SELF-SUPPORT IN MISSION HOSPITALS.

J. G. Kerr, M.D.

The papers by Dr. Whitney and Dr. Atterbury in recent numbers of the Medical Missionary Journal on the subject of pay for treatment in missionary hospitals and dispensaries present most of the arguments and objections to be advanced for and against this plan; and it is clear enough that, from the common standpoint, there is much to be said on both sides. But it must be remembered that medical missions are to be viewed and prosecuted from a higher standpoint than has been taken in this discussion or than has been taken by mission secretaries and the Churches in general.

The term *humanitarian* is applied to the work of the medical missionary by those who depreciate its importance, as compared with preaching and teaching, but we do not find any such distinction in the teaching of our Saviour.

Healing the diseases of the body was a supremely important part of His work. We have in the Gospels the record of the methods of our great exemplar in His miracles of healing, and the objects He had in view are clearly set forth. The healing of disease was a means to an end, and that end was not merely to remove prejudice, gain favour and commend the Gospel. The great object to be accomplished by healing disease was to *convince* men. It was *necessary* for our Saviour to convince men:

1st. Of the divinity of His person.
2nd. Of the heavenly origin of His doctrines, and
3rd. That His religion was one of beneficence; that its chief characteristic and moving power was love.
 Supernatural power was indispensable to accomplish the first object; and because of the short period of His ministry it was an important aid to the second and third. From an unlimited number of means at His command the Saviour chose the miracles of healing as the means He would use in the establishment of true religion among mankind.

Supernatural power is not now required to convince men of the heavenly origin and beneficent nature of Christianity, but it is the province of His disciples, by works of mercy and ministrations of love, to demonstrate that this religion is one of love.

The ministry of healing is by divine arrangement peculiarly adapted to present to the heathen evidence of the heavenly character of Christianity which cannot be gainsaid, and it carries conviction alike to the wise and the ignorant.

In view of the fact that the work of the medical missionary is the evidence to the heathen of the exalted character of Christianity—the proof that it is a religion of love and mercy, and so differs from all other so called religions, it is necessary that we should avoid everything which could in the least vitiate that evidence or weaken its force.

It needs no argument to show that practising for money, or fixing a price for services rendered, must of necessity present to the Chinese mercenary and selfish motives which would counteract the great purpose of the work and take away the very element which gives the work of the medical missionary any relationship to that of the Master.

In other words a surgical operation performed for a stipulated sum will be to the heathen mind an evidence of mercenary and personal motives, thus taking away from the healing of the sick that which gives the missionary physician his power as a co-worker in Christian missions.

The Churches at home devote millions of dollars to the establishment of magnificent hospitals, where hospitals are already numerous.

It is a duty the Churches may not evade to supply the comparatively small sums needed to carry healing where unnumbered thousands are suffering and dying with no means of relief at hand, and where these works of mercy and of love are the very arguments needed to convince men that the ministers of the Gospel seek the salvation of souls and not money. It is right and desirable that those who receive benefit at the hands of the missionary physician should aid in supporting his work, but it must be voluntary not enforced. There is wide range for the exercise of judgment and tact in the methods which may be used to secure aid to medical work in mission fields, and in many hospitals there are examples of generous gifts from those who have not as yet accepted Christianity.
Retention of Placenta for Thirteen Days.

Unselfish, faithful, persevering devotion in behalf of suffering humanity, with the blessing of Him who has commissioned us to preach the Gospel and heal the sick, is a power which must not be lost in the great battle for the salvation of the world. The Churches at home are gradually awaking to the importance of our work; let not those of us who have come in obedience to the Saviour's command by any act of ours weaken or vitiate the influence of our work.

Note.—The Medical Missionary Society's Hospital in Canton was, when it began over 50 years ago, supported entirely by Europeans. In the course of time, as its object and usefulness became known, the Chinese began to contribute. Last year's Report shows that a large part of the income is derived in various ways from Chinese sources; the items being as follows:

<table>
<thead>
<tr>
<th>Item</th>
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<tr>
<td>Foreign subscriptions</td>
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<tr>
<td>Chinese Subscriptions</td>
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<td>Officials</td>
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<tr>
<td>Room rent (voluntary)</td>
<td>600</td>
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<tr>
<td>Entrance fees (required)</td>
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RETENTION OF PLACENTA FOR THIRTEEN DAYS. HOUR-GLASS CONSTRICTION, SEPTICÆMIA, RECOVERY.

By A. W. DOUTHWAITE, M.D.

Mrs. Tai, age 28 years, primipara, gave birth to a child on April 18th, 1895, about 4 a.m.; whether the child was born dead or died soon afterwards I was unable to find out. At 11 a.m. I was sent for to remove the placenta, as the midwife having broken the cord "had nothing left to pull at." On arrival I found the patient sitting on a brick bed, propped up by two old women, while a third had her right hand in the vagina, "holding on," she said, "to the placenta, to prevent it being dispersed into the body." On making an examination I found the os elongated and flabby (for it was that to which the attendant had been "holding on" for several hours) and hour-glass constriction of the uterus so rigid that all the force I dare use made no impression upon it. I then put the woman thoroughly under chloroform, and made another attempt to reach the fundus, to which the placenta was firmly attached; but in vain, for the stricture would not yield, although my hand became exhausted by the force used.
I ordered injections of hot water, and gave a dose of chloral hydrate, and on the following day called in the assistance of Miss Dobson, a qualified midwife, hoping that with her smaller hand she would be able to accomplish what I had failed to do. Chloroform was again administered, but again we failed to reach the placenta, so we decided to try the effect of frequent injections of hot solution of potassium permanganate. Morphia was given hypodermically once a day, and chloral was again tried, but the hour-glass constriction would not relax, and in a few days it became difficult even to pass the pipe of the douche. All hope of removing the adherent placenta en masse was abandoned, so I ordered the uterus to be thoroughly flushed five times a day with hot solution of "Condy," to remove the placenta as it began to slough away and prevent the retention of septic material. On the fifth day the patient had a rigor followed by a rise of temperature to 104°, but her pulse remained good, and she took nourishment well. The following day her temperature fell to 101°, and remained about the same till the eleventh day, when after a severe rigor, it suddenly rose to 106°; pulse 160; abdomen swollen and tender. On the thirteenth day a large piece of placenta came away, but I did not see it until it had dried, so could not correctly estimate its original size.

For a few days afterwards the patient was in a critical condition, but gradually the temperature fell, appetite returned, and convalescence was established.

It is remarkable that all through the case there was no offensive discharge, and the water used in flushing the uterus was returned with only the slightest change in appearance. Miss Dobson continued in attendance on the case, and to her care the patient doubtless owes her life.

MEDICAL REPORT ON THE EPIDEMIC OF BUBONIC PLAGUE IN HONGKONG.

(By James A. Lowson, M.B., Medical Officer in charge of Epidemic Hospital.)

Doubtless many of us have been waiting for an adequate account, from a medical point of view, of the bubonic plague epidemic in Hongkong last year. This has come to hand at last in an interesting and able report to the Hongkong government by Dr. Lowson. It is in the form of a blue book issued by the government and extending to 58 pages. In Dr. Lowson's letter of submittal he refers in strong terms to the Tung Wah Hospital, denouncing it from a professional standpoint as constituting a serious menace
Medical Report on the Epidemic of Bubonic Plague in Hongkong. 139

to the health of the community. This hospital is run by the Chinese under
government supervision. Two years ago I visited it and was struck with its
cleanliness and order as evidencing the overseeing eye of government, but
according to Dr. Lowson it has been weighed in the balance and found
wanting. Such an institution under Chinese management will be satisfactory
in direct ratio to the amount of foreign supervision.

According to investigations Dr. L. had made, and contrary to the
teachings of the text-books, the first record of bubonic plague in China was
in 1844. There was an epidemic in Canton in 1850 and not again until
1894. It has been endemic in Yunnan since 1873, and in Pakhoi for over
twenty years.

Dr. Lowson is of opinion that the epidemic began in Canton early in Feb.,
1894. Perhaps this is a misprint for Jan., for two paragraphs below he says
that from Jan. 1st to May 1st, 1894, tens of thousands of persons died of
plague in Canton. Certainly the latter date seems more correct, for Dr.
Niles' first case was seen Jan. 16, 1894 (vide M. M. J., p. 116.)

The usual mortality among rats was noticed, but there was no proof
that pigs, cattle and dogs were affected. This is also our experience in
Swatow this summer, and is at variance with what has been noticed
in other places, e.g., Yunnan. Can our Canton friends tell us how it
was there?

Our author defines bubonic plague as "a specific infectious fever, char-
acterised by the presence of a definite bacillus, primarily affecting especially
the lymphatic system, and afterwards the cerebral and vascular systems."
Among the important factors in the spread of the disease he includes the
bad condition of the latrines, and blames them not only for affecting those
who used them, but also the neighboring houses. If the latter statement
can be proved they must have indeed been virulent foci of the disease.

The dryness or humidity of the atmosphere is stated to have had little
effect on the progress of the plague. It is, however, noticeable that the winter
and spring of 1894 and 1895 were exceptionally dry, and in the former year
the plague prevailed in Canton and Hongkong, and in the latter at some of
the neighbouring coast ports. It stands to reason that the accumulation of
dirt in Chinese towns during a prolonged dry season renders them better
fields for the propagation of the disease. That an actual increase in the
severity of the plague should follow rain is explainable, as our author suggests,
by the rise in the subsoil water and by the people being driven in to sleep in
the houses instead of the open air.

Bacteriological investigations cut down our ideas of the mode of
infection. The poison is only proved to be given off in the faces, blood and
contents of buboes. It is not given off in ordinary respiration. Infection
takes place by inoculation, inspiration and introduction to the stomach, the
last being infrequent. A prominence is given to inoculation which would
seem rather too great.

In discussing the clinical history some new light is thrown on the
petechial and purpuric spots which have heretofore been associated with
plague. The evidence goes to show that they were in the first place caused
by mosquito bites and were due to the state of the blood. "One day they
appeared as typical mosquito bites, the following day they looked like
hæmorrhagic spots." On the Hygeia, where there were no mosquitos, they
were not seen, and in the hospital they did not appear on the parts covered
by the clothes. Dr. L. insists that the word carbuncle should be expunged
from plague literature as they are really buboes or hæmorrhagic blisters.
Reference to Dr. Lubbock's article in Davidson's book would seem to bear him
out in this, for the carbuncles there described correspond fairly well to Dr.
Lowson's description.

An account of the examination of the blood for the bacilli, discovered by
Dr. Kitasato, follows and their diagnostic value is dwelt upon.

Prophylaxis is next considered, and it is noted "that none of those who
were in active attendance on, or engaged in, removing the sick during the
whole period were attacked." This is attributed to the instructions given at
the beginning. Nothing is said of the risk to those engaged in cleaning the
houses and the cause of the Shropshire men's infection.

Treatment may be summed up in:—calomel grs. x. to commence with,
and then treat symptoms; avoid depressants; stimulate freely when pulse
becomes dicrotic; tepid sponging for hyperpyrexia; morphine, hyoscyn and
ice-bag for insomnia. Salol proved the best remedy for diarrhœa, and
strophanthus answered better than digitalis.

The mortality figures are most interesting and instructive. Chinese
93.4%, Indian 77%, Japanese 60%. Eurasian 100%/. Europeans 18.2%.
It must be remembered, however, that only in the case of the Chinese were the
numbers under treatment sufficient to enable reliable statistics to be drawn up.
The relatively heavier mortality among women and children accords with our
experience here, and the reason given, i.e., that it is due to their confinement
to the house, is undoubtedly the right one.

Immunity to plague on the part of opium smokers was alleged by some,
but Dr. L. emphatically denies this.

The last twenty-three pages are occupied with clinical cases of the
greatest interest and value.

It is worthy of notice that both Japanese doctors acquired the plague
trough dissection wounds. It is pointed out that there is a greater tendency
to heart failure in Asiatic patients than in European.
Wisdom is easy after experience has been gained, but it strikes one that depressing treatment in fevers must have been rather in vogue in Hongkong, and that the cardiac virtues of strychnine had not been held at their usual estimate before the epidemic.

The report is a most valuable one, and should be in the hands of all our members.

Swatow, June, 1895.

P. B. C.

A CONTRIBUTION ON MEDICAL NOMENCLATURE.

BY A. MORLEY, L.R.C.S. AND P.E.

In attempting a system of scientific nomenclature in Chinese, precision and brevity can scarcely be hoped for in their perfection, except by Dr. Faber's ideal of a separate character with no other meaning, for at least every separate genus if not species: but this almost means the forming of new characters, which we can scarcely expect to see until native men of science have sufficient authority to form a sort of native French academy. But, fortunately for us, medicine, of all the sciences, has perhaps the least need for new characters: the species of disease are after all comparatively few; and the number of characters applied to diseases is comparatively large. We may say of medical terms in Chinese pretty much what Dr. Legge said of the plants in the Books of Odes; there are names enough but little botany. For our purpose this is an advantage. A glance through the dictionary will show a vast number of little used characters, names of diseases which have been very little defined: many of them have not so much two meanings, one of which has to be got rid of, as only one meaning ill-defined; they are like definitions in solution ready for crystallization. I grant that in giving to these airy nothings a local habitation and a name we must have something of the fine frenzy of the poet; but in doing it we shall not only facilitate our own labours and add precision to the Chinese language, but we shall also enrich it by doing away with the monotony of this void and filling it with real shapes. I have therefore looked through some of the radicals in K'ang Hi's dictionary, noting those characters which seemed to be available for our purpose, and accepting two principles: 1st, a single character for every generic disease; 2nd, this character to have no other meaning, either technically or colloquially; which implies that no character be used which is too colloquial, and therefore too heterogeneous in its meanings, and as far as possible none which is used in an ethical sense. On the eve of departure for England I have not the leisure
to go through the dictionary again to fill some gaps still left; and I offer this merely as a suggestion, conscious that it might be much improved by reference not only to the dictionary but also to native medical works.

I need scarcely add that any such system as this is meant only for books; but if we are to have a scientific description of diseases in Chinese we must have some such system of purely technical nomenclature. Dr. Kerr’s list will do very well for colloquial except in a few antiquated classifications which he seems to follow; but in more technical colloquial—if the phrase may be allowed—it would probably be sufficient merely to add some such word as 瘡 or 瘡 to the character used in books.

In the list below the characters bracketed may perhaps be dispensed with.

A. SYMPTOMS. Some colloquial characters may be used here:—

Eruption, 瘡, is the colloquial for any skin disease from a rash to an ulcer,

Macula, Petechiae,

Contusion, bruise; 伤 瘡 would probably do; but 瘡 is a sore caused by beating,

Papule: Dr. Kerr has 痣粒, but 痣 he properly uses as the specific name for prickly heat, and it should not be used adjectivally for a papule. Our colloquial word is 疔, which is applied to a papule or a shotty gland. A minute papule might be 痣.

Papphi,

Vesicle: 泡 is often interchanged with 泡 (also written 疮), both being read P‘ao‘,

Pustule,

Bulla, 疣＝skin raised,

Excoriation: 疣＝sore from scratching,

Ulcer,

Fissure: 疣＝a crack in the skin,

Scale: For squama Dr. Kerr uses 痠; it is a tempting word; but the dictionary does not mention scaliness as a symptom of the disease; in our colloquial it is used chiefly for tinea, but not for such scaly eruptions as psoriasis. 疣 is loose skin, epidermis, scurf,

Crust, Scale. Our colloquial is 痠子; but Dr. Kerr’s 痠 seems to be the more correct,

Canedone should be taken as a variety of crust,

Edema,

Induration: According to Morrison 痠 is “a hard swelling,
A Contribution on Medical Nomenclature.

143

a local adhesion of the parts.” K’ang Hi is less definite,

Wrinkles,

B. Diseases:—

1. Functional.

i. Pruritus: Dr. Kerr gives 痒; but it is probably the same
    with 興, and so should not be used for any particular disease. The
    dictionary has 痒 as meaning 髢, ‘to gnash’; it is used for to itch,
    and not being much used may be restricted in our books to pruritus,
    痒.

ii. Prurigo of Hebra: Little is known of the etiology of this
disease; but whilst I have here called it the rough skinned pruritus
referred to the minute papules of the disease, I admit that it is
probably quite distinct from pruritus. Other characters might
probably be found available,

iii. Atrophy: Scarcely requires a name.

iv. Albinism: 白屑 seems to be colloquial.

v. Vitiligo (Leucoderma): Dr. Kerr refers to albino!

vi. Lentigo (Freckles): Dr. Kerr under ‘Sunburn’ gives 黑 黑.
    黑 must be taken adjectively, and so 黒 can only be a verb—‘to
    scorch dark’; but we want a name. It is a variety of macula,
    黒 症.

vii. Ephelis (Chloasma).

viii. Mole: is a melanosis.

ix. Addison’s disease: not essentially a skin disease, but 色 is a black
    skin.

Of the hair:—

x. Hirsuties: Dr. Kerr gives 髭多 ‘much hair on the head’.
    髭 means the same, and indicates the whole body,
    髭.

xi. Alopecia: Dr. Kerr gives 病, an ‘itching of the head,’ and is
    probably thinking of ring-worm. Believing alopecia areata to be
    parasitical I look upon all alopecia as symptomatic; if, however, a
    special character be needed; 色 is baldness,
    髭.

A. Areata: v. Tinea Decalvans.

xii. Abnormalities of the hair: The etiology of these diseases is uncertain,
    and I will class them together. 色 is perhaps the best general word to use; it
    appears to mean merely an unhealthy condition of the hair; if special char-
    acters be required for each there are plenty which may be appropriated.

    Fragilitas Minium,
    Trichorexis Nodosa,
    Trichonosis Versicolor,
    Cavities: Symptomatic,
Of glands. Here it is difficult to find characters sufficiently precise; so I have named these diseases anatomically.

xiii. Milium (Strophulus),
xiv. Seborrhoea (Acne Sebacea),
sv. Acne (A. dissem : A. vulgaris),
svi. Ephidrosis (Hyperidrosis),
vii. Sudamina (Miliaria),

[Perhaps in the above the character 核 may be omitted].

2. Inflammatory:

i. Erythema,
   E. Capitis (Pityriasis Capitis),
   E. Circinata (Roseola, &c.),
   E. Strophulus (Lichendis),
   E. Punctatum,
   E. Lavee,
   E. Intertrigo (Intertrigo ; Eczema Eryth.),
   E. Pernio (Chilblain),
   E. Papulatum (E. Multiforme of Hebra),
   E. Nodosum,

Urticaria : I would take as an erythema,
   U. Conferta,
   U. Febrilis,
   U. Perstans,
   U. Nodosa,

ii. Lichen Tropicus,

iii. Eczema : Dr. Kerr has 水齲癬, 'a watery grub eruption,' and he uses 發 in Ascarus Ecthyma, Herpes and Eczema. The dict. simply calls it 惡疾. Dr. Legge (v. An. vi. viii) says that it formerly, i.e., before Choo He's time, meant 'leprosy,' but now 'the itch.' In Hupeh colloquial it does not seem to be used for leprosy, and the dict. knows of no such meaning ; in our own colloquial it is applied to any moist or pustular itching skin disease, and is the only specific name which I have heard applied to eczema. Being colloquial it should not be used for our purpose. 發 is a severe skin disease with itching,

E. Papulosum (Lichen : Eczema Lichenoides), i.e., an eczema in which the lesion is a papule),

E. Vesiculosemum,
E. Pustulosum (Impetigo),
A Contribution on Medical Nomenclature.

Impetigo Contagiosum of Tilbury Pox,
E. Sclerosum,
E. Marginatum of Hebra: v. under Tinea.

iv. Erysipelas is certainly pythogenic, and should probably be classed under fevers. 痰 is heat in the skin, and read yin it is a swelling, and so might do for erysipelas,

v. Herpes: Dr. Kerr has 大水垃揃, which in his own terminology would mean 'a large eczema' (v. under Eczema). The dict. gives 痘 (v. 痘) as a sudden breaking out of spots, 點, of between the size of a bean and a grain of wheat.

H. Facialis and H. Preputialis (Hydroa Febrilis),
H. Iris (Hydroa),
H. Zoster,
vi. Pemphigus (Pamphylex); 彼 is a rising of the skin,
P. Vulgaris (P. Dintinus),
P. Foliaceous,

vii. Pityriasis Rubra.
viii. Lichen Ruber (Lichen planus of Wilson).
ix. Rosacea (Acne Rosacea; Gutta Rosa): Dr. Kerr has 紅暗 痘, 'red acne,' and 醴虬, 'wine grub;' but it is in no wise an acne.

皰 is a red nose from cold or liquor,

x. Ecthyma and Rupia are to be taken as symptoms.

xi. Furunculus: 痘 is colloquial, but with us, and seemingly in books, is purely definite,

Carbuncle: 痘 seems to be an aggravated 痘,
Pustula Maligna,

xii. Psoriasis: In 痘 the skin is said to be scaly,
P. Punctata et Guttata,
P. Nummularis,
P. Circinata et Gyrata (Lepra),
P. Rupioides,

3. New Formations:

i. Callosities, 痘 is hard skin on hands or feet,
   Calvus,
ii. Lichen Pilaris (Pityriasis Pilaris; Hair Lichen),
iii. Verrucae,
iv. Ichthyosis,
I. Cornea,
The China Medical Missionary Journal.

v. Scleroderma Adultorum (Addison's keloid; hide bound). 定 is defined as 急 貌, which I suppose means the app. of tenseness; it is not a very good word, but being little used we may give it a slightly new meaning,

S. Morphea,
S. Necutorum: Here I follow the English name,
vi. Rhinoscleroma.

vii. Xeroderma.

viii. Elephantiasis: The Chinese have several characters for 症, a disease of lower parts of body (Morrison), but we want one to include Lymph Scrotum, so I would suggest an anatomical term,

ix. Framboesia (Yaws: Piau).

x. Leprosy: 症 瘤 would do well, but neither character is admissible by itself. 瘤 appears in some places to be used colloquially, but cf. under Eczema; as a tentative suggestion I will write 瘤, a chronic disease, probably the same with 症; but a distinction might be made,

- Tubercular Leprosy,
- Anæsthetic do.
- Macular do.

xi. Ainhum.

xii. Madura Foot (Mycetana; fungous foot),

xiii. Pellagia.

xiv. Molluscum Contagiosum.

xv. Molluscum Fibrosum,

xvi. Vitiligoidea (Xanthalasma).

xvii. Cheloid,

xviii. Nævus,

xix. Rodentular,

4. Hæmorrhages:—

i. Purpura,

ii. Hæmidrosis.

5. Parasites (awaiting zoological terms.)

i. Tinea: In our colloquial 症 is used almost exclusively for T. Circinata (v. under 'Scale'); it, however, may be found to have other colloquial meanings (Dr. Kerr uses it alone for both Serpigo and Pruritus and as the last character in 'Lichen,' 'Ichthyosis,' 'Pityriasis,' 'Psoriasis,' 'Pityriasis Ruber' and 'Prurigo'),

T. Favosa,
A Contribution on Medical Nomenclature.

T. Tricophytma, Tonsurans, Circinata, Sycosis, T. Versicolor, T. Imbricata, T. Decalvans (Alopecia Ureata), probably parasitic, but its relation to Tinea is uncertain: so use 坜髮.

i. Scabies: In our colloquial the common term is 坜.

iii. Phthiriasis,
   Ped. Corporis,
   P. Capitis,
   P. Pubis,

6. Diathetic:—
   i. Lupus,
      L. Exedens,
      L. Erythematosus,
   ii. Lichen Scrophulosorum.
   iii. Scrofuloderma.
   iv. Syphilide.

[The above paper was forwarded by me at Dr. Morley's request to Dr. Douthwaite for communication to the Terminology Committee. Dr. Douthwaite thinks it best that it should be published at once in the Magazine "rather than run the risk of losing" the original manuscript "by sending it to far inland stations where some members of the Terminology Committee reside; and so by circulating it among the members of our Association the committee may have the benefit of their suggestions and additions." When Dr. Kerr's original list of medical terms was published last year the editor forgot to issue with it a request of Dr. Douthwaite's that each copy should be returned to him within six months, along with any suggestions or additions. Dr. Douthwaite wishes it to be known that if all who have received Dr. Kerr's list will return their revised copies (bearing in mind Dr. Morley's criticisms) to him before the end of the present year he will be able to make use of them before leaving for England in the spring of 1896.—EDITOR.]
BREVIA THEOLOGICA.

A distinguishing feature of our present-day theological literature is what might be called an upper middle class of magazine. Not many decades ago the theological magazines were sharply divided into those for "the classes" and those "for the masses." In the one class comments on the obvious were made for "Sunday-school teachers," "skeletons" were provided for addresses or sermons, "illustrations" from travellers and anecdotes, both old and new, filled up what would have been otherwise a useless blank. In the other class the aristocrats of learning waged learned duels, or wrote articles adorned with patches of all sorts of Oriental languages, except Chinese! Now-a-days either a "long felt want" is being satisfied, or what ought to have been a want" long since has recently become so, and the supply is as the demand. An excellent type of magazine has arisen, of which, in England, the Expositor was almost the first, and for some time the only example, but is now happily but one of quite a band of rivals. One may be excused for thinking that no class of reader can enjoy such magazines more than the missionary. A man who is obliged by the all-imperious demands of Chinese to view with dismay his college priming of a little Greek and less Hebrew gradually diminishing rather than increasing, is exactly suited by the gentle stimulus of the aids to understanding the Holy Scriptures which now lie at his hand.

Last year a controversy occurred in the pages of The Thinker, which must be of interest to both medical and clerical readers alike. In May and June the Rev. W. Warren, M.A., appeared well laden with spoils which he had won by a few skirmishes on the fields of medical Greek. He honestly told us that he was but a tyro in that particular branch, and made no claims to be regarded as a specialist. He had merely gathered a few illustrations "from a chance opening of Greek medical works" which he had never before consulted, and to which he could find no good index.

On reading the articles I could not but make a few jottings for the Medical Missionary Journal. But, alas for the amateur who rushes into print. The specialist was not long in forthcoming, and in September and October a disappointed warrior—the Rev. F. T. Penley, M.A.—gave us his experience to warn us from thinking that medical Greek would prove an interesting "by-path to Bible knowledge," or at least a by-path to the better understanding of the works of St. Luke, "the beloved physician."
Mr. Penley writes: "When I began the study of Greek medical language I was buoyed up with the hope of finding some indubitable (marks of St. Luke's profession) in the Third Gospel or Acts. I have come reluctantly to the conclusion that they do not exist." He gives a somewhat severe—though if one who feels quite an outsider in the matter may judge from the facts which are alleged, not unjustly severe—treatment to a book which doubtless many readers of this magazine are familiar with: "The Medical Language of St. Luke," by the Rev. W. K. Hobart, LL.D., of Dublin. He believes that both Dr. Hobart and Mr. Warren have fallen into the trap of not distinguishing between the mere use of words which occur in medical works and the correct use of technical terms which, of course, would alone be the distinguishing marks of a medical man. The former class of words Mr. Penley admits St. Luke to use, but he qualifies the admission by adding that "Josephus is undoubtedly richer in medical terms... Philo much more," and that "one literary author remains who surpasses both Josephus and Philo"—"that garrulous Greek," Plutarch. The latter class of words Mr. Penley, "as one who has devoted several years' study to the Greek medical works extant and to the leading authors of contemporaneous literature," regrets that he has searched for in vain.

Not content with this merely negative conclusion our author makes the surprising positive assertion that St. Luke actually uses medical terms in an unscientific manner, e.g., in Acts i. 18 "in the account of the death of Judas Iscariot, St. Luke, following, no doubt, the Septuagint, uses the word σπλάγχνα for "bowels" as is evident from the meaning of the verse. This is medically incorrect. Τὰ σπλάγχνα are the seven viscera enumerated by Aristotle and Philo, and referred to by Galen. The proper word should be τὰ ἐντερά."

"Another popular expression is πυρετός μέγας (Luke iv. 38). The complaint from which Peter's wife's mother was suffering was doubtless marsh fever. To this day this complaint is very prevalent in the seething plains of Capernaum. In that case Greek medical language had a recognized nomenclature for its various forms. πυρετὸς μεγάλοι was not one of the recognized forms. Μέγας is quantitative and not qualitative when joined to πυρετός, and Galen blames those who so use it. Dr Bernhard Weiss (Introd. N. T., ii., p. 312) says that to profess to discover traces of medical knowledge in these words of St. Luke is mere trifling."

Two general points noted by Mr. Penley are of interest. "Firstly, down to their final overthrow there was no such thing as medical science among the Jews. While flourishing in Greece for five hundred years B. C. the Jews did not advance beyond magic and exorcism (Dr. Stapfer). Hence its adepts are reproved in Scripture (2 Chron. xvi. 12; Acts xix. 13), or
spoken of with contempt (Luke xiv. 23; viii. 43). There is not a single rational medical cure related as taking place in Palestine, either in the Bible or in the Talmud. Tobit's cure of cataract (xi. 13) occurs far from the Holy Land. The treatment was medical (cp. Dioscorides, Mat. Med., ii. 96); the revelation of it supernatural—a concession no doubt to Jewish prejudices.

"Secondly, when the Jews of the Dispersion came in contact with the ubiquitous Greek they began to learn and value medical science. In a later book, probably written at Alexandria, Jesus, the Son of Sirach, enriches his didactic work with rules of health (xxxi. 21, 22), indications of pathology (xxiii. 16; xxv. 15) and an encomium on physicians (xxxviii. 1-15)."

(That last section, by the way, is very interesting. It is appointed to be read for the first evening lesson on St. Luke's day (Oct. 18) in the English Church Lectionary.)

Of course it by no means follows that because St. Luke did not make a technical use of medical terms that therefore he could not so use them. In one sense we may all join Mr. Penley when he says: "It is a matter of regret that St. Luke is so reticent about himself." And yet, in another and truer sense we may feel that it is well to be thus. The one absorbing theme of the Gospel has led four men to write us four books in such a way as to show us just what is meant by that great word, which the third of the four (whom we call above all others the evangelist) has recorded for us, "If any man would come after me, let him deny himself."

G. G. W.
The answer which Dr. Neal has given to a query which appeared in the March number of this magazine brings us face to face with an important and not very creditable truth. This truth is the indisputable fact that the committees appointed by the medical conference of 1890 have practically done no work. That conference appointed six committees, viz., on “Collective Investigation of Disease,” “Chinese Materia Medica,” “Chinese Medical Nomenclature,” “The Preparation of an English Tract upon the Opium Habit and its Treatment,” “An Appeal for two Medical Men in each Large Centre,” and upon “The Relations of Non-qualified Missionaries and the Recognition of Native Assistants.” As Dr. Neal points out only one committee, that on Nomenclature, has done anything at all. It is not sufficient to bewail this fact; the thing to be done is to endeavour to show the causes which, in our opinion, have led to this state of things and next to indicate what can be done, even so late in the day as now, to set this machinery to work.

First, then, it appears to us that one cause of failure may be found in the number of committees elected and the number of subjects appointed to be dealt with. The great majority of these committees, if they did their work properly, would have to communicate with a large number of the members of the Association; their progress would have to be reported from time to time in the Journal, and their results, as so far attained, subjected to criticism before they could draw up any final report. Further, it is very desirable that members of a committee should at stated intervals meet for consultation and discussion, as it is almost impossible to do any collective work satisfactorily by correspondence. When one considers the long distances that separate us, and the long intervals that in many cases must elapse before any interchange of views can be effected, this desirability becomes an almost absolute necessity. These difficulties might possibly have been overcome had a less ambitious programme been adopted, and only one, or at most two, committees been appointed.

Next, the same man was placed on too many committees. One member of the Association is named on four, the names of three
others appear on three, and that of two other members on two committees. As the average number of members to a committee is five this means that three-fifths of half the whole number of committees consists of the same men. Remembering how overworked most of us are, what many duties other than strictly medical fall to our lot on a mission station, the impossibility of any good work being accomplished under such conditions is obvious.

Again, the committees were, as a rule, too large, and their members too widely separated from one another. One committee has seven members, and two other committees have six each. Now the labour of a committee is rendered more difficult in direct ratio to its size, and when, as in this case, all work has to be done by correspondence this labour is increased many fold. A glance at the personnel of the committees will illustrate our point. We take one at random. Its members are scattered between Chefoo on the north-east, Han-chung in Shensi on the west and Canton on the extreme south. Imagine the time consumed in communicating with one another!

Members were nominated for committee without previous consultation. Of course this is a very usual method of procedure, but that does not make it a wise method. In several cases gentlemen who were not present at the conference were elected on committees, and small wonder is it if they have taken no interest in them. Only a small minority of large gatherings have sufficient public spirit to take up such work as these committees involved, and not sufficient pains appears to us to have been taken to find out that minority and utilise it.

Finally, in only one case was a chairman of committee named, and no one knows clearly now whose duty it is to take the initiative in the work. The probability is that there was some understanding on the subject at the time, but if so we cannot remember what it was. The fact remains that the only committee that has a recorded chairman is that on Medical Nomenclature, and it is a suggestive comment on our remarks that this is the only committee that has done any work.

It is very far from our intention to put the blame for these mistakes upon our then president but rather upon the general body of the conference. It is only by faithfully pointing out the failures of the past that we can hope for success in the future.

The question remains. What can be done? We venture to suggest the following scheme: (1.) That the president dissolve all committees but two, viz., that of Medical Nomenclature and that on Native Materia
Medica. (2.) That in the case of the second committee he appoint a chairman whom he knows would take up the work con amore. (3.) That the two chairmen fill up their own committees by weeding out such members of the present committees as decline to work and by co-opting other people who will. This proceeding might not be according to the constitution, but the fact is the constitution makes no provision for many things. If the president took such initiative action, and then submitted its result to the general vote for confirmation, we believe the spirit of the constitution would be kept. We shall have something to say upon the constitution another time.

The committee appointed by the president to take up the matter of the Opium Commission Report have been in constant communication with one another ever since. The plan agreed upon is to issue a series of questions to each member of the Association, and from their replies to formulate a number of propositions to submit to the vote of the Association. It is earnestly requested that every member will carefully and fully reply to these questions, that every reply be founded upon specified experience, and that immature or unsupportable expressions of opinion be avoided. Facts, not opinions or theories, are wanted. The list of questions will be in the hands of members soon after the present issue of the Journal. All replies should be in the hands of the Secretary of the Committee not later than November 1, as it will take some considerable time to collate them and draw up a series of resolutions. The secretary of the committee will be glad to receive any suggestions for the better furthering of the end we have in view.

Since last going to press the evil genius of the Chinese people has once more asserted itself in riot and murder. Szchuan has been temporarily cleared of its Protestant missions, and Fukien has stained its soil with the blood of defenceless women and children. Our deepest sympathies go out to those who have been driven from their homes, to the little children maimed for life and orphaned, to the survivors of that terrible tragedy at Wha-sang and to the Church Missionary Society and its friends. But chiefly we mourn and fear for this people, upon whom has been poured the wealth of Christian love. For over 70 years the Church of Christ has laboured in this land, healed the sick, cared for the lepers, educated the blind, tended the dying, provided for the last days of the aged,
taught the little children, rescued the orphans and proclaimed the accept-
able year of the Lord. As we read the long list of crime and outrage
prepared by the Rev. Timothy Richard the thought of another country
that filled up its cup of woe rises to our mind, and unconsciously we
repeat the lament of the Lord Jesus "O Jerusalem, Jerusalem, which
killeth the prophets and stoneth them that are sent unto her! how
often would I have gathered thy children together, even as a hen
gathereth her chickens under her wings, and ye would not!" From
such fatal stiff-neckedness may the Lord in His mercy preserve this
people.

One has constantly to ask oneself when such scenes as these are
enacted, Is there any lesson here for me or for the Christian Church?
We think there is such a lesson in the Szchuan disturbances. We have
long held the opinion that the Church views its medical missionary
work from a wrong standpoint and propagates it, too exclusively, from
one particular motive.

The utility, one might say in some instances the absolute necessity,
of medical missions has slowly impressed the home Churches and led
them, with very various degrees of zeal, to avail themselves of this
branch of Christian service. But that which has caused the Churches,
of late years, to embark on this fresh enterprize is the conviction that
the medical missionary can go where the simple evangelist cannot, that
he receives an almost universal welcome, and is altogether the most
efficient means of preparing the way of the Lord. Foolish and exaggerated
statements of the esteem in which the foreign doctor is held in China,
a too exclusive dwelling upon successes and their impression on the
populace, has caused people to forget that there are two sides to this
shield. Whilst on the one side it is undeniable that medical work operates
powerfully to remove prejudice and hostility, yet on the other side it
must never be forgotten that it gives, and must give, however cautious
one may be, abounding opportunities to ignorant and superstitious and
malicious people to spread all sorts of evil stories. The removal of an
eye to arrest sympathetic ophthalmia, or the amputation of a leg for a
compound comminated fracture, are deeds which, though they may be
absolutely necessary, are powerful for either good or evil, and one can ne-
ever be sure in which direction they will operate. This is true not only of
hospitals conducted by missionary medical men but also of those bene-
volent establishments to which so many port doctors freely give their
services. Now there can be no question that in Szchuan ugly stories
were afloat about the hospitals, that the medical men themselves, despite their many years of kindly work, enjoyed no immunity from attack, and that their hospitals were absolutely destroyed. No doubt there were hundreds in Cheng-tu who had received kindly attention and healing from the hands of the foreign doctors, and who took no part in the work of destruction; nay, who probably bitterly regretted it and possibly even remonstrated against it. But there, as a rule, a Chinaman's intervention stops, and the few who disapproved availed as nothing against the many who raged or abetted. How many of us can feel sure that under similar circumstances we and our work would not suffer the same fate? We verily believe the exceptions would be few, and this not because the Chinese are an exceptionally ungrateful people but because the mass of ignorance in any given place is so vast, and so easily worked upon, that evil stories always find a ready audience.

There is a danger that these facts, when once they are realized at home, may produce a reaction against medical missionary work. The most expensive of all our philanthropies, people will be in danger of withholding their subscriptions from an investment which yields such a questionable return. But the work of the Lord is not a business investment; our medical work is to be undertaken in the full conviction that we shall meet ingratitude, misrepresentation and opposition. To manifest the love of God to these people, disinterested love of which they know so little, the love which seeketh not her own—this is our aim. The faithlessness of the generation in which He lived never quenched the love of the Divine Philanthropist; the ingratitude of the nine healed lepers never caused Him to refuse the touch of His healing hand, and even the shout of that excited multitude which bore Him to death, a crowd that must have contained many and many that had received His gift of healing, but drew from Him the prayer, "Father, forgive them, for they know not what they do." "A disciple is not above his master, nor a servant above his lord . . . . If they have called the master of the house Beelzebub how much more shall they call them of his household". If the inspiring motive of our work is to get men into the Church, and not that full abounding love which looks on the multitude and has compassion on them, it will not survive such treatment as this; but Love "beareth all things, believeth all things, hopeth all things, endureth all things," and "Love never faileth."

The question as to what amount of caution should be used in our work, more especially pure surgery and operative midwifery, is one
upon which there may well be some difference of opinion. For our part increasing experience makes us, if anything, more careful. With so many possibilities of evil arising from our actions we fight shy of heroic measures, which under other circumstances we should feel free to adopt. We never undertake an important operation without a signed paper holding us free from consequences, and we never engage in any serious midwifery without fully explaining the risks and obtaining full consent to do what is necessary. Such care may not be necessary everywhere, but it is wise council to our young members, which every medical missionary of experience will confirm, to err on the side of caution. Seek not to be brilliant but safe operators.
An interesting article by a Chinese student appears in the May number of the *St. John's Echo*. It discourses on "The Relative Value of the Three Forms of Mission Work." It speaks first of Evangelistic, then of Educational and Medical. But we feel sometimes the three are so closely related in their nature, the motives that prompt to each kind of work being identical, and they are so intermingled in their working on the mission field that it is hard to fix the bounds of either, or to write of one department without touching on another. The persuasiveness of the methods used by Christ's disciples would be a very suggestive subject for study. "They worked with great patience," says the writer above referred to. "Ye have need of patience" must always apply to mission work, and perhaps not least to the directly evangelistic part of it. Mr. Yen concludes his article with the words:—"The question is really very hard and complicated; no man can be able to prove positively to which form Christianity owes the most . . . . they are so closely allied as to be indispensable to one another."

The Report of the C. M. S. Hospital at Hangchow contains a record of patient, hopeful work. "Work is not less real, because there is not much apparent fruit," we are told. The evangelistic work and its results are thus described:—

"We all take our share in the regular services and direct Gospel work, but the burden of the preaching and teaching is borne by the three hospital evangelists, who give all their time to it. We have regular preaching to the out-patients, daily services with the in-patients, weekly meetings for enquirers, weekly meetings for assistants, students, nurses and servants. The evangelists also give much of their time daily to regular bedside instruction, teaching those who are willing to learn and talking to those who are eager to listen; they also visit the homes of all the patients who, while in the hospital, showed an interest in the Gospel. In this way we are able to keep in touch with many of the patients and deepen and confirm impressions made in the wards. This part of the work is most essential, and is bringing forth much fruit. The Chinese are 'in all things too superstitious,' and we find that when our patients return home to their superstitious surroundings they are liable to drift, and good impressions pass away like the morning cloud and early dew, if they are not followed up and regularly instructed in the Way of Life. We cannot speak of conversions by the hundred, but we can speak of a few (thirteen) who were brought into the Church during the year. For these tokens of blessing we thank God and take courage."

The free hospital and dispensary at Chefoo, with the "Red Cross" Hospital, has had unusual opportunities. Great stress of work has not crowded
out evangelistic effort. The paragraph from the Report headed "Evangelistic Work" we give in full:

"While so busily engaged in attending to the material part of our patients we never lost sight of the fact that they had souls as well as bodies. Many listened attentively to the Gospel, and for the first time heard of a God of love. Several native Christians visited the wards every day, and while ministering to the comfort of the patients endeavoured to lead them to the Saviour. Through the generosity of the American Bible Society I have been able to present a copy of the New Testament to each soldier on leaving the hospital, and in every case the book has been received with expressions of gratitude. A few days ago I met one of the dismissed patients tramping homewards with no other baggage than a Bible, carefully wrapped in a towel, showing that he attached no small value to it.

In the dispensary the Gospel is preached every morning to the patients and their friends, while waiting their turn to pass into the consulting-room, and all who can read are presented with portions of Scripture or tracts.

Every morning at 8.30 o'clock the servants employed on the Mission premises, and such in-patients as can leave the wards, assemble for a short service in the hospital chapel, and on Sundays the Church members living in the neighbourhood also attend the services held morning and afternoon; thus we do what we can to scatter the seed of the Word of God, believing that in due time we shall reap, if we faint not. The subject of baptism, or "entering the religion," is never mentioned to the patients; our object being to lead them to God through Jesus the Christ rather than to add names to our Church register.

If their names are written in the "Book of Life" it is a matter of indifference to me what Church they join; but I always urge them to attach themselves to any body of Christians who may meet together in their district."

_Herein is that saying true, "One soweth and another reapeth."_

From an American magazine, the organ of the Presbyterian Church, we gather something more of evangelistic work in North-China. In this case it is the direct outcome of educational work. Elementary or intermediate schools are scattered through the province of Shantung, and these supply the normal school at Chefoo and the college at Tungchow with students. "Most of the graduates," writes Mr. Hayes, "have been employed as teachers in Christian schools, or are engaged in evangelistic work."

"All these schools accomplish something in the way of direct evangelistic work." After referring to the influence of the pupils in their heathen homes Mr. Hayes resumes:—"Direct evangelical results, we believe, will continue to flow from this work . . . its instrumentality in evangelizing the people of Sinim will become more and more apparent."

M. A. P.
A TALE OF TWO SISTERS.

Yes, friends. Sisters of yours, not less related to you than each to the other, for their Father is your Father, and the Home where each several life journey will end is the same abiding one.

The younger we shall always think and speak of as “little San,” although when she sadly left us she had completed her seventeenth year. She was a gentle, delicate child. Fatherless and motherless she knew no earthly care better than that of an aunt, who was only nominally her protectress, and one of whose disqualifications for that office was the opium habit.

San was brought to the mission hospital three years ago to be cured of diseased bone of the leg. For ten months she stayed; medical skill and careful nursing were lavished upon her, and the daughter of our native minister, then a nurse in the hospital, never failed in patient teaching of the way of life, or in constant kindly care. San endeared herself to all, and was grateful and happy. She went “home” again, and returned several times, wishing to be baptised, but her friends would not consent. Finally her ailment seemed to be quite cured, and soon after leaving us for the last time we heard she was engaged to be married. The mother-in-law was said to be very fond of San, and we hoped at least for comfort and kindliness for the lonely little Christian.

Alas! Last Monday an urgent opium case was announced, and astonished and shocked we heard it was San. Two men carried her hastily in, drenched with water, bedraggled, and apparently lifeless. Stringent remedies with artificial respiration seemed, after a while, to take effect; her breathing improved, but at 2 o’clock in the morning the heart suddenly stopped, and the tired workers knew that no further effort would avail. And why, O why, we asked, could our little friend have done such a desperate deed as to take her own life? The day shall reveal it, and some know. “Devily” said the doctor, not too strongly. A Christian girl in a purely heathen home! Sisters, come and see what it means. San had been exposed to the perils of such a home, but though she left us thus we must hope she is safer now and for evermore.

And the elder girl? She left us last evening. I am astonished as I look back to the time (not so long ago) when these girls and women seemed all alike to be unattractive and utterly foreign. They are foreign no more. One faith, one Lord, united work and prayer together make us to be no more strangers but very real friends. But what of Tin Shen and her home? She was betrothed in childhood. Her own family and that into which she
was to wed were all alike heathen. Tin Shen, however, attended our girls' day-school, and was one of the brightest and most promising scholars, and she believed the Gospel that she heard there. For a time she was pupil-teacher, and later entered the hospital to be trained as a nurse. Never was more unwearied worker than she, soon becoming invaluable. She joined the Church early in her hospital course. But her friends began to talk of her marriage. She was eighteen. Every effort was made to arrange matters, so that she might, as she earnestly desired, be freed from the engagement. There was a quarrel between the two houses and a lawsuit, and we hoped a release might result. But no, a time was fixed, and with suspense, and hope, and fear, Tin Shen grew pale and thin and lost all her buoyancy of spirit. "I shall wear white," she said (the Chinese mourning.) They would try to induce her to bow to the idol, without which ceremony the marriage is not supposed to be complete. "I worship the idol!" exclaimed Tin Shen as we spoke of it, and we were sure she would not. Last night we bid her farewell. They sent for her from her mother's house about nine at night, the marriage to take place to-day. We went with her to the street gate, which was as far as we might go, commending her to the care of Him who has said, "I will never leave you."

1. Her wedding day! no joy bells ring, In darkness doth Faith's light arise, The parting hymn That heathen gloom
With tears we sing Shall not entomb; Unlit by smile. Who follow Him

2. "She will array herself in white," Shall sure possess the Light of Life, Yes, festive red And to that Light
When joy is dead By grace kept bright Is mockery. Others shall come.

3. "The pure in heart are blest" we say On them shall dawn a better day "Crown follows cross, Aye, darkness shall not quench the Light
Heaven's gain earth's loss For morning shall succeed the night,
We'll kneel and pray." And sin's dark shadow flee away.

Since writing the above we hear that Tin Shen's husband, a youth of nineteen, has so far been kind to his wife, and shown himself friendly to her foreign friends by coming to the hospital to pay his respects to Mrs. Bell. We may at some future time tell how our hope and confidence have been justified,—our hope that by a consistent life in her new home Tin Shen may win her husband and others, proving in this case, as in similar cases, that "all things work together for good to them that love God."
In 1892, after two years' work in Kien-ning Fu, a plot of land was purchased, and arrangements were made for erecting a cheap building of wood, and lath, and plaster; the cottage or hovel being really unfit for hospital work. About the same time two ladies of the Church of England Zenana Society went to Ching-ho, a hien (district) city of the prefecture, three days' journey beyond Kien-ning Fu. Within a month of their arrival a riot took place, and, after being in imminent danger, the ladies were expelled, the house they had rented was destroyed, and to this day remains a heap of ruins. All efforts at obtaining compensation and re-occupation have failed, and, by the decision of the British Consul, no ladies can return to Ching-ho until a married missionary shall have settled in the city. Since that time the six Zenana ladies have found plenty of work in the villages, and have proved themselves capital itinerant evangelists. In seeking the women, and patiently teaching them, their influence has been by no means confined to their own sex. They have divided into three parties so as to spread the tidings more widely, and several villages which they visited, and in which they spent the summer, have become places in which precious souls have put their trust in Jesus, the Saviour, and the work of these devoted ladies is a factor of the greatest importance in estimating the prospects of the evangelization of the district. Living, as far as advisable, in Chinese style, and dressed in Chinese clothes, they have shown devotion and zeal of which any Church, even the Roman Catholic, might be proud.

Within a fortnight after the expulsion of the ladies from Ching-ho our enemies in Kien-ning Fu brought their opposition to a head. They engaged men to dig graves in the night and bury sealed jars, presumably containing bones, on our land, which was being prepared for the rearing of pillars and joining of beams, all of which had been got ready by the workmen on their own premises. These graves effectually stopped our building. In interviews with the mandarins every effort to effect a compromise had been made, and it was only after the rejection of every other proposal that we proceeded with the building. When the litterati had spoiled our land with the graves the magistrate, who was young and recently appointed, offered to provide us with a plot of land in another place in exchange, and to build a hospital upon
it, which he would rent to us in perpetuity. We gladly closed with the offer, but the gentry were not so minded, and on the 11th of May they sent hired ruffians to pull down the hospital and drive out the Christian workers. The Christians, with some half-dozen friends, along with Dr. Rigg, who had come up the previous day for an appointed interview with the mandarin, were scattered; some sought refuge in adjacent houses, some were seized, robbed, and maltreated by the mob, and two narrowly escaped with their lives. During the next fortnight an attack on Nang-wa was threatened, and all the children, and most of the women, were sent by boat to a place of safety. Strong pressure was brought to bear upon the Taotai, a magistrate of high rank in the adjacent city of Yen-ping Fu, and by his intervention, or rather by the good hand of God, the station of Nang-wa was saved.

Through the intervention of the British Consul in Foochow full monetary compensation was given, a fresh plot of land further away from the city was granted, and now, after a wearisome delay and many disappointments, the relation of which would make the story too long, a hospital has been built, and close to it a house for Dr. Rigg. The possibility of a foreign medical missionary living on the premises seemed too remote; but, to our surprise, the native officials themselves made the proposal. As Dr. Rigg is at home on sick furlough the house is at present unoccupied. The gentry will not suffer a clergyman to live in the house, but Mr. Collins pays visits of supervision, and medical and evangelistic work is being carried on by the native students whom Drs. Taylor and Rigg have trained.

Since 1891 a trained worker has been kept at the Kien-ning Leper Settlement; he has been supported by the Leper Society, and continued his good work during most of the time the city was closed against any other form of Christian activity. This has had no mean influence in teaching the people of the love which actuates our attempts to reach them, and so has been a witness for God as well as a blessing to poor suffering men.

In the autumn of 1892 Mr. and Mrs. Phillips were driven from the hien city of Kien-yang, their lives endangered and their house burnt down. After protracted negotiations with the authorities Mr. Phillips has again got a footing in Kien-yang, and, assisted by a native medical evangelist, is doing a valuable work there.

The old station of Ning-wa is being kept on as a hospital and opium refuge, also in charge of a trained native. These five trained natives, one trained by Dr. Taylor and four by Dr. Rigg, are doing a work, without which, probably, no foothold could be retained in this very anti-foreign district. They much need the prayers of those whose hearts are touched with sympathy towards the Christian Church in China thus struggling with the dense mass of heathenism which surrounds it.
The Church Missionary Society's Pioneer Mission, etc. 163

The neighbouring prefecture to Kien-ning is that of Yen-ping, with its chief city of Yen-ping Fu, lying twenty-five English miles to the south of Nang-wa. When the Christians were expelled from Kien-ning Fu some of them began dispensary work in Yen-ping Fu, where suitable premises were engaged. With several interruptions this work was carried on for over a year; but when the re-occupation of Kien-ning Fu took place it was found impossible, from lack of workers, to retain Yen-ping Fu. The station has therefore been given up, with the hope that in time we may again occupy it. To our pleasure let it be recorded that three months ago a deputation of some of the shop-keepers and gentry invited us to resume the medical work in that city. We may take courage and thank God for this, as Yen-ping Fu also has a history notorious for hatred of foreigners and persecution of Christians.

The whole work being that of pioneering, and greatly undermanned, there is no record to be made of a flourishing native Church; but there have been a score or more of baptisms, after necessary probation, and many have heard, not with the outward ear only, let us hope, of Jesus, the Saviour of men. Great grace has been upon the native Christians, and they and the English workers have been brought close to each other's hearts in their united efforts for the spread of the Gospel.

The field is large, the workers are weak, and it seems likely that, during the furloughs of Messrs. Phillips and Collins, Dr. Rigg will be in charge of all the work. Are there none who can help?

"An interesting example of the way in which evangelistic and medical departments of the work are mutually helpful is seen in the way in which a new class has been started at a small market town, some eight miles from our most recent centre at T'ang-shien-tsen. Mr. Yang, the native preacher, (who is supported by funds given by members of the Christian Endeavour Society in Canada), visited the town in July last. He had with him a small stock of Gospels and tracts for sale, and offered some to a school-master, but as a Confucian gentleman he treated the "foreign" teaching with scorn. Curiosity, however, as well as contempt, is a characteristic of the literary man in a small out-of-the-way town, and so he who would not purchase could not but listen to the conversation of Mr. Yang and such people as stood around. An arrow of conviction entered the listener's heart when that conversation turned on opium, and he at once acknowledged not only the use of the drug but also a desire to be freed from the habit. He was persuaded to put himself under Dr. Morley's care at the Teh-ngan hospital. During the two weeks' strict confinement to the hospital wards he whiled away the time by reading Mr. Selby's Life of Christ and other Christian literature. On his return to his
home he at once persuaded three, and has since got still more, of his companions to follow his example. Within a few weeks the resident minister was passing through the same town, and was at once heartily greeted by the school-master. The change from the sallow thin face to the healthy full features was not more marked than the change from the "Don't want" of a few months earlier to the eager inquiry whether he could purchase a Testament, hymn book and prayer book. A still more recent visit showed Mr. Wu, not only advising opium smokers to go to the hospital but sinners of all classes to come to the Saviour."—"Central China Wesleyan Mission Prayer Union."
To the Editor of
"The Medical Missionary Journal."

DEAR SIR:

You suggest an article from me, but
I can only offer a few notes of some
surgical cases:

(1.) Amputation of both legs below
the knee.—The case was that of a poor
beggar, whom I found lying on his
back on the street about the middle
of last winter; his two poor legs
gangrenous to above the ankle. I took
him in, and had him shaved and
bathed and clad. We use a shower
bath of hot or warm water, which
is very convenient for such dirty
patients. The legs were removed
three or four weeks apart by the
lateral flap operation. There was no
difficulty, except that in the second
amputation the vessels were somewhat
friable, and with difficulty held the
ligature. The aseptic method was
used, and there was union by first
intention. For skin cleansing I used
soft soap, and smeared the skin with
pure creoline, which was washed off,
and then the surface washed with
bichloride. No irrigation was used
before or after the operation. Though
the patient was very weak and an
opium-smoker he rallied well, and is
now stumping about on his knees.

(2.) Amputation of the breast for
rather active schirrhous not ulcerated.—
Woman, 58 years of age. The breast
and all the axilla was removed, togeth-
er with a large portion of the
pectoralis major. All of the wound,
except the drainage opening, has
healed by first intention.

(3.) Stone in the bladder in a child
6 years of age, Chinese, recovery.
Stone about the size of a pigeon's
egg. The suprapubic operation was
performed, the T drain and aseptic
dressings used. The case is almost
healed, and he urinates normally after
16 days.

(4.) Abscess of the liver.—Man 35
years of age, somewhat emaciated.
Tumor of the right side, which gave
more or less of an thrill on percussion.
I supposed it was an hydatid cyst, but
on aspirating with a hypodermic
needle I found pus.

The operation recommended in
Gorster's anti-septic surgery was per-
formed. Aseptically (i.e., soap and
pure creoline and bichloride washing
with sterilized dressing) a cut was
made about two and one-half inches
long through the abdominal wall below
the cartilages, and as there were no
adhesions of the liver to the abdominal
wall, but the liver moved freely in
respiration under the eye, the wound
was dressed with iodoform gauze.
As there was pain a few hours later,
the patient having sat up in bed, the
wound was opened and a prolapse of
omentum found. This was pushed
far in with the finger.

Five days later the wound was
opened again, and found to be free of
pus. A thrust of a trochar was made
into the abscess, followed by a stretch-
ing with dressing forceps and two
large drains inserted. About sixty
ounces of pus was evacuated, and the
abscess cavity washed with iodine so-
lution. Five days more have passed,
and the man is gaining in health
and strength.

Yours sincerely,

W. E. MACkLIN.
Queries and Answers.

[The editor trusts that members will avail themselves to the full of the advantages of this column, and he will endeavour, on his part, to see that every query receives an answer from the quarter, or quarters, most competent to give it.]

Answer to Query No. 1.—This query was referred to Dr. J. B. Neal, of the Materia Medica Committee, who writes as follows: "I scarcely feel like undertaking to do any large part of re-writing Dr. P. Smith's work, unless a good strong committee can be formed which will do good thorough work . . . No one on the Materia Medica Committee has yet published anything on the native organic drugs that I know of, unless Dr. Douthwaite's papers were such, but I think he was not on the committee. [Dr. Neal is in error; the committee consisted of Drs. Douthwaite, Neal, Wilson, J. C. Thomson and W. H. Park.—Ed.] I am the only one on any committee who has published anything, except Dr. Kerr for the Committee on Nomenclature. I am very sorry that Dr. Smith's book is out of print; it is an excellent book, but I hardly feel like doing much more than is represented in my paper already published toward revising the work." [If any member is willing to co-operate in such an undertaking and will communicate with me I will write to Drs. Neal and others and see whether this work can be taken in hand.—Ed.]

Query No. 2.—A patient at our dispensary had a carbuncle in the dorsal region measuring nine by three inches, complicated with relapsing fever. During the invasion of the fever he had a vesicular eruption over his entire body, face only exempt: over the arms, thighs, above the scapulae, and in the lumbar region the vesicles were as thick as could stand, in some places coalescing. There was no itching, slight burning, and it entirely disappeared in about two weeks, drying up, the crusts falling off, leaving normal skin beneath but deeply pigmented. A day after the appearance of the eruption his left leg was paralyzed. I want to ask if anyone has ever seen herpes so profuse as that? There was no tendency to the formation of concentric rings as described in herpes iris. This man's case was an exceedingly interesting one. He had three relapses after the first attack; the whole extending through more than a month's time. He had œdema of the lower extremities for several weeks, which was anæmic, as he had no albuminuria.

This furnishes a good illustration of what some Chinese can pull through. He came to the dispensary every day; some days falling several times from vertigo before he would get there. His food was chiefly boiled dough strings and coarsely ground wheat made into a thin cake. He refused brandy and beef-tea and said iron nauseated him. He lived in a beggars' inn, no other inn being willing to receive him, and slept on the dirt floor, but still he made a good recovery. When he left for his home in Shantung he was well; his paralyzed leg almost recovered.

A. H. P.

Answer.—[The details of this case are far too meagre to make it possible to give a definite opinion as to what this eruption was. A temperature chart at least should have been sent, and the presence or absence of the "spirilla" of relapsing fever stated. One suspects, from the general tenor of the notes, that the term "Relapsing Fever" has been loosely employed for a malarial remittent; if so the presence
or absence of the malarial parasite in the blood should have been noted. For anything the notes say to the contrary the fever might well have been due to the carbuncle only; high fever, of a remittent pyæmic character, is very common in that affection. Assuming that the case was one of relapsing fever the occurrence of herpes, beyond a slight herpes labialis which may appear in any feverish condition, is uncommon, though various forms of erythema and petechiae have been met with in patients suffering from that disease. One may say pretty safely, though, that if the description of the eruption given is correct, whatever it was it was not a true herpes of any known variety. This eruption is described as being bilateral "over his entire body, face only exempt." These are not the characteristics of herpes, which is admittedly of neurotic origin; generally unilateral and frequently, in herpes zoster always, follows some nerve distribution. Although the manner of disappearance of the eruption is referred to no description of the way in which the vesicles appeared and developed is given, and such a description is a very important point in diagnosis. No mention is made of treatment, or of the behaviour of the eruption under it. There are, however, four important points mentioned which help to intimate the nature of this affection: (1) the formation of crusts, (2) the pigmentation left by the eruption, (3) the symmetrical character of the eruption, (4) the localised paralysis of the leg. These four taken together certainly suggest syphilis, and to our mind the case was probably one of early syphilis, with a vesicular eczematous eruption; the carbuncle, of course, had nothing to do with the syphilis, but was probably the cause of the fever. If our suggestion is correct the case is a very interesting one, as these vesicular eczematous syphilides are not common. A good description will be found in Dr. Radcliffe Crocker's Diseases of the Skin, p. 433.—Ed. M. M. J.]

Query No. 3.—Will some brother medical missionary of experience say what, in his opinion, is the cause of the obstinate diarrhoea which often follows on breaking off the opium habit, and what is the best treatment for it?
The following is the “confession of faith” put forth by Dr. Ernst Haeckel in his famous discourse on Monism, just recently translated into English:—

“The real maker of the organic world is in all probability an atom of carbon, a tetrahedron made up of four primitive atoms. The human soul is only the sum of these physiological functions, whose elementary organs are constituted by the microscopic ganglion cells of our brain; in this respect it is identical with the soul of the lowest single-celled infusoria.

Consciousness is a mechanical work of the ganglion cells, and as such must be carried back to chemical and physical events in the plasma of these.

From these three articles of faith it follows:—

1. That the belief in an immortal soul inhabiting the body during life and leaving it at death is an exploded superstition.

2. That there is no such thing as personal immortality, for the only soul man possesses being the work performed by the form into which the nerve substance has fashioned, it disappears on decomposition of the nervous mass.

But this is not all. Not only has man no soul, but the universe has no God, and Christianity is a bundle of irrational dogmas based upon an impossible mythology. “All such mystical teachings are irrational,” and “we can at once set aside all mythical stories, all miracles and so-called revelations.” The notion of a personal God has also been rendered quite untenable by the recent advances of monistic science,” and this “antiquated conception” is destined “before the present century is ended, to drop out of currency throughout the entire domain of truly scientific philosophy.” The God of Christendom, it seems, is a “gaseous vertebrate,” whereas the only God whom the Monist recognises is “the infinite sum of all atomic forces and all other vibrations.” The only Trinity which the coming twentieth century will worship—“the three august divine ones, to which mankind will build its altars, are the True, the Beautiful and the Good.”

All of which is sad enough reading for those who still cling to what Dr. Haeckel dismisses as “the beautiful dream of God’s goodness and wisdom in nature” which has disappeared “among educated people who think.” Of course, such ideas have been held by many men in many ages. What is significant about Dr. Haeckel’s utterance is the complacent cocksureness with which he proclaims the effacement of the Christian faith. This is the apogee of the spirit of scientific dogmatism, worthy of note as such, for already its sun is beginning to set.—Review of Reviews.

DR. MILLER ON THE PROBLEM OF MISSIONS.

The aim of missions to the heathen was once supposed to be very obvious, and that being so there could be little question about missionary methods. The missionary believed that the heathen needed salvation, and that the Gospel he carried, and that alone, was the power of God to save. Such a belief, no doubt, is most natural in those who identify the Gospel with the particular form in which they themselves hold it. It may mark a certain kind of progress when one is
capable of distinguishing between form and substance, and can expound various conceptions of Christianity; but it is not progress which qualifies him for missionary work. To evangelize is one thing; to philosophize is another.

The missionary, then, as most people have supposed, went out with his Gospel to confront the sin and misery, the ruin and failure of the world. No one ever imagined that he would be met by its virtues and its success. "Without the message I bring," he was supposed to say to his hearers, "you are lost men;" no fancy ever contemplated him pleading for an audience on the ground that he and his hearers had much to learn from each other. His business was to win men over alike from their religions and their sins; to persuade them to commit themselves absolutely, renouncing everything else, to Jesus Christ; to baptize them, in His name, into the universal Church, and to teach them to observe all things whatsoever He had commanded. This plan is radical, simple and intelligible; and if it assumes that "the past part" of the heathens' experience has only a negative relation to the Gospel—constitutes his need for it, but not a contribution to it—there is a great deal in the New Testament which looks the same way.

This simple plan, however, has for some time been subjected to criticism. The science of Comparative Religion had naturally something to say to its assumptions. This new science, of course, studies religions and estimates them, according to their ideals; it seeks for the positive spiritual impulse at the heart of each, and is greatly concerned to prove that they are vitally related, and from the highest to the lowest are branches upon one tree. It cannot allow that in the most degraded forms of religion—not to mention the highly intellectual and ethical forms assumed by Brahmanism and Buddhism—there is no positive relation to the Christian faith. Even in carrying the Gospel to Brahmans, to Buddhists, or to Moslems, we must admit the worth of what they have. Christ does not wage a war of extermination against the other great founders of religions; at best, He carries their work to a further stage of perfection. This tone is probably painful to the ears of many sincere Christians, but we hear it on every hand. What is more, missionaries hear it too. The great religious societies of the East boldly compare the ideals of their ancestral faiths with that of Christianity, and claim to maintain their independence in its presence. Every nation, it is said, lives by its religion—so far, Mr. Kidd's ideas are familiar in Hindostan. To change its religion is to dissolve itself. How, then, is the Gospel to be presented, say to Hindu society? Granted that it has something to give, in what way is it to be offered?

Questions like these are now being freely discussed among the missionaries themselves, and no one can fail to see their importance. What may be called the newer mode of answering them is worthily presented by Dr. Miller, of Madras, in a recent address on "The Place of Hinduism in the Story of the World." The address was delivered to the students of the Christian College, and embodies the convictions in the strength of which Dr. Miller has spent his life in India. He does not expect universal acceptance for them; on the contrary, he is sure that a storm will burst, and he knows beforehand all the fierce and unkind things that will be said of him by Christians, Hindus and irreligious men. But, he writes, "it is enough for me to know that they are true. It is enough to know that in the end they will prevail." What, we ask eagerly, are the ideas or the aim or the methods of Christian work in India, which are destined to provoke such general resentment, and in spite of it to triumph at last?
Dr. Miller's address is somewhat involved, both in thought and expression; but we do not think the scope of it is misrepresented if we say that he would have Christ offered, or rather exhibited, to Hindu society, as "He who has united ideals." He would preach the Gospel, so to speak, on the basis of a certain interpretation—we might almost say a certain philosophy—of history. The various elements in the moral resources of humanity have, as he points out, been elaborated apart from each other, and only united under Christ. The Greek ideal of knowledge, the Roman ideal of law, the Israelitish ideal of a divine ruler of the world, the Tontonic ideal of freedom or individuality, are all united, more or less, in Christian nations under the power of the perfect ideal supplied in Christ. One may utterly distrust such formula, and deny that they do anything but puff up the ignorant with the conceit of knowledge; but let that pass. We, too, believe that the desirable things of all the nations shall be brought into the city of God. We believe that the Hindus, were they Christians, would add enormous ly to the riches of the Church. We believe that whatever intellectual or moral power Hinduism has generated or accumulated can be absorbed by Christianity. We will not contest Dr. Miller's assertion that the Western mind needs to be impregnated with the great Hindu conceptions of the omnipenetrationess of God, and the unitdness and solidity of men, though we do not admit that there is no plain English for these imposing words. But the real question remains—the question on which Dr. Miller avowedly differs from many of his colleagues, as well as from many Christians at home. Through what process is the Christian ideal to assert its superiority over the Hindu mind, and lead it, with all its wealth, captive to humanity? How is it to bring the Hindu out of his isolation into the great spiritual life of the world?

To these questions Dr. Miller cannot be said to give a clear answer. He exhibits Christ as the embodiment of an ideal into which all that is good in Hinduism can be absorbed, and he leaves the individual who feels its charm to go and work it out as God guides him, in the circumstances in which God has placed him. It is not so much the Christian ideal which absorbs the Hindu one, as the reverse. The Church, in the sense of the Epistles, disappears. There is no new Christian society, constituted by men who have been baptized into the death and resurrection of Jesus, open alike to Hindu and to Englishman, and visibly distinct from the natural organization of the race. Perhaps Dr. Miller would say the Church in his programme is sublimated into the kingdom; to others it will seem to be lost in the world. As for the existing Churches and their missionary methods, in India at least, he has a very decided opinion. They do not represent the highest Christian ideal either in their conception of the Gospel, in their evangelistic intention, or in the method and spirit of their work. They represent among Christian nations the survival of that aggressive patriotism which was once the characteristic of the republics of Greece and Rome. This is the only thing in Dr. Miller's paper which is at once unjust and unkind. "You know the energy," he says to his pupils, "which characterises the Churches of the West and the missionary societies and missionaries that represent them. If we had moral weights and measures, I do not know whether we should find ninety per cent. or only eighty, but I know we should find the most of that energy to arise not directly from the power of Christ's life or precepts, not from the working of Christ's ideal, but from the working of the old ideal of sacrificing self to secure the success of one's own community, to secure the triumph of the Christian scheme of life over other schemes which are regarded as its adversaries." And again, "We have other institutions (referring to
the missions of the various Churches) which, working rather on the Greek and Roman ideal than on Christ’s, make it their one overmastering aim to bring men over from other schemes of life, and to place them within the Christian fold. Dr. Miller might easily anticipate that statements like these would be resented, though we hope not in “fierce” and “unkind” words. But his formal philosophizing must surely have put out his eyes when he ventured to describe the modern missionary movement, which sprung directly from the evangelical revival of last century, as the recrudescence, within the various sects of Protestantism, of the patriotism of classical times. If it is a case of atavism, the reversion is not to Pericles and Cæsar, but to Peter and Paul. The statement would be a slander if it were not grotesque; if it were true, then if not ninety per cent. or eighty, certainly most of the friends of missions would fall under the woe pronounced by Jesus on those who compassed sea and land to make one proselyte. We do not believe they do.

“Is He the God of the Jews only?” says the greatest of missionaries. No, of the Gentiles also; of the Hindus too. There is no exclusiveness with Him, and we may be sure He will take Hinduism for all it is worth. But the truth must be held fast, if Christianity is to live, that it is indispensable to all men and nations, in a sense in which they are not indispensable to it. It is not only the power which unifies ideals, but in the first instance the power which saves souls. And Christ is not merely the highest ideal, the central consciousness of the race; He is the only Saviour. The Christian religion has a solitary importance, because it is the religion of redemption; it is not to be absorbed into the general stream of human progress, it is rather to absorb all things into itself. It is a mode of selfishness in Alexander or Cæsar if he wishes to subdue the world, but not in Christ, and not in the Christian who calls Him Lord: for He is the head of every man, the First and the Last. It is difficult in reading Dr. Miller’s plea to avoid the impression that he is preaching wisdom to those who are not perfect, and that the foundation is not likely to be laid in this way. There is something imposing in its generalities, and in the confidence with which the writer, after long experience, ventures to stand above all possible criticism; but the temper is not that in which evangelistic work has ever been done, and the mind of the Church will be exercised over it.

JAMES DENNEY. —From the British Weekly.

HEREDITY.

Why bowest thou, O soul of mine, Crushed by ancestral sin? Thou hast a noble heritage That bids the victory win.

The tainted past may bring forth flowers, As blossomed Aaron’s rod, No legacy of sin annuls Heredity from God.

LYDIA A. COLUMBIA in “Arena.”

OPium Habit.

“In 1893 there was a British Royal Opium Commission appointed to consider the evils of opium eating and the financial difficulties that would be involved should the traffic be abolished by law. The commission has reported that it not only found no evil from the “temperate use of opium in India” but that in many instances its use is “even beneficial.” The finding of this Royal Commission reminds us of the findings of a Scotch beadle on the use of alcohol. The elders of a Church had reason to suspect that their good old minister was occasionally taking a little too much usque beatha. With the characteristic caution of the race they thought it well to have their suspicions verified by the testimony of the Church beadle.
They consequently inquired of Andrew if he had ever seen the good doctor the worse for liquor. Andrew replied that he had never seen the doctor the worse for liquor, but he had often seen him “mickle the better for it.” —Extracted.

From a private correspondent we hear that Dr. and Mrs. MacFarlane, of the L. M. S., have once more lost one of their little ones; this time at Chefoo. We are sure that our friends will have our sympathy and prayers in this affliction which has come to them. The loss of a little child in this far off land touches us all deeply. Many of us long for the prattle of some little voice now hushed for ever on earth. The circumstances were especially sad. The little one was in perfect health, apparently, the day he was taken ill, and in a few hours he was dead. For some time he with his mother, and the other little one, had been at Chefoo. Dr. MacFarlane was on his way down to take them home. A fog delayed his steamer, and he was actually lying anchored at the bluff at the time his child was dying. He arrived six hours too late!

Dr. J. D. Thomson, of Hankow, in an interesting private note to us tells of having performed Halsted’s operation for removal of the breast (reproduced M. Mis. J., Vol. IX., No. 1, p. 42.) He writes: “The patient was an old woman 63 years of age and very thin. The breasts were very low, and she had a large ulcerating cancer of the left breast with a mass of hard glands in the axilla, and under the pectoral muscles as far as the clavicle. The woman was so thin that these could easily be palpated. The breast hanging the incision was necessarily very long, and the triangular flap of skin long too. Owing to the extensive glandular infiltration I considered it wise to remove the pectoral minor as well as major, after having divided it perpendicular to its fibres to get at the tissue beneath. I left only the clavicular portion of the pect. major, after having divided it hard up to the clavicle and cleaned out the tissue beneath it. I dissected the tissues (including the affected glands) clean out, laying perfectly bare the axillary vein in its whole length and exposing also the artery and nerves, finishing up, as described in Halsted’s paper, with the lateral and posterior walls of the axilla.”

The patient stood the operation well, and recovery was rapid. “Owing to the low state of vitality there is a little necrosis of the free angle of the skin flap, but that will make no difference to the free movement of the arm as the fornix of the axilla is well lined and to spare.” Dr. Thomson says he found no special difficulty in the operation, and would undertake it again should occasion arise, as “I am convinced it gives the patient the best chance. In this case a less radical operation would, I think, have been certainly unavailing.”

Dr. Thomson also refers to two stone cases. The first removed by lateral lithotomy weighed 2 ozs. 3 drs. (13i grains). It was a flat ovoid 13 inches thick, 13 inches broad and 2½ inches long—a fairly large stone to remove by the lateral operation. The patient did well, passing water ½ by wound and ½ by urethra on the 6th day, and the whole of it per urethram on the 10th day. Left hospital within three weeks well and with wound firmly healed.

The second stone was removed by the suprapubic operation, as rectal and other examination left little doubt that the prostate was well thinned and possibly ulcerated. On removal it was found to be a “very curiously shaped stone with hour glass-contraction, and having the part that was imbedded in the prostate eroded like
the broken surface of living bone. The portion behind the constriction was smooth and shaped like the trigone of the bladder—somewhat heart-shaped—total weight 670 grains. The bladder was irregularly shaped—sacculated—and the prostate scooped out and ulcerated.” This patient did well for a few days, and then died on the eighth day after operation with symptoms of uraemia.

“MEDICAL MISSIONS IN INDIA.”

We welcome heartily another medical missionary journal. Dr. Husband, of Ajmere, writes as follows:

“DEAR DOCTOR,—At a meeting of twenty-four medical missionaries held in the hall of the Free Church, Calcutta, on the afternoon of Thursday, the 27th December, 1894, it was agreed, after full consideration, to start a quarterly publication, to be called Medical Missions in India, with the object of promoting the interests of our work in this country, and providing a means of regular communication between all those engaged therein. It was further agreed that the price of the journal should be four annas per quarter, exclusive of postage. We, the undersigned, were appointed a committee to carry out the necessary arrangements, and we earnestly appeal to all those engaged in medical missionary work in India to give us their co-operation and support, both by subscribing to the paper and contributing material. An effort will be made to have the first issue ready in April. The undersigned will be glad to give any further information that may be desired, and also to receive the names and addresses of any medical missionaries who may not have received this circular. Trusting to receive not only your approval of this effort but also your prayerful help in making it a means of helping our common work, we are, yours very sincerely,


P.S.—All orders or contributions for the journal to be sent to Dr. Husband, Ajmere.—Medical Missions at Home and Abroad.
CLINICAL LECTURE ON COCAINE IN SURGERY.
Delivered at the Pitié Hospital.

By Dr. P. Reclus,
Professor Agrégé at the Medical Faculty of Paris, Surgeon to the Paris Hospitals.

I have been asked, by several medical men who attend my hospital practice, for precise indications with regard to the method of cocaine injection I employ in my operations. In compliance with their desire I have selected this subject for my first lecture in this hospital, where I spent a long time as house-surgeon to such men of eminence as Broca, Trelat, Labbé and Verneuil.

The subject, however, is much too extensive to be fully dealt with within the limits of a clinical lecture. I shall, therefore, take for granted what is still denied by some of my colleagues, viz., that cocaine is a local anaesthetic; that with its assistance grave and lengthy operations can be performed without the slightest pain to the patient; that it is absolutely harmless when properly applied and that the accidents which are attributed to its use are simply the result of ignorance or recklessness. I intend to discuss the last two points more fully at some future date, when I shall avail myself of the results obtained in 1,937 cases of all kinds on which I have operated under cocaine during the last eight years. To-day I shall confine myself to the description of the method of procedure which should be employed to avoid danger and to produce a sufficient degree of anaesthesia for ordinary surgical operations.

The strength of the solution is perhaps the point on which the safety of the operation most depends. Cocaine is generally used in 5, 10 and even 20% solutions. Too strong a protest cannot be raised against such an abuse. From a careful examination of the accidents which have been recorded from the administration of cocaine, I am satisfied that the strength of the solution plays at least as important a part as the dose injected. I would much rather inject twenty centigrammes (three grains) of cocaine in the form of a 1% solution than ten centigrammes (one and a half grain) in a 20% solution. I am not prepared to give a physiological explanation of this variation produced in the effect of cocaine by dilution, but I assert that such a difference does exist, and I conclude, therefore, that cocaine should only be injected in 1 and 2% solutions; the 2% solution is to be used in minor surgical operations and the injection of two or three hypodermic syringefuls will then suffice to produce the desired effect; the 1% solution is to be reserved for operations requiring more elaborate dissection when four, six, ten or fifteen syringefuls are required to render the part sufficiently anaesthetic.

A syringeful of the 2% solution contains two centigrammes (one-third grain) of cocaine in one gramme (fifteen minims) of fluid, while the same quantity of the 1% solution represents one centigramme (one-sixth grain) of alkaloid. The dose of cocaine injected can, therefore, be accurately measured. It should on no occasion reach twenty centigrammes (three grains), for twenty-two centigrammes (three and two-thirds grains) have caused death. The strength of the solution used in this particular instance was not given, but I fancy it must have been a concentrated one. However, I do not mean to argue the point, I simply take the fact as I find it and I
maintain that in order to avoid all danger
the total quantity of 1% solution injected
should on no account be such as to represent
twenty centigrammes of cocaine. This is
of little consequence, however, for it is
very seldom that it is found necessary to
inject more than fifteen centigrammes (two
and a half grains) of cocaine. For my
own part I have never injected more than
seventeen centigrammes (a little under
three grains), a dose which is perfectly
consistent with safety, even in such im-
portant operations as amputation of the
fore-arm, wiring of the patella or laparo-
tomy. Therefore, to recapitulate, 1% and
2% solutions should alone be used, and
the dose of cocaine injected should not be
larger than from fifteen to twenty centi-
grammes (two and a half to three grains).
The degree of anaesthesia produced in this
way is quite sufficient even for severe
operations.

Before describing the injection itself I
may be allowed to make a few preliminary
remarks. The operation should always be
performed with the patient in the recum-
bent posture. In this way syncope, which
is of such frequent occurrence in dental
practice, is almost certainly avoided.
Throughout my long experience I have noti-
ced signs of syncope only in patients who
were allowed to sit up during an operation
for labial cysts, whens of the scalp and
face, rodent ulcer of the cheeks or brow,
 extraction of wisdom teeth. Quite recently
I performed an operation on a Greek from
Smyrna, who was allowed to sit up during
the operation, but my assistants were told to
prepare for the possible occurrence of syn-
cope. Towards the end of the operation
the patient gave signs of faintness, which
disappeared as soon as he was placed in the
recumbent posture. Not once have I ob-
served an accident of this kind in patients
who were placed from the first in the hori-
izontal position, independently of the strength
of the solution used and of the dose injected.
The patient, however, is usually given some
spirits or coffee, and although the presence
or absence of food in the stomach may be
disregarded, yet I consider that a little food
before the operation increases the chances
of success.

As regards the injection itself, let us take
as an illustration a simple case, for example,
the removal of a subcutaneous tumour,
lipoma or sebaceous cyst. Having decided
upon the exact site and length of the incision
to be made, I plunge the needle at the point
where I mean to enter the knife. If the
needle has penetrated to the subcutaneous
cellular tissue it is withdrawn a little until
the point is again in the true skin. A few
drops of the solution are then injected, the
injection being followed by a slight swelling
of the skin, and from that time the pain
should completely disappear. If the pa-
tient complains of pain it is the surgeon's
fault. The needle must be introduced slow-
ly and, as the cocaine is gradually injected
as the needle travels in the thickness of the
corium, all sensibility has already disap-
ppeared from the tissues when the needle
passes through them. The needle must not
pass deeper than the true skin, and in this
the surgeon is guided by the swelling pro-
duced by the fluid and by the resistance en-
countered by the point of the needle. The
disappearance of this feeling of resistance in-
dicates that the needle has passed into the
loose subcutaneous tissue. It should then
be withdrawn until the resistance is again
felt. The true skin is so thin in the eyelids
and prepuce that it is difficult to keep the
point of the needle therein, but this is of
little consequence in operations on these
parts, for the tissues are rapidly permeated
by the cocaine solution.

If the needle is too short to be carried at
once along the whole line of the future in-
cision it is taken out, the syringe is refilled
if necessary, and the needle introduced
again at a point a little above that which it
had previously reached and where the skin
is now completely anaesthetised. I may be
excused if I insist on the necessity of inject-
ing the fluid gradually and, as far as possible, without removing the needle instead of by a series of punctures. In this way the patient complains of no pain except when the needle is first introduced, the cocaine solution is equally distributed throughout the tissues and the degree of anaesthesia is the same all along the line of injection. Lastly, and this is important, the risk of injecting a large quantity of cocaine into a vein is avoided, for since the solution is continuously injected as the needle travels in the substance of the corium, even if a vein is punctured, the needle soon passes through it and the dose of cocaine which finds its way directly into the circulation is then too small to give rise to any accident. Such a danger is not, it is true, to be apprehended in the case of the skin which contains no large blood vessels, but the injection should be performed with the greatest care in such parts as the lips, tongue, cervix uteri, anus and in certain forms of navi. Hence I am in the habit in these cases of first introducing the needle as far as it will go and of injecting the fluid as the needle is withdrawn; the piston is driven home as the needle is drawn out of the part.

When the injection is completed, I allow three or four minutes to elapse if the 2% solution is used and five or six if the 1% solution is the one employed. During that time the part is shaved and bathed first in hot water, then in ether, alcohol and corrosive lotion. The next step is the incision. The greatest care is required in carrying the knife exactly along the tract of the needle and to keep in the centre of the anaesthetised area, which is often not more than one centimetre (two-fifths inch) in width. The parts are sometimes displaced by the hands of assistants, and I have seen more than one case in which the patient complained of pain because the surgeon had entered his knife on one or the other side of the part anaesthetised. Hence all manoeuvres likely to alter the relations of the parts are to be avoided, and, if the operator is not sure of recognising the line of the injection by the slight whitish or pinkish ridge on the skin and the points of puncture, the incision should first be marked on the part with tincture of iodine. When these precautions are taken, the operation is absolutely painless; the patient feels the contact of the instrument but no pain. In fact it is really not anaesthesia but analgesia.

This, however, is but a simple operation, where the knife has only to go through the skin. But we may be called upon to perform operations of a more complicated character under local anaesthesia: for example, the operation for the radical cure of inguinal hernia or of hydrocele, castration, amputation of a phalanx or of one of the metatarsal bones, dilatation of the anus and the removal of haemorrhoids, laparotomy for appendicitis, hydatid of the liver or for ovarian cyst. I could mention a good many more operations which may be performed by this method, but the enumeration would serve no useful purpose. Every surgeon has his own methods of operation which he prefers to all others, and he will soon learn how to use cocaine to the best advantage.

For the radical cure of an inguinal hernia of medium size, a tract of skin from six to eight centimetres (between two and three inches) in length is rendered anaesthetic, the injection of three or four syringefuls of the 1% solution being sufficient for that purpose. An incision is made down to the aponeurosis of the external oblique. The external abdominal ring and the hernial sac having been exposed, the hypodermic needle is introduced under the aponeurosis of the external oblique and into the adjacent muscles, which are in their turn rendered anaesthetic; they are then divided as far as the internal ring. The sac is carefully dissected from the surrounding parts with the scissors to avoid injuring the adherent spermatic vessels and vas deferens. If adhesions are found, division of which gives rise to pain, a little more cocaine is injected and pain at once disappears. When the sac has
been separated as high up as possible, one or two syringefuls of cocaine solution are injected into it before it is opened, in order to produce anesthesia of the peritoneum and of the contents of the sac. The latter is then opened and the hernia reduced; the reduction is not attended with colicky pains as it would if no anaesthetic were used. The sac is tied very high up and cut off. The muscles and the aponeurosis of the external oblique are successively sutured in such a way as to obliterate the inguinal canal and to restore the strength of that part of the abdominal wall. As a last step in the operation the external wound is closed.

The dose of cocaine injected depends on the length of the incision, the degree of obesity of the patient, the size of the sac and the amount of adhesion to adjacent parts, to the intestine and omentum. In a recent case of this kind I obtained the desired effect with only three injections of the 1% solution, but in other cases I have had to inject as many as fifteen centigrammes (two and half grains). As a general rule, from seven to nine centigrammes (about one to one and a half grains) are amply sufficient to produce complete anesthesia.

The parts remain anaesthetic throughout the operation, and the stitching of the wound seldom gives rise to any pain, although it may not be done until half an hour after the first injection. In one case where I had to open several diverticula before I could reduce the hernia the operation lasted an hour, and yet the patient complained of no pain when the external wound was closed, although he could feel the needle pass through the tissues. I have never had occasion to repeat the application of cocaine, even in most prolonged operations.

The operation for the radical cure of hydrocele has many points in common with that just described. A band of skin over the anterior aspect of the distended scrotum is rendered anaesthetic with three injections of cocaine. The coverings of the testicle are divided until the tunica vaginalis is exposed. This is carefully separated from the surrounding parts as far back as the epididymis. The fluid is drawn off, and one or two syringefuls of cocaine solution are injected into the cavity and shaken about in it. When the serous membrane is completely anaesthetised it is cut away, enough being left in position to form a new tunica vaginalis. For this purpose, after resection of a portion of the sac, the edges of the cut are brought together by means of a few silk sutures. Some surgeons prefer Bergmann's method, which consists in total excision of the tunica vaginalis inclusive of the digital fossa which can be easily dissected off. All that now remains to be done is to replace the testicle in the scrotum and, after ligaturing the few vessels which have been divided, to close the wound in the scrotum. Cysts of the epididymis are dealt with in the same way.

The operation for excision of the testicle is just as simple. In this case the injections are made along a looped line forming a figure somewhat like a tennis-racket. It begins at the external abdominal ring, runs circularly round the part of the scrotum to be opened and then back again to the external ring. As the skin of the scrotum is very mobile it is of the greatest importance to follow the tract of the needle with the greatest care so as not to carry the knife outside the anaesthetic area. The testicle is carefully isolated until it hangs freely from the end of the cord. A syringeful of 1% solution is injected into the latter at the point where it emerges from the inguinal canal. It is then tied at this level or a little higher up and divided. The presence of the large spermatic plexus of veins renders the injection of cocaine into the cord a rather delicate operation, owing to the danger of injecting the alkaloid directly into the blood stream. To avoid this I am in the habit of spreading the cord on my finger and of introducing the needle at once as far as it will go; the fluid is then injected as the needle is being withdrawn. After removal of the
gland the cut vessels are tied and the scrotal wound is closed.

Dilatation of the anus is a more complex operation, for here we have to anæsthetise the mucous membrane and the sphincter. A plug of cotton-wool soaked in 2% cocaine solution is introduced into the rectum. Six injections are made round the anal orifice into the substance of the sphincter itself. The injections are made in different places; this operation is, therefore, more painful than those already described in which the patient only feels the first puncture. As we are here dealing with a very vascular region the whole of the needle is, in this case also, introduced at once and the fluid injected as the needle is being withdrawn. A syringe full is injected each time. The 1% solution should be used, in which case a total of six centigrammes (one grain) of cocaine is injected into the sphincter. This is important, for in this case the whole of the cocaine is absorbed, whereas in the operations I have already described part of it escapes with the blood. It is essential, therefore, to exercise the greatest care in the use of cocaine in such a case. For my part I have never exceeded the dose of six centigrammes, which is quite sufficient for our purpose, and after three or four minutes I was enabled to introduce Tréalat's speculum and to dilate the sphincter without causing any pain to the patient. I have now successfully performed this operation more than forty times under cocaine anæsthesia.

When haemorrhoids are present the operation is not rendered more complicated by their removal. The mass is seized with forceps and half a syringe full of the 1% solution is injected at its base with the most infinite precautions owing to the great vascularity of the part. When anæsthesia has been produced the pile is cut away with the scissors and the mucous membrane brought down and stitched to the skin at the margin of the anus. There is complete union in a few days. I feel justified in recommending this operation which I have myself performed twenty-seven times with complete success, and I have never met with a relapse in these cases as I have after simple dilatation.

Amputations of the fingers and toes, of metacarpal and metatarsal bones, operations for hammer-toes and for alterations in the first metatarsophalangeal joint can very well be performed under cocaine. But after rendering the skin anæsthetic along the line of the future incision some of the solution should be injected under the periosteum at the point where the bone is to be sawn through. The amputation is then perfectly painless. We have gone still further, for we have succeeded in amputating the forearm by this method without any pain to the patient, and the total dose of cocaine injected in the form of the 1% solution did not exceed fifteen centigrammes (two and a half grains). The fluid was injected into the skin along the lines of incision, into the muscles of the front and into those of the back of the forearm, and also into the three main nerves of the part, which had previously been exposed. Lastly, cocaine was injected under the periosteum of the radius and ulna. It was only under very special circumstances that we decided to make use of cocaine in such a serious operation and one which, in my opinion, should not, as a rule, be performed except under chloroform. In this case the patient was exhausted by prolonged and extensive suppuration, and he was eighty-three years of age; I have long ago been able to convince myself of the fact that cocaine is better, or less badly, borne than chloroform by cachectic and debilitated patients.

Cocaine and chloroform have each their own indications. I consider that cocaine is not to be used in extensive operations and those the limits of which are not very well-defined from the outset. Whereas, on the one hand, it seems to me to be indicated in excision of subcutaneous tumours, the opening of abscesses, ingrowing nails, amputations and excision of the phalanges or of the metacarpal bones, in kelotomy, the
operation for the radical cure of hernia and hydrocele, in dilatation of the anus, circumcision and castration, in abscesses and hydatid cysts of the liver and in the formation of an artificial anus: I believe, on the other hand, that chloroform should be preferred in the surgery of the uterus and abdomen generally. If on two occasions I have had recourse to cocaine in an operation for ovarian cysts, it is because I consider that it is desirable that we should obtain experimental evidence as to the limits within which local anaesthesia can be depended upon. Cases of this kind may, indeed, arise in which, owing to the existence of some contra-indication to the use of chloroform, cocaine becomes the preferable anaesthetic, but they should always be regarded as exceptional.

As already said I made use of cocaine in two cases of ovarian cyst. In the first of these the tumour only extended to about a finger’s breadth above the umbilicus, and it did not seem to me to be adherent. The skin, the abdominal aponeurosis and the peritoneum were successively rendered anaesthetic. The fluid contained in the cavity of the cyst was drawn off, and so painless was the operation that the patient was unaware that it had commenced. Unfortunately the tumour had formed such extensive adhesions with the peritoneum and intestines that I was compelled to complete the operation under chloroform. A few drops of chloroform were sufficient to produce general anaesthesia, and I was able to proceed with the operation without further interruption. Ten days ago I met with a similar case. I found no difficulty in opening the abdomen from the umbilicus to the symphysis pubis and in removing the contents of a dermoid cyst. I hoped to be as successful in drawing the tumour out of the abdominal cavity and in rendering the pedicle anaesthetic, but I soon discovered the existence of a sarcoma which was adherent to the cyst, to the intestines and meso-colon. The operation was thereby rendered much more difficult. Chloroform was administered, and in this case, as in the first and likewise in three others which I intend to publish, general anaesthesia was rapidly produced with only a few drops of chloroform. I do not mean to say that we should look upon this as an indication that chloroform is to be given in combination with cocaine but, in my experience at any rate, there seems to be no antagonism between these two substances.

I could, and ought, perhaps, to describe a few more cases and to give a detailed account of the method of procedure adopted in the numerous operations in which I have made use of cocaine injections. But I believe I have said enough on this subject to justify my concluding this lecture by this general statement: cocaine is a most valuable agent under certain conditions; it enables us to perform delicate and important operations almost without any assistance, and its use is not attended with the same risk, trouble and loss of time which is so characteristic of chloroform.

THE THERAPEUTICAL EFFECTS OF BETA-NAPHTHOL BISMUTH.

By Hugo Engel, A.M., M.D.
Fellow of the American Academy of Medicine, Late Professor of Nervous Diseases and Clinical Medicine in Philadelphia, etc.

Should each decade of the nineteenth century be given a name to represent the progress made and the activity displayed during it in the various branches of medicine, we might bestow upon the period of the last ten years the appellation of the epoch of the discovery of new remedies. It, indeed, is not easy to keep step with the rapid march of advancement in therapeutics. And it is not only the great number of new drugs—though so great as to cause our admiration of the wonderful fertility of the human brain in the invention alone of names for them—but it is also
their valuable character, the definite results following their employment, that has made this decade so remarkable. That some chaff is mixed up with the wheat scarcely deserves mention; wherever truth and real worth achieve victories, humbug is bound to claim its portion; but when it appropriates to itself the lion’s share, it can do so only by proving the correctness of the adage: Mundus vult decipi, ergo decipiatur. Fortunately, since a higher standard of medical education has extended the grasp of the intellect, that proverb to-day finds but little application to physicians, and the harvest of proprietary remedies, whose sole virtue (?) rests in the skill with which the owners have succeeded in giving a new name to well-known drugs, has been but limited.

Among the many valuable achievements of the modern manufacturing chemist one class has not yet attracted in our country the attention it deserves, viz., the combinations of phenol, cresol and naphthol with bismuth. Of these I have thoroughly tested but one—beta-naphthol bismuth—and so reliable have I found this drug, and so superior in intestinal complaints to all the various bismuth salts previously known, that I determined to publish my observations for the benefit of the medical profession as well as for that of suffering humanity.

The internal application of the phenols has thus far been but a very limited one. In their free state they are exceedingly poisonous, their caustic action is deleterious to the mucous membranes of the alimentary canal, and they possess, besides, a very disagreeable odor and are repugnant to the taste. In their combination with bismuth they seem mutually to neutralize these obnoxious properties, and when thus introduced into the human system they again form the various phenols with all their therapeutical effects, the oxide of bismuth also being liberated and fixing the toxic albumins in the intestines.

From the reports of experiments made in Professor Nencki’s Laboratory at the St. Petersburg Imperial Institute for Experimental Medicine,* we learn that beta-naphthol bismuth, when introduced into the stomach, is decomposed into naphthol and bismuth to some extent; some passes on into the intestines, where the conditions are also favourable to its complete decomposition from the acid reaction of its contents and the presence of the pancreatic juice. Naphthol is but partially eliminated with the urine; the residue passes through the whole alimentary canal, and is finally excreted by the faces. Bismuth, on the other hand, is totally excreted with the faces as sulphide (in man; in the dog not, because of the relatively much greater amount of muriatic acid in that quadruped, causing the formation of some soluble chloride, but most of it undergoing the same changes as in man). In no single case were any toxic symptoms observed, though administered in daily doses of seventy-five grains (one hundred and fifty grains to dogs).

Another observation showed that all the combinations of the phenols with bismuth undoubtedly arrested the development of bacteria—an important fact which, though explained by the separation occurring in the intestinal tract, yet by itself explains the remarkable effect of these remedies in certain bowel complaints.

Professor Hueppe† also found beta-naphthol bismuth a most powerful intestinal antiseptic, and recommends it as a specific in Asiatic cholera. He treated a number of cases with it in one of the Hamburg hospitals. Von Nencki ‡ noticed that the drug was well borne by patients even when continued a long while. Other Russian physicians§ administered it in Baku in

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‡ Wraatsch, 1893, No. 1.
§ Schubenke, Blackstein, and Petkewitsch, Wraatsch, 1892, Nos. 41 and 51.
daily doses of fifteen to thirty grains in choleraic diarrhoea and allied diseases, and, while recovery occurred in almost all cases, injurious effects were not noticed in any.

Wilcox* read last December a paper on bismuth in general, in which he speaks highly of the combinations in question, and finds the beta-naphthol bismuth especially indicated in all fermentative bowel complaints.

By Jasenskij it has been used with success in chronic intestinal catarrh and in cancer of the stomach. The eructations and the vomiting were completely relieved in the latter disease.

I will now report a few cases from my own practice to illustrate the remarkable effect of the preparation:

A. G., aged twenty years, had been a robust, healthy young man up to July, 1894, when, while at the seashore, he was seized with severe abdominal pain in the left hypochondriac region. The pain returned from one and a half to two hours after every meal, and was at first felt only for a few minutes. Gradually, however, this time extended; the pain lasted an hour and more, until it finally never ceased completely. Simultaneously with this exacerbation in the pain the general health deteriorated; the appetite vanished, severe thirst took its place, and A. G. lost decidedly in weight. This train of symptoms went on unchecked until, early in October, vomiting and diarrhoea made their appearance, from which the patient had suffered but a few days when high fever set in, forcing him to seek his bed. Here he remained confined for over two weeks, during which his temperature, without any regularity, varied from 102° to 104.5° F. The discharges were of a fetid odour; the vomited matter, either half-digested food or acid mucus. By the end of the fortnight the fever left him, and he was once more able to be about; but the vomiting, diarrhoea, anorexia and pain, and the loss in weight continued unabated. It was in this state that I first saw him on November 1, 1894.

I had known the patient previously, and was not a little surprised at the fearful change in his looks. He made the impression of a consumptive in the last stages, and even the red hectic spots, almost pathognomonic of that malady, were visible on his cheeks. He could scarcely keep himself in the upright position, so weak was he. The physicians had pronounced his case first one of walking typhoid and later one of acute malaria. There had been no bleeding from the nose, no general malaise preceding the first attack of colicky pain—which had set in abruptly in the midst of apparent health two hours after a meal—and the temperature record also disproved the presence of either fever. Upon physical examination I could detect no organic disease except an enlargement of the spleen. There were no rose-coloured spots; the abdomen was flat and sunken; there were no tympanites, no gurgling sound, and no tenderness whatever in the right iliac fossa. Neither had dysentery instigated the complaint; the patient never had any bloody discharge from the bowels, no feeling of a heavy weight in the rectum, and intestinal tuberculosis could also be excluded. Nowhere was there felt any pain on pressure, but the pain seemed to radiate from the middle of the descending colon, and to extend thence a little over to the other side, not much beyond the umbilicus. It seemed an ache with colicky exacerbations. The tongue was covered with a thick yellowish fur and evinced a tendency to dryness; no sordes. Sleep very restless. Pains and aches all over the body, reminding one almost of those accompanying trichinosis. The patient was an Israelite. Nothing else could be elicited except the general debility, which seemed to have seized upon every tissue. Urine slightly

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† Loc. Cit.
albuminous; no casts; no sugar; otherwise normal; quantity also normal and no disturbance in miceturition. Temperature, 100.4° F.; pulse, 126.

The discharges were dark brown, highly offensive, fluid, frothy, and from six to fifteen in number daily. I took a small quantity with me in a bottle and injected some of it into the abdominal cavity of a rabbit. The animal seemed restless for about ten minutes, then appeared as if under the influence of some narcotic, and in about an hour after the injection it had four fluid stools in rapid succession, when it was suddenly seized with spasms and died. Except a congested appearance all over the small intestines, no lesion was visible at the autopsy. The bacteriological investigation showed the presence of five different kinds of micro-organisms, one of them resembling the bacillus of cholera morbus, but the tests have not yet been completed.

The patient had been in charge of able physicians; his diet had been carefully regulated and a great number of drugs seemed to have been tried in vain. I continued the milk diet that he had been on for several weeks, but insisted upon the milk being boiled and drunk hot, and prescribed for him cachets each containing five grains of beta-naphthol bismuth—three such cachets to be taken three times daily.

November 2nd.—Pain had lessened after the first dose of the bismuth the day before, and almost ceased after the third dose this morning, when it was scarcely perceptible. Vomiting occurred but once yesterday. Tongue begins to clear off; slept better; pains in joints stopped. The stools have greatly improved in colour and lost their dark colour and frothy appearance. Had only four discharges since first dose of medicine. Temperature, 99° F.

3rd.—No pain; temperature normal; no vomiting, but two stools of yellowish colour. Says that he feels much better and would like to eat something solid. Tongue but slightly coated; sleep undisturbed. Ordered toasted white bread with butter, salt soda crackers, and poached eggs.

4th.—Appearance greatly changed for the better. None of the morbid symptoms returned. Tongue clean. Had one healthy-looking stool, though still soft. Ravenous appetite. Had a very good sleep for twelve hours, during which he did not wake once. Permitted more variety in his food.

5th.—Greatly improved in every way. Gained three pounds. Had no stool. Ordered to take but one cachet twice daily and to have a clysm if the bowels did not move.

From this day on his recovery was rapid and uninterrupted, and two weeks later he had almost regained his former weight and robust appearance. I induced his parents to go with him to the mountainous country in Virginia. When he returned, a month later, he was the picture of health.

J. E., aged thirty-four years. After eating some oysters, November 11, 1894, was seized with cramps in his stomach and diarrhoea. Ordered beta-naphthol bismuth, fifteen grains, three times daily until better, then to take less. Stopped remedy after but two doses, because of the complete cessation of symptoms after second powder. Neither pain nor diarrhoea returned. Recovered.

W. D., aged fifty-four years. On November 12, 1894, called on me complaining of of looseness of his bowels, which had commenced a few days before after eating some ice cream and cake. It always set in immediately after eating. Some eructation. Tongue slightly coated. No other sign of any disease. Prescribed ten grains of beta-naphthol bismuth. Diarrhoea stopped after fifth powder, but, as he had a slight relapse a few days later, I caused him to take for a week five grains of the drug three times a day, then twice, and ultimately once a day. During the first week his bowels had to be opened several times by an injection. This constipation ceased with the withdrawal of the remedy.
C. M., aged sixty-one years. Suffers from frequently recurring attacks of camp diarrhoea, contracted during our late war and evidently due to old ulcerations and thickening of lower colon. Beta-naphthol bismuth controlled the diarrhoea perhaps quicker than any other drug (except opium and its preparations), but proved of no avail in the cure of the complaint.

J. R., aged two months. When, on November 20, 1894, I first saw this infant a priest present remarked that we should not torture the little child, as it plainly was dying. I must admit I myself had scarcely any hope. When the little girl was nine days old the mother's breasts had suddenly ceased the secretion of milk, and the child had been fed in the most injudicious manner possible. The skin was wrinkled and dry; nothing but a withered integument seemed to cover its tiny bones. No ulceration, no specific disease. The baby vomited everything it swallowed and had from ten to fifteen fluid discharges daily. No treatment seemed to improve it. I insisted upon a trained nurse. Every vessel or utensil used for feeding was thoroughly disinfected and kept aseptic; the utmost cleanliness was enjoined; as diet, nothing but rice water to be given with some whisky added, and the following powders to be taken internally:—

R Pepsin. Boudault ... ... gr. iv.
Bismuth. β-naphthol ... ... ū. jij.
Pulv. aromat ... ... ... 3.
Pulv. Doveri ... ... ... 6.
Saccharin ... ... ... q. s.

M. ft. pulvis. Sig.: One such powder to be taken three times daily.

The improvement was astonishing. Vomiting ceased the first day; the stools, previously of a greenish colour, yeasty and of a sour odour—as in cases of so-called acute dyspeptic diarrhoea, undoubtedly a misnomer—had assumed a healthier appearance and their number had been reduced to four; the third day the disease had actually disappeared. The baby recovered completely, and is as healthy looking to-day as if it had never suffered from so formidable an attack as the one described.

M. F., aged five months. On December 3, 1894, I found this baby, also "artificially brought up," from similar causes afflicted with the same disease and in nearly the same state as the foregoing. Having made similar arrangements concerning a nurse, disinfection, cleanliness, and a suitable diet to those in the first case, I prescribed the same powders as in J. R.'s case, except that I substituted the subnitrate of bismuth for the beta-naphthol preparation. Under its influence the vomiting became somewhat less severe, and there were also from two to three stools a day less, but otherwise no improvement discernible for three days, when I had recourse to beta-naphthol bismuth. Within twelve hours after the second dose a more decided change occurred; on December 7th the improvement was still more marked, and I increased the dose of the beta-naphthol bismuth by two grains.

December 9th.—Constipation had set in. This infant also made a perfect recovery.

I have administered the drug in a considerable number of cases, but those quoted will suffice to show the effect of the remedy. The more we have reason to suppose that the intestinal contents are in a state of fermentation brought about by the presence of pathogenic bacteria, the more the toxic products of the latter are responsible for the general impairment of the health of the patient, the more there is evidence of auto-intoxication—the more apparent and the more rapid will be the effect of the beta-naphthol bismuth. It far surpasses that of the older preparations of bismuth. In my opinion, and if I can draw such a conclusion from the cases under my charge, the beta-naphthol bismuth—while the most reliable intestinal disinfectant that we possess to-day, and combining with its antiseptic action an astringent effect—can be given with impunity in doses large enough and
A CASE OF CARCINOMA OF THE CONJUNCTIVAL LIMBUS IN A CHILD OF FOURTEEN YEARS.

By Dr. Rogman,

Physician-in-Chief to the Ophthalmic Institute of Ghent.

Case.—On December 27, 1893, L. M. ——, fourteen years of age, a native of T——, came to my clinic. On the corneo-conjunctival limbus of the right eye, in the lower inter nal region, was a small tumour which from its persistence had attracted the attention of the family physician, my distinguished colleague, Dr. St. Nicholas De Ryck. The tumour was of a yellowish-white colour, 3 millimetres wide, 4 millimetres long, its greatest diameter being parallel to the limbus, and it was raised about 1 or 2 millimetres above the sclera. Its surface was slightly nodulated, but not ulcerated. It did not encroach upon the cornea, and was not movable when the conjunctiva was moved over the sclera. On its peripheral side it was surrounded by a slight superficial vascularization, which by its colour contrast emphasized the pale yellowish tint. The tumour had been noticed for the first time one month and a half before this visit; the family, however, remembered that, for two years before, the eye became easily reddened by the wind or other irritating cause. There never had been pain in or about the organ; only for the last fifteen days the child had noticed, from time to time, a sensation like the prick of a pin. All the other portions of the eye were normal, and the function was regular. No ganglionic enlargements were found. There had never been an injury or any other noticeable cause which could have given rise to the disturbance. The child was in perfect health; he was the youngest of five children, the eldest of whom was twenty-six years old, all of whom enjoyed the best of health. The parents are still living, and have never had any disease. There was no antecedent history of tumours in the family.

The tumour was removed with a bistoury, the blade gliding along the sclera, and then the surface of implantation was energetically curetted.

The after treatment was very simple, and no complication occurred. The wound recovered without leaving any other traces than a slight spot of venous tint (thinning of the sclera from the grattage), which still persists.

Anatomical Examination.—The tumour was hardened in the chromo-osmic fluid of Flemming and imbedded in colloïdin.

It was cut parallel to the surface. The sections, about forty in number and taken at different depths, were coloured with safranine, and were divided into three series—superficial, median, and deep. The tumour had somewhat the form of a truncated cone flattened at the side, and by comparing the sizes of the sections it was easily seen what relative positions they had occupied.

The structural arrangement was the same in all of them: at the periphery, in almost the entire circumference, was a border formed of conjunctival epithelium; in the centre, the body of the tumour.

The conjunctival border was much wider at the two angular extremities of the section than at the sides, probably because the razor had encountered the conjunctiva in a direction more inclined to its surface. It was formed of pavement epithelial cells progressively smaller, more flattened, and serrated near the periphery, more globular, and less exactly united in the deeper part. In some places the intercellular spaces were quite large; they formed actual vacuoles, where here and there were seen immigrated white corpuscles, assuming various forms and with filaments stretching from cell to cell; these filaments were very well marked.
in places: they formed what are known as intercellular bridges.

In half of the sections the epithelial layer was quite sharply limited from the subjacent tissue, but in the second half it was prolonged in tracts into the tumour proper. These tracts were continuous there with cellular groups surrounded by bundles of connective tissue; the cells forming these groups had almost all preserved their more or less globular form, while some were slightly compressed; their nucleus was sometimes small, sometimes deeply stained, rounded or oval, and ordinarily quite regular. Intercellular bridges were here found.

In the second half of the sections the cellular groups had a different appearance: crowded together in the midst of an abundant connective tissue, the cells which composed them were pressed concentrically together; they were flattened, horny, and covered each other like the layers of an onion, and at the centre they completely lost their form and were replaced by an amorphous substance strongly coloured by the safranine. In some places these horny cells were found not only near the amorphous central substance, but also at the periphery, the two layers being then separated by cells, which had preserved to a greater or less degree their form, with protoplasm and nucleus. The external horny layer sometimes surrounded two contiguous centres of degeneration (1). The epidermic globes thus formed were about twenty in number; they were situated, as I have said, for the most part in the sub-epithelial cellular tissue, but some were also found in the epithelial covering and in the complex tissue of the first half of the tumour described above.

The superficial layers were distinguished by the relative predominance of epidermic tissue. In the deeper layers the conjunctival tissue became more and more predominant. The portion of the sections which corresponded to the first half of the proper tissue of the tumour was formed of a reticular tissue, in the meshes of which were found numerous white corpuscles. The epidermic globes penetrated to the deeper layers. Numerous newly-formed blood vessels were found in all parts.

The anatomical diagnosis was then unquestionable. This was a commencing epithelial carcinoma of the conjunctival limbus.

Malignant tumours in the ocular conjunctiva, as well as in all other parts of the body, are proper to old age, and it is rare to see them appear before the age of forty (Pauas). In studying the literature on this subject, I have only been able to find seven cases in younger patients: one case of Dujardin (a child of twenty months); two others of Pauas (twelve, and thirteen and a half years); another of Keyser, in a young man nineteen years of age; that of Lagrange (Transactions of the French Ophthalmological Society, 1892, p. 81), occurring in a man twenty-seven years old (epithelioma situated between the caruncle and the limbus); still another of Valude (Ophthalmological Society of Paris, December 1, 1891), in a man thirty-five to forty years of age (epithelioma of the limbus); lastly, the case of a man thirty-seven years old presented by Bousquet to the Anatomical Society of Paris, November 3, 1876 (encephaloid carcinoma).

The nature of malignant tumours of the limbus has caused much controversy. Clinically, sarcoma is differentiated with difficulty from epithelioma. In an article which appeared in von Gräfe's Archives (Zur Casuistik der an der Hornhautgrenze vorkommenden Carcinome und Sarkome) (2), Berthold gives the following differential diagnosis between these two tumours: 1st, in carcinoma the adhesion of the neoplasm to the cornea is more intimate on account of the greater thickness of the epithelial layer in the latter; 2nd, the borders of the sarcoma are raised perpendicularly from the cornea and the sclera, those of carcinoma are inclined; 3rd, the tissue of carcinoma is very delicate and fragile, that of sarcoma
is of a firmer consistency. The literature of the subject shows, however, 
observes Heyder (3), that these characters are far from being constant. In my case there 
was concordance with the second symptom, 
but not with the third, as the tumor was 
dense and hard.

According to Panas (1), the structure of 
tumours of the limbus is more frequently 
mixed.

In affections of the conjunctival limbus, 
the diagnosis which it is important to 
determine immediately is between malignant 
tumours, on the one hand, and benign 
tumours and inflammatory processes, on the 
other hand. When these disturbances are 
just commencing, there may be consider-
able difficulty in distinguishing them. 
Malign tumours may be mistaken for a 
papilloma, a pinguecula, a dermoid, and, 
above all, they are easily confounded with 
phytyeulcular disturbances, especially when 
their principal differential symptom, that of 
age (1), is lacking. My case, however, 
proved, and this circumstance gives it a 
peculiar interest, that the presumptive 
diagnosis based on the persistence and the 
continued development of the process should 
suffice in cases of this kind to authorize 
and even to impose intervention. Indeed, 
the preservation of the eye may depend 
upon prompt and energetic action.

The treatment of malignant tumours of 
the limbus has been the subject of numerous 
discussions in recent years. While some 
ophthalmologists advise immediate enucle-
ation of the eye as soon as the neoplasm has 
been recognized, others are content with a 
local treatment, and do not concede the 
necessity of enucleation until the tumour has 
reached a certain size (Caspar) (2). Still 
others (Valdne) (3) claim that epitheliomas 
of the sclero-corneal limbus, which, in 
general, have no tendency to extend either 
upon the cornea or the sclera, present rather 
the indications for local extirpation.

When examination shows that the media 
of the eye are still completely exempt it is 
nearly always proper to try local extirpation, 
even when, according to Professor Knies (2), 
there has already been a recurrence, as in 
one of my cases. But care should be taken 
to remove the tumour as completely as 
possible by finishing the operation with the 
galvanic or thermo-cautery, or rather with 
eneregetic curing of the surface of im-
plantation. Knies and Sgroess (3) draw 
over the neighbouring conjunctiva and fix it 
to the operative wound. Although this 
practice is formally condemned by Lagrange 
(4), I think that one should be guided 
according to the supposed nature, progress, 
and extent of the affection, and that it is 
not necessary to systematically renounce 
the advantages of a covering, at least 
partial, of the wound, which the superim-
posed conjunctiva, on account of its slight 
thickness, does not completely hide from 
view.

Enucleation of the eye should not be per-
formed, especially in the early stage, until 
perforation or extended invasion of the 
envolving membranes of the eye does not 
allow of simple ablation under favourable 
conditions, but demands complete removal of 
the neoplasm.—From Annales d'Oculistique.

CASTRATION IN HYPERTROPHY OF THE 
PROSTATE GLAND.

When Dr. J. William White first sug-
gested to the profession the operation of 
castration for the relief of hypertrophy of 
the prostate gland (Address at the Annual 
Meeting of the American Surgical Associa-
tion, June 1, 1893, Annals of Surgery, 
August, 1893) on theoretical grounds, 
although strongly supported by experimental 
evidence, it is doubtful whether any one 
appreciated the full value of the recom-
modation. Cases of prostatic hypertrophy 
are of extreme frequency. Sir Henry 
Thompson found that one man of every three 
over 24 years of age examined after death 
showed some enlargement of the prostate; 
one in every seven had some degree of ob-
struktion present; while one in fifteen had sufficient enlargement to demand some form of treatment. In this country to-day, as shown by the last census, there are more than three millions of men over fifty-four; of these, according to Thompson's estimate, which genito-urinary specialists consider a conservative one, about two hundred thousand are sufferers from hypertrophy of this gland. This number seems very large, but the assertions of Thompson unquestionably express a general rule, and in fact every surgeon must have seen men in whom some prostatic overgrowth existed before the fifty-fourth year. The lives of such patients are threatened, because, if the obstruction is not removed, the health is rapidly undermined by the retention of urine and the consequent fermentative changes, the deleterious influence of backward pressure on the kidneys, the frequent use of the catheter, and the loss of sleep incident to the incessant demands to void urine. Heretofore the surgeon has been unable to afford distinct relief from the distressing symptoms of an advanced case of this affection. If the patient's general condition would warrant the very considerable risk some form of prostatectomy was performed. The suprapubic method was recommended for a time, but the difficulties encountered in its performance, the frequency of suprapubic fistula as a sequel, and the high mortality following the operation have led to its almost total abandonment. Perineal prostatectomy is also attended with considerable risk, on account of the free hemorrhage, which cannot be controlled during the operation, and the prolonged anesthesia which is necessary. In addition to this the operation is a bungling one; the enlarged gland is removed by cutting, scraping, or gouging, while the instrument is out of sight, and much of the time it cannot be guided even by the finger. Combined suprapubic and perineal prostatectomy enables the operator to reach and enucleate the gland with greater freedom, but it is an operation of such gravity that it would be contraindicated in the very cases in which the demand for relief was most urgent.

Perineal prostatectomy is little more than a palliative measure, which does some good, temporarily, by draining the bladder and inducing slight contraction of the middle lobe of the prostate in the healing process. All of these operations confine the patient to bed for several weeks, which is, in itself, objectionable, and in addition require the use of the bougie for a long time afterwards.

In view of these facts it is not strange that surgeons should have presented Dr. White's suggestion to patients suffering from the consequences of prostatic hypertrophy, nor is it unnatural that such patients accepted this chance for relief from a condition that in many cases was rapidly and surely impairing the health of a person otherwise vigorous and, apparently, without this trouble, destined to enjoy many additional years of life.

With the tests already or soon to become functionless, and with the contemplation of a long period of intense suffering which will be relieved only by death, sentimental objections pale into insignificance, and the problem of securing relief without placing the life in danger is the only one entitled to consideration.

Cases of castration based upon Professor White's deductions soon began to be reported. Ramm, of Christiania, Norway, recorded two in September, 1893: Haynes, Los Angeles, Cal., and White, Philadelphia, each report three cases; Finney, Baltimore, reports two cases; Smith, St. Augustine, Fla., Powell, London, Mayer and Haenel, Dresden, Moulin, London, Thomas, Pittsburgh, Ricketts, Cincinnati, Swain, Bristol, England, and Bereskin, Moscow, each record one case. Thus far eighteen operations have been published. All have been more or less successful, and usually the relief from the distressing symptoms and the shrinking of the prostate have been
marvellous. The least favourable cases have experienced infinitely greater relief than has been obtained by any method heretofore employed. At least as many unpublished cases have been operated upon with equally favourable results. There have been no deaths from the operation: of course, few would be expected in the hands of competent surgeons.

To those familiar with these cases the rapid shrinking of the prostate and the simultaneous relief afforded the patient have been truly wonderful. The operation has therefore passed the experimental stage, and has legitimately established for itself a position among the most successful of operative procedures. Indeed, the results have been so uniformly favourable that castration may now be considered a specific for hypertrophy of the prostate.

It is necessary, however, to utter a word of caution here. Castration is not indicated in every case of prostatic enlargement or urinary obstruction. To secure uniformly successful results one must be certain that the condition from which the patient is suffering is appropriate for the operation. Cases of prostatic abscess, prostatitis, tumours of the prostate and of the region of the neck of the bladder, and other forms of obstruction in the neighborhood of the prostate must be distinguished from true prostatic hypertrophy. Without careful discrimination, both the surgeon and the patient will be disappointed, and the operation will unnecessarily be brought into discredit.

As it stands to-day, however, in appropriate cases, it appears to mark an advance in the surgery of the prostate, which, when the gravity and the frequency of the condition of hypertrophy are recalled, together with the more or less ineffectual and always dangerous methods of treatment which have prevailed, must be a source of congratulation not only to Professor White but to the profession at large, and to thousands of patients who, having outlived there sexual lives and earned an old age of mental and physical repose and intellectual enjoyment, have had only a few short years of torment and misery to look forward to on account of this hitherto intractable disease.—Pennsylvania University Medical Magazine.

THE TREATMENT OF ACUTE CORYZA.

The Journal des Praticiens for January 26th publishes an article on this subject by M. Marcel Lermoyez, who remarks that there is a very widespread opinion that coryza is always a benign affection that does not call for treatment, and, moreover, that therapeutics has no influence over it, a double mistake of which many persons have been the victims.

Acute coryza, says M. Lermoyez, from a pathological point of view, should not be neglected. It may leave in its place a chronic purulent discharge, or predispose the patient by repeated attacks to hypertrophic rhinitis; and its effects which manifest themselves in other parts are still more to be feared. Occasionally it spreads to the lacrimal sac or to the frontal sinus and causes persistent suppuration. Or, again, it infects the middle ear and leads to the necessity of trephining the mastoid; finally, it is very often the origin of descending broncho-pulmonary infection.

Medicine, says the author, is not so powerless against coryza as is supposed. It may moderate the disease at the outset; it may palliate painful symptoms in a marked degree; and very often it may prevent the complications which are provoked by coryza. There are innumerable abortive remedies and certain local means which, if employed when dryness of the mucous membrane is first observed, give excellent results. But if at the end of twelve hours their effect is not visible, their use must be stopped, as their irritating action, if kept up, will increase the intensity of the coryza. An excellent solution for inhalation, known as Brandt's...
remedy, is the following: Pure carbolic acid and ammonia water, each, 75 grains; alcohol, 150 grains; distilled water, 225 grains. Every hour ten drops of this solution should be poured on blotting paper and the vapours inhaled by the nose for several seconds.

Among the abortive powders the following, which should be very finely pulverized, is preferred by M. Lermoyez: Cocaine hydrochloride, 8 grains; menthol, 4 grains; salol, 75 grains; boric acid, 225 grains. A pinch of this is to be snuffed up every hour; it provokes an abundant mucous discharge and affords great relief.

Among the internal abortive remedies there is only one, says M. Lermoyez, that is comparatively reliable, and that is the mixture, in equal parts, of tincture of belladonna and tincture of aconite root, of which thirty drops are to be taken in divided doses. Energetic sweating, also, induced by a vapor bath has occasionally given beneficial results. These abortive means are sufficient in ordinary cases. In certain subjects, however, coryza brings, almost inevitably, with each attack, serious otic or bronchitic symptoms, and more energetic means are required. The patient should remain in bed, and revulsion should be practised on the legs; abundant perspiration should be brought on by means of hot alcoholic drinks, by a potion of ammonium acetate, or by Dover's powder.

If the coryza itself cannot be moderated the most painful symptoms, which are nasal obstruction and headache, may be ameliorated by the palliative treatment. For this nothing is so good as the use of a Richardson spray with a boiled and tepid one per cent. solution of cocaine hydrochloride; this brings real relief, freeing the nose and at the same time suppressing the pain in the head. Spraying every two or three hours is sufficient. The cocaine may also be incorporated in powders that are slightly antiseptic but not irritating. The following formula is given: Cocaine hydrochloride, 8 grains; menthol, 4 grains; bismuth salicylate and sugar of milk, each, 75 grains. If there is reason to fear cocaine poisoning, 300 grains of pure olive oil and 30 grains of menthol may be administered by the spray and not by painting, which may produce an erosion, especially if the patient attempts to do it himself.

In order to quiet the neuralgia of the trigeminal nerve which often accompanies coryza, says M. Lermoyez, as well as to combat the general infection which manifests itself in chill is and lumbago, a capsule containing four grains of quinine hydrochloride and eight grains of antipyrine is to be taken at each meal. To prevent erythema of the orifice of the nostril, the entrance of the nose and the upper lip should be rubbed with vaseline with which boric acid has been incorporated. Finally, several hygienic prescriptions are indicated. If there are no general symptoms the patient may go out; if there is fever he should remain in his room. He must avoid sneezing as much as possible, and refrain from blowing his nose too energetically, as there is danger of projecting septic mucosities into the middle ear. Irrigation of the nose at the acute period of coryza should be absolutely interdicted, as it results in a constant irritation of the mucous membrane and increases the tumefaction; furthermore, it constitutes a real danger for the ear. On the other hand, it finds its indication afterward when a mucopurulent secretion follows coryza, which tends to become chronic. Then the treatment should be the same as that employed in chronic purulent rhinitis.

The prophylactic treatment, says M. Lermoyez, has a great importance for certain persons in whom coryza sets in on the least exposure to cold. These persons should become accustomed to the inclemency of the weather; they should exercise in the open air; and cold douches and salt-water baths should be taken; at the same time underclothing and stockings of wool, also
shoes with heavy soles should be worn. The chronic lesions of the nose, which are the starting point of acute attacks of rhinitis, should be treated. These lesions are, ordinarily, adenoid growths in infancy and hypertrophic rhinitis in adults. It is not rare to find that, among the latter, ablation of the hypertrophied turbinals will cause the cessation of repeated attacks of coryza.

Acute coryza in the newborn, says the author, is a very serious affection. It disturbs the sleep and prevents the child from nursing, and the patient wastes away rapidly. In these cases the nasal obstruction should be removed at once by applying several drops of a two-per-cent oily solution of menthol to the nasal fossa, which detaches the crusting at the opening of the nostrils and provokes momentary retraction of the turbinals. The mentholated oil, which is entirely harmless, is preferable to cocaine solutions, which, at that age, cause very serious toxic symptoms and should, for this reason, be proscribed.

Before the child nurses the secretions which obstruct the nose should be removed by means of a dry douche given with a Politzer's bag. One moderate insufflation into each nostril is sufficient. This very simple procedure is preferable to nasal irrigation, which should be reserved for cases of purulent rhinitis. With regard to intubation of the nose, which consists in introducing into the nasal fossae rubber tubes to establish an air-passage, this is a dangerous method, says the author, which wounds the mucus membrane and gives rise to synechiae. If the child, in spite of this treatment, cannot breathe sufficiently through the nose to admit of its nursing it must be fed with a spoon. The best prophylactic treatment for coryza in infants is not to allow them to go out too soon after birth, especially in damp weather; also, in bathing them, soapy water must not be allowed to penetrate the nose.

The Indian Medical Congress, Calcutta.

Constitutional Malaria in the Tropics.—Surgeon-Major L. T. Young considered the pathological condition produced by malaria and the functional effects of alkaline salines. Even a rather casual inspection at numerous necropsies leads to the adoption of the opinion that malaria congests the internal organs and causes catarrh of the mucous membranes. A proper recognition of these two facts and their results may be considered the key to the successful treatment of the constitutional effects of malaria. It is rare at an Indian necropsy to find a liver free from congestion of some form or other. In many instances the appearances are distinctly those of incipient "nutmeg" congestion; whilst in advanced malarial cases there is distinct cirrhosis of an hypertrophic kind following, to some extent, as the result of long-standing congestion, according to the well-known pathological law. This cirrhosis is not the ordinary "hob-nailed," contracted surface form, but the enlarged, hypertrophic, morocco-leather surface form, which commences in and around the bile-ducts, and which, he suggested, begins as a catarrh of these channels in a manner similar to that in which catarrhal malarial enteritis supervenes on tropical intestinal catarrh. Tropical hepatic congestion is always associated with more or less fatty infiltration of the liver-cells. The acute results comprise hepatitis, abscess, perihepatitis, dysentery, catarrh of the bile-ducts, etc. The chronic results embrace the various forms of imperfect proteid metabolism or liver indigestion; also gout, rheumatism and possible diabetes, etc. The early congested and the late cirrhotic stages of the spleen are only too well known. The organ, or its capsule, sometimes becomes inflamed; the enlargement of the organ may reach an enormous size, sufficient to almost fill the entire abdomen. In the later stages ascites supervenes, anaemia and debility, with a tendency to sudden death from pulmonary
thrombosis, as so ably described by Sir
Joseph Fayrer. These kidneys are nearly
always found congested, often intensely so.
Of the later stages the large white kidney
has been the most frequent in his own
observations, not the cirrhotic form as one
would have expected. Acute desquama-
tive nephritis is not a rare complication of
severe malarial fevers, and it is often in
the slighter degrees overlooked, and gra-
dually assumes the fatal chronic form.
The dietetic errors to which Anglo-Indians
as a class are so much addicted are also
largely to blame for many cases of Bright's
disease. All the mucous membranes of
the body become sooner or later affected by
catarrh from malaria and residence in a
tropical climate. Pharyngeal and laryn-
geal catarrhs are generally the earliest to
occur. The latter spreads with great
frequency up the Eustachian tube, giving
rise to otitis media, which often goes on to
suppuration with loss of the membrana
tympani and ossicles, or to plastic inflam-
mation scaling up the ossicles into the
fenestrae, and so causing deafness. The
Schneiderian membrane shares the same
fate, and hyperplasia of it over the tur-
binated bones is a common result. Slight
chronic ophthalmia attacks the conjunc-
tivae. The lining of the uterus becomes
endometritic. The most important catarrh,
however, is that of the stomach and intes-
tines. Under the influence of repeated
"long drinks," large meals and hot
weather the stomach becomes dilated;
it glandular structures degenerate and
atrophy, leading to the secretion of gastric
juice imperfect in quality. An acute patient
who has had a drink of milk half an hour
previously brings it up perfectly uncurdled,
showing the complete absence of acid from
his stomach. The thickly-loaded, large,
flabby, indented "tropical tongue" is
a frequent sign of tropical gastric
catarrh. The intestinal catarrh often
causes not alone obstructive jaundice
but ramiﬁes and extends along the bile-
passages in its more chronic forms. This,
as already suggested, may act as the
starting-point of biliary cirrhosis. Catar-
rhal enteritis is a common and extremely
fatal consequence of extension of intestinal
catarrh to the substance of the intestine
from its mucous membrane, and its occur-
rence is favoured by the mechanical obstruc-
tion to the return of blood from the
chylopoietic viscera by a chronically-
congested liver. This enteritis is not a
sthenic form of inflammation accompanied
by the exudation of lymph, nor does it
usually excite the overlying peritoneum to
eﬀusive inflammation. The bowel—usually
pale, thinned and anaemic from a malarial
atrophy—is, when enteric, darkly congested,
thickened, and its mucous membrane soft
and vividly injected. The peritoneal side
of the bowel is also red and injected. Long
tracts of the bowel are not affected in this
intense manner, but only patches of a foot
or two. The spaces between these present
all the signs of chronic congestion or of
incipient inflammation, with signs of vascu-
lar dilatation and blood-stasis. The conges-
tion is usually most marked about the
ileum. There is no trace of any ulceration
of Peyer's patches or of the mucous
membrane. A patient who recently died
at the Umbala Hospital from this affection
had grass-green diarrhoea, just like a child
with irritative diarrhoea. The colour of the
notions in diarrhoea is mostly either pale
or dark. I have not often seen it green in
adults. Malarial degeneration or atrophy
of the heart also occurs in advanced cases.
This organ is found pale, thin, small and
flabby. The ventricular walls are reduced
to about half their normal thickness.
There are atrophy and fatty degeneration
of the muscular tissue. Severe and long-
continued malarial fevers often produce
paralysis or paralysis, motor or sensory, or
both, of the lower limbs. This was found
to be due to spinal nephritis.
In regard to the treatment by Carlsbad
water the speaker said that patients must
be prepared to devote two hours each morning to drinking the water in the proper manner. On getting up in the morning a dose of 6½ ounces (200 cubic centimetres) of the natural or artificial water made from the salts and warmed to a temperature of 120° F. (48.9° C.) should be slowly sipped as it cools. After this a walk of twenty minutes in the open air is taken, and then another 6½-ounce dose; a second walk of twenty minutes and a third similar dose are next indulged in. This is followed by a walk of one hour, after which the patient can have a simple breakfast. Some patients are given an extra dose of the water at 11 a.m., and another on going to bed at night. This latter has a great effect in cleaning the thickly-furred "tropical tongue." During the course of the following articles of diet are strictly excluded: fresh fruit, salads, acids, cheese; tiemed, dried or smoked fish and butter. Sweets, greasy dishes and strong wines or short drinks are also to be avoided.—_Lancet_, January 19, 1895.

**THE MORBID ANATOMY OF THE LUNGS AFTER INFLUENZA**

_Louis B. Hayne_, of St. George's Hospital, London, discusses the various pathological changes visible to the naked eye in the lungs of victims to the recent epidemics of influenza. The mortality of influenza seems to be mainly due to involvement of the lungs, the deaths from the virulence of the febrile attack and from implication of the digestive tract being comparatively few. These pulmonary complications were not only fatal to the young and the aged but also to adults in the prime of life; death generally occurring about the tenth day after the onset of the attack.

In the cases of pneumonia occurring in influenza the peculiar smooth aspect of the consolidated lung noted by Rubbert ( _Lancet_, vol. i, p. 1318, 1892) has been frequently observed in the deaths from recent epidemics, alone as well as with associated areas of broncho-pneumonia. The solid lung often appears to be composed of a number of patches of broncho-pneumonic consolidation, these patches having run together and invaded the entire lung, suggesting the appearance of a confluent broncho-pneumonia rather than that of the croupous variety of pneumonia. Some lungs, on the other hand, show the results of ordinary lobular pneumonia; this condition being observed in early adult life quite as frequently as in youth or old age. Broncho-pneumonia, rare under ordinary circumstances in an adult, except cases of septic origin, is by no means uncommon as a complication of influenza, but the confluent type just referred to is even still more common. This is often found in the same lung in conjunction with a red hepatization, the gray, isolated patches of consolidated lung-tissue around a small bronchus contrasting very plainly with the uniform red and congested appearance of the remaining tissue. These patches often seem to originate in the posterior borders, and thence to spread to the apices and sides, so as eventually to involve the whole lobe. In other cases the apices are the parts first affected; apical pneumonia being more frequent than any other condition in influenza.

In some cases pale patches of broncho-pneumonia have been found scattered throughout the lung, suggesting at first sight tubercle of the miliary type. Under the microscope the small bronchi are seen filled with fibrinous plugs; the cells lining the bronchi have undergone proliferation, some having escaped into the lumen of the tube; the alveoli in the neighborhood are crowded with catarhial cells, and the blood-vessels in the surrounding tissue are dilated and crowded with corpuscles, some of which appear to have escaped from the vessel-walls into the pulmonic substance. These patches are distinct around each bronchiule, but run into one another at the periphery. The distribution is thus broncho-pneumonic while the character of the exudation resem-
bles that met with in lobar pneumonia. As in broncho-pneumonia the localized patches of consolidation are accompanied with collapse of the neighbouring lung-tissue, due to a similar cause, viz., the blocking up of the bronchioles with exudation and the consequent removal of the air from the alveoli in communication with the bronchioles at fault.

Localized patches of pleurisy, characterized by the adherence of the pleural surfaces to each other by means of recent lymph, are also frequently present, and arise from an extension of the inflammation from the superficial patches of consolidated lung-tissue. Pleural effusion is rare, not one case being found among the records of post-mortem examinations at St. George's Hospital during the recent epidemics of influenza.

Besides the capillary bronchitis, which generally terminates fatally, inflammation of the larger tubes is very common. The bronchi are found to be congested, their inner walls often being covered with thick, tenacious mucus; as a rule the larger tubes are not so deeply congested as the smaller ones. They are usually filled with mucopurulent, and in some cases are so distended with purulent secretion that on being cut across they look exactly like small abscesses, varying from the size of a pea to that of a pin's head. The whole thickness of the bronchial wall is considerably softened, accounting for the dilatation of the tubes so often present. Occasionally the walls are so dilated that a condition of acute bronchiectasis is simulated. The dilatation involves the whole length of the tube, but more markedly its terminations, being thus of the cylindrical variety. Clinically, however, the typical symptoms of bronchiectasis are not manifested, though the expectoration may be very profuse. The contents of the tubes are not always mucopurulent in character, but are sometimes quite fibrinous or membranous.

In most cases there is present not one of the conditions just described, but a number of them. One lobe may be in a state of solid, gray hepatization, another may be studded with disseminated patches of consolidation of varying sizes, while at the same time the bronchial tubes may present any of the morbid conditions above noted.—Practitioner, October, 1894.

**INDOLENCE OF THE CAECUM IN CHILDREN.**

Dr. Jules Simon, in a clinical lecture, calls attention to this condition as occurring in children of sufficient age to be left considerably to themselves. They eat in a careless manner, and frequently eat too much. The food remains in the caecum and large intestine, giving rise to such symptoms as headache, incapacity for study, paleness and irregular and capricious appetite. Although there is a daily movement of the bowels this is not sufficient, and the caecum and colon, on palpation, will usually be found sensitive and engorged. In such cases M. Simon employs a symptomatic treatment against the constipation and hygienic and preventive measures against the return of the trouble. Every morning he gives sweet almond-oil, 15 grammes (3½ fluid-drachms); castor oil 20 to 30 drops; or a tablespoonful of syrup of rhubarb in water; or an infusion of senna-leaves in coffee or chocolate with milk.

Before the two principal meals he gives a pill containing 0.01 grammé (½ grain) each of extract of hyoscyamus and powdered hyoscyamus, and after the meal an elixir or a cachet composed of cream of tartar, 0.10 to 0.15 grammé (1½ to 2½ grains); vegetable charcoal, 0.05 to 0.10 grammé (¼ to ½ grains); calcined magnesia, 0.20 grammé (3 grains). There are cases in which this treatment fails, and it becomes necessary to substitute half a glass of a natural laxative mineral water, returning later to the above prescriptions, or giving cascara or magnesia. The most important point is to prevent alternating diarrhoea and constipation.

As external treatment, friction and massage of the abdomen and continued electric
currents, if necessary, are employed, and if there is any congestion of the caecum or pericæcal ganglia the parts are painted with tincture of iodine or small blisters applied.

Dr. Simon believes the diet to be of great importance and advises that no solid foods be taken, but that meats, fish, etc., be reduced to a fine pulp, and vegetables be given in the form of a purée.—Journal des Praticiens, January 19, 1895.

UNITED STATES.
College of Physicians of Philadelphia.

Strontium Salicylate.—Prof. H. C. Wood calls attention to this drug as one likely to prove a valuable addition to everyday therapeutics. After using the lactate, iodide, and bromide of strontium very freely he came to the conclusion that the strontium element materially modified the action of haloid bodies on the alimentary canal. This suggested the possibility that strontium might modify the action of salicylic acid; so he had a strontium salicylate prepared, and experimented with it upon dogs, determining that in therapeutic doses it elevates the arterial pressure, and that to depress the blood-pressure and circulation larger amounts of it per kilo (2½ pounds) are required than of the sodium or even of the ammonium salicylate. He afterward employed it largely in practice, and found, somewhat to his surprise, that in doses of 5 grains (0.23 grammes) it is one of the best of intestinal antiseptics, yielding better results than sulol, naphthalin and similar agents. In doses of 10 or 15 grains (0.65 to 1.0 grammes) it acts very decidedly as a salicylate in gouty and chronic rheumatic conditions, without producing disturbance of the stomach. It may be given in capsules. When large quantities are administered it produces cinchonism, but it seems to be less active and powerful in acute cases than is the ammonium salicylate. In chronic gouty conditions and lithæmia with intestinal indigestion it appears to be the most valuable drug that we have.—British Medical Journal, January 5, 1895.

EXTRA-PERITONEAL CLOSURE OF ARTIFICIAL ANUS AND Fecal FISTULA.

By J. Greig Smith, M.B., F.R.S.E.,
Professor of Surgery, University College, Bristol; Surgeon to the Bristol Royal Infirmary.

During the past few years I have had to deal with a number of cases of faecal fistula left after intestinal drainage in cases of obstruction; and also with some cases of artificial anus left after intestinal resection for malignant disease and for gangrene associated with obstruction. The method I employ is so safe, and has been so uniformly successful, that I think a short description of it may be acceptable.

The aim of the operation is to perform enterorraphy without opening the general peritoneal cavity; and this is managed by detaching from the parietes all round the fistula or anus sufficient peritoneum to permit delivery of the gut through a parietal incision without separating it from its peritoneal adhesions.

It is unnecessary to emphasise the importance of being able to deal with an intestinal fistula without opening the general cavity. This is the main feature underlying the procedure I advocate; and no arguments in its support need be adduced. But in respect of another feature, the approximation of surfaces not covered with peritoneum but simply rawed or covered with cicatrix, for the purpose of closing an opening in intestines, some argument may be necessary.

Too much has been made of the agglutination of peritoneal surfaces in abdominal surgery. It is true that irritated peritoneal surfaces very soon become glued together by lymph. But such union is neither permanent nor strong. It serves a useful purpose by preventing leakage till
true union by vascularised granulations takes place. It is by no means certain that two apposed surfaces of intact peritoneum unite as quickly as two surfaces denuded of peritoneum. The process of vascularisation, which is essential to true union, is not likely to be so rapid where a double layer of intact endothelium has to be pierced as where there is no such obstacle. Whether this be true or not, it is certain that in practice the fallacy of peritoneum to peritoneum has been proved again and again, and need not further be insisted upon. Here I do not seek to push this thesis to its full outcome: all I desire to insist upon is, that an opening in gut can be closed as satisfactorily and as speedily by the apposition of rough cicatricial tissue on its surface as by the apposition of intact peritoneum. The operation I suggest brings raw surface to raw, and does not involve peritoneum. There is a sufficiency of proof that it is successful and safe, and there is no need to carry the argument further.

Between the parietal peritoneum and any discharging intestinal opening is a circle of adhesions binding the bowel to the parietes. These adhesions are left intact. The bowel is delivered through an incision carried above and below the parietal opening along with parietal peritoneum, which is separated from the parietes to any extent desired. The chief element in the operation is this separation of parietal peritoneum, with its fat, all round the fistula. It is remarkable how much freedom for manipulation a peritoneal stripping of an inch all round will give. A stripping over a circle of two inches radius will permit the gut to be delivered completely through the wound. The detachment is begun at a distance from the fistula, and carried down to it; it may be done almost entirely with the fingers. Further details may now be given.

**Facial Fistula.**

Here the bowel does not protrude through the parietal opening, and there is no spur, or only a slight one. A simple fistula lined with granulations leads from skin to bowel.

The granulations are first scraped from the sinus by means of a small sharp Volkman's spoon, and the parts around are purified. If there is any discharge from the intestine, a small sponge with string attached is pushed through the fistula so as to block it.

![Diagrams to show method of Closing Facal Fistula.](image-url)

*Fi.* Fistula in abdominal wall communicating with bowel.

G. Granulations lining facial fistula.

S. Skin. M. Muscular layer. F. Sub-peritoneal fascia.

AD. Adhesions between bowel and peritoneum surrounding fistula. B. Bowel.

*Broken line* in upper diagram shows incisions around fistula and in sub-peritoneal areolar tissue. Lower diagram shows operation finished and sutures placed.

Two incisions are now made in the parietes, with the fistula as centre, down to the sub-peritoneal areolar tissue. Their direction is to be guided by that of the principal muscular fibres in the parietes, so as to avoid their division and thus minimise weakening of the parietes. A fistula in the middle line would have vertical incisions...
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below it; in the loin it would be
vertical or oblique, as we desire to preserve
the fibres of the internal oblique muscle, or
external oblique muscle and aponeurosis.
The incision comes up to, but does not pass
through, the fistula; it is carried round the
fistula; the fistula with the cicatricial tissue
surrounding it is bodily removed. The
parietal incision goes down to the sub-perito-
eonal areolar and fatty tissue, but does not
go through it. Then with finger and scissors
the parietal peritoneum with its fat is
detached from the muscle all round the
fistula for a distance of from one to two
inches. When the separation is complete,
the fistulous tract is removed down to the gut.
The bowel remains attached to the parietal
peritoneum by adhesions around the fis-
tulous opening. By means of forceps placed
close to the opening, the bowel, with its
attached peritoneum, may now be lifted out
through the incision in the parietes. If
there is any difficulty in doing this, a little
increase of detachment of peritoneum will make
it easy. The opening in the gut is now clos-
ed by infolding of the rawed areolar surfaces
around the fistula and suturing by Lem.
burt's method, as if smooth peritoneal
surfaces only were involved. The line of
closure may be vertical or transverse, as
seems best. Two layers of closely-placed
sutures, one continuous (Dupuytren), suffice
for closure. The outer row will engage
some of the sub-peritoneal areolar tissue,
and should have a considerable grip
of material. The sutured gut and peritoneum
is pushed inside, and the parietal wound
closed over it by silkworm gut sutures in
the ordinary way. A small drainage tube
laid over the line of gut suture adds to the
security by preventing burrowing of fluids
in case of leakage.

Artificial Anus.

Here the intestine itself forms the sur-
rounding of the fistula; the mucous mem-
brane of the bowel and the skin are
practically continuous. There may be
ectropion of intestinal mucous membrane
or of the whole bowel. There will always
be a spur more or less perfect, and, accord-
ing to its perfection, requiring previous
treatment. If there has been loss of bowel
from resection or gangrene the spur will be
dense and unyielding, but it need not be so
large as when it is made simply by kinking.
In every case where the spur is well
developed, or where the intestine below the
artificial anus is contracted, it will be wise
to devote a few days before operation to the
amelioration of both conditions. For these
purposes I have found Mitchell Banks's in-
genious method, by means of a piece of rub-
er tubing, quite efficient. The tubing, if
introduced on the stretch, may be of con-
siderable dimensions. It rests comfortably
in the large entering gut; dilates the
contracted efferent gut, and presses back the
encroaching spur (Fig. 2). It is kept
in position by a loop of aluminium wire,
The operation is begun as in that for fistula, by making incisions along the direction of the chief muscular fibres on each side of the opening down to the sub-peritoneal tissue. The length of the incisions will vary according to the thickness of the parietes, but will not be shorter than two inches on each side of the anus. The knife is carried round the gut adherent to the parietes, liberating it thoroughly. The peritoneum, with its areolar tissue, is separated from the overlying muscle all round over a circle of two inches radius or more. The bowel, with its adherent parietal peritoneum, is then delivered through the peritoneum. All superfluous pieces of tissue are removed, and the gut is ready for suture.

Usually union is best made transversely. If there has been resection of gut, transverse suturing is essential. If there has been only incision of bowel, as in colostomy or enterostomy, suture may be longitudinal; but even here it is perhaps best done transversely. I have succeeded equally well by each method.

Sutures are carefully placed by the Lembert method from behind forwards. Particular care is given to the deep suturing. A good hold of the tissues is taken, and each stitch must bring about accurate apposition. A single or double row of sutures is placed over the deep row, and here also perfect closure, without undue compression, must be secured. Tension may be avoided by complete liberation of the bowel from surrounding adhesions, and by further stripping of parietal peritoneum. The gut is closed exactly as in enterorraphy by Lembert's method inside the peritoneum; only there being more available tissue for union a more extensive grip is taken by each suture.

The wound in the bowel is cleansed; and the whole is pushed inside the cavity. The parietal wound is closed as before. A drainage tube placed over the line of intestinal suture will guard against infiltration if there is leakage. In one case (after resection) where there was leakage (caused possibly by constant vomiting for many hours from the anaesthetic) the fistula spontaneously closed without much trouble.

In conclusion, I may add that the operation, safe and satisfactory as it is to the patient, is not a very easy one for the surgeon. The most important detail is liberation of the gut by detachment of the parietal peritoneum. If detachment is well begun at the distal ends of the incisions, and the plane of separation is followed up to the very margin of the fistula or anus, the operation is much simplified. In my first
operations I began the detachment from the edges of the fistula; this is not so easy, and may lead to opening of the cavity. Free detachment of parietal peritoneum, with accurate suturing of the bowel, are the most important elements of success.

In chronic cases of conjunctivitis, massage with castor oil, and in the follicular variety acetic acid of lead ointment, are recommended; and for trachoma, trituration with alum, sulphate of copper, or modified nitrate of silver stick. Dr. Kenneth Scott, who has had exceptional opportunities in Egypt of treating trachoma, formerly used a four per cent. solution of perchloride of mercury, with an eyedrop of a quarter per cent. At the Bristol meeting of the British Medical Association, he advocated, as an improvement, the use of cyanide of mercury, which is much less irritating and quite as efficacious. A four per cent. solution of the cyanide should be daily brushed on the everted lids, and a quarter per cent. solution used as an eye-drop three times a day. A slower cure is obtained by painting a one per cent. solution, and using as a drop one in 1,000. Warm weather seems distinctly favourable to a cure. Mr. Stephenson advocates a one per cent. solution of the perchloride, sulphate of copper crystal, and "expression." He considers trachoma to be a specific form of follicular conjunctivitis, due to the irritation of a specific organism. Many authorities still consider sulphate of copper crystal the best application.—The Bristol Medical-Chirurgical Journal.

In the treatment of cancer a paper by Dr. W. B. Coley, of New York,† is of the greatest interest. For although the treatment here reported for inoperable malignant tumours seems especially efficacious in the class of sarcomata, yet there seems some hope that the results in carcinomata may improve. The treatment is based on the well-known fact that erysipelas attacking malignant growths has sometimes resulted in their cure. The method consists in injecting locally into the tumour, at intervals of from twenty-four to forty-eight hours, or longer, according to the reaction produced, the mixed toxins of the streptococci of erysipelas and the bacillus prodigiosus, the cultures being sterilised at a low temperature, but not filtered. After cooling, some thymol is added as a preservative. Of this preparation the dose is one to eight minims. It is of rather uncertain strength; and Dr. Coley advises always beginning with the lowest dose, and gradually increasing it until the desired reaction is obtained, viz., a rise of temperature to 105° or 104° F. This reaction is only temporary, passing off in a few hours. The cases treated have all been either growths which had repeatedly recurred and were finally inoperable, or such as from the first were not fit for operation. In many cases the tumour disappeared by a process of necrosis and disintegration, but in some by absorption. One very remarkable case of the latter kind is quoted in which an enormous spindle-celled sarcoma, involving nearly the whole of one side of the chest, back and front, entirely disappeared in four months.

He had treated (by the combined toxins, filtered, as he originally prepared them) up to May, 1894, twenty-five cases of sarcoma, eight of carcinoma, and three of carcinoma or sarcoma; and since that date (by the combined toxins, unfiltered, as described above), thirteen sarcomata and eleven carcinomata. In the cases of sarcoma only, cuo Dr. Coley claim any cures; and of the combined thirty-eight cases, he thinks nine promise to be permanently successful: but, although none of the carcinomatous tumours disappeared, the injections seemed to have an undoubted retarding influence, in some cases to an extraordinary degree.

The method is, of course, still on its trial; but enough evidence has been adduced to


more than justify an extended and careful employment of it in these otherwise hopeless cases. The discomfort and risks seem very slight, while the issues at stake are enormous.—The Bristol Medico-Chirurgical Journal.

AN OPERATION FOR RELIEVING PHIMOSIS WHEN COMPPLICATING GONORRHOEA, WITHOUT INFECTING THE WOUND.*

By R. M. Woodward, M.D.,
Passed Assistant Surgeon, U. S. Marine Hospital Service; Clinical Lecturer on Surgery, Medical Department, Western Reserve University, Cleveland, Ohio.

All general practitioners see many cases of gonorrhoea, and among them is frequently one occurring in an individual the subject of more or less marked phimosis. The swelling of the glans penis and prepuce incident to gonorrhoea increases the degree of phimosis. The pain produced by an attempt to retract the prepuce for purposes of cleanliness induces the patient to defer this act longer and longer, until finally it becomes nearly or quite impossible. Gonorrhoeal pus collects beneath the prepuce, especially back of the corona glandis. It cannot be removed with a gonorrhœal syringe.

The contact of the irritating pus soon causes balanitis and phthisis, with gonorrhœal ulcers, all of which complicate the original trouble, interfere with treatment, and make the patient miserable.

The usual treatment in such cases has been to slit up the back of the prepuce, and later on to circumcise, or to proceed to circumcision at once; but in either case the wound becomes infected, and an indolent ulcer the size of the entire incision results, which may last for weeks, and leaves an unsightly scar.

To relieve the constriction, and at the same time avoid infection of the wound, I adopted the following simple procedure, which, so far as I know, has not been suggested before:—

* Read, and the patient exhibited, before the Cleveland Medical Society, December 28, 1894.

1. Shave the pubes, penis and scrotum.
2. Thoroughly scrub the parts with a solution of bichloride of mercury, 1 to 2,000.
3. Compress the glans penis, forcing the blood out, and dexterously slip back the prepuce over the corona glandis, converting the phimosis into a paraphimosis.
4. Cleanse the glans and prepuce well with the same antiseptic solution, and have an assistant hold the glans wrapped in cotton wet with bichloride.
5. Place a rubber band about the penis at the level of B, near the base.
6. Inject a four-per-cent. solution of cocaine subcutaneously, entering the needle just back of A and passing it down to and under the constriction at C, slowly injecting the solution during withdrawal.
7. Pick up the skin at A with two forceps, and snip with scissors.
8. Withdraw the foreskin to its fullest extent, bringing the constriction (junction of mucous and cutaneous surfaces) about a quarter or half an inch back of the corona glandis.
9. Introduce subcutaneously a grooved director at A, and pass down beneath the constriction.
10. Upon the director pass a tenotome flatwise, until the constriction is reached, then turn the cutting edge up, and gently sever the constricting band without cutting through the mucous membrane or skin.
11. Withdraw the instruments, remove the rubber band, check the few drops of blood that appear, take one or two fine catgut stitches in the wound, and close it with cotton and collodion, to prevent the absorption of any poison that may afterward touch it.
12. Lay one thickness of iodoform gauze over the glans, again compress it, and draw down the prepuce to its former position.

The opening in the prepuce is appreciably enlarged at the time, and this increases during the first three days. To prevent
oedema of the penis, bandage the organ snugly, swing the scrotum up over the abdomen, and give an opium pill the first two or three nights to prevent priapism.

The patient is now able to retract the prepuce at will, and daily dressings can be applied to the irritated membranes. The soreness disappears in a few days.

When the gonorrhoeal discharge has entirely ceased, circumcision can be performed if considered advisable; but in the cases where I have performed this operation, the opening in the prepuce has been rendered so large that there was no possibility of a phimosis occurring with any subsequent attack of gonorrhoea, and circumcision was not indicated. The operation is equally applicable to phimosis complicating chancreoids. If the chancreoid should be in the dorsal median line beneath the prepuce, pass the grooved director and tenotome at one side.

The wound in the skin need only be large enough to admit the tip of a grooved director, and the resulting cicatrix is almost invisible. The tenotome should be well bellied and have a keen edge.

The treatment of bleeding from the nose.

(New York Medical Journal, November 17, 1894.)—The Revue Internationale de Rhinologie, Otologie, et Laryngologie for August 10, publishes an article by Dr. Baumgarten, of Budapest, in which he recommends the following methods in the treatment of epistaxis: A thorough examination of the inside of the nose must be made in order to discover where the bleeding comes from. Usually there are to be seen at the anterior part of the septum, rarely elsewhere, one or more small superficial vessels of a red color, or else little nodules, erosions, and varicose veins, or a small empty vessel looking blackish on a red background. Occasionally the hemorrhagic spot is covered with fresh blood-crusts, which must be softened and carefully raised in order to expose the appearances referred to. If there is nothing of a suspicious nature to be seen, the patient must be made to blow his nose several times. Another method is to apply a tampon of wet cotton to the septum, and press it more and more firmly against the place until the morbid spot bleeds. Sometimes this brings on at once a more abundant hemorrhage, which makes the continued application of the tampon necessary before the bleeding spot can be destroyed. For its destruction the author has used the galvanic cauterity or chromic acid, sometimes both. He touches the spot with the cautery, which is very painful, and the wire loop cannot always be withdrawn while it is still red, so that the eschar is apt to be removed at the same time. Then the small wound bleeds feebly, and it should be cauterized with chromic acid, which, according to Dr. Bresgen, is an excellent hemostatic. When operating on children or on timid persons Dr. Baumgarten uses the chromic acid only, but the cauterizations must be repeated two or more times after the eschar has fallen or after a fresh hemorrhage. This treatment must be continued until a plainly visible
cicatrix is produced. The patient must be told not to scratch the eschar, to apply a little oil or grease to the spot, to keep quiet, to avoid handling his nose, and not to blow it too hard.

Sometimes sneezing occurs, and this may bring on a hemorrhage through the eschar. In this case the application must be renewed. A hemorrhage must always be arrested before cauterizing the spot from which it proceeds. After the source of the hemorrhage has been ascertained the spot is washed with warm water, the nostril is dilated, and as large a tampon as possible is inserted, against which the wing of the nostril is pressed with the finger. That generally suffices, as nearly all forms of epistaxis have their origin in the forepart of the nasal passages, but the patient must hold himself erect and remain quiet. After this pressure has been continued for a moment the tampon is slowly withdrawn in order to find the origin of the hemorrhage. A second tampon is then pressed against the spot. The epistaxis is thus often arrested. Afterwards the place may be cauterized with chronic acid. The author has often succeeded in covering the bloody points with a layer of chronic acid by pushing the tampon forward very gently; it cannot always be removed immediately, because the wound will bleed anew, and it must be left until the following day or longer if necessary. The author, however, has never had to repeat this for more than three days. He always uses cotton saturated with carbolic acid or some other aseptic cotton, but never iron perchloride, as that only cauterizes.

If the blood runs through the tampon or into the pharynx, the physician should use the same means as those employed in the more serious hemorrhages. After the part has been washed with warm water, a strip of iodoform gauze as wide as a finger should be pushed as far as the choana; then the entire nasal fossa should be packed with the same material. This may be done easily and without pain; it is better than Belloq's method, and may be accomplished even with a contracted nostril. With regard to Belloq’s method, Dr. Baumgarten thinks it is not sufficient and that it may produce accidents to the ear, etc. In one case, that of an old man who was the subject of advanced arterio-sclerosis, Belloq’s tampon was inserted, and several tampons were added anteriorly. Two physicians had tried to stop the bleeding, but their efforts had been of no avail. The velum of the palate had been cut, and it was ulcerated and edematous. The author, who was called in, immediately removed everything, and while the bleeding continued he applied strips of iodoform gauze, and two days afterwards the hemorrhage was arrested.

As a palliative method, or in cases where the anterior tampon is not efficacious, or where the patient is taking care of himself pending the physician’s arrival, the author recommends the use of warm water, which is a better hemostatic than cold water or ice water, or else lemon juice. A solution of iron perchloride is an excellent hemostatic, he says, but it cauterizes the neighboring region and prevents the physician from distinguishing the diseased spot.

When the hemorrhage finally stops, and the bleeding points are found, they must be cauterized. There is no harm in cauterizing somewhat around the bleeding spot; on the contrary, the indications are to burn the entire vicinity. In cases of arterio-sclerosis the author has been obliged to cauterize the entire pituitary surface as far as the choana, as the iodoformed strips were removed one after another. These cauterizations should be repeated several times, and every suspected place covered anew with chronic acid. These tampons of iodoform gauze are not disagreeable to the patient, and they may be left for two days. Before removing them the nose should be washed with warm water, and the strips of gauze should be drawn away very gently in order to prevent the hemorrhage from breaking out again, and any
suspected places immediately cauterized, even at the risk of touching a healthy spot. The patient may take wine and iron, but should avoid coffee, tea, and effervescing drinks. All internal medicines are useless and harmful.

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A CASE OF HORDEOLUM TERMINATING IN DEATH.

By Dr. Lesniowski.

(‘Gazeta Lekarska,’ No. 18.)

The case reported by the author relates to a man twenty years old who had had a stye on the lower lid of the right eye for several days, and who was suddenly seized with a severe chill, followed immediately by a marked oedema of the forehead. The condition of the patient continued to grow worse, and he entered the Hôpital de l’Enfant-Jesus during the service of Dr. Jawlenski, when quite an intense fever was found, with loss of consciousness; the lids of the right eye, the forehead, and the root of the nose were oedematous, and the oedema spread to the left half of the cranium. The eyeball and conjunctiva showed no signs of trouble, râles were heard in the lungs, and the general bad condition of the patient increased. At the lower border of the right lid a small scar was seen, near the internal angle of the eye. After shaving the hair about the oedematous epidermal region deep red streaks were found corresponding to the course of the veins, forming a network at the top of the head. In several parts of this network softening and fluctuation were found, while in others the streaks felt like hard cords. This was, then, a phlebitis of the frontal veins, which had arisen from the seat of the stye and had spread to the cerebral sinuses and produced pyæmia.

Incisions made along all the dilated veins of the forehead and cranium gave issue to a yellow, thick, non-fetid pus, and the suppuration was found to have invaded the surrounding tissue as well as the vessels. All the wounds were carefully irrigated with a sublimate solution, and an antiseptic dressing applied, but the patient succumbed to the general weakness.

The autopsy confirmed the diagnosis made during life. Suppuration of the two cavernous sinuses was found, while the other cerebral sinuses contained liquid blood, a fact which showed the course of propagation of the pathological process to have been the ophthalmic vein, and not the veins of the cranium which communicate with the superficial sinuses. On removal of the eye the ophthalmic vein was seen to be completely filled with pus, and one of the suppurating veins could be traced to the root of the stye. The lungs contained several metastatic abscesses.

Pus obtained with proper precautions at the time of the operation produced cultures of yellow pyogenic staphylococcus. There was then no secondary infection. The same germ which is constantly found in abscesses in general, and especially in hordeolum, had caused the primary trouble (the hordeolum), and its consequence (phlebitis).

From the study of this case Dr. Lesniowski is led to affirm that any one with a trouble even so slight as a stye may be exposed to the most serious infectious complications.—From Semaine Méd.

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A CASE OF OPERATION FOR CONGENITAL CATARACT.

By Dr. Van den Bergh.

(‘La Presse Méd. Belge,’ Oct. 28.)

The patient was a child four years of age with a complete congenital cataract with good projection. The mother also had a congenital cataract. Extraction was performed according to the simple linear method of Von Graefe, as there were calcareous deposits in the lens and a commencing absorption with rendered dissection as well as aspiration improper. Indeed, according to the author, it is not always proper to rely upon aspiration in cataracts.
of infancy. A hard nucleus is frequently found when it is not expected, and complications may follow, the least of which is the ill-success of the operation. The same is true of discision. Dr. Van der Bergh remembers an operation for discision attempted in his presence, and which could not be completed because of the hard condition of the lens. The needle dislocated the lens into the anterior chamber, and the child lost the eye. As the consistency of a cataract is never absolutely certain, it is better to have recourse to a process which offers security in all respects.

The operation was then performed according to the method of Van Graefe. A number of softened masses were extracted, and there remained in place a thick sac which was impossible to tear. Dr. Van den Bergh then introduced a capsular forceps and drew out the whole capsular sac. The same manœuvre was successfully accomplished on both sides, not an easy thing when the iris is left intact. After the operation the pupils were round and quite black. Recovery followed without complications, and the child enjoys good vision.—Valude.

HOW TO MAKE IODOFORM GAUZE.

New York, May 13, 1895.

To the Editor of the New York Medical Journal.

Sir: At the request of a number of gentlemen who have attended my clinics I desire to make public through you my formula for making a surgical dressing impregnated with iodoform. Fine-mesh gauze is steam-sterilized. It is then dried. After drying, the gauze is soaked in a twenty-per-cent. solution of iodoform in ether for ten minutes. It is taken out and the excess of ether wrung out with the hands. The gauze is now placed in a basin and covered with a towel. It is left for twelve hours in a warm room, after which time it will be found that the ether has entirely evaporated. The gauze is now of a greenish-blue colour, presenting the characteristic starch-iodine reaction. It is unfit for use in this state, the iodine being too free.

The next step is to soak the gauze for twelve hours in a watery solution of bichloride of mercury, 1 to 4,000. This acts as a "fixing agent," and the beautiful golden colour of iodoform again appears. The gauze is now wrung as dry as the hands can make it and preserved in glass jars. Prepared in this way, the iodoform is not held in the gauze in mere mechanical association, but is in every bast cell of the fibre (cotton) of which the gauze is composed. The advantage of this is manifest: such a dressing cannot be poisonous, as the iodoform is not absorbed. The addition of discharges and blood to the gauze again turns it greenish-blue, showing that the iodine is again in a free state. So, when the dressings are saturated they are yet sterile. In cavity walls, there being no givixia in the gauze, no serious exudation is induced. This material has been used by me for five years or more, and I may say it has largely influenced the results as well as after-treatment of my operations. I estimate that I make one dressing where three are made when other gaizes are used.

For instance, I leave a Mikulicz packing in the abdomen for two weeks, and when it is removed there is no pus, and no rise of temperature while it is in.

In one case where I did a successful hysterectomy for puerperal septicemia the last piece of gauze was not removed before the tenth day. In curettage for gonorrhoeal and septic endometritis the gauze stays in for five or more days.

In my method of operating for ventral hernia, the first dressing is made in from ten to fourteen days. Ablations of the uterus are not dressed before the tenth or twelfth day.

This is the only dressing I have ever found which is powerfully antiseptic, is non-
irritant to the tissues, and remains sterile when soaked with discharges from an infected area.

It is perhaps well to mention that the dressing is prepared under an aseptic procedure as precise as that employed at an operation.

As to quantity that may be used: five yards long, one yard wide, in a puerperal uterus; sixteen yards long, four inches wide, in an obliteration of the pelvic cavity; nine yards long, four inches wide, after a sacral resection; and in no instance has there been the least evidence of iodoform intoxication.

So far as the chemistry of the procedure is concerned I have been told it is as follows: When the gauze is given after the ether has evaporated there is iodide of starch and there is free iodine; when the bichloride has been added there is bichloride in the starch and there is iodoform; when the bichloride is changed to calomel by blood, etc., the iodine again becomes free and the dressing is again greenish-blue. But I cannot say whether this is true so far as the chemistry is involved. Certainly marvelous results are obtained with it.—W. B. PEYOR, M.D.

**WHAT CASES OF PHTHISIS ARE CURED BY COLORADO CLIMATE? IS PERMANENT RESIDENCE NECESSARY?**

Regarding Colorado climate as a cure for tuberculosis, experience has given Waxham many fixed and positive opinions. He does not believe that this climate and altitude are suitable for all cases of consumption, but that a great many recover here who would otherwise have filled untimely graves has been so frequently demonstrated as to require no argument.

The cases that are especially unfavourably affected by this climate are those in the later stages. The dyspnoea is increased, the ability to take exercise diminished, and the heart's action increased. This, added to the disappointment and the absence from friends and home comforts, renders life miserable and the unfavourable result certain and speedy. Colorado climate is worse than useless where a large area of lung tissue is involved in the tubercular process, where there are profuse night-sweats, rapid heart action, elevated temperature, with emaciation and prostration. Patients so affected are much better at home, but, if sent away, should be sent to a mild climate and a low altitude. He believes that fibroid cases with bronchitis and embarrassed heart action are unfavourable, but with proper care in regard to exercise, and with the aid of heart tonics, they will undoubtedly do quite as well here as anywhere, except in the later stages. A word of caution is necessary in relation to exercise. Frequently patients are advised to walk, to ride horseback, to climb the hills; in fact, to take all the out-door exercise possible and to take little or no medicine. It must be remembered that, to one even in good health, exercise at an altitude of from five thousand to seven thousand feet is much more exhausting than at the sea-level, until one has become acclimated or accustomed to it. To one in feeble health great and sometimes permanent injury is done by too great exercise on first coming to this altitude. They should be advised to rest and to take exercise gradually. Frequently digitalis is required in addition. Fresh, uncontaminated air is of the utmost importance, and those do better who can even sleep in tents, and yet too much care cannot be taken in regard to exercise, especially for the first few weeks.

He has not seen nervous cases aggravated by Denver climate, but it is probably true that very high altitudes, as at Leadville (ten thousand feet), Georgetown (nine thousand), and the like, are not at all suitable for nervous cases or those affected with mitral insufficiency or other diseases of the heart. He states that he should hardly feel justified in sending such cases to an altitude of over six thousand feet. He
does not believe that this climate in itself increases the tendency to fever, but has often seen fevers induced by injudicious exercise that would not otherwise have developed. The tendency to hemorrhage is not increased, but, on the contrary, is diminished, and we look upon the hemorrhagic cases as the most favourable if not too far advanced.

Cases of tuberculosis should not come to Colorado for six, eight, or ten months, but from three to five years. Permanent residence in Colorado is not absolutely necessary after this time, provided all symptoms have disappeared, but it is better and safer to do so. Relapsing cases are unfavorable, and hence a patient should not be allowed to return too soon. As a rule, it requires from one to two years for active cases to pass into the stage of "arrest." Cases complicated with diseases of the heart need not be debarred from going to Colorado, provided care is observed in regard to exercise, if heart tonics are taken until the patient has become acclimated, and especially if the lower altitudes of Colorado are selected.—Colorado Climatologist, December 15, 1894.

TREATMENT OF PUERPERAL INFECTION.

Bonnaire thus treats puerperal infection (La Tribune Médicale, July, 1894).

In all manipulations before, during, and after labour, scrupulously cleanse everything, from hands and instruments to bed-linen, that in any way may come in contact with the genitals of the patient.

Those who claim that the cause is always hetero-infection rely upon asepsis alone, but those who claim that the source of the microbes may be both hetero- and auto-infection rely upon antisepsis.

The author believes with others that auto-infection may be occasioned by the streptococcus, staphylococcus, gonococcus, or the colon bacillus, etc., and for that reason proposes antisepsis.

To avoid the entrance of the microbes, and their destruction when present after labour, a very fe-bile stream should be used in washing out the vagina, and the olive-tipped glass instrument used for the injections should be perforated only on the side.

Great care should be exercised that the canula contains no air, and from 3 to 4 quarts of a solution of sublimate (1 to 10,000) should be injected.

CarboD acid is also a good antiseptic to use in these cases, in strength of at least two-per-cent, solutions.

Sulphate of copper is also a good drug, but possesses the same danger as the carboD, in that they may both cause rapid poisoning when absorbed.

Bonnaire especially recommends the iodide and permanganate of potassium, iodoform, and phenosalyl. The following is an excellent way of using iodine:—

R. Iodide of potassium, ½ dr.
Metallic iodine, m. xiv.
Water, fl. oz. iii.
Mix the whole in a quart of water.

Potassium permanganate is a good disinfectant, but less energetic than iodine.

Phenosalyl in solutions of one per cent. is more active than phenol at five per cent.

Iodoform increases diapedesis, and is an excellent antiseptic to living tissues.

As for boric acid, he considers it dangerous, not because it is toxic, but because it offers no resistance to microbes.

Finally, in a case of puerperal metritis, commence by washing the vagina with sublimate; then irrigate the uterus with permanganate, 1 to 1,000. If, in a few hours, the temperature does not commence to subside, then inject into the uterine cavity the solution of iodine.

If there are false membranes, or if the irritation does not suffice to remove the source of infection, then cleanse by friction, or, finally, curette the uterine cavity.

When swabbing is resorted to, impregnate the substance used with zinc chloride, iodine, or carbolic, five to ten per cent.
After curetting, wipe out the uterine cavity with a solution of carbolized glycerin, ten per cent.; cresol and glycerin, one to three per cent., or chloride of zinc, ten per cent., and tampon the vagina with iodoform gauze, either dry or saturated with one of the foregoing solutions.

General Treatment.—There is usually a diarrhea, very offensive in colour and with large stools. To remedy this, some form of intestinal antiseptic will be sufficient,—benzonaphthol, naphthol, salol, salicylate of bismuth.

Increase diuresis by a milk diet; excite the skin to increased action by frictions or by baths. In cases of high fever with delirium, cold baths will give good results.

To act directly upon the germs and their products in the blood, mercury is a great auxiliary. The best form is calomel; by its action upon the liver it increases the microbicidal power and also disinfects the intestines. Give the first day 7 grains at a dose and repeat four hours afterwards, followed the next day with small doses (1 grain) every two hours.

Alcohol and quinine sulphate may also be added to this list, supplemented by milk, bouillon, eggs, peptones, and coffee.

Also in the line of rendering the blood more resistant to microbic influence, the subcutaneous injection of the serum of Hayem, in two injections daily of ten fluid drachms each, will often produce the greatest tonic influence. Below is appended the formula for the serum of Hayem:

\[
\text{R Sodii chloridi, gr. 4is.}
\text{Sodii sulph., gr. 4is.}
\text{Aqua, Oi.}
\]

THE DYSPESPIA OF STRUMOUS CHILDREN.

Dr. W. Soltau Fenwick states (Clin. Jour.) that mild cases of strumous dyspepsia are very common and usually escape notice, but that the more severe forms immediately claim attention. Of 200 cases of disease in children during the past year in his service, 32 suffered from the disorder.

In the majority of the cases there is a strong family history of tuberculosis, and usually some of the brothers or sisters of the patient suffer from scrofula. The disease usually appears about the age of five years, and in addition to the general tuberculous aspect there is usually some local manifestation, such as chronic enlargement of the cervical glands, hypertrophy of the tonsils, or phlyctenular ulcers of the cornea. Anæmia is always a noticeable feature, while pain in the abdomen is the most constant and characteristic symptom. It comes on suddenly, lasting from a few minutes to several hours, the face being flushed with free perspiration, although at times great pallor is present. The pain is described as a gripping or twisting sensation in the region of the transverse colon, though occasionally the right iliac region or the hypogastrum is indicated as the chief site of suffering. Constipation, exhaustion from want of food, and excessive mental or physical fatigue are the principal factors which seem to excite an attack.

As a rule the appetite is poor and extremely capricious, and the patient exhibits an intense dislike to most forms of fat, especially that of mutton, beef, and pork. Bacon-fat, on the other hand, is often agreeable, and milk, butter, and cod-liver oil never give rise to any unpleasant symptoms. Occasionally dislike is expressed for the carbohydrates, and saccharine materials are found to occasion flatulence, acidity or nausea. Many of the patients also develop a special liking for certain articles which are usually regarded as the reverse of digestible or nourishing, vinegar and lemon enjoying an extreme degree of popularity. Thirst always constitutes a prominent symptom, and is chiefly complained of during the night or early morning.

Although the ordinary symptoms of gastric disease, such as nausea, acidity, and flatulence, are usually absent in these cases, it occasionally happens that a sudden change in the atmospheric condition or some
slight indiscretion in diet will induce an attack of subacute gastric catarrh. Under these circumstances the patient awakes in the morning with head-ache, and complains of nausea and a foul taste in the mouth. The appetite is in abeyance, but thirst is excessive. The face appears pale and puffy, and dark lines make their appearance beneath the eyes. The breath is sour and the dorum of the tongue covered with a thick white fur, while the tip and edges are of a vivid red colour. The pulse is slightly quickened, and the temperature raised a degree or so above the normal. Nausea is a persistent symptom, and retching or vomiting follows every attempt to partake of food. As a rule diarrhoea complicates the gastric disorder, but occasionally constipation is observed. These catarrhal attacks last from two to five days and are apt to recur from time to time.

After the age of puberty the various symptoms of the complaint generally subside, but the patient may still be subject to occasional attacks of gastric catarrh. In some instances, however, the disease undergoes a kind of evolution, and the stomach, rather than the intestine, eventually becomes the chief seat of the disorder. Dr. Fenwick regards the affection as essentially a neuroma of the intestinal tract, associated with extreme difficulty of digestion and absorption of neutral fats, both conditions being dependent upon the strumous dyscrasia.

TREATMENT OF THE "SENiLE HEART."

Dr. G. W. Balfour gives (Bristol Med. Chirur. Jour.) In every case careful removal of lacerdenia.

Precordial Anxiety.—Careful dieting; cardiac tonics; rest at first, afterwards regulated exercise.

Intermission and Irregularity.—Careful dieting; vascular stimulants, combined with cardiac tonics; sedatives, especially for women about their climacteric, occasionally hypnotics; antacids and anti-arthritis; assafetida (pil. galbani co.); moderate exercise.

Palpitation.—Antacids; stimulants; mustard over precordial region; hot foot-baths. In interval strengthen patient by open air exercise, good food and such tonics as may seem needful, especially iron.

Tremor Cordis.—Careful dieting most important; antacids; anti-arthritis; pil. galbani co.

Tachycardia.—Careful dieting; in recent cases following cardiac overstrain, belladonna, or atropine, must be pushed till pupils dilate. In cases of poisoning by tobacco or alcohol, tonic doses of digitalis useful. Cardiac tonics, especially digitalis and arsenic, continued for a long time in moderate doses, supplemented by hypnotics at bed-time, especially morphia. Digitalis most useful in vagus paralysis, morphia in affections of the sympathetic. Cholate of soda slows the pulse, but it destroys the blood corpuscles, and the benefit is thus a doubtful one. Antipyrine has been recommended theoretically. Faradization of the skin over the precordia, or of the vagus nerve; or the skin or vagus may be galvanized. Compression of the vagus. Forced inspiration holding the breath as long as possible. Ether sprayed along the cervical spine. A chloroform poultice over the precordial region.

Bradycardia.—In the semi-systolic variety cardiac tonics, especially digitalis. In true bradycardia digitalis is also indispensable, to maintain the elastic tonicity of the heart, and to enable the heart to cope with the exceptionally high blood pressure prevalent during part of the systole.

Delirium Cordis.—Careful dieting, vascular stimulants, cardiac tonics, antacids, and anti-arthritis.

Angina pectoris.—During the paroxysm, nitro-glycerine, nitrite of amyl, chloroform and morphia. During the interval, most careful and abstemious diet, especially towards evening. Vascular stimulants in combination with cardiac tonics, especially
arsenic. Exercise is to be avoided and only undertaken when duly prepared for by the ingestion of some vascular stimulant.

SOME UNUSUAL EFFECTS OF QUININE ON THE SKIN.

Schneck contributes to the Journal of the American Medical Association, August 4, 1894, some facts in regard to this subject which are of interest.

Perhaps the most common dermal effect of quinine, when administered internally, is a form of hives or urticaria, in which the surface is fairly covered with irregular-shaped, reddish-coloured blotches, varying in size from that of a dime to the palm of the hand. The skin is slightly elevated, has a hard, tense feel to the touch; there is usually intolerable itching and burning; sometimes the skin is so sensitive that even the slightest touch causes severe pain and feels as if a raw surface had been touched.

In other cases the eruption is in the form of a rash similar to that seen in scarlet fever. Often there is a uniform flush of the surface of the skin, as in an erythema. Quite frequently an herpetic eruption follows the administration of quinine, which may be located on the lips, ear, cheek, or prepuce. One of the writer’s patients suffered from acute coryza on the administration of a 5-grain dose.

There is a rarer form in which a small circumscribed area is affected whenever quinine is administered. He has treated an old lady for years, in whom 10 grains of quinine, given during one-half a day, will cause large reddish-purple blotches to appear on the ulnar margin of the left hand, and another, about the size of a half-dollar, on the upper portion of the left concha; the eruption is accompanied by a hot, tingling sensation, and disappears during the following twenty-four hours after the remedy has been given; the same train of symptoms invariably recurs when she takes quinine.

Another case is that of a carpenter, in whom a course of twenty grains of quinine, given in 4-grain doses two hours apart, invariably produces a similarly coloured condition of the skin on the back of the left thumb, between the first and second joints. The burning sensation is very severe; the epidermis is raised into a blister and afterwards shed.

A still more singular case is that of a young farmer, in whom 20 grains of quinine will cause the mucous membrane covering the glans penis to change to a dark-purple colour, accompanied by intense itching, followed by the shedding of the epithelial layer in the course of the following week.

Another instance is that of an intimate friend, in whom 4 grains of quinine will cause a most annoying itching of the glans penis in from thirty to sixty minutes after it has been taken. If taken at bed-time, the itching will continue until morning. The man is about fifty years old, and during the last eight or ten years of his life this effect has invariably followed the use of quinine, while previous to that time it was not noticed, although he has taken quinine frequently since early childhood. This last instance is of especial interest, as it indicates the length of time required from the ingestion of an ordinary dose of quinine until its physiological effects are produced.

BRIEF LOCAL ANÆSTHESIA,
says the Practitioner, can be produced by spraying with a mixture of half a drachm of menthol, five drachms of chloroform, and an ounce of ether. The anaesthesia lasts for about five minutes.

CHLORAL IN HÆMOPYSIS.

In the Berliner Klinische Wochenschrift, Doctor Pal praises chloral hydrate very highly in the treatment of pulmonary hæmorrhages, when administered per rectum in doses of from fifteen to thirty grains. He declares its action is usually
manifested in from thirty to forty minutes, and that it is rarely necessary to repeat the dose; moreover, it sometimes acts as a prophylactic. A normal heart is, of course, essential.

STRYCHNIA IN UTERINE HEMORRHAGE.

Recently very extensive claims have been made for strychnine as a specific against all forms of uterine hemorrhage. In gestation where there has been a previous history of flooding, it is advised to administer the drug in one-sixtieth-grain doses three times daily for a period of from four to six weeks before expected labour. It is also declared to be of value where previous parturitions have been tardy owing to irregular and feeble uterine contractions.

BELLADONNA IN SKIN DISEASES.

Eliza Dunbar, M.D. (Woman's Medical Journal) speaks in high terms of the benefit she has derived from the internal administration of Belladonna in all itching skin diseases. She has employed it in pruritus and eczema. Daily doses of one drachm are usually enough. It may be combined with tr. ferri, and in this form is very helpful in pruritus pudendi. In some old and obstinate cases, not only was the itching relieved, but the cases did well and improved under the administration of the drug. Persons vary in their susceptibility to the drug, and this must be kept in mind. When the patient flushes and gets headache from small doses, he will derive no benefit. The author noted that in case of failure she had good results when the drug was obtained from another chemist, showing the need for care in selecting the remedy. When the case is not promptly benefited it is, as a rule, useless to persist in the treatment.

ICHTHYOL IN FOOT-BLISTERS.

Myrdarz (Deut. Med. Woch., No. 12, 1894; Monatsschr. für Praktische Dermatol., No. 10, 1894) states that the foot-blisters occasioned by badly fitting shoes, usually located on the heel, or on, between, or beneath the toes, or the sole of the foot, are best treated by ichthyol. Sometimes these blisters form superficial abrasions, sometimes ulcers.

In one branch of the Austrian army there were in twelve years three hundred and fifty thousand soldiers treated in the hospital for these lesions. The average length of treatment is sixteen days. Twenty-per-cent. ichthyol solution painted over the lesions was found most efficacious.

TOOTHACHE.

In toothache: Chloral, camphor, glycerin, carbolic acid, equal quantities, applied on a small piece of cotton after cleaning the cavity, will relieve the pain. (Cover with more cotton to fill the cavity.) I keep the mixture, ready made, under the name of "Toothache Drops," in my medicine case. If the patient has lost sleep I give a full dose of chloral by the mouth.

FITOTRIASIS VERSICOLOR.

Cold cream, 40 grammes (1½ ounces), unwashed precipitated sulphur, 4 grammes (1 drachm); iodide of sulphur, 2 grammes (½ drachm); red oxide of mercury, 1 gramme (15½ grains). Rub in well three times daily, then dust with a powder made of talc and starch. (Monin, Mouvement Thér. et Mèd., December 1, 1894.)

PSORIASIS PALMARI.

Rectified spirits of wine, 5 drachms (20 grammes); sulphuric ether, 3 drachms (12 grammens); mix; add gum mastic, 25 grains (1.6 grammes); when dissolved, add salicylic acid, 1 drachm (4 grammes). An excellent varnish. Apply a cold-starch poultice for a few hours, to allay any irritation caused by its use. To wash the hands use (instead of soap) very hot water with quillaja-bark, mixing the fluid extract with
a small quantity of coal-tar (liq. carbonis detergens). (H. S. Purdon, Belfast Skin Hospital, Dublin Journal of Medical Science, January, 1895.)

ICHTHYOL-ZINC PASTE AS A TREATMENT FOR ECZEMA OF THE FEMALE GENITALS.

In an article on eczema of the mucous membranes, Von Sehlen (Monatshefte für Praktische Dermatologie, July, 1894) says that the inside of the vaginal sheath is especially subject to eczema, which continues outward to the labia, causing excessive itching. For the relief of this condition he proposes the following:—

Ichthyol ammon., 1½ to 2 parts.
Amyl triiti.
Zinc flor, of each, 12 parts.
Vaseline, 25 parts.
M. et fiat pasta.
Sig.—Zinc-ichthyol paste.

Also calomel ointment of a high per cent. will often be useful in preventing the intense itching.

ICHTHYOL IN FISSURES OF THE ANUS.

Van Der Willigen warmly commends ichthyol in the treatment of fissures of the anus (Journ. de Mèd., No. 32, 1894; Monatshefte für Praktische Dermatol., No. 10, 1894.) The pure drug is introduced into the anus by a brush. The contraction of the sphinter forces this into all the folds of the mucous membranes. Little pain is excited. Treatment should be repeated daily. The patient is given liquid diet and occasionally castor oil. The first patient, who had previously been treated by every means short of operation, was cured in eight days, the other three in two or three weeks. One had already been subjected to operation without benefit. There was no recurrence.

THIERSCH'S SKIN GRAFTING.

Thiersch's method consists of removing the granulations by a sharp curet. As soon as bleeding has been stopped by protecive compresses, broad strips of the upper layers of the skin, removed by a razor with a rapid to-and-fro movement, from a portion of the arm or leg free from fat, are applied so as to completely cover the raw granulating surface. The field of operation is made aseptic and constantly bathed in a salt solution 6:1000. Protective strips and compresses moistened with the salt solution are then applied and an antiseptic dressing completes the operation.

REMEDY FOR INSECT STINGS.

A paint for the stings of insects, in which ammonia is kept in close and prolonged contact with the affected part, is prescribed as follows:—

R. Aq. ammonis, m. cl.
Collodium, gr. 1.
Acid salicylici, gr. v.

A few drops to be applied to each bite or sting.

—Medical Chronicle, September, 1894.

CHRONIC ECZEMA OF THE FACE.

A prescription emanating from Hebra is:—

R. Acidi salicylici ...
Ichthyol ...
Glycerini ...
Sp. menth. pip ...
Sp. lavand ...
Sp. vini rect ...

M. Sig. Apply with a brush several times a day.—Dr. M. Regensburger in Pacific Medical Journal.

TO SUMMARIZE BRIEFLY THE TREATMENT OF FURUNCULOSIS OF THE EXTERNAL AUDITORY CANAL.

1. As antiphlogistic measures, use the leech or blister in front of the tragus, and hot antiseptic irrigation when indicated. Avoid the use of poultices.

2. As local applications, cleanse the canal with alcohol and insert an ample tampon of cotton-wool saturated with camphor-phenol, renewing this every twenty-four hours, or
oftener if required. This is at once antiseptic and analgesic.

3. As constitutional remedies, give tonics and alteratives, with the especial recommendation of arsenic in the form of Fowler's solution. This should be administered in increasing doses until its physiologic action is obtained.

4. As an operative procedure, make a free incision through the boil and divide the periosteum down to the bone. This will prove necessary in well-advanced and chronic cases, especially when pus has already formed.

**NEW PHENIC PREPARATIONS.**

Dr. Galezowski recommends phenate of mercury in diseases of the cornea, especially in herpetic phlyctenular keratitis. This preparation is an advantageous substitute for yellow ointment, which is at times irritating.

As a wash or instillation, the following solutions:—

- Distilled water, 100 grammes.
- Phenate of mercury, 0 gr. 010 milligr. to 0 gr. 047 milligr.
- As an ointment:—
  - Lanoline, 10 grammes.
  - Phenate of mercury, 0 gr. 05 centigr. to 0 gr. 10 centigr.

The author recommends the avoidance of cocaine in herpes of the cornea, inasmuch as this is an anesthetic disease. The above preparations should not be used until steam douches or mydriatics have reduced the congestion; they should, however, be discontinued if they are not well borne.

**VOMITING OF PREGNANCY:**

A writer in the *Lancet* says, "I have not failed once for many years, by a single vesication over the fourth and fifth dorsal vertebrae, to put an end at once to the sickness of pregnancy for the whole remaining period of gestation, no matter at what stage I was consulted. The neuralgic toothache and pruritus pudendi of the puerperal con-

**CHLOASMA OF PREGNANCY.**

Dr. Hare recommends (Coll. and Clin. Rec.) the following:—

- Zinci oxidi, gr. vj.
- Hydarg. ammon, gr. ij.
- Ol. theobrom, gr. v.
- Ol. ric., m. v.
- Ess. ros., gtt. xx.

M. Sig.: Apply to the face night and morning.

**ABSOLUTE BLINDNESS CAUSED BY A VERMIFUGE.**

Dr. Grosz.—A man twenty-nine years old had somewhat weak vision in the left eye, but perfect vision in the right. He was suffering from his stomach, and went to a pharmacist, who gave him a vermifuge, consisting of capsules of ethereal extract of male fern and extract of pomegranate; each capsule contained about 0.25 gramme of this combined medication. He took 32 of these capsules—that is, about 8 grammes of the medication—after previously taking castor oil.

In the evening he had syncope. The next day he had severe diarrhoea, and two days later he was blind in both eyes.

On examination there was complete mydriasis, and the pupils did not react at all to light. At first the fundus of each eye was normal, but little by little both lost their colour and become atrophic.

The author thinks that the noxious influence here was the extract of fern, which is toxic in doses of 4 to 5 grammes; perhaps, also, the castor oil previously taken reinforced the toxic action.

**BIRTH.**

At Ryde, Isle of Wight, on July 8th, the wife of Herbert Parry, M.R.C.S., of C. I. Mission, of a daughter.

**MARRIAGES.**

At Terre Haute, Indiana, U. S. A., July 30th, 1896, Dr. W. H. Curtiss, M. E. Mission, Peking, to Miss Lulu M. Hale, of
The following gentleman has been duly elected a member of the Association:—James Henry Bennett, M.R.C.S., L.R.C.P., of the London Mission, Tientsin.

An opportunity having presented itself of securing part of the pathological specimens of the late Dr. Jamieson, of Shanghai, they have been purchased, on behalf of the Association, for the sum of Tls. 50. An effort will be made to secure the rest of the collection. As the Association only appropriates $50 a year for the expenses of the museum, subscriptions are asked towards defraying this special charge: they may be forwarded to the Rev. G. F. Fitch, Presbyterian Mission Press, Shanghai, and will be acknowledged in the Journal. Further information will be given in our next number.