist. For this reason my personal experience is but slight, though, indeed, more extensive with reference to injuries produced by hair-dyes, since people often consult the dermatologist because of the dermatitis produced by

these dyes. Unless in quite exceptional cases, I advise my patients for the most part against the use of hair-dyes, since an eye which is even but slightly practised recognises the artificiality, however good the technique. Thus in the bleaching of dark hair the adept is immediately struck by the fact that the eyebrows and eyelashes have a different appearance from the hair of the head. If, however, our patients demand of us a hair-dye of golden tint, which is not nearly so fashionable at present as it is sometimes, the application to the hair of a 10 to 20 per cent. solution of peroxide of hydrogen is efficacious, according as the hair is originally lighter or darker; further, too, the strength must be determined in proportion as the new colour is to be more or less light. That hair-dyes containing hydrogen peroxide, however, are not always absolutely harmless, as is frequently believed, I saw in the case of a lady, who, after lengthy use of such a remedy, suffered from protracted dermatitis of the head occurring together with very considerable loss of hair, a condition which was so much the more unpleasant and difficult to control since the lady, for reasons which are easily explicable, would not forego the use of the dye.

We will now turn our attention to the tinting of grey hair.

In order to get a brown tint one may moisten the hair from which the grease has been removed with a 10 to 15 per cent. solution of potassium permanganate.

If one holds the opinion, which differs from my own, that pyrogallol is permissible as a hair-dye, the two following lotions, which are applied one after the other, as soon as the hair is dry from the use of No. 1, give good results for dyeing black.

℞	Acid. pyrogallic . .	℥j gr. xvij	5·0
	Alcohol. absolut. . . .	℥iijss	12·5
	Aq. dest.	℥j ℥vj	50·0

M. S.—No. 1. For external application.

℞	Argenti nitrat. . .	℥j gr. xvij	5·0
	Liq. ammon. . . .	℥iijss	12·5
	Aq. dest.	℥j ℥vj	50·0

M. S.—No. 2. For external application.

Unfortunately, after the application of pyrogallol inflammations of the skin have not infrequently been observed, and in some cases too evidences of poisoning. The introduction of p-phenylendiamin as a hair-dye, particularly in the form of the preparation known under the trade name of Aureol, appeared to indicate progress, only until such time as the disagreeable consequences manifested themselves. It may therefore be well to add Tomasczewski's opinion: "Solutions which contain pyrogallic acid or p-phenylendiamin are to be unconditionally rejected as dyes for living human hair." The disagreeably irritating properties of p-phenylendiamin appear to be increased by the addition of sulphur, according to the investigations of Erdmann and Tomasczewski. According to the numerous experiments performed by Tomasczewski,

the preparation introduced into the market under the name Eugatol, which is sold in three different compositions for dyeing the hair blonde, brown, and black, can without objection be recommended as an efficient and hygienic dye.

At times your advice will be sought with reference to changing the tint of hair already dyed. The conditions under which this occurs are usually as follow. A lady (up to the present I have not met with a gentleman) complains of an abnormal tint of the hair, the results of the hairdresser confusing the bottles during shampooing. These statements never correspond with the facts. The clients, whose hair was not white, desired to possess hair of another colour, and unfortunately some time after the use of the dyes wished to go back to the former tint. I can strongly recommend you not to express any doubt with reference to the communication as to the cause of the particular tint, which is obviously false. It is our duty to listen to the complaints of our patients, and so to endeavour to restore their peace of mind of patients who in such cases are always despondent by ordering a hair-dye which restores the original tint.

I should like now to deal with cosmetic affections of a few definite portions of the body, and turn first to the treatment of rough and red or chapped hands. A long list of remedies has at different times been recommended for the treatment of objectionable redness of the hands, and none of these have come up to one's expectations. Prophylaxis is of the

greatest importance; the hands should not be exposed to excessive changes of temperature either in warm or cold weather, and in like manner sudden transition from the warmth to the cold and the contrary is to be avoided. Persons thus disposed, in winter as well as summer, should wear gloves out of doors. The gloves must be comfortable, in summer cotton, silk, or thin suède gloves are the best; the latter, as well as the so-called reindeer gloves, are also used in winter. Woollen gloves are as a rule to be avoided because of their tendency to make the hands rough. People with rough and red hands should not wash them too frequently; the water should not be cold, but moderately warm; immediately after washing, a few drops of pure glycerin should be poured on the still wet hands, or the hands may be partially but not fully dried and then rubbed with ung. glycerin, or the English preparation glycerin and honey jelly (glymiel), or the German kaloderma. Instead of these you can also use a solution of equal parts of glycerin and rose water. The hands are now completely dried, and vigorous rubbing or friction is to be avoided.

In place of the above preparations the hands can also be rubbed after drying with lanolin cream, lanolin and vaseline cream, or nafalan, the excess being removed by wiping with a dry towel. During the night gloves should be worn, after a thicker layer of the above creams has been applied. The skin-cream recommended by Schleich has the

advantage of being able to be rubbed into the skin until the greasiness has almost entirely disappeared.

Small separate cracks should be covered with an ordinary plaster such as zinc oxide plaster mull or leucoplast, whilst for somewhat deeper fissures with infiltrated margins a 5 per cent. salicylic soap tricoplast is applied.

Special care is to be taken as regards soap. It is often of the highest importance to avoid all the so-called medicated soaps which contain substances more or less irritating to the skin. Those recommended on page 33 for the treatment of asperities faciei may be recommended as mild soaps. In the case of rough and red hands, however, I give a word of caution not only against the so-called medicated soaps, but chiefly also against the expensive scented soaps, which often contain ethereal oils which are injurious to a sensitive skin.

By systematic care of the hands very good results are obtained. The skin becomes soft and white and frequently loses much of its redness. To conceal the redness in a given case, yellow powder should be dusted on.

If we succeed in removing the roughness and redness of the hands we have not yet fulfilled all the requirements which we demand in a beautiful hand apart from its shape. The appearance of the nails should also satisfy an æsthetic taste. Apart from the fact that the free margin of the nails must be clean, the cuticle of the nail and the nail itself require special care. The free margin

of the nail must be neither too short nor too long, hence it must be cut from time to time with scissors, and the cut surface should be parallel with that front part of the nail which is firmly adherent. If of late it has become the fashion not to cut the nail in such a manner but to allow the surface of the nail to project at an acute angle, this is a matter of taste about which one would not dispute. The nail should be cut in such a way that its free margin coincides with the distal portion of the finger. In order, to render the cuticle as little conspicuous as possible, the hand is plunged for a few minutes into warm water, then the cuticle is raised from the underlying nail by means of a nail-cleaner of bone, ivory, or tortoise-shell, and then cut away with fine scissors or a knife. The remainder is pushed backwards or sideways as the case may be with the nail-cleaner.

In order to make a lustreless nail shine it is polished with a piece of leather. As a polish one uses the following:—

℞	Stanni oxydi . .)		
	Pulver. lapid. smirid. }	āā ʒj gr. xvij	āā 5·0
	Talci veneti . .)		
	Carmini	gr. iij	0·2

M. f. pulv.

A little of this powder is made into a thick paste by the addition of a little eau-de-Cologne. If the polishing be continued for several days in succession the nail appears beautiful and shiny and

only quite exceptionally, when it looks absolutely dull, you will be obliged to produce the gloss by rubbing with dilute hydrochloric acid. To preserve the lustre the nail is rubbed daily or every other day with lanolin cream. If the cuticle is not pushed back, and in consequence of this attains a disproportionate size, the skin will tear and in places become detached, thus forming hangnails. These latter must be cut off with fine scissors. The base is touched with a silver-nitrate stick and the small wound covered with court plaster.

If through lack of care of the nails, hangnails are formed and through these local (or even general) infection arise, a similar condition will happen if the treatment of the nails is too vigorous or injudicious. This is not infrequently the case in treatment by professional manicurists of both sexes. More often than one imagines, as a consequence of this error, paronychia develops, an affection which at times is as painful as it is protracted. For this reason, therefore, doctors should not distain to lend what aid they can in giving unsightly nails a better appearance.

A little while ago we spoke of chapped hands; on the lips similar unpleasant cracks are found. Injury from without is sometimes held ætiologically responsible for this complaint; most frequently, however, it depends upon individual disposition which gives rise to this troublesome affection. In such subjects all factors likely to promote injury must naturally be shunned, such as all external

irritants of the nature of piquant foods, spices, tobacco, and strong alcoholic drinks. In recent times the harmfulness of many mouth-washes which contain irritating ingredients has been rightly pointed out. To this class especially belong volatile oils, which for the sake of their perfume are included in almost every better-class, that is to say, dearer, mouth-wash, and in many tooth-pastes as well. Peppermint oil in particular, which is commonly used for this purpose, is apt to produce irritative conditions of the tongue, slight in themselves, but very troublesome for the patient. It gives rise, moreover, to eczema of the lips, and in connection with this cracks appear. As I have observed in practice, sometimes the person so affected hopes to cure these cracks by too strong antiseptic applications, by which the condition is naturally aggravated. It stands to reason that in such cases, and particularly in persons inclined to cracked lips, alcoholic mouth-washes, which in addition contain volatile oils, as well as tooth-pastes with volatile oils, must be temporarily or wholly avoided, and replaced by unirritating ones. Those who suffer from genuine (sit venia verbo) cracked lips, apart from the aforesaid dangers, are cautioned to avoid exposure to air which is keen or salt without previously anointing the lips with one of the lip-salves mentioned below.

Biting of the lips is also to be forbidden; so too, diabetes as a causal factor must not be lost sight of, and in young girls the existence of chlorosis

must be dealt with. The lip-salves, some recipes for which are here given, should be applied many times daily, particularly before going out of the house and at night before bedtime.

℞	Adeps lanæ . .	℥ij gr. xviij	9·0
	Ol. oliv.	♏ xvij	1·0
	Carmin.	gr. ¾	0·05

M. S.—To be applied to the lips.

℞	Ol. theobromatis . . .	℥iv	15·0
	Ol. amygdal. dulc. . .	℥j ♏xxiv	5·0
	Ol. ros. gtt. I		
	Carmin.	gr. jss	0·1

M.—Divide in part. æqual. No. 4. F. bacilli.
D. in folio stanneo. S.—The lip-salve.

℞	Cer. alb.	℥v	20·0
	Ol. amygdal. dulc. . . .	℥ijss	10·0
	Carmin.	gr. ¾	0·1
	Ol. ros. gtt. I		

M.—Divide in part. æqual. No. 6. F. bacilli.
D. in folio stanneo. S.—The lip-salve.

A white lip-salve is obtained by omitting the carmine in these recipes.

For cracks which are more extensive, apart from the application of lunar caustic, a zinc oxide plaster mull should be worn during the night.

Much more frequently now than formerly, gentlemen, is your help required in the removal of unsightly scars. While formerly these were regarded as outside the scope of surgery, and palliatives such as powders and paints were

recommended, nowadays one goes more radically to work. May I emphasise the fact that, after a trifling cosmetic operation, scars should not appear, just as in girls vaccination should not be performed upon the arm but on the calf or thigh. If, however, a flat, white scar has resulted on a part of the skin uncovered by clothing, the question of tattooing after the above-mentioned manner will arise. In deeper scars later on a paraffin injection will be found of service. If a scar is somewhat deep and of not too great circumference, its excision by an oval-shaped incision is recommended, followed by suture with very fine silk. The resulting fine linear scar is much finer than the original one, hence the cosmetic result can for the most part be claimed as satisfactory.

Under the heading of scar formation belongs also keloid, which comes within the reach of cosmetic art when occurring on uncovered parts of the body such as the neck and on vaccination scars on the arm. In the treatment of keloidal scars or of spontaneous keloids one must be very cautious, but the assertion made formerly that a keloid always returns after excision must not any longer be considered as correct; at times the complete removal of a keloid by oval incision with subsequent suture is successful. If this operation, however, is accompanied by failure, or should this interference be declined from the outset, electrolysis with large needles may be tried. The results which I have attained personally

with this procedure are not exactly encouraging, so that I can only recommend this method in exceptional cases. Multiple scarification too often leaves one in the lurch, nevertheless a trial of this should not entirely be put aside. A subsequent application of a carbolic mercury plaster mull is recommended, and indeed a softening, shrinking, and complete disappearance of the keloid can be observed at times in the case of patients who have the necessary perseverance. The flattening of the keloid after preliminary freezing with ethyl chloride comes into use as a preparation for this plaster.

Of newer methods the treatment with thiosinamin or fibrolysin deserves mention. It is reported that injection of these preparations has effected a disappearance of the keloid. Fibrolysin, which has nearly supplanted thiosinamin, is put up ready for use in sterilised capsules of two to three cubic centimetre capacity, and is injected subcutaneously intra-muscularly every third or second day. Personally, I have been able to exercise a favourable influence upon keloid by means of radium, and should like to recommend this method specially for this purpose.[1]

Next comes under review the application of the vapour-douche followed by massage, a proceeding which, as Herr Geheimrat Brieger has kindly

[1] Several cases of keloid have done well, in my experience, with X-rays, and two small ones recently with radium. I have been disappointed with thiosinamin as well as with electrolysis. (P. S. A.)

informed me, has given good results in this rebellious affection.

A very unpleasant affection that falls within the range of cosmetic treatment, and which like hirsuties is of practical interest only for ladies, presents itself to our notice in lichen pilaris (keratosis pilaris), a nutmeg-grater-like roughness of the skin, especially of the extensor surface of the arm. From the cosmetic standpoint it is of less importance when this affection shows itself upon the nates, upon the anterior and external surfaces of the thigh, and on the calves of the legs. The affected parts look as if they were permanently in a goose-skin-like condition. Here we have to do with an accumulation of horny epidermic cells at the mouths of the follicles, under which may be found a curled-up lanugo hair. The colour of the spots varies considerably between white and red, keratosis pilaris alba and rubra. But the different tints are not limited to the spots, but encroach at times also upon the surrounding skin, so that the latter in pronounced cases exhibits an unpleasing redness, and it is just this appearance which makes the removal of the complaint desirable, a wish the fulfilment of which in treatment frequently encounters obstinate resistance, so that the prognosis as regards complete restoration to a smooth condition must not infrequently be regarded as dubious. Treatment must be directed against the overproduction of horny material. This end is reached by means of various

softening remedies and those which promote detachment of the epidermis. Apart from regular washing with hot water and soap and the frequent use of warm baths, application of sapo kalinus (which should be obtained from a chemist) occupies the first place. The green soap is applied to the affected parts either with a flannel or a stiff brush; over this comes a muslin bandage. If it can be borne the soap may be left for some hours. If the burning, however, is too strong, so that inflammation of the skin is threatened, after one to two hours the soap should be removed with warm water. According to the severity of the lichen pilaris, the application of the soap must be repeated. Amongst other remedies compounds of sulphur, β-naphthol, chrysarobin, and pyrogallol come under consideration. Although tar is often of service for similar purposes it cannot be used in lichen pilaris, for the reason that a tar-folliculitis is easily produced. Sulphur ointment is prescribed in 10 to 30 per cent. strength, together with 5 to 10 per cent. potassium or sodium carbonate (see above), or is employed as a modification of Wilkinson's ointment (without tar).

R	Sulphuris præcipitati . .	℥iv	15·0
	Saponis kalini Adipis suilli . .	āā ℥j	āā 30·0
	Pumicis pulverisati . .	℥ijss	10·0

M. f. ungt.

S.—For external application.

β-naphthol ointment is prescribed in a strength of 5 to 10 per cent. with lanolin, or one can order the modified ungt. naphthol co. (Kaposi).

℞	Lanolini Adipis suilli Saponis kalini	āā ℥j ℥v	50·0
	β-naphtholi	℥ss	15·0
	Cretæ albæ pulverisatæ	℥ijss	10·0

M. f. ungt.

S.—For external application.

Or

℞	β-naphtholi	℥ijss	10·0
	Lanolini Saponis kalini	āā ℥v	20·0

M. f. ungt.

S.—For external application.

In some cases one can allow a stronger β-naphthol ointment to act for half an hour to one hour, after which it should be washed off, on several evenings in succession. Chrysarobin or pyrogallic acid are used in 10 to 20 per cent. ointments.

If after these somewhat strongly acting preparations evidences of irritation appear, milder ointments should be prescribed.

Ehrmann tells of the cure of a rebellious case, that had resisted the most diverse methods, by the use of Franzensbad mud baths, a treatment which in some cases might also take the form of mud poultices. Whether this treatment, of which I

have no personal experience, has been found successful by others is not known to me. Also I am unable to express an opinion upon the use of the fine-pointed galvano-cautery recommended by Besnier for more marked cases, a method which would be as trying to the patient as to the doctor.

At the outset of the treatment of lichen pilaris the patient's attention must be drawn to the fact that, in consequence of the inevitable irritation caused by the rigorous remedies, the appearance of the arm is at first worse than before, and that the disease, apart from its obstinacy, has in pronounced cases a great tendency to recur.

A further affection, from the point of view of the cosmetic physician concerning almost entirely ladies, is xanthoma palpebrarum, those yellowish flat infiltrations of the skin (xanthoma planum) or the rarer nodular formation (xanthoma tuberosum) on the eyelids and on the skin of the nose in the neighbourhood of the internal canthus. They vary in size from a pin's head to that of a small bean, and appear larger by confluence. For the removal of this disfigurement careful trial may be made with 5 per cent. sublimate collodion, taking care that the eyes are uninjured; or electrolysis may be used, by which these new growths will soon be caused to disappear. On account of the position, excision should be avoided.

Redness of the nose has already been mentioned when discussing telangeiectases and rosacea as well as chilblains. It is very difficult to combat that

red or reddish blue tint of the nose, the cause of which lies in a passive hyperæmia. Apart from the procedures already mentioned—namely, scarification, electrolysis, ichthyol with its substitutes, as well as compresses with 5 per cent. solution of alum — palliative benzene compresses may be prescribed. The redness of the nose is particularly noticeable in changes of temperature. The patients are told to place upon the nose for a few seconds in cold weather small pieces of rag soaked in benzene immediately before leaving or entering a room, whereby the disfiguring redness is for some time diminished and appears less conspicuous.

Massage of the face for beautifying purposes, which of late has gained a certain real interest, has unfortunately not completely fulfilled our expectations. We can reckon upon some degree of success when we are expected to, speaking generally, bring back the tension of the relaxed skin of the face. In this case careful percussion is preferable to stroking movements. They can be performed partly with the fingers, partly with a vibration apparatus, and always with only slight pressure. As regards the vibration apparatus, the employment of a small, flat, eccentrically placed joint-arm covered with indiarubber is best. Or you can employ a bell-like, somewhat larger terminal portion consisting of elastic indiarubber, which, by means of its margin being flattened against the face, in addition to the vibration has in a certain sense a suction action, and in this way causes

hyperæmia, even if only to a slight extent. Also for the removal of a worse degree of relaxation of the skin of the face and its musculature, namely, furrows, folds, and wrinkles, face massage has been employed.

In recent times considerable mischief has been done by persons unskilled in the practice of face massage, the manipulations as a rule being too forcible, on the principle, "The more the better." By this means laceration of the skin and underlying tissues or bruising has occurred. Hence by meddling or unskilled hands the exact opposite to what was intended may be attained.

In order to meet this crying evil it will be of advantage for the doctor who practises the Art of Cosmetics to familiarise himself with cosmetic massage.

For its development, in the first place, we must thank Zabludowski. This author rightly remarks that massage for cosmetic purposes should not be limited solely to the face, especially in conditions of congestion of the face, as, for example, in rosacea. Here massage of the body, especially of the abdomen when suitably performed, causes derivation of the blood-flow to the face, and so occasions a better appearance of the latter. Massage should not, of course, be considered as the only treatment; it is to be regarded solely as an adjuvant.

For special massage of the face and neck, which must be continued for several weeks or even months to obtain a noticeable result, Zabludowski gives the

following directions. The massage is best performed in a morning, and should last for a quarter of an hour. The parts covered with hair, whether shaved or unshaved, are to be avoided by the fingers. The masseur stands at the side of (pars. 1–3, 7–9) or behind the patient (pars. 4–6, 10).

1. Stroking and kneading of the forehead.

Kneading is done with the right hand, which moves zigzag wise across the forehead, beginning at the bridge of the nose and traversing the forehead as far as the margin of the hair; whilst the left hand, with light stroking movements beginning at the frontal eminences, travels lengthwise over the forehead to the mid-line of the occiput.

2. Kneading of the nose with the balls of the thumbs and index-finger of the right hand.

The zigzag-like, light vibratile movement proceeds from the tip of the nose to its root, and extends laterally over the alæ nasi. The left hand of the masseur supports the occiput.

3. Kneading of the left cheek, double movement.

The right hand half-closed moves across the face from within outwards, and *vice versa*, and at the same time moves upwards, beginning from the lower jaw to the cheek-bone below the lower eyelids.

4. Kneading the right cheek with both hands half-closed in the vertical direction.

Chiefly done by the thumb and index-finger; the latter bent at right angles. The movement

extends outwards from the lower jaw and right ear over the malar-bone to beneath the right lower lid.

5. Smoothing the lines on the forehead.

Stroking with the index and middle fingers of both hands across the forehead from the middle line to the temporal region.

6. Vibration of the face.

The digits of both hands, with the exception of the thumbs, are applied to the cheeks between the malar eminences and the ascending ramus of the mandible, and execute shaking movements, whilst the tips of the fingers approach and move away from each other in the quickest possible time. After a number of vibrations on one part of the face the vibrating fingers are transferred to another part. The thumbs hang free in the air.

7. Stroking the lines under the eyes with both thumbs.

The movement begins on the bridge of the nose at the root, and is continued over the cheek-bones beneath the lower eyelids as far as the temporal region.

8. Stroking the lines between the chin and lower lip.

The movement is executed with both thumbs, beginning close beneath the lower lip, and is continued to the ascending ramus of the lower jaw. The masseur stands on the right of the patient.

9. Kneading of the neck.

The movement begins close beneath the chin,

descending upon the throat and following the direction of the neck as far as the upper extremity of the sternum.

10. Stroking and kneading of the right shoulder.

Whilst the right hand, beginning at the upper third of the right arm, makes kneading movements in a transverse direction over the shoulder-joint, the left hand travels with a stroking movement, following the right hand, over the region of the shoulder, upwards upon the neck as far as the level of the ear.

Creases, furrows, and wrinkles manifest themselves not only in older people, but sometimes also very early in young persons. In order to render these less conspicuous, ladies usually employ powder or paint. Not only can these inconvenient signs of age be so concealed, but they can even be banished for a short time by subcutaneous infiltration with sterilised physiological saline solution. Perfect filling-up of the hollows, moreover, can be attained by paraffin injections. Should one not care to employ either this or the saline solution, besides the just-mentioned massage, which is always performed in a direction perpendicular to the course of the wrinkles, trial may be made of Bier's suction glasses. For this purpose a longish cup is used, the margin of which is covered with an indiarubber border; suction is performed for half an hour several times a day. By consecutive applications of this treatment the result is gained that the wrinkles become less apparent. Respect-

ing d'Arsonvalisation, which is practised in France for the removal of wrinkles, I have no personal experience.

I should like to give a warning against the use of elastic rubber masks, the object of which is to smooth the skin of the face and to remove crow's feet and wrinkles. These rubber masks are closely applied to the face during the night, in some cases also for several hours during the day, a proceeding frequently carried out in France, but seldom in Germany. On the same principle is based the employment of court plaster, or non-irritant plaster (leucoplast), which, after the furrows have been smoothed, is worn during the night adherent to the forehead. Too great expectations should not be placed on the result of this process.

Enamelling of the face, which is hardly ever practised in Germany, I will only refer to for the sake of completeness, so as to bring its disadvantages directly into notice. Ladies whose faces are covered with a paste-like layer of paint must of necessity move the facial muscles as little as possible, so that the paste does not crumble or crack, hence laughing is strictly forbidden and speaking reduced to a minimum. In the case of enamelling of the décolleté neck and shoulders which now and then require to be filled out, all similar movements which may destroy the work of art are scrupulously to be avoided. The enamel should naturally be worn only for a few hours and must then be removed. Frequent repetitions cause

the skin to suffer considerably, as does every kind of paint, and so the original ailment is always aggravated. On account of this, enamelling, from the point of view of the physician, should only be resorted to in quite exceptional cases.

APPENDIX

Water, Washing the Face, Baths—Fats—Soaps—Ointments

In the course of my lectures, gentlemen, I have so frequently had to refer to water, soaps, and fats that it appears advisable, even if briefly, to make a few connected remarks concerning these three weighty factors in dermatotherapy, in so far as they come under consideration in the practice of Cosmetics.

Water is used for daily cleansing of the body; the action of water without other additions consists in a soaking of the horny lamella, and this effect is increased proportionately to the length (in the form of baths) and the hotness of its application. Moreover, by means of water fat is abstracted from the skin (even if in small amount), an action which takes place particularly when water is used in conjunction with soap. A further action, besides, is due to water, inasmuch as the calcium and magnesium salts contained in the so-called hard water irritate a sensitive skin and dry it up. Thus in the discussion of asperities faciei it could have been pointed out that in extreme grades of this affection water should be entirely avoided for a time, and with improvement of

the condition soft boiled water, at times with the addition of borax or glycerin, should be used. In contrast to this affection, in seborrhœa and the closely allied conditions water is of service, the more frequently the better and at the highest possible temperature.

As regards the frequency with which the face should be washed, it is impossible to lay down general rules. We waive the consideration of industrial occupations, which make more frequent washing of the face a daily necessity. For the normal skin as a rule it is sufficient to wash the face once in the morning, since a second washing at night is not practised by most people, for this makes them too "fresh" and they cannot sleep. If, however, this contra-indication does not exist, it is advisable to wash the face both morning and evening. No principles either can be advanced with reference to the frequency of taking baths. For the normal skin a warm bath twice a week is sufficient, since warm baths taken more frequently than this are not good for the skin. Those who take a daily warm bath easily tire; their skin too becomes very sensitive to external influences, so that they are easily exposed to chill. These inconveniences can be prevented by a rapid cold douche after the warm bath. Daily ablutions of the body or douches, however, are not suitable in every case, because the skin afterwards often becomes dry or chapped. This drawback may be avoided if after the bath the skin be greased, a somewhat troublesome procedure which our hustling generation as a rule lacks the patience to carry out. The age of the Romans, the greater part of whose industrial and social life was spent in their magnificent baths, is past.

Let us turn now to the consideration of fats and soaps,

and first of all I must give you a definition of fats. Chemically speaking, one understands by fats the neutral glycerin esters of the higher fatty acids such as oleic, palmitic, and stearic acids. The ester of oleic acid—olein—is fluid, whilst, on the other hand, the ester of stearic acid—stearin—is solid.

The natural fats, animal and vegetable alike, are not simple compounds, but combinations of different fats. In consistence they are solid, semi-solid, or fluid, and differ in composition from stearin and olein.

The fats are insoluble in water; they dissolve in alcohol, more readily in chloroform, ether and benzene. They serve as protectives to the skin against external injuries, and partially penetrate it, in virtue of which it swells, acquires a gloss, and is protected against dryness. Besides the above the fats serve as a basis for ointments, either by themselves or mixed with other substances, *e.g.* wax.

Of the animal fats which have the right consistency for ointments there is butter, which, unsalted in former times, was as much employed as goose grease, but, owing to its property of easily becoming rancid, has been quite abandoned, whilst hog's lard (adeps suillus, axungia porci) is much used for ointment.

Under the heading of vegetable fats, apart from cacao butter and palm oil, which are scarcely used in Germany, there is not one which by itself can be employed as an ointment basis, because, the right consistency being wanting, the addition of another substance is always needed. The vegetable fats are more stable than the animal fats.

By heating with caustic alkalis and metallic oxides the fats are split up into glycerin and the corresponding

fatty acid. The resultant products, the salts of the fatty acids, are termed soaps, the process just described being known as saponification. The alkaline soaps are soluble in water, and in very dilute solution are easily split up into free fatty acids and basic hydrates. The fatty salts of the alkaline earths, namely, the calcium and magnesium soaps, are insoluble in water; the fatty salts of oxide of lead or lead soaps, are also termed plasters.

Under the title of soaps of the alkalis, one has to distinguish soda and potash soaps, the former of which, since they are solid and hard, are also known as hard soaps (Kernseifen). The potash soaps, by reason of their soft and greasy quality, are known as soft soaps (Schmierseifen). The cleansing property of soap depends upon the fact that, as stated above, decomposition of the soap takes place owing to the action of water, fatty alkali being formed, which dissolves and emulsifies fat, and so cleanses.

For the care of the normal skin it is of the greatest importance that the soap used should contain no free alkali, since this gives it irritating properties. Removal of the alkali is attained by the so-called salting-out of the soap, *i.e.* the so-called soap-suds or soap lye are mixed with common salt, by which the soap is separated out, and the alkali remaining in solution is removed by collecting and pressing or by the method of centrifugalising introduced into soap technique by von Liebreich.

In order to obtain as neutral a soap as possible, Unna has introduced into treatment the so-called superfatted soaps. They are soaps made with an excess of fat.

Soaps serve too as vehicles for various medicaments; for many substances they are a more useful medium than ointments: they penetrate more easily into the

skin, by which means the action of the soap as such at the same time plays its part. Many bodies which are insoluble in fats are soluble in soaps, and by the addition of soap can be brought into a form which is efficacious. On the other hand, however, there are some substances unsuitable for prescribing with soap, since they decompose the latter, *e.g.* the salts of the heavy metals.

The cosmetic uses of the soaps which are employed I have already dealt with in the consideration of the corresponding affections, and need not repeat them now; in addition to these I might also have given you long prescriptions for complicated soaps, whereas probably you hardly ever have occasion to order such to be made up in the chemist's shop. Ointments are remedies of soft consistency intended for external application, which without using force are readily rubbed over the surface of the skin. The foundation of ointments consists, as mentioned above, of an animal or a vegetable fat.

Apart from the consistency, what requisites are necessary for a good ointment basis? First, it should be unirritating; next, it should be stable. The ointment above all should not undergo decomposition, or only with difficulty; in other words, in its decomposition no product should be formed which through its action on the skin can cause irritation. Moreover, it is desirable, and in many cases even necessary, that the ointment should possess the property of absorbing a certain amount of fluid without at the same time losing its ointment-like character. Finally, it is frequently of importance for it to possess a base which to a greater or less extent penetrates the skin.

Butter has a great affinity for water, but soon becomes

rancid. Lard is somewhat more stable and absorbs water, though to a less extent than butter, and nowadays frequently is used as a more economical material. Many skins which do not tolerate the ordinary fats stand pork-fat quite well, if only it meets one definite requirement, namely, that it is not rancid. At times I direct my patients to buy a small quantity of suet, to melt it down whilst fresh, and then to apply it to the skin without the addition of salt, a method inexpensive as well as simple.

The vegetable fats are essentially more stable than the animal ones, and do not so readily enter into decomposition. There is not one, however, as we have said, which possesses the right consistency for ointments, so that invariably we are only able to order combinations of vegetable with animal fats or wax or of various vegetable fats with one another.

In place of the fats, Liebreich has introduced into therapeutic use the purified fat of sheep's wool under the name of Lanolin. Wool fat is not a true fat, it is rather a cholesterin ester, and differs from the fats in that it does not become rancid, but changes in course of time and acquires a viscid resinous constitution, a condition in which it is no longer to be converted into an ointment base. Lanolin is specially noteworthy for the fact that it is capable of absorbing a large quantity of water; wool fat of this kind mixed with 20 per cent. of water Liebreich calls "lanolin," whilst the water-free variety he terms "anhydrous lanolin." Both preparations may conveniently be utilised as ointment bases by the addition of oil or of a neutral liquefied fat.

The capacity of lanolin for taking up a large quantity of water leads to the manufacture of a so-called cooling

ointment, which is the same ointment hydrated. As a result of evaporation of the fluid, warmth is abstracted from the skin and so a cooling effect is produced. Its employment in Cosmetics is not so extensive as in Dermatology; in Cosmetics, unguentum leniens or cold cream, in the composition of which cetaceum (spermaceti) is utilised is frequently employed. This preparation is also hydrated but does not contain lanolin.

Vaseline is a by-product obtained in the extraction of petroleum, and is a mixture of various hydrocarbons of the higher series. The yellow American vaseline is the best and most beneficial preparation for the skin. Vaseline is but slightly hygroscopic, possesses the right consistency for ointments, and is practically unchangeable. The official unguentum paraffini, a mixture of hard and soft paraffin, is occasionally used in place of vaseline. It cannot, however, be triturated as readily as American vaseline and is therefore less recommendable.

Unguentum glycerini is composed of—

Amyli tritici	℥ijss	10·0
Aq. dest.	℥iv	15·0
Glycerini	℥iijss	100·0

and is sometimes used as an ointment for cosmetic purposes, since it contains in solution many substances which are insoluble in other ointment bases.

In order to obtain an ointment base of firmer quality which remains on the skin without melting for a longer time than other ointment bases, Liebreich has devised Fetion, which is a mixture of the anilide of stearic acid with 97 per cent. American vaseline.

If one desires to perfume an ointment, the addition of a drop of otto of roses to 30 grms. of ointment is

usually sufficient, or, to produce another scent, one can add to the like quantity of ointment the following mixture :—

Ol. Gaultheriæ	℥j
Ol. Bergamott	
Ol. Citri	āā ℥ iij

I would refer you to an additional means of perfuming by the combination with lanolin cream mentioned on page 144.

By reason of its physiological properties glycerin stands in a certain relationship to the fats. Glycerin, which is obtained by the saponification of fats, is a triatomic alcohol. It is a colourless and inodorous fluid, with a neutral reaction and syrupy in consistence, soluble in alcohol and water in all proportions. Undiluted glycerin is strongly hygroscopic. It deprives the tissues of water, in consequence of which it has a drying and irritating effect upon the skin, which effect is mitigated by dilution of the glycerin with water, and thus a favourable influence is exercised upon a sensitive skin. Glycerin is unsuitable for use on parts covered with hair, since it causes the hairs to stick together.

Gentlemen, I have come to the conclusion of my series of lectures. I hope that you have gained the impression and will take with you the conviction that the Art of Cosmetics is not to be regarded as a negligible quantity in Medicine, but that in reality it embraces a region a thorough knowledge of which is of considerable importance to the physician in active practice; that in cosmetic affections, by mastery of the methods, the physician can often by the use of simple measures

achieve results in cases of which, alas! only too frequently is said, "It is of no use," to the damage of the physician's reputation as well as to the injury of the suffering public. Show by your skill that the saying is justified, "For cosmetic troubles medical help exists."

ADDENDA

NOTE 1 (p. 88).

I do not find the use of tar soaps always disadvantageous even in the very greasy seborrhoic cases. A strong sphagnol soap (containing tar distilled from peat) is often of use, and this I recommend for washing the head once a week in most cases, to be followed as soon as the scalp is dry by an application of some ointment. (P. S. A.)

NOTE 2 (p. 89).

Here again I cannot quite agree. It may be difficult to introduce a medicament into a greasy scalp, unless it can be got to incorporate itself or mix with the greasy secretion. Hence an ointment or oil containing the drug will penetrate in such circumstances more readily than anything else. In point of fact, I always begin the treatment of seborrhœa with copious and thorough inunctions. (P. S. A.)

NOTE 3 (p. 96).

Ointments containing small quantities of a mercurial salt are also efficacious in seborrhœic conditions of the scalp. A modification of one for many years successfully employed at Blackfriars is :—

℞	Hydrarg. ox. rubr.	gr. xv
	Acidi salicylici	gr. xv
	Paraffini mollis Lanolini	āā ad ℥i

M. f. ung.

In many cases I order an ointment of this nature to be massaged into the scalp every night for a fortnight, some two or three hours after rubbing in with a stiff brush an ammonia and cantharidis lotion, *e.g.* :—

℞	Liq. ammon. fort.	℥ij
	Ol. terebinth.	℥j
	Tr. cantharidis	℥ij
	Eau-de-Cologne	℥ij
	Aq.	ad ℥viij

M. f. lot.

Once a week the scalp is well washed with sphagnol soap—after rubbing in emulsion of yolk of egg, the head is then dried and the ointment applied that night. The treatment is gradually lessened after a fortnight, according to its progress. (P. S. A.)

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