



MARY STONE, M.D.

IDA KAHN, M.D.

The  
China Medical Missionary Journal.

VOL. X.

DECEMBER, 1896.

No. 4.

Original Communications.

[No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editor on the first day of the month preceding that in which they are expected to appear. The editor cannot undertake to return manuscripts which are sent to him. A complimentary edition of a dozen reprints of his article will be furnished each contributor. Any number of reprints may be had at reasonable rates if a *written* order for the same accompany the paper.]

DRS. IDA KAHN AND MARY STONE.

While an increase in the number of medical missionaries at work in China is *always* a cause of encouragement to those already in this field, there are reasons why the arrival among us of Dr. Mary Stone and Dr. Ida Kahn excites especial interest.

Ever since the departure of these Chinese girls for the United States, over four years ago, their career in that country has been watched with great interest by many in China, as well as by a host of the interested and curious in America.

When, with many American students, they took the examinations that are required of all who enter the medical department of the University of Michigan, it was a great surprise to the authorities of the University to find that the papers of these little foreigners were among the best that were presented. They had been nearly all their lives under the immediate personal care of Miss Gertrude Howe and, for some years before they went to America, were being educated with that end in view.

While in the United States they did not wear Chinese clothing, but by keeping house for themselves they were better able to retain their native characteristics than they would otherwise have been. They were loved and respected by their fellow-students for their sterling Christian qualities, whilst their conscientious work and high grade of scholarship brought them into favour with all of their instructors.

The fact, that two Chinese girls were making a fine record in a medical college of high grade, caused them to become widely known through the press and, in varied phrases, the wonder was constantly expressed, "*Can any good thing come out of China?*"

They graduated in their native dress and when, in the procession of over 400 graduates, fifty-eight of whom were medics, these Chinese girls crossed the platform to receive the diplomas which testify that they have earned the degree of M.D., the great audience in University hall showed their appreciation by a burst of applause.

President Angell said to the friends of these girls, "Their future career will be watched with every expectation of their eminent success."

They spent the summer after their graduation in further research and experience in Chicago.

Although the appreciation of their student efforts was gratifying to their friends and patrons there was still considerable anxiety as to their reception by the Chinese on their return to Kiukiang. When it was known that they might soon be expected their Chinese friends laid plans for receiving them with honour. The missionaries had at first some doubts as to the wisdom of allowing a public ovation to two young ladies, but their native friends pressed the point and gained the day. As soon as they were seen to be leaving the steamer the fire-crackers were heard and, except during the ride through the narrow city streets, there was no cessation until they were within the doors of their old school home.

The long continued firing attracted the natives, of course, and by the time the newly-arrived doctors reached the Bund there was a large crowd that constantly increased. Word went from one to another, until all around the natives were crowding and pushing to get a glimpse of the "women doctors." Some in the crowd were heard to say, "Why these girls are receiving more honour than was shown to our commandant when he arrived!"

As the company made their way slowly along the Bund through the crowd, the Chinese pressed up close to the chairs of the missionaries and asked over and over again, "Are they Chinese women?" "Is it true they have been studying or four years in a foreign land?" "In what country were they?" "Can they heal the sick?" And then there was vigorous nodding of heads, and "Hao! Hao! Hao!" was heard on all sides. "Will they live in Kinkiang?" was asked, and the affirmative reply pleased them. It seemed at the time remarkable that in so dense a crowd the universal expression of face and voice indicated only favourable interest.

It had been the plan of the girls and their friends that they should rest and visit for a short time after returning and then, as they could gain the confidence of the people, gradually feel their way into work. It had seemed so certain that this would be the only way in which to proceed, that no provision was made for the immediate opening of work.

But lo! on the third day after their arrival four patients presented themselves and asked for treatment. On the following day the same four

returned and six new ones came; and so it has gone on day after day until now a dispensary is in hasty preparation, so that they may work to greater advantage. The largest number of patients in any one day has been twenty, yet it was only on the 5th of October that they reached home.

When they had been back for about a month they were one evening sent for to attend a woman in confinement. She had twins, but as soon as one child was born all action ceased and the Chinese were at a loss to know what to do. On arriving at the house the young ladies found there the native doctor of highest repute in the city. He was richly clad in satin and silk and had four chair bearers, but he told the people he could do nothing for the woman. He received the girls pleasantly and, after a little, took his departure, advising the family to put the patient into the hands of the lady doctors. He said, "They have crossed mountains and seas to study about these matters."

The people asked the doctors to guarantee that the woman would live. Of course they promptly refused to do this and after some parleying turned to go. Then the aged members of the family fell on their knees and begged them to stay and told them to do what they thought best. The second child was safely delivered and with its mother continued to do well, but the first child died.

Three days later Drs. Stone and Kahn were invited by this grateful family to a feast, after which they were wound about with red scarfs by the old grandmother, and the whole family escorted them home with gifts amid the firing of many crackers.

They have not, up to the present time, had to endure the pain of losing a patient, although they have had several very serious cases. When that does occur, as of course it must, there will doubtless be some reaction and present faith may be changed to distrust for a time. But the most hopeful had not dreamed of their commencing work without some opposition and that they were actually sought, before making any effort to secure patients, has been a great surprise to all.

This early success is doubtless due largely to the fact that they are back among their own people as *true Chinese* and, while they have gained much in culture and intellect, love and sympathy for their race have been ever present, whilst the ruling motive in all their efforts has been how to best prepare themselves to help their countrywomen. The native women do not stand at a distance to admire them, but familiarly take their hands and feel their clothing and, while acknowledging their superiority, do not hesitate to invite them as guests to their humble homes.

Dr. Stone was the first girl in Kiukiang whose parents allowed her to go always with unbound feet. Her father is a preacher in the Methodist Epis-

copal Church; before her birth her parents said that if God gave them a little girl they would never bind her feet.

Dr. Kahn, when a few weeks old, was given by her parents to Miss Howe, by whom she was adopted.

In a few months a woman's hospital will be erected in Kiukiang to be in charge of Drs. Kahn and Stone. They live in native style, in the home that has been provided for them and over which Miss Howe presides.

It will be of interest to all Christian workers to know that these girls have voluntarily pledged themselves to *give* their services for four years to the society to whom they are indebted for their education. The help of personal friends enables them to do this.

---

#### MEDICAL NOMENCLATURE.

To some of us it seems that by far the most pressing question for the members of the Association just now is that of Medical Terminology, and the following list of terms is published in the hope that it will stimulate work in this direction. Until some agreement on the subject is arrived at, teaching, translation and the proposed Chinese Medical Journal are all hindered, and the longer the delay the greater the difficulties of changing the present terms that have proved unsatisfactory.

Many have been engaged in teaching for some time and are in a position to present criticisms and suggest changes. Will all such not see to it that they set apart as much time as possible this autumn and winter to this subject and send in the results to Dr. Kerr? Surely considering how important it is for all of us that this obstacle be removed from our path it is not too much to suggest that we should consider it for the present as important *at least* as teaching our students and arrange that it shall receive as much consideration. If all put their shoulder to the wheel we should see the way fairly clear by next year.

The following list of criticisms and suggestions is based on Dr. Kerr's Vocabulary of Diseases, and can only be intelligible by referring to it, but in compiling it Hobson's, Hunter's and the Anglo-Japanese lists were consulted, and also Morley's suggestive paper published in the journal a year ago.

If Dr. Kerr had printed all the terms used by these authorities, indicating which he preferred, an enormous amount of labor on the part of the rest of us would have been saved. In subsequent lists this plan should be followed.

In selecting terms six plans have occurred to me:—

1. Use the existing native term.

2. Translate the foreign term.
3. Transliterate the foreign term.
4. Coin a new one based on, *e.g.*, the symptoms, etc.
5. Coin a new Chinese character.
6. Use an appropriate or indefinite or obsolete Chinese character.

Let us briefly consider these :—

1. Such native terms as can be discovered are often too colloquial or popular, and what we want is, if possible, one character to be used as the generic name.

2. This is sometimes feasible, more frequently it is impossible, or the resultant phrase is too long or too clumsy.

3. Transliteration should be avoided if possible.

4. Sometimes answers, but difficult to be terse enough.

5. The Chinese naturally object strenuously to this.

6. In many cases we must fall back on this plan. Where there is no native term or it is unsuitable or where translation is not feasible, the judicious selection of a character whose meaning will fairly correspond, and yet which is not appropriated to any disease, although it is often an obsolete one, will frequently solve the difficulty. There are many of these characters given under 疔 in Khang-hi.

In translating names or in coining new ones care should be taken to avoid those based on pathology or ætiology, as they will be antiquated in a few years. It is better to be as non-committal as possible.

It only remains to be said that in the following list as a rule the term first following the English letter press is the one preferred.

PHILIP B. COUSLAND.

Abscess—瘡 is more a sore, eruption, wound, etc. If it is not too late in the day I think 腫膿 or 積膿 would be better. (腫, according to Khang-hi includes the idea of an abscess).

A. alveolar (gum boil) 腫膿窩牙, not 癰齦.

A. metastatic 腫膿串.

Ulcer. Why has 瘍 been passed over? One character is better than two, and this is the one used by Khang-hi. 瘡 is too general a term, and especially if used for abscess should not be used for ulcer.

Ulceration 瘍潰, 爛潰.

Ulcer, spreading 潰瘍.

„ indolent 頑, weak 弱, irritable 痛.

Granulations 芽肉.

Phagedena 癰, or 疔 if a special character is wanted. 瘍毒 where due to poison. Otherwise say virulent ulcer 瘍惡 according to Khang-hi, and if the use of 惡 had better be avoided use 厲.

Sphacelus 脫質死, 塊質死.

Slough 質死.

Malignant, *i.e.*, dangerous to life 險.

Virulent 厲, 惡, 癘

Carbuncle 癰.

Malignant pustule 癰毒, 癰性, 癰

Pyæmia 瘡申毒血.

Tumor, benign 性良 is simpler than 毒無. Malignant 厲, 險.

Myeloid 珠大 is less misleading than 髓. Myeloid or Myeloma is now classified as a sarcoma.

Recurrent. Does not 覆翻 convey the idea of coming and going? say 發再 or 瘤疹.

Dermoid 瘤袋裏皮 or 瘤袋皮生.

Polypus, gelatinous, probably are œdematous connective tissue tumours 瘤軟帶, 瘤筋軟帶.

Papilloma 瘤瘻.

Carcinoma 毒 should not be used in this sense. C. are not poisonous, and 毒 should be restricted to that. Why not take 疽 and limit it to this class of tumors? According to K. it is deeper and more 惡 than 癰, and undoubtedly often is used for cancer in native books. 疔 or 疔 may do if 疽 is not suitable. 疔 is mammary cancer, and would do for the general term carcinoma.

Sarcoma 瘤肉 is translating the antiquated term which pathologists would gladly get rid of. I suggest embryonic tissue tumor 瘤珠胚 or 質織胚 or 瘤胚 or for one character 疔.

Myeloid S. 瘤胚珠大.

Epithelioma 統 would do.

Skin Diseases :—

Eruption. I would follow Morley here 瘡.

Macula 癍, given by K. and M., as far as I can find out, means a cicatrix.

Macula includes petechiæ. Take 癍.

Papula 粒 will do 瘡粒.

Vesicle 疱 and not 泡.

Pustule, *i.e.*, purulent vesicle, develops from vesicle 疱膿.

Bulla. No special term needed, = large pustule.

Wheal 團 may do.

Tubercle 疔.

Crust 痂.

Scale, squama. M. has misread Kerr's term 鱗.

Excoriations 肌.

Fissures 裂皮, 皸.

Cicatrices 癩.

Pigmentation or leathery infiltration. Descriptive phrase will do.

Acne 瘡暗 is not good. 炎核油 too long and indefinite. 瘡, 疔, 瘡, are near enough. Prefer 瘡, or perhaps 癩 would be still better.

A. indurata 硬. A. vulgaris 常.

Albino. M.'s term = dandriff here! K.'s term too colloquial. Take 症體白.

Alopecia 癩. A. areata 塊癩.

Bromidrosis 汗臭.

Hyperidrosis. See M.

Callosity 胼, 臄.

Corn 臄釘, or 胼釘 would do.

Cheloid 瘡 is a misprint; should be 瘡 (M.) a scab. K.'s term hardly scientific.

Say 癩癩. Practically always arises from a lesion, however slight. On the whole M.'s term is safer.

Chilblain 瘡凍, 瘡凍. No need to call it an erythema.

Chloasma 皸

Comedones 條脂, 條核脂.

Dandriff, K.

Dermatitis herpetiformis 炎癩皮.

Ecthyma 瘡, 瘡.

Eczema. I do not agree with M. that because a character is used colloquially it cannot be used for our purpose. Any way 癩 is not colloquial with us. It is certainly the character for eczema.

Papular 癩粒. Rubrum 癩紅.

Vesicular 癩疱. Impetiginoides 癩范膿.

Squamosa 癩鱗. Sclerosum 癩硬.

Verrucosum 癩瘰. Erythematous 癩癩.

Ephelis 黑曬.

Erythema. Much more appropriate than 癩 is 癩. It is used in native books of the patches of leprosy.

E. multiforme. Can't see the point of 癩對. Take 癩雜. Varieties of E. multiforme can be named according to their characteristics.

E. nodosum 癩疔.

.Peliosis 癩癩癩.

E. Iris (Herpes Iris) 癩華.

Intertrigo is not a true erythema. Erasmus Wilson calls it eczema erythematousum. 癩向 or 炎向皮.



- Herpes and Ichthyosis. M.'s terms.
- Impetigo contagiosa 疱膿染 or 疱膿瘰
- Lentigo 癍曬, 墨.
- Leucoderma 皚.
- Lichen 瘤 will do pretty well. See Kh.
- L. rubra (planus) 瘤紅.
- L. scrof. 瘤瘰.
- L. circumscriptus (if a lichen) 瘤錢.
- L. pilaris, not a lichen.
- Lupus 癩 (M.'s) may do.
- L. verrucosus 癩癩.
- L. exedens 癩噬.
- L. erythematosus 癩癩.
- Miliaria 疱汗.
- Milium 粒脂.
- Molluscum contagiosum 疣染 or 疣瘰.
- ,, fibrosum 瘤軟筋.
- Mole 痣.
- Nævus 痣血.
- Papilloma neuroticum 癩筋膠.
- Pemphigus. M.'s term may do.
- Petechia 點癍瘀, 點癍血.
- Pityriasis 皚.
- ,, rubra or primary exfoliative dermatitis 皚紅.
- P. rosea 皚錢.
- Porrigo is obsolete.
- Prickly heat is a papular eczema, which see. Popular term = 癩熱.
- Pruritus 癢.
- Prurigo (Hebras) 癩韻.
- Psoriasis. M.'s terms.
- Purpura 癍瘀, 癍血.
- Rash 疹 if it is not used for any of the exanthemata, or 癩 if the other is not available.
- Rodent ulcer 瘍噬.
- Roseola 紅瑰玫, 疹紅, 癩紅.
- Rupia 癩釘, 瘡疔.
- Scabies 疥 is unquestionably the right term.
- Scleroma and sclerosis are much the same 癩變.
- Scleroderma 皮硬 is a descriptive term, and needed to describe some infiltrations. Take 釘, e.g., 釘蠟 and 釘胎.

Seborrhœa 痲核油.

Steorrhœa omit.

Sycosis 瘡鬚 or 症瘡膿鬚.

Syphilides, Syphiloderma 症皮瘰, and for the various forms see the skin diseases they resemble, e.g., Pustular syphilide, etc.

Tinea, Reserve 癬 for Tinea.

„ Favosa 癬黃.

„ Trycophytina tonsurans, circinata 癬錢.

„ Versicolor 癬團.

„ Iubricata 癬暈.

Trichosis. M.'s term Williams gives as woman's coiffure. Khang-hi is indefinite.

As neither 髮 nor 髻 will do take 毛.

Hersuties 毛多.

Trichorexis nodosa 毛節.

Urticaria 癩團. 密 and 熱 for the varieties. Chronic or perstans | | 久.

U. papulosa (lichen urticatus) 癩團粒.

Verruca 癩.

Leprosy 瘋癩 is objectionable on several grounds, i.e., the use of two characters and the use of 癩 which is appropriated by measles, etc. There is a good deal in M.'s suggestion to use 瘰 if it is not taking too great liberties with Chinese character. Kh. says that 癩 was formerly used, but 瘰 is the proper character. How would 瘋 alone do? It originally meant megrim, but is applied to leprosy and a good many other diseases now.

Tubercular 瘋癩.

Trophoneurotic 瘋筋膈, 瘰筋膈.

Anesthetic leprosy is not a good term, as anesthesia is present to some extent in tubercular leprosy.

Macular. Can use such terms as 癩. 癩, according to the appearance.

Elephantiasis. M.'s term is unsafe and too general. There is much to be learnt about the pathology and ætiology of E. Better stick to 皮象 for the present, or 癩 might do.

Addison's disease 瘰黑.

Œdema 水積網連, 腫水 | |.

Anasarca 水積體徧.

Ascites 水積腹, 積水 |, 脹水 |.

Hydrothorax 水積胸, 積水腔胸, 脹水膜肺.

Hydropericardium 水積衣包心.

Emphysema 脹氣.

Interlobular Emphysema 脹氣中葉小肺.

Vesicular emphysema 脹氣泡肺.

Subcutaneous „ 脹氣下皮.

Pneumothorax 脹氣胸.

Hydrocephalus 水積宮腦大.

Dropsy of brain 水積腦.

Empyema 膿積膜肺.

Flatulence 脹氣腹, 脹氣腸胃. K. uses 脹氣 both for this and emphysema.

Tympanitis 臑氣, 臑氣腹.

Lobar pneumonia 炎葉肺.

Lobular or catarrhal 炎葉小肺, 炎涕肺, 炎泡及管氣肺.

P. œdema 水積肺.

„ congestion 血盈肺, 血充肺, 血脹肺.

Hepatization of lung 肝似寔肺.

Dyspnœa 促氣.

Coryza 嚏鼻, 鼷.

Laryngitis stridulus 肌抽口管聲. K. evidently thinking of non-memb. croup in the term he gives: latter = 炎管聲兒小, or infantile laryngitis 喘痰口聲.

Aphonia. Delete the second term.

Hæmothorax 瘀腔胸, 血積胸, 瘀衣腔胸.

Consumption, i.e., emaciating 瘵癆.

„ mesenteric 癆膜包腸, 瘵膜包腸 (tubercular).

Phthisis pulmonalis 症癆肺, 症瘵 |.

Tubercle 粒腐 is not good, as 腐 is elsewhere used for putrefaction. 咖吡啻 is too long. Much of the ground that used to be covered by scrofula is now included under tuberculosis, but as we are scarcely at the stage where the term scrofula can be disused I suggest as a good solution of the difficulty the use of its companion character 瘰 for tubercle, e.g., 粒瘰, 瘤瘰, or if another character is wanted take 癧

Myocarditis 炎發體心.

Heart, hypertrophy 大生體心.

„ dilatation 大房心. 脹 here might mean hypertrophy or œdema of the heart.

„ murmurs. Delete 音心. 音 here is surely misapplied. See aphonia in K.'s list.

Angina Pectoris 症痛胸心, 暈痛胸心, 痛重胸心, 疢, 症急痛胸.

Thrombus, Thrombosis. Prefer 團 to 塊.

Embolism. Change to 塞移團血.

Plethora, Hyperæmia, Congestion 血盈, 多過血, 漲過脰血, 血充.

Active or arterial congestion 漲過脰脉, 血盈脰脉.

Passive or venous congestion 血盈脗廻. 血積 had better be avoided here.

It infers more the idea of stasis of a quantity of blood. See its use in empyema, dropsy, etc. In Hyperæmia, although there may be slowing of the blood current there is no actual stoppage. 血積 is more the idea of, e.g., Hæmatocele. So Khang-hi.

Hypostasis 積血下, 積血壓, 積墜血.

Stasis 血積脗血.

Aneurismal varix. Insert 通 between 脉 and 廻.

Cirroid Aneurysm 瘤脉曲.

Hæmorrhage. Is not 血出 better than 血流?

„ idiopathic 血流起自. 病無 is taking too much for granted.

„ vicarious 血流代.

Extravasation, or hæmorrhage that does not escape externally 瘀.

Cerebral extravasation | 腦.

Hæmatocele 瘀, 血積.

Echymosis 瘀下皮.

Purpura 斑瘀.

„ rheumatica (Peliosis). According to Quain's Dictionary it is an erythema, which see.

„ urticans. Delete.

Apoplexy 風中 is colloquial, but may pass for the present as a symptomatic name. 爆脉 is one form, the other is embolic, etc.

Serous apoplexy. Delete (Quain).

Pulmonary apoplexy 瘀肺.

Anorexia 食厭.

Stomatitis, ulcerative 瘍口, 瘍生炎口.

„ parasitica or thrush. Add 瘍口生寄.

„ gangrenous or cancrum oris 症死頰口.

Salivation 多過涎.

Ranula 瘤袋下舌.

Stricture of Œsophagus. Better take one character for stricture and stick to it 窄.

Vomiting 吐嘔.

Nausea 嘔欲 or the second phrase. Isn't 胃反 too strong?

Retching 嘔乾

Dyspepsia 滯食, 痞.

„ gastric 滯胃, 痞胃.

Indigestion 化消不 and the dyspepsia phrases.

Pyrosis 吐 is too strong. Any other word?

Intussusception 襞自腸.

Colic 疝 alone is sufficient. 疝腸 where required to distinguish from, e.g.,  
Hepatic colic 疝淋膽.

Diarrhœa, catarrhal. For catarrh everywhere use 瀉 and reserve 痰 for ex-  
pectoration.

Lienteric 癘而化不, 癘隨 | |. Use the 疝 characters

Tenesmus 疝 = .疝 Take 急肛 or 痛 | |.

Hernia, strangulated 疝勒.

„ cerebri 脫腦.

Hæmorrhoids. Delete 痔盲 and use | 血無.

Anal fissure 韃門肛

Prolapsus 墮 where descent. 脫 where no descent, e.g., hernia iris.

P. ani 疝.

Trichiniasis 病 or 虫絲螺 or 胆 (?)

Tricocephalus dispar 虫鞭

Ascaris. Delete 虫生寄 as ascaris is *one* genus.

„ lumbricoides 虫蟻

Hepatic degeneration 變質肝.

Amyloid or waxy degeneration 漿變 is bad pathology; the degen. being al-  
bumenoid 蠟似變肝.

Jaundice. Why not also 癘?

Cirrhosis 寔變 more accurate than 寔縮, as there is no contraction in the  
early stages.

Perinephritis 炎網圍腎.

Strangury 痛急便小.

Incontinence of urine and fæces, paralytic 禁失便兩.

„ „ „ „ „ non-paralytic 糞溺遺.

Suppression of urine 閉 is obstructed. Use 生不溺, 生停溺.

Urinary fistula 痛溺.

Urinary deposits 底溺=urea! Take 渣溺 or 渣沉溺 for urea. Why not  
use 朮?

Lithiasis 淋結, but if 淋=any calculus should say 淋溺結.

Casts 模, Renal 模腎, Blood | 血.

Brain, anæmia of 血欠腦.

Headache, congestive 痛頭血盈, 痛頭漲血.

Nervous=Hemicrania.

Pachymeningitis 炎膜筋腦.

Facial paralysis 癱偏面.

Paraplegia 癱截下. Delete 痿下.

Hemiplegia 癱偏 or 病癱.

Numbness 癱.

Writers' cramp 抽寫.

Locomotor ataxia. The second term is better or anatomical, *e.g.*, 症寔變柱  
後(脊) or choose a special character.

Paresis 癱.

Infantile paralysis 癱嬰.

„ „ adults or children | 炎角前.

Disseminated sclerosis | 點寔.

Spinal paralysis | 脊.

Progressive muscular atrophy | 瘦漸肌.

Pseudo-hypertrophic paralysis | 大肌, | 大變肌.

Raynaud's disease or symmetrical gangrene 症內死對相, | | | 畔雙

Acute ascending paralysis 癱上.

Syringomyelia 症脹脛中根腦.

Depression of spirits 爽欠 includes physical discomfort without depression of  
spirits=malaise. Take 神精無 or 症神.

Tremor. K.'s term too strong 戰微.

„ „ tendinum 戰肢四.

Idiocy, congenital 呆胎.

Idiot 人 | |.

Dementia. Don't use 心 in this connection. 寔 will do.

Hysteria 癡. A special character seems to be needed here.

Hypochondriasis 痛 or 症之病恐自

Melancholia 滯 or 痕 or 憂鬱 or 氣 |.

Nostalgia 寔.

Delirium tremens 狂酒.

Epilepsy 症癇.

Convulsions 癇癇, 搐抽.

Chorea 昏 or 寔.

Catalepsy is a variety of trance 病硬抽睡昏.

Tetanus is undoubtedly 寔, also suggest 寔 and 症毒肌抽.

Rabies 病癲獸=animal madness. Better take 病毒癲獸.

„ „ canina 病毒癲狗.

Hydrophobia do.

Nervousness 寔.

Shock. Insert 卒 to convey idea of suddenness.

Shock=neuroparalysis 衰卒氣腦, 傷 | | |.

Collapse 衰沉 | |, 失脫 | |.

Clonic spasm. Add 搐抽代間.

Opisthotonus 張反(背)(身), 張反脊, 彎後肌抽.

Sea sickness 船暈 is the better phrase.

General paralysis of the insane 癱癩.

Glossio labial pharyngeal paralysis 癱喉舌唇.

Delirium. Add 亂昏 for the milder forms, *i.e.*, low muttering.

Typhus. If 瘟 be used here its use in 疫 | may need to be curtailed.

Relapsing fever. Famine fever should only be used as a secondary term. 復 will do well.

Intermittent fever 瘧=ague symptoms and includes intermittent and remittent. If it be used for intermittent then | 退=the receding or abating intermittent, surely a confusion in terms. 退 includes the idea of intermitting, *i.e.*, complete abatement, see apyrexia. For intermittent, take 店 or 瘧退 or 瘧復. Tertian 瘧日二.

Remittent 瘧熱常 shows there is no complete recession of fever, at the same time included the ague idea.

Exanthema 症熱瘡 or K.'s term.

Measles 癩 is wanted for numbness, local anæsthesia. It is used also in 瘋癩.

Take 症熱疹.

Scarlet fever 症熱痰.

Rubella 癩輕 won't do, as it is *not* measles. Take 症熱疹小 or 症熱痧.

Plague. Term for typhus is given. If 瘟 is taken for typhus couldn't 疫 be used for Bubonic Plague? 疫炎核吸, 症熱 | | |, 症熱疫.

Varioloid 症熱痘小. Delete 發復.

Vaccinia 症熱痘種.

Yellow fever 症熱黃.

Cerebro spinal fever 症熱炎膜根腦 or 症熱瘵.

Malaria. Perhaps 瘧(ague) is a little apt to lead to confusion in use. 瘴 is convenient. Malarial miasm 氣瘴.

Cholera 症霍. Don't need 亂.

Pertussis. Add 行時.

Mumps 症熱炎核腮, | | | 核涎. 腮疔 is Cantonese. Kh. uses it for scrofulous sores on the neck.

Apyrexia. Both terms are needed.

Remission 熱退. See note on remittent fever. 退稍 would be more correct.

Glanders. K. gives infectious horse disease, a wide term. Williams gives 瘰.

Milk fever. Why 奶 for milk here and not elsewhere?

Zymotic disease is now restricted to the specific fevers 症熱瘵, 症熱行時, | | 染傳.

Infectious disease 病瘴.

Dengue 症熱痛節.

Adynamic or typhoid condition 倒衰力生. 盡 | |.

Rheumatism 濕風 is colloquial. 痺 is better, and undoubtedly means rheumatism.

„ metastatic 痺節歷.

Rheumatic arthritis. This is not rheumatism, although considered by many as an allied affection. 症癰 will do very well, and as a secondary term for those who wish to retain “Rheumatic” 痺節曲. K's term=articular rheumatism, and is misleading.

Gonorrhœal rheumatism. This, too, should not be called rheumatism. 炎節濁白.

Pleurodynia. A shorter term is 痺脇.

Lumbago 症痺腰.

Rheumatic pains 痛痠

Gout 瘡 or 癩. The terms in use are neither accurate nor convenient.

Gout stones 石瘡, 石溺鏽.

Scorbutus 癩 or 瘴.

Beri-beri 癩.

Chlorosis. If 癩 be not taken for scorbutus it will do for chlorosis, but K's term will do.

Syphilis 症柳花 means venereal disease, and includes soft chancre and gonorrhœa. Take 瘡.

Chancre 瘡 is children's abdominal disease. 疔 Khang-hi doesn't give any venereal meaning. Take 瘡.

Chancroid. Prefix 似.

Condyloma 癩瘻 or 疣 | as the case may be.

Rachitis. Prefix 嬰 or take 癩. As K. gives it the similarity to Mollities Ossium is great.

Dyscrasia 血癩.

Melanæmia 血点黑.

Bronchocele 大核牌.

Sterility 子生不.

Impotence (male) 痿陽.

Parturition, obstructed 產癩.

„ difficult 產難.

„ tedious 產緩.

Superfecundation and superfœtation 孕複.

Criminal abortion 胎犯.

Placenta prævia 前貼胞.



Anteflexion 屈前.

Anteversio 前跌.

Menorrhagia 多過經.

Menses, cessation 止經.

„ suppression 生不經, 經停.

Menopause 經絕.

Menstruation, vicarious 血出經代, 經逆.

Interstitial gestation 孕頭胎蛋.

Vaginismus 窄抽道陰. 閉 is too strong.

Caries 骨爛. If 腐 is used for putrefaction better not for caries. 癩 or 蝨 may do.

Sequestrum 骨死, 片 | |.

Necrosis is not the same as caries. Take 死骨.

„ cloaca 癩骨.

Node is not always syphilitic 阜生骨.

Spinal curvature 曲脊.

Subluxation 傷扭節骨.

Genuvalgum 向相膝.

Narcosis 木癡 is not good. 睡昏藥吸, | | | 用, 迷 | | 服.

Anesthesia 失脫覺知.

Local anesthesia | | | | 處一, also 癡, or if it must be retained for measles take 痘. 癡 is the proper character.

Obesity 疒 had better be deleted. 養肥 will do.

Scalds 傷湯.

Sporadic disease. Instead of "rare" disease read 症希.

Suspended animation. Phrase too weak. Take 停呼吸, 停暫 | |.

Symptom, essential. 應 is better than 要.

„ accidental 狀偶.

Vegetations 生植 won't do if the phrase refers to vegs. on cardiac valves. 肉贅 is better.

疝 should be confined to hernial protrusions, *i.e.*, of abdominal viscera.

Hydrocele 水積囊腎, | | 衣卵, | | 筋卵.

Congenital Hydrocele 疝水胎.

Scrotal hæmatocele 瘀囊腎.

Pelvic „ 瘀盆, 血積盆. Don't use 疝 for extravasations, even if encysted.

Miasm 氣毒 = poisonous gas, and therefore objectionable. The term is now pretty much limited to malaria 氣瘴.

Marasmus 瘦漸. Why not 癆?

Acephalocyst. For 泡 read 疱.

Apnoea and Asphyxia 停吸呼.

Contusion, bruise 瘡, 傷 | .

Bubo. If inguinal 炎核腠.

Bulimia 飢太.

Inebriety 醉酒.

Lymphadenoma. Affix to 脹核吸 the following: 症厲, or | 惡, or | 險, or 大 | | .

Mucopurulent. Delete 痰. Take 涕膿.

Amaurosis, amblyopia, e.g., tobacco 眊 or 眊 or 眊.

Ametropia. Why not 曲 instead of 折?

Ankyloblepharon. Use 閉連胞眼 or 閉生 | | .

Blepharitis. K.'s term=tarsitis. 炎睫 is better.

Conj. catarrhal. For 痰 read 涕. Confine the first to sputum.

„ „ Phlyctenular 炎泡衣睛.

Corneal opacity, leucoma=cicatrix 癥生衣明, or take 膜.

„ ulceration 瘍生衣明, 爛潰 | | .

Entropion and ectropion 內捲胞眼, 外捲 | | , 翻外內 | | .

Glaucoma. Take 晦 or 眊. 眼光青 is the best of the old terms.

Granular lids 砂 should *not* be used, see calculus. 齶, or 瘡 will do well, and use 芽肉 for granulations on a wound 齶生內胞眼, 眼齶, | 瘡.

Cataract 質變珠睛 is a wide term, including all changes in the lens. Why not use the native terms? 障 is very appropriate, and although like most Chinese terms, is used loosely and unscientifically, we can confine it to this disease.

Hordeolum 癰睫.

Hypopyon 膿墜房前.

Presbyopia 叻 or 眼視老.

Phlyctenular Keratitis 炎泡衣明.

Hemeralopia 盲晝. } These words are used in exactly the opposite sense by  
Nyctalopia 盲夜. } various authors. I have followed the standard nomenclature, that of the Royal College of Physicians.

Muscæ volitantes. Can't use 花 here if it is used for syphilis.

Ophthalmia 炎眼.

Pannus 管血生衣明.

Pterygium 翳眼.

Panophthalmia. For 重 read 膿.

Iritis prolapse. Use 脫 and not 墜.

Stillicidium lachrymarium 漏 and not 流. 眵 as a single character.

Strabismus 斜 not 邪, which has a moral meaning.

Trichiasis 眼擦毛睫.

Ptosis 墜胞上眼.

Astigmatism 眼光散.

Hemianopia 眼視偏.

Asthenopia 眼視弱.

Exophthalmos 眈.

Anything in the eye 眵.

Color blindness 眵.

Nystagmus 眵 or 闕.

Arcus senilis 眵 or 眼環.

PHILIP B. COUSLAND.

August, 1896.



## WHAT PILLS SHALL WE USE?

By ROBERT COLTMAN, JR., M.D.,

*Professor of Medicine, Tung Wên Kwan, Peking, China.*

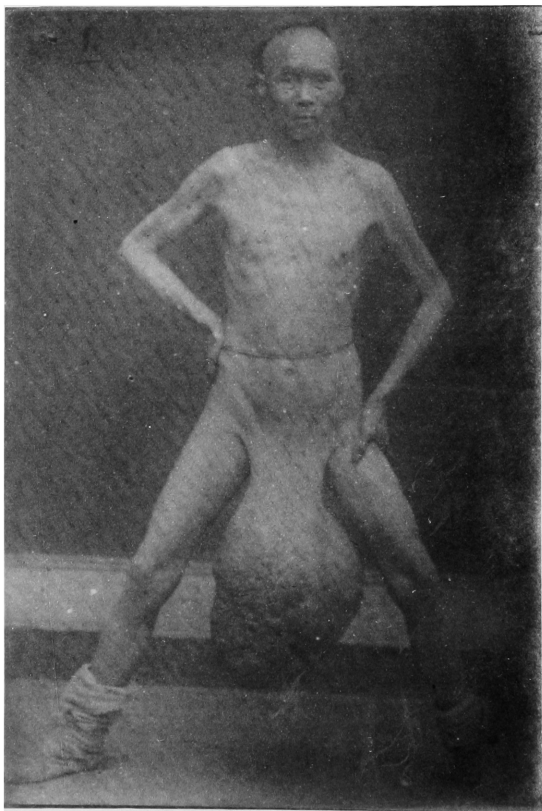
For a number of years I used in practice sugar-coated, gelatine-coated, pearl-coated or compressed pills indiscriminately, as they happened to be easily purchased.

To be sure each manufacturing druggist claimed his own production to be the most excellent, as to solubility, keeping qualities, etc., etc., and I, without testing, concluded they must all be good, with perhaps only a little difference in the time required to dissolve in the stomach. During the last three years I have been observing the effects, often the non-effect, and sometimes the partial effect, of remedies administered in pill form and have come to the following conclusions:—

Pills should always be freshly made of newly-prepared chemicals, or of recently assayed extracts, in order to get a certain and uniform effect.

Coatings of any kind interfere with the rapidity of absorption and often prevent it altogether. The so-called soluble (gelatinous) coating of Schiefflin, of New York, is the least objectionable. Sugar coatings, if recently done, are generally dissolved. Sugar coatings, if aged, are very uncertain to dissolve and often pass unchanged, especially in children.

Compressed pills, if of vegetable extracts, or powders, are usually quite certainly and easily dissolved.



Compressed pills of minerals, especially Bismuth Sub Nit, some forms of Iron, also Calomel alone, are little better than bullets, and usually pass through the intestinal tract unchanged. If mixed with a soluble salt the pill is more easily disintegrated and less open to objection, but the safer rule would be to use no compressed pills of minerals. Salol in compressed pills is very uncertain and frequently passes unchanged.

Pills are such a convenient mode of administration of remedies that we cannot afford to dispense with them, but where life is in danger we should make sure that we are not losing time with uncertain or non-effective preparations.

Fluid extracts of assayed strength are the most scientific method of administering vegetable remedies, while minerals should be given in solution or finely divided powder. The situation might be best remembered by a few "Don't's."

1. Don't use old pills.
2. " " unknown coated pills.
3. " " compressed mineral pills.

By observing these three cautions the average practitioner will avoid the results that careless administration of sometimes highly praised products of various pharmacists often brings.

---

#### ELEPHANTIASIS OF THE EXTERNAL GENITALS.

As appears in the photographs the tumour is irregularly pyriform in shape, bulging to the left, and reaches to below the level of the patient's calves. The upper fourth of the tumour is covered with apparently normal skin, soft and pliable to the touch, though with a few coarse hairs scattered over the surface. The skin over the lower three-fourths in front and at the sides is coarse, nodulated, of firm brawny consistence, with a few coarse hairs and enlarged sebaceous and sweat glands showing on the surface, and is more deeply pigmented than the skin elsewhere. Looked at from behind (photo. 3) the apex is more or less marked off from the rest of the tumour, and is traversed by a slit about three inches long running obliquely from left to right at an angle of about 30° to the horizontal. From this slit, when the patient urinates, urine issues in two or three jets. On the posterior aspect from the base of the tumour to the apex is a broad median band, soft and pliable, with the raphe running along its centre. The lower half of this band seems to include the bulk of the scrotum unaltered. The raphe terminates at the slit.

*Measurements.*—A straight line from the middle point of the base in front, over the apex to the middle point of the base behind measures

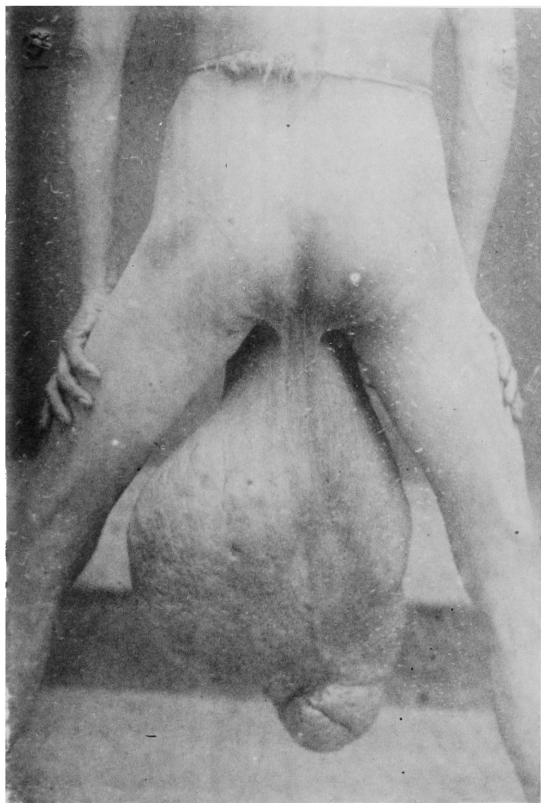
forty-five inches (being twenty-three inches from front to apex, and twenty-two inches from back to apex). Similarly from the angle of reflection with the left thigh over the apex to the angle of reflection with the right thigh, the greatest measurement is forty-seven inches (being twenty-five inches from left to apex and twenty-two inches from right to apex). The circumference at the base measures seventeen inches. The greatest circumference (about half way down the tumour) measures thirty-six inches.

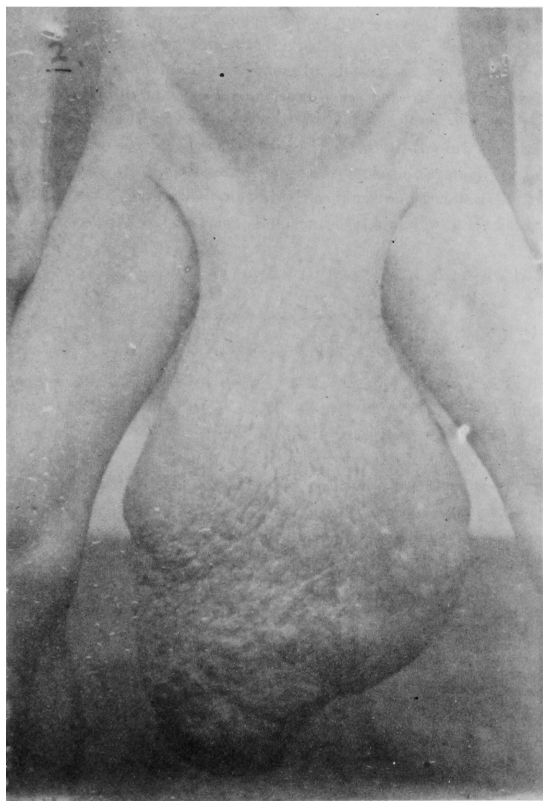
Patient refused to have the tumour removed, and no attempt was made to weigh it "in situ"; but judging from the measurements, the density of the tumour, and from the patient's position while the tumour hangs free (photo. 1) the weight he supports must be considerable.

*Private and Family History.*—Patient is fifty years of age, and the tumour, he says, is of twenty years' growth. Elephantiasis arabum is by no means common in this part of China; yet the patient says that he, and his father before him, spent the whole of their lives in their native village, about fifty miles from Hankow. Patient had one brother, and he had a similar tumour. This brother died some time ago; and his tumour being then of not more than ten years' growth had not reached to half the size of patient's.

*History of Tumour, its Mode of Origin and Growth.*—What the patient remembers to have first noticed was pain on urinating, a pain that persisted for some time after the act of urination had ended. Next the 'left testicle,' he says, became painful and began to swell. This swelling from time to time steadily increased, and about one year later the right testicle also became painful and began to swell. After three years the penis seems to have become involved and incorporated in the tumour. The opening from which the urine issued was then on the anterior surface of the tumour. Year by year as the tumour grew, this opening was pushed lower down until at last it disappeared round the apex and came to occupy its present position on the posterior aspect from one to two inches above the apex. Every winter, he says, he has pain on passing urine. He presented himself here during the warm weather, and was then free from any such discomfort. A sample of his urine then examined was free from albumen, of a pale straw colour, acid reaction and sp. gr. 1019. Neither the blood nor serum from the tumour were examined microscopically.

*Remarks.*—The chief interest in this case, and the reason for bringing it forward at all, is that the foreskin and the skin of the dorsum of the penis seem to have become involved early in the history of the tumour, and to have formed the great bulk of the tumour. The greater part of the scrotum, perhaps the whole of it—occupying the position above referred to—is free from disease. The pain and swelling of testicle mentioned as occurring in the early







history of the tumour, may have been orchitis of filarial origin. Judging from the absence of literature on the special point, Elephantiasis of the Penis seems to be a rare condition. The only case I can find any definite reference to is one figured in “Hutchinson’s Clinical Illustrations of Surgery” (Plate lxxii.) where the patient was a negro, and the tumour—“a condition of disease of the prepuce and skin of the penis only”—was much smaller than the present one, reaching as it did only “almost to the patient’s knees.” Taking for granted that Elephantiasis Arabum is now generally allowed to be a filarial disease, due to blocking of lymphatic channels in some part of their course and to repeated attacks of lymphangitis, may it not be that, while the lower extremities and the scrotum are so frequently involved, the integument of the penis usually escapes the disease from its lymphatic system being more liable to variations in internal pressure and thus rendered less liable to be blocked at any part by filariae? Elephantiasis arabum, it is said, rarely occurs before the age of puberty.

JOHN D. THOMSON, A.M., M.B., C.M.

---

“NURSING.”

The necessity for being “something of everything” is constantly brought prominently before us out here in China and one of the most important points, upon which every one of us needs to know “something,” is the subject of Nursing.

There can hardly be a more trying position than that of the man or woman planted for the first time in a sick-room with no idea how to set about things and with no one to give the needed help and teaching; often the position is rendered doubly painful by the knowledge that a little skill might have saved a great deal of suffering to some one very dear. It is in the hope that the hints contained in these papers may be found useful in such times of need that they are being written.

*The Sick-room*

should be chosen according to the time of year, warm and bright in winter, cool and shady in summer. It should be, if possible, upstairs and its window should not look out over any badly smelling refuse heap, neither should it be closed in by trees. In winter a south aspect is preferable. The room should be clean and bright looking. The *appearance* of a sick-chamber will make a great deal of difference to a patient’s spirits during a long illness and, especially, during a long convalescence.

Much furniture is a mistake, as it prevents free circulation of air and harbours dust and, as a rule, carpets, bed-curtains and valences should be dispensed with. Ventilation is most important; we will hope the sick-room is

a well-ventilated apartment, but in any case it is well, once or twice in the day at least, to cover the patient over and open both doors and windows for a few minutes, thus allowing a current of air to pass through the room. It is a great convenience to have another room opening out of the sick-room, where hot water can be kept close at hand and poultices, &c., prepared and, in some cases especially, it is a great advantage to be able to move a patient from room to room for change of atmosphere.

*The bed* should be placed, where possible, between the door and window. To avoid draught a screen may be placed between the door and the bed. It is much easier to do what is necessary if the patient is on a *single* bed. A mattress is much preferable to a feather bed, both as regards the patient's and the nurse's comfort. Sometimes, in the case of a long illness, it is well to have two beds, so that the patient may find relief in change. The bed should be made with a draw-sheet, about  $2\frac{1}{2}$  feet wide and long enough to tuck in well at the sides, placed about the middle of the bed. Under this should be spread a Mackintosh sheet to guard the mattress from possible accidents. At least one extra pillow should be kept ready, so that the tired, hot head may have the comfort of its cool freshness. Where an air or water pillow is not to be obtained, a large india-rubber hot water bottle, filled with cold water, will often be welcomed as a pillow. In making the bed, if the blankets are very long, turn them up at the foot of the bed in preference to having a great deal to double over at the top. Turn the clothes down *once* at the top, do not double them in again, or an uncomfortable bundle will result over the patient's shoulders.

Never mind the *look* of the bed, the patient's comfort is the first consideration.

Now as to *the nurse*. A good nurse should have nothing noisy or irritating about her person, no squeaking shoes or rattling *châtelaine* for instance. Her movements about the room should be quiet but not snake-like, quick but not bustling, and *always* with some purpose. No *whispering* should be allowed in the sick-room. Low-toned talking is rarely irritating, but anyone who has ever been ill will know that whispering is almost exasperating. Personal cleanliness is, of course, essential to good nursing, and the nurse's safety as well as that of her patient often depends on care in this particular.

All things being ready, the next thing is to put the patient to bed. In doing this see that the pillows are arranged so as to give him comfortable support; no rule *can* be laid down for arranging pillows, for every patient has a different way in which he likes them; the only thing to do is to use common sense and see that he is comfortable. Some patients require a bed-rest to enable them to breathe easily; this is especially the case with some forms of heart and lung disease. In the absence of a bed-rest, an ordinary

chair may be substituted. Turn the chair on its side, put the legs through the top of the bed, so as to touch the wall, and thus keep steady when the patient's weight is against it. Let the patient's back rest against the seat of the chair, the chair back coming to one side of him. If hot water bottles are needed be careful to have them well covered with flannel, *especially if the patient is paralysed or unconscious*; many a patient has been severely burnt without being conscious of any pain.

Bear in mind the fact that, by doing all in your power to give complete rest to an inflamed or injured part, you are giving nature the best chance to recover herself and this is the great aim of good nursing. Therefore, if a limb is injured support it in as easy a position as possible by pillows, or otherwise, arranged so as to allow as little movement as possible when other parts of the body are moved; the same rule also applies where the whole body is involved. Do all in your power to give rest.

Before washing a patient have everything ready to hand. Have the towel dry and warm and dry one part of the body before washing another. It is quite unnecessary to expose much of the patient at a time. Wash all the flexures very carefully and pay special attention to thorough drying. The back should be carefully sponged and dried every day, the patient being turned over on to one side during the process and any sign of redness noticed. Nothing is more important in the prevention of bed-sores than scrupulous cleanliness. A little methylated spirit rubbed into the skin, or brandy and white of egg painted over it, will by hardening it help to prevent bed-sores; if any red places are seen over bony prominences they should be painted over with collodion and the pressure relieved by cotton wool pads. Where the skin is broken a little zinc or boracic acid ointment should be kept applied.

In turning a patient, who is too ill to be able to help himself, on to his side, do *not*, as people so often do, seize his arms and drag him over, but, standing on one side of the bed, put both your hands under his back, one being at the level of his shoulder-blades, the other under the “small” of his back, and gently turn him over like a log. In this way he has a comfortable sense of support and if he has pain in the process it will be as little aggravated as possible. If a patient can lie in different positions it is a great help towards keeping him free from bed-sores, as well as affording him great relief. If he cannot move himself turn him gently, in the way mentioned above, and keep him supported in that position by means of a pillow doubled up and pushed up under the mattress against his back.

In hot weather, or if a patient perspires much, he should be rubbed down frequently with a dry, warm bath towel and the back and flexures dusted with powder. A good dusting powder consists of equal parts of zinc oxide and starch.

*To change the Sheets.*

Take away the pillow, turn the patient over on to one side and roll the soiled sheet as close as possible to the patient's back; then lay the clean sheet previously rolled for half its width, with the roll close up against that of the soiled one and turn the patient back slightly on to his other side; both rolls can then be reached from one side, and the soiled sheet can be removed and the clean one smoothed out. Very little trouble or discomfort need be caused to the patient if this plan be carefully carried out; there need be no lifting or shaking. While the undersheet is being changed the patient should be lightly covered with one sheet or blanket.

With regard to *wearing apparel*. In cases where it is essential that a patient should be kept very still and yet, owing to profuse perspiration or other causes, his things have to be frequently changed, it is advisable to have garments made to fasten *behind* and just to put the arms through the sleeves and leave them unfastened.

In changing an ordinary night-dress or night-shirt do not try to pull out both arms at once and do not begin to try to get out *one* arm until you have drawn as much of the garment over to one side as the width will allow. If more than one sleeved garment has to be put on slip the sleeves of the one into those of the other and put on both at the same time.

Washing and changing sheets and clothes is, at best, a very exhausting process to a weak patient and should be done so as to cause him as little exertion as possible.

*Use of the Bed-pan.*

In giving a patient a bed-pan, if he is able to raise himself a little, put one hand under the sacrum, so as to give a feeling of support, and with the other put the utensil in place. Where he is quite helpless you will need some one else to help to lift him. Otherwise, by trying to do two things at once, you may actually make a bed-sore by pushing the utensil against the tender skin.

In some forms of disease, *e.g.*, in paralysis, where there is a greater tendency to the formation of bed-sores, it is better always to *oil the bed-pan*, so as to lessen friction. The bed-pan should be warmed before use with warm water.

*Enemas.*

If you have to give an enema, the kind and quantity will always be indicated by the doctor. Large enemas, as of hot water, are usually given by means of a Higginson's india-rubber enema-syringe; smaller quantities, as of glycerine, by a small brass, vulcanite or glass syringe. In using a Higginson's syringe first make sure that there is no air left in the bulb by squeezing some water through while the nozzle is under water. If there is

bubbling there is still air. Then, when the requisite quantity has been given, after the last squeeze, do not allow the bulb to expand again until you have withdrawn the nozzle, otherwise some of the water will be drawn back again and you will be fortunate if the whole enema does not follow, before it has had time to take effect.\*

*To pass a Catheter.*

First wash the entrance to the urethra with a piece of wool soaked in some disinfectant, such as Izal (1 in 200); carbolic acid (1 in 80); “Condy’s Fluid,” etc. If this is not done some impurity may be carried up into the bladder and set up inflammation there.

A number 8 male catheter is a good size to use, and it should be made of red rubber. Before use it should be carefully washed and dipped in a disinfectant solution. The part beyond the eye should be carefully attended to, as it often forms a trap for dirt. †

Have the catheter well oiled, and do not use any force in passing it. When a catheter has to be constantly passed on a patient it should be kept in a solution of Hg. Perchlor 1 in 200.

*To pass a Catheter on a Female.*

On separating the hair-covered *labia majora* the small folds of mucous membrane, known as the *labia minora*, will be seen; separate these and two orifices will be brought into view: the posterior and larger is the entrance to the vagina; the smaller, anterior opening, is the entrance to the urethra, the so-called *meatus urinarius*.

With the patient lying on her back, stand by her right side, at about the level of her hips, and with your left-hand separate the labia. Lean over and see the entrance to the urethra, cleanse it carefully and pass the previously oiled catheter in with your right hand in a direction at first backwards and slightly downwards, afterwards backwards and a little upwards.

When the flow has ceased withdraw the catheter a little, after which, often, a little more urine will come.

It is better for anyone who has not previously been trained to pass a catheter to do it in this way, though in any ordinary case it can be easily done under the bed-clothes without exposing the patient. This can scarcely be taught in a paper.

[In ordinary cases the passage of a catheter on the male is perfectly easy. Use a *soft* rubber catheter. Expose the urethral orifice by reflecting the prepuce, hold the organ steady with the left hand and push the soft catheter in inch by inch until urine flows. There is nothing to be afraid of, you can do no harm—Ed.]

\* For other ways of giving an enema see *Med. Miss. Jour.*, vol. x., p., 51 on “Methods of emptying an Obstructed Bowel.”

† Gum elastic catheters, solid beyond the eye, so as not to harbour dirt, and smooth inside, can now be obtained from Messrs. Maw, Son and Thomson and other makers.—Ed.

In a case of long illness it is important to remember not to let the weight of the bed-clothes rest on the patient's feet, sometimes serious consequences follow prolonged pressure of heavy bed clothes on the feet. A little four-legged stool, or a box with the sides taken out, will answer all the purposes of a "cradle" very well.

#### *Patient's Food.*

A patient's diet will, of course, vary according to the complaint from which he is suffering, but a few general remarks may be helpful. Patients on "milk diet" ought to take from 3 to 4 pints in the day.

Three pints of milk and one of beef tea is a very usual diet to be ordered. This may be varied or supplemented by gruel, barley-water, rice water, meat extracts, jellies, etc. *All the Milk and Water should be boiled before use.* Invalid appetites are very difficult to manage and often it is anything but easy to coax down the necessary amount of nourishment. It is, therefore, very important that things should be served up as nicely as possible. It is always a mistake, for instance, to bring gruel to a patient with the spoon that has been used to make it, or to bring a saucer with some of the contents of the cup spilled into it, or to let a patient see his food tasted by some one else before it is given to him. What he cannot eat should be taken right away out of the room and never brought back on the same plate, or in the same cup. Have two feeding cups in use at the same time, keeping one for milk and milky foods and the other for beef tea, broth, etc. Do not let food stand in a feeding-cup, or there will be great difficulty in cleaning the spout properly; let it always be well washed with hot water as soon as it is done with. When the patient has to be fed with a tea spoon, in the absence of a proper feeding spoon, do not *fill* the tea spoon, or some of the contents will be almost sure to run down his neck or get spilt. Food should never be *kept* in the same room as the patient.

Where *rectal feeding* becomes necessary not more than oz. ii. at a time should be given. While it is being used the rectum should be washed out once a day with warm water. Pass the tube upwards and *backwards*. A nutrient enema should be given very slowly, or it will be returned.

Where the rectum becomes very irritable a few drops of laudanum may be added; in some cases again a few grains of quinine may be ordered, to act as an intestinal disinfectant, while in others it may be advisable to peptonise the milk, etc., before injecting.

Other methods of feeding in common use are: by the use of the *nasal tube*, or by the stomach-tube passed through the mouth. The first method can be very easily carried out. A small, soft, red india-rubber tube is used, about

18 inches long. It is passed along the floor of one nostril, having been previously oiled, and, as a rule, readily passes along the back of the pharynx down into the œsophagus.

The index finger of one hand may be put into the patient's mouth to guide the tube along the back of the pharynx should there be any difficulty. The required amount of nourishment should then be *measured* and poured down the tube, slowly, with the aid of a funnel.

Nasal feeding is often necessary in very little children suffering from pneumonia, probably because, owing to the great difficulty in breathing, they are afraid to swallow food and persistently refuse it.

There are certain forms of treatment which a nurse may at any time be called upon to carry out, having for their object the reduction of temperature by helping the skin to act freely. These are sponging, packing and the cold bath.

### 1. *Sponging.*

If there are two beds in the sick-room the sponging should be done on one and the patient afterwards lifted on to the other, always supposing that there are plenty of helpers available to lift him without disturbing him greatly, otherwise he should not be moved.

First spread a large Mackintosh sheet over the bed (it can be slipped under the patient in the same way as an ordinary undersheet). Then, having the patient lightly covered with one blanket, take a good-sized sponge, wrung out of tepid water, and, beginning at his face and hands to gradually accustom him to the process, sponge all over his body, doing each part for a few minutes. Then gradually lower the temperature of the water by means of ice added, or fresh well-water, until it is cold or even ice cold, continuing the sponging for 25-30 minutes at a time. Afterwards take the temperature and see how much it has fallen. Cover the patient well up. Watch the temperature and repeat the sponging, if necessary, several times during the day.

### 2. *Packing*

should always be done on another bed. It is a much more exhausting process than sponging, but more effectual.

Spread the Mackintosh and underneath it have a couple of blankets, width ways across the bed. Wring out a sheet in ice-cold water and wrap it all round the patient. Then roll the Mackintosh and blankets well round him and put several more blankets over him. Unless the patient begins to feel cold, or show signs of exhaustion the pack may be left on for an hour or more. If the patient feels chilly, or the sheet becomes dry, it is an indication that it had better be taken off. The patient should be rubbed down with a dry, warm bath towel and warmly covered up in bed.

*3. The Cold Bath.*

This is the best and most effectual method of all, where it can be properly carried out and the patient is not too weak to stand it. In the case of little children it is especially valuable, as they can be so easily lifted in and out.

The bath should at first be about the temperature of the body (*i. e.*, about 98-99 degrees), and should contain sufficient water to be able to immerse the patient up to the neck. The temperature of the water should be gradually lowered by addition of ice or well-water.

If the patient shows signs of great exhaustion, strong coffee, carbonate of ammonium or sal volatile may be necessary. If possible, *i. e.*, if he is not too exhausted, he should be kept in till the temperature is down to normal, or nearly so; the time varying from three to twenty minutes or more.

Afterwards he should be dried with a warm towel and put back to bed. One of the above mentioned stimulants may be then needed. The bath may be repeated; many people never allowing the temperature to go above 103°. Assistants are necessary to carry out the treatment, which should only be used under a doctor's direction.

*Poultice Making.*

Put the required amount of boiling water into a *hot* basin *first*, then add linseed meal, stirring quickly with a large knife, previously warmed. When of the right consistency and *well mixed* spread on tow, lint or whatever is to be used, turn over its edges, pour a little oil over it, or *wet* the surface, and apply always with the linseed *next the skin*.

A well-made poultice ought not to stick about the skin, or crumble into the bed at all.

*Fomentations.*

Take the lint or old linen to be used out of the boiling water or lotion, place on a towel in the middle and wring dry, or, better, with the aid of sticks, using a jack towel and putting a piece of wood through the loop at each end, turning these "handles" in opposite directions. Then open the towel, shake out and apply quickly.—[For the best way of making a Turpentine Stupe see "Notes and Queries" in the present No.—ED.]

*Typhoid and Cholera Stools.*

For disposal of these see Dr. Hodge's paper on Cholera, "Medical Notes for Non-Medical Readers." Remember that garments or sheets having the *smallest stain* will speedily become fruitful sources of infection.

E. G.



# The China Medical Missionary Journal.

VOL. X.

DECEMBER, 1896.

No. 4.

---

## Editorial.

It is with mingled feelings of relief and regret that we retire from the editorship of the Journal. The post is one involving much hard work and much responsibility. It has, of course, its compensations, not the least of which are the kindly expressions of approval which one from time to time receives. We would fain have been willing to serve our brethren for another term, but the claims of one's own work, and the prospect of a return to England at no distant date, have left us no option. We can, however, congratulate the Association on having secured the services of so able a man as Dr. Stuart, of Nanking. Dr. Stuart is well known as a man well abreast of medical literature, keenly interested in the great question of medical education in this country and an earnest evangelist; in fact in close touch with every department of the medical branch of missionary service. We bespeak for him the cordial support of the members of the Association, without which the best editor in the world cannot conduct a magazine.

We have, once more, to thank those members who have helped us during the year and especially those who have sent us articles without being asked to; to a busy editor such contributions, in this land of vast distances, are doubly welcome. Will our members remember this during the coming year? The lack of such unsolicited help makes all the difference to one's work being a pleasure or a burden.

Certain departments are still left too much to the editor, especially the evangelistic column. It is too much to expect a busy man to hunt through the pages of innumerable magazines, belonging to many different Societies, in order to bring together in a collective form all the interesting pieces of news from every part of the field. But for the help of one or two personal friends, *not medical missionaries*, it would not have been possible to keep this department going. If members, when writing home to their own Societies, will remember to send to the Editor a copy

of their communication it will save much trouble and add interest to these pages of the magazine. "Notes and Queries" have been somewhat disappointing. This column affords an opportunity to a man, who is too busy to write a long article, to send a short note on some case; we trust it will be more used in the future.

It will not be unfitting if, on retiring from the editorial chair, we make some reference to some of the principles which we have kept before us during our tenure of office. In compiling "Medical and Surgical Progress" (a column which, though it is only paste and scissors work, involves an enormous amount of reading) we have aimed, not so much at a medical "Tit Bits" as, to give abstracts of all the most important articles which have appeared in the various medical journals, knowing that no one man, probably, sees half the journals that come to the Editor. We have not been able to bring this department of the paper up to our ideal, which is, that separate columns (*e. g.*, Surgery, Medicine, Pediatrics, &c.) should be taken by different sub-editors, who should write a succinct and interesting account of every new departure during the past quarter. This means more help than we have had at our disposal, but it may yet be realised in the future.

In our editorials we have, at the risk of a charge of egotism, written somewhat dogmatically. We have done so purposely and have largely dealt with subjects of general interest and importance to our Society. We are of opinion that in our journal, and for our Society, working under conditions which make mutual consultation difficult or impossible, this course is, on the whole, for the general good. The initiatory action in almost everything is coming to rest more and more upon the Editor, who forms the one connecting link and bond between the scattered units of our Association. He, from the very conditions of his office, is in touch with almost every one; he knows best the inner workings of our machinery and where the wheels run least smoothly; he, too, being keenly alive to the best interests of the work, is always on the look out for some better way of carrying on our affairs. It is becoming, too, more and more apparent, that the editor is the man upon whom must rest the chief burden of the success, or otherwise, of our Society. In this fact lies at once a real benefit and a real danger. It throws a heavy responsibility both upon those who elect that officer and upon him who accepts the post. We could speak of other important duties that devolve upon the editor, which the Constitution never contemplated and never provided for; but these will be discovered by each successive occupant of the chair, and the pages of a public journal are scarcely the place to refer to them.

As a firm believer in the value of the eye as a help to the understanding, we have, wherever possible, made use of collotyped photographs to illustrate the various articles which have been contributed to our pages. As some have, in the past, made complaint of the old wood cuts, we wish to say that collotypes can be produced in Japan for about two cents each. We believe that our publishers are making arrangements to produce their own collotypes next year, so that we shall probably be able to get this work done still more reasonably. We would urge all our friends to send photographs whenever possible ; it adds so very much both to the interest and the value of an article.

We have one parting suggestion to make, a suggestion originating in a chance remark in a letter of Dr. Kerr's the other day, that the title of our Association and Journal be altered to include the medical missionaries in Japan. The two countries lie so near, the workers have so much in common, that such a step could only be fraught with good to both parties.

With these few remarks we take our adieu, wishing all our readers

**A Merry 'Emas and a Happy New Year.**



## Medical and Surgical Progress.

### THE HYPODERMIC INJECTION OF QUININE.

In studying this question, M. Kelsch (*Arch. de Méd. Milit.; La Méd. Mod.*, February 27, 1895) recommends the following two formulæ:—

R Quininae hydrochlor. (basic), gr. xlv.  
Analgesine, gr. xxx.  
Aq. dest., f. dr. iss.

Or this:—

R Quininae hydrochlor. (neut.), gr. xlv.  
Aq. dest., q s. ad. f. dr. iss.

Fifteen minims contain about eight grains of the neutral chlorohydrate of quinine.

The author gives the following general instructions:—

In employing these injections the neutral chlorohydrate of quinine, or the basic chlorohydrate associated with antipyrin should be used, and if aseptic instruments are employed, and care is taken to make the injections gradually into regions that are rich in cellular tissue, the danger of the formation of eschars or of sloughs is avoided.

No form of quinine or method of operating does away absolutely with the chance of these complications, for they are dependent upon the particular subject treated, at least to a great extent. In men who are anæmic from a prolonged sojourn in foreign climates, or reduced by rebellious fevers, these accidents are to be expected, despite all antiseptic precautions or with no matter what salt of quinine. For this reason the use of hypodermic medication should be reserved for cases of intense fever, where it is necessary to act promptly and where the danger from the hypodermic injection cannot be compared with the danger threatening the patient.

### THE TREATMENT OF CHRONIC SCROFULOUS OTORRHOEA.

M. Isaia (*Revue Internationale de Médecine et de Chirurgie Pratiques*, December, 1894) gives the following formulæ for the treatment of this condition:—

R Balsam Peruvianæ.  
Alcohol, of each, dr. iiss.  
Cocaine hydrochlor., gr. viii. to xv. M.  
Sig.—For external use.

Or this:—

R Balsam Peruvianæ, dr. i. gr. xv.  
Glyc., dr. iiss.  
Cocaine hydrochlor., gr. vii. to xv. M.  
Sig.—For external use.

Or this:—

R Balsam Peruvianæ.  
Balsam Tulu, of each, dr. ss.  
Alcohol, dr. i. to dr. iiss.  
Cocaine hydrochlor., gr. xv. to xxx. M.  
Sig.—For external use.

These formulæ are used in the following manner: after the external auditory canal has been thoroughly cleansed with a solution of resorcin, of boracic acid, or simply a salt solution, the canal is made insensible with cocaine and a few drops of one of the above solutions are then instilled into it, or a tampon previously saturated in one of these solutions may be introduced.

In the hands of Dr. Isaia, of Naples, these solutions have generally given good results, but they should not be employed where there are any excoriations, since the balsams are liable to set up an irritation that may result in a painful inflammation.

### TREATMENT OF INSOMNIA.

Brush, the well-known alienist of Maryland, contributes a paper with this title to the *Maryland Medical Journal* of February 23, 1895.

In numerous instances which he could report it has been found that the patients did much better after their admission to the asylum, both as concerned sleep and amelioration of their general nervous and mental symptoms, when the hypnotics which had been prescribed were discontinued, or very largely reduced, and tonics, proper food, and attention to the personal hygiene of the patient substituted therefor. It is too often the case that physicians who treat insanity in the earliest stages forget, or are oblivious of the fact, that the symptoms which are most prominent—namely, sleeplessness, mental excitement or depression, and possibly disorder of one or more of the senses—are in a large proportion of cases the direct result of physical and nervous exhaustion and the imperfect elimination of the products of tissue waste and metamorphosis, which, having been retained, have produced a state of auto-intoxication, of which the general symptom group presented in the patient is the evidence. To give such a patient chloroform, the bromides, or opium in any of its preparations, or any of the more modern hypnotics would, in many instances, add a new feature to the complicated problem already presented, rather than produce relief. Some of the most distressing complications of cases of insanity which he has seen have been due to prolonged use of the bromides. It may not be out of place, indeed, to call attention to the fact that experience has shown that several of the new hypnotics and analgesics have been found by various independent observers to seriously disturb the digestive and renal functions and to produce themselves symptoms of toxic delirium. Five years ago he called attention to the fact that sulphonal, in most cases, caused diarrhoeal disorders and impaired intestinal digestion. Evensen (*Deutsche Medicinische Wochenschrift*, No. 10, 1894), a Danish physician, in two cases, and Stein (*Therapeutische Monatshefte*, February, 1893) in one, found that hæmatopor-

phyruria was induced by sulphonal. In Stein's case there was albuminuria, necrosis of the tubules, and other evidences of toxic nephritis. A case has also been reported by Schaffer, assistant at the asylum at Heppenheim, in which similar symptoms were observed.

Too little is known of the etiology of the rare condition known as hæmatoporphyria, of which but a few cases have been reported, to estimate its exact significance, but it is certainly worthy of note that four, at least, of the few resulted from sulphonal-poisoning. A drug which is capable of producing such serious blood changes is certainly one which should not be rashly prescribed. Habit cases have already been reported of sulphonal and phenacetin and he has had under care a patient with the antikamnia habit. When the drug in this case was discontinued, the patient had a chill, followed by a high temperature, delirium and subsequent great prostration. The patient, on admission, was profoundly anæmic and approached very nearly to the condition of a case of pernicious anæmia. He had albuminuria and hæmaturia and evidences of profound toxæmia. From these he rallied for a time, but subsequently died after leaving the institution. Hypnal has been too little used, and tetronal and trional are of too recent origin, to have experience concerning them accumulate, but they all belong to the same group and may be properly regarded with suspicion and used with care.

Paraldehyde, if used for but a brief time continuously, as he has had occasion to note in patients admitted under its influence, produces a peculiar intoxication and its taste and odour render its use disagreeable; moreover, in patients with pulmonary disease, its well known irritating effect upon the respiratory mucous membrane contraindicates its use.

Of the purely analgesic drugs, like antipyrin, phenacetin, and acetanilide, it is sufficient for the present purpose to say

that they afford but temporary relief, that their use may develop into habit, and that serious circulatory disturbances and tissue-changes have been attributed to their use.

It is to be deplored that the public has been taught that these drugs are harmless and has come to apply them without advice and often without necessity. The faculty should issue a warning that has no uncertain sound against the indiscriminate use of these, in some cases, dangerous compounds. Brush perhaps owes his readers an apology for wandering so far from his text, but these points are among those upon which he had to ponder in considering some of the problems which have faced him in treating the varying disturbances of physiological functions which have been found in his patients and which have been some of the elements involved in many of them. Moreover, this seemed a good occasion to raise a protest against the popular use of these new hypnotics and anodynes.

The modern treatment of insanity and of nerve disorders in general may be summed up in tonics, food, rest, and attention to personal hygiene, under which may be included attention to all the physiological functions. Why not, therefore, apply the general to the special indication in these, and in place of prescribing an hypnotic simply as an hypnotic, attempt to combat the sleeplessness by such attention to the physical state of the patient as would be at once suggested were this condition not lost sight of by the more prominent symptom and apparently more distressing one of sleeplessness? Brush is well aware that often in private practice the apparent necessity of quieting the patient, and the importunities of friends, induce the use of drugs which might not be employed under other circumstances, and that in some cases, sleep and quiet are absolutely necessary and time will not permit any resource except the employment of hypnotic medicines. He has seen, however, more than one patient with a rapid, feeble pulse, a dusky,

almost cyanotic, countenance, dilated pupils, dry, brown tongue and restless delirium pass into a condition in which sufficient sleep was obtained by the careful administration of food, heart tonics and diffusible stimulants.

There are numerous cases of insomnia due to renal or heart-disease, and a long line of cases in which lithaemia plays a prominent causative role, in which the sleeplessness is best met by attention to these conditions. Not only do we remove the insomnia by so doing, but we are at the same time upon the high road, and indeed the only road, which leads to a permanent improvement of the general nervous and physical prostration of the patient.

About seven years ago Professor Lauder Brunton, in the *Practitioner*, called attention to the use of strychnine as an hypnotic. The use of the term hypnotic in connection with strychnine may sound strange to many, and strictly speaking it is not an hypnotic, except as any drug may be considered one which places the patient in a condition to sleep. He showed in this very suggestive article that strychnine, by its direct action as a general tonic and by its action upon nerve-tissues themselves, produced such a condition that sleep was not only possible, but was often, in cases under consideration, best produced by this means.

The employment of baths, massage, dry frictions and mild counter-irritations to the skin are methods so well known as to require little more than a passing notice.

The warm bath has advantages which few who have not systematically tried it appreciate. It may be made at once a stimulant to the circulation and then a sedative. Some seven years ago A. Symon Eccles, M.B. (*Practitioner*, March, 1888) showed that the administration of a bath for the purpose of inducing sleep was not as simple a matter as it seemed. The bath should be administered in a room whose temperature is 65° to 70° F. The patient is made to stand with his head over the edge of the

tub and his head and face are then rapidly doused with water at 100° F. The cooling of the body by the air and the hot sponging of the head sends the blood to the head, dilating the vessels of the entire brain. The entire body is then immersed, except, of course, the head, in a bath at 98° F., which is rapidly raised to a temperature of 105° to 110° F. In a few minutes the patient is taken from the bath, wrapped in warm blankets, and without exertion on his part, taken to his room. The blankets absorb the moisture; in his room his night-clothes are put on, a warm bottle placed at his feet, and possibly some warm liquid food administered. The sedative and refreshing result is often most marked.

The theory of this proceeding is easily comprehended. After the vessels of the brain have been filled by the cooling of the skin of the body and the hot douching to the head, the warm bath dilates the vessels of the trunk and extremities, with corresponding contraction of those of the brain, which, with the slowing of the heart induced by the bath, reduces the supply of blood to the whole brain; at the same time the vascular sewers of the brain have been flushed and blood charged with the products of tissue waste, of disordered digestion or with various toxic elements of internal or external origin, has been replaced with a fresh supply.

Some patients cannot be subjected to this method, for one reason or another. For these, massage, sponging of the body, followed by hot sponging for from three to five minutes from the vertex to the tip of the spine and subsequently brisk friction with Turkish towelling, of a portion of the body at a time until the whole body has been gone over, will be found a fairly efficient substitute.

If massage can call into the blood-stream, as seems to be the case, blood-corpuscles which have lain hidden and dormant in the capillary system, it is not too wild a conjecture to infer that the cerebral cir-

ulation can be quickened and the entire vascular system of the brain flushed out in this or some analogous manner. Massage, moreover, appears to increase the local blood-supply in the manipulated parts at the expense of deeper structures and to cause lower blood-pressure conditions, both favourable to sleep.

The hot pack to the abdomen, preceded by friction of the limbs and kneading of the abdominal walls, will, in certain cases, be of great service. In all of these cases the administration of hot milk, oatmeal gruel, or the animal broths will be an efficient adjuvant.

If we take the classification of insomnia as laid down by Professor Sée, it is quite evident that not many of our cases can be placed arbitrarily in any one of the divisions which he makes. There may be, for instance, a combination in the production of insomnia of pain, cardiac disease and some condition of toxæmia. If, however, we examine the cases as he presents them, it will be found that it is in the first class, the cases of insomnia from pain, and almost in that class alone, that we require morphine or some similar preparation. Those numerous cases of insomnia which depend upon some disorders of digestion, either gastric or intestinal, are not infrequently the most difficult ones to treat. It is plain that narcotics and hypnotics are of little or no utility in these cases. He attributes in many of these cases the cerebral agitation to an excessive acidity, or what he terms "hyperchlorhydria," in which cases he prescribes drachm doses of bichlorate of sodium in a glass of hot water on retiring. Many of these cases are due to, or complicated by, intestinal indigestion or fermentation. In such cases naphthalin will be found of considerable value and an improvement in sleep and in the patient's mental state has been observed to follow its use.

Next in order, possibly, to the cases of insomnia from digestive disorders are those

arising from lithæmia or uræmia. In the lithæmic cases exercise, which favours the complete transformation of the waste products and promotes excretion and circulation, will always be found beneficial. In those cases in which active exercise on the part of the patient can not be taken, the passive exercise of massage will be found to be a fairly efficient substitute. These cases are quite analogous in many respects, in the matter of treatment, to those conditions of insomnia arising from digestive disorders and they also bear an intimate relation to the cases of toxæmia either from substances taken into the body or from auto-intoxication.

In some of these latter cases, and especially in cases of alcohol and opium intoxication and the insomnia resulting therefrom, the prolonged warm bath, with brisk friction following, or occasionally the wet pack, have, in the several instances in the writer's experience, proved of remarkable value. In some cases of alcoholic and in many cases of opium intoxication the condition of the heart is such that the prolonged warm bath can only be administered by exercising great caution. The heart must be supported occasionally by stimulants and it is always a good plan to give to these cases, during the bath, some easily digested liquid food, as, for example, hot milk or hot beef-tea.

—

A METHOD OF DIMINISHING THE INCONVENIENT EFFECTS OF THE IODIDES.

Erhlich and Kroenig showed in 1885 that the combination of sulphanic acid with the iodides converts the harmful and nascent nitrites found in the saliva and nasal secretions into inoffensive products.

Valentin has shown latterly that we possess in this drug an excellent remedy for certain symptoms of acute catarrh. Thus, in acute coryza, the redness and swelling, with profuse discharge, are notably diminished or completely aborted after a few hours by its use. In acute laryngitis and

otitis media the drug has an action, but it is less certain, the pain alone being diminished in the latter disease. The influence upon catarrhal conditions is not a permanent one and it is necessary to repeat the dose at the end of twenty-four to forty-eight hours.

It is given as follows:—

℞ Acid. sulphanic, dr. iiss.  
Sod. bicarb., dr. ii.  
Aq. dest., f. oz. x. M.

Sig.—A dessertspoonful in water twice a day.

Or as follows:—

℞ Sodii sulphanicat., dr. iiss.  
Aq. dest., f. oz. viiss. M.

Sig.—3 teaspoonfuls twice daily.

—*La Médecine Mod.*, March 23, 1895.

—

A METHOD OF RESTORING PERSONS APPARENTLY DEAD FROM CHLOROFORM.

Leedham-Green, in the *Birmingham Medical Review* of February, 1895, under this title, writes of what is often called Maas's method, which was described in the *Berliner Klinische Wochenschrift* for 1892, in an article by Dr. Mass, of Göttingen. Little notice was taken of it at the time. It was, however, again brought prominently forward by Professor König at the Surgical Congress at Berlin in 1893. The method advocated was a slight but important modification of the well-known one suggested by Professor König himself. As originally practised by that professor, the operator, standing on the left side of the patient and facing him, placed the ball of the thumb of the opened right hand upon the patient's chest, between the place of the apex-beat of the heart and the sternum. He then repeatedly pressed in the thoracic wall with a quick, strong movement, at the rate of thirty times to the minute.

Dr. Maas was led, through the following incident, to modify the procedure in one particular and thereby greatly to enhance its value: A boy, aged nine years, while under chloroform for cleft palate, suddenly ceased to breathe; the pupils dilated and



the face became cyanotic. He was at once treated by Professor König's method; but both pulse and respiration became gradually weaker, until at length they stopped altogether and the boy was considered to be dead. Dr. Maas, who had been compressing the thorax at the usual rate, on learning that the respiration and the heart's action had entirely ceased, became excited and commenced to compress the chest-wall very quickly and strongly (at about the rate of 120 to the minute) and in a short time was agreeably surprised to observe the pupils contract and to detect faint attempts at respiration. Although the boy's life hung in the balance for fully an hour, during which time this quick compression had to be continued, in the end he recovered.

Since that time the quick compression of the præcordium has invariably been used in the Göttingen clinic and with the best results. While acting there as assistant to Professor König, Leedham-Green had several opportunities of testing its value and was much struck with its efficacy in case of heart-failure. But the most striking instance of its efficiency that he has met with was one in which he had occasion to use it a few weeks ago. The circumstances of the case were these: A healthy child, four months old, was under operation for circumcision in the out-patient room of the Queen's Hospital. The child took the chloroform at first very well and, the operation being almost concluded, the lint on which the chloroform had been given had been laid aside for a moment or two. Suddenly the child became deathly pale, the pupils dilated, and the respiration and the heart's action ceased. The operation was instantly stopped, the head was lowered and the tongue was pulled well forward. As the child made no attempt to breathe, artificial respiration (Sylvester's method) was energetically used. This proving ineffectual, the child was completely inverted for a few seconds, being held up by the heels. Sylvester's method was again tried, but

without producing the slightest effect either on the breathing or on the heart. At this point Green happened to come into the room, just as the anæsthetist declared the child to be dead. He at once examined the child and could not find any trace of life whatever. There was no impulse of the heart to be felt, nor was there the slightest effort to breathe; the surface of the body was pale and cold; the eyes were shrunken and pupils widely dilated; at the mouth and nostrils a collection of froth appeared, together with some stomach contents, which had been forced up during the artificial respiration.

Although Green did not for a moment doubt that the child was dead, yet, in desperation, he at once commenced the rapid compression of the præcordium, as described above. For fully three minutes he worked away, apparently [with no result, during which time his colleague and he discussed the painful questions of informing the waiting mother and the unpleasantness of an inquest. Suddenly they were surprised and delighted to hear a faint gasp, followed in a few seconds by another.

A little later they felt a weak heart-throb and in a minute or two more the child began to cry and all danger was passed.

The points of special interest to be noted in this case are: (1) the length of time (seven minutes) during which neither heart-beat nor respiratory effort could be detected; (2) the inadequacy of Sylvester's method and inversion to re-establish the circulation and respiration, neither of them producing the slightest apparent effect; (3) the complete recovery of the patient under the rapid and forcible heart compression.

There can be no doubt that the efficacy of König-Maas's method lies in its direct action on the heart, restoring not the respiration only, but the circulation also. If, on a fresh cadaver, the præcordium be quickly and forcibly compressed, it is easy

to detect a distinctive pulsewave in the carotid arteries and the pupils will be found to contract as the blood fills the capillaries of the iris.

Although this method is naturally easier of application upon the flexible chest of a child than on the rigid thorax of an adult, yet age does not preclude its use. It need hardly be mentioned that provision must be made for the free entry and exit of the air to and from the chest.

A method so simple and rational, and withal so effective, Green feels sure only requires to be better known in order to be more generally adopted.

---

THE STABILITY OF AQUEOUS SOLUTIONS OF  
BICHLORIDE OF MERCURY.

Burcker (*Archives de Médecine et de Pharmacie Militaires*, April, 1895) finds, as a result of experimentation, that ordinary water causes an immediate decomposition of bichloride of mercury; that this decomposition steadily continues under the influence of air and light. This decomposition ceases or becomes arrested when air and light are excluded. Solutions of bichloride of mercury made in distilled water undergo only trifling decompositions even when exposed to air and light.

Guillot (*ibid.*) examined the emergency packets made for the army. Each of these contained sterile gauze impregnated with bichloride of mercury, one-tenth of one per cent. by weight. He found that a reduction took place, the mercury being transformed to insoluble salt, so that in eighteen months no bichloride of mercury could be found.

---

HÆMORRHAGE FOLLOWING THE EXTRACTION  
OF A TOOTH ARRESTED INSTANTLY BY  
ETHYL CHLORIDE.

The *Lancet* for January 25th publishes the following report of a case by Mr. A. E. Hind: The patient, a girl twenty years old, had a tooth extracted at noon. At ten o'clock at night she was

bleeding freely from the socket of a lower molar tooth and she stated that the bleeding had been continuous since the extraction of the tooth. Pressure and plugging with perchloride of iron had been resorted to without any result. Remembering, says the author, a similar case in which all ordinary methods of treatment had been resisted, he resolved to try freezing with ethyl chloride spray. After clearing out the clots, the author used the spray and was able to stop the bleeding immediately. To prevent its recurring, he plugged the socket with wool soaked in tincture of hamamelis. There was no pain and no more blood escaped. Although ethyl chloride is used for producing anæsthesia in small operations, this case, says Mr. Hind, suggests a further use of it.

---

NEW OBSERVATIONS RESPECTING  
PERKINSON'S DISEASE.

Paralysis agitans always presents a special contraction of the muscles. Trembling is commonly present and muscular atrophy is sometimes found. This disease is thought by Gautier to be wrongly classed with the neuroses. Instead of being considered a functional malady of the nervous system without any appreciable lesion, it must be considered a disease of the muscles. The nervous system is involved only secondarily, the primary seat of the disease being in the muscles, the nutrition of which has been impaired. Gautier asserts that this disease is only the manifestation of a disorder pertaining to the elasticity of muscle. But this muscle has its own individual life; it nourishes itself; it has a variable composition. When at rest, the reaction is alkaline; when contracting, the reaction is distinctly acid.

Suppression of muscular elasticity results from the production of sarco-lactic acid, an acid phosphate of potash. These products accumulate in the tissues as the result of energetic, long-continued, and repeated contractions; hence any cause capable of

provoking or favouring this accumulation will determine a contracture. Thus paralysis agitans is very frequent, in certain persons whose professional duties are very taxing. This view of the disease suggests at once the proper mode of treatment, which consists in increasing the elimination of the irritating substances and in improving nutrition by appropriate dietary.

STAINING AND MOUNTING TUBE-CASTS.

Dr. Byrom Bromwell describes in the *British Medical Journal*, the following method of staining and mounting tube-casts and other urinary deposits:—

“The recognition of tube-casts under such circumstances is greatly facilitated by the use of staining reagents. Picrocarmine is the stain which I chiefly use. The method which I adopt is as follows:—

“1. An ordinary conical urine glass is filled with equal parts of urine and an aqueous solution of boracic acid and set aside until the deposit settles.

“2. The deposit is then drawn off by means of a pipette and transferred to an ordinary test-tube, in which a small quantity (half a dram is quite sufficient) of picro-carmin solution has been previously placed.

“3. The urine and staining fluids are then thoroughly mixed by inverting the test-tube two or three times, the end being closed, of course, by the thumb.

“4. The test-tube containing the urine and staining fluid is then set aside to stand for twenty-four hours.

“5. The deposit, which has by that time settled at the bottom of the test-tube, is then drawn off by a fine mouthed pipette, placed on a slide, covered and examined under a low power.

“If any tube-casts are present, they are very easily detected by this method.

“When a cast is detected, it should be carefully brought to the centre of the field

and examined with a higher power. If amyloid degeneration is suspected, methyl-violet may be used, for in some cases of waxy disease of the kidney the tube-casts give the characteristic rose-pink reaction with methyl-violet. For permanent preparation, the deposit is drawn off as in No. 5, above, and transferred to a small tube of Farrant's medium, in which it remains until the organic deposit has settled, when it is again drawn off and transferred to clear Farrant's solution, whence it is mounted in the usual manner. All organic deposits are thus stained and mounted in a perfectly clear medium. Their minute characters can be studied with the highest powers of the microscope.”

THE INFLUENCE OF HEAT APPLIED OVER THE STOMACH UPON DIGESTION.

A Russian physician, M. Pouschkin (Witch, October, 1895), has, by experiments upon six healthy persons, definitely determined the following facts respecting the influence of fomentations over the region of the stomach. The general result was to increase digestive activity. The total acidity and the quantity of free hydrochloric acid were increased; the amount of combined chlorine was diminished. Fermentation was diminished, while the production of peptone was increased, as was also the digestive activity of the gastric juice, together with the motor functions of the stomach.

The increased activity of digestion induced by the application of heat was found to persist for several hours and, in some instances, for several days. Practical experience long ago demonstrated the utility of the application of heat over the stomach as a means of increasing digestive activity. The writer has made use of this valuable information for more than twenty years and with excellent success in a great number of cases.

## AVOID COUGH MIXTURES IN PHTHISIS.

The *American Practitioner and News* says to the patient suffering from phthisis, "Never take cough mixtures if they can possibly be avoided," with which the writer heartily agrees. The patient, however, must have something to relieve his cough. What shall it be? Sipping very hot water is a remedy of great value for relieving the cough of phthisis, as well as most other forms of cough. A cough resulting from irritation is relieved by hot water, through the promotion of a secretion which moistens the irritated surfaces. Hot water also promotes expectoration and so relieves the dry cough.

## BISMUTH PASTE FOR ORCHITIS.

A thick paste consisting of subnitrate of bismuth and water is the best application for swollen testicles. It relieves the pain and the burning sensation and the swelling rapidly subsides. It is equally useful for burns and scalds and as an application for sunburn, blistered skin, and chafing of the groin.

## THE HOT BATH IN CEREBRO-SPINAL MENINGITIS.

Worroschilsky reports, in the February number of the *Therapeutique Monatshefte*, two cases of cerebro-spinal meningitis treated by the hot bath, in which most excellent results were obtained. The effect of the bath was, almost invariably, to produce sleep, reduce the temperature, and diminish pain in the head. The bath usually lasted from eight to ten minutes; temperature 104° F.

## A RAPID STAINING METHOD.

Collen (*Centr. f. allg. Path. u Patholog. Anat.*, 1895) describes a rapid method of staining fresh tissues, after hardening with formalin. By this method sections can be stained in the postmortem room within fifteen minutes of the removal of the tissue from the body. The fresh material is frozen, sections are cut and placed in a fifty per cent. watery solution of formalin for five

minutes, thence into a fifty per cent. alcohol solution for three minutes, and lastly into absolute alcohol for one minute. They are then washed in water. Such sections can be stained at once and mounted in the usual way.

## PARALDEHYDE.

Frederick P. Hearder, M.B., C.M. Edin., writes to the *British Medical Journal* as follows:—"In the Journal of February 29th Dr. Aitken speaks of the value of paraldehyde as a hypnotic and sedative. I wish to draw attention to a less generally recognised action of the drug—namely, as an antispasmodic in that most distressing malady—asthma. Dr. W. Mackie has a note on this action in the Journal of January 14th, 1893, in twelve cases of spasmodic asthma. Since that date I have exhibited the drug, with good effect, in about thirty cases of asthma, including ordinary spasmodic asthma, asthma with epilepsy, with morbus cordis, with renal disease, with chronic bronchitis, and in two cases of asthma with pneumonia. In the majority of the cases relief was rapid and complete, and in the remainder the distress was lessened. The dose employed was 45 to 60 minims, one dose being usually sufficient, a few cases needing a further dose of 35 to 40 minims an hour or so later. The hypnotic action of the drug, also, is of great service, as in so many cases of asthma the attack comes on in the evening or during the night. Using the above doses, I have never observed any untoward action of the drug, but, on the contrary, the breathing has gradually become easy and normal, the pulse steadied and strengthened, the patient falling into comfortable sleep. A disagreeable feature of the drug is that it scents the breath strongly for about twenty-four hours. A point in dispensing is that the addition of a few drops of alcohol renders paraldehyde perfectly miscible with water; any flavouring tincture can be used for this purpose."

THE ADMINISTRATION OF DRUGS TO CHILDREN.

The *Therapeutic Gazette* for September draws attention to the importance of this subject, quoting Danchez (*Rev. Internat. de Méd. et de Chi. Pratiques*, May 25, 1895).

The following points are important in reference to prescribing:—

(1). That the substances most easily administered are the tinctures and alcoholic extracts, in the form of drops (aconite, digitalis, belladonna, laudanum, etc.), mixed with sweet liquids, as black currant syrup, Malagy wine, currant syrup, prune juice, orange liquorice, coffee, and sometimes distilled water. Certain powders that are very active may be mixed in small doses with soups which the children take as daily food; thus may be used scammony, bismuth, magnesia.

(2). That the elixirs, the biscuits (scammony), the pastills (lactate of iron), the chocolate (iodides), the electuary (honey and syrup of althæa), mixed with sulphur, with senna ( $\frac{1}{2}$  to 2 drachms), magnesia ( $\frac{1}{2}$  to  $2\frac{1}{2}$  drachms), confections and syrups, can be used in pharmacy to mask the taste of drugs, according to the special liking of the child.

One should avoid using prescriptions containing over five drachms, one ounce, or two ounces; at least, not over this amount should be administered in forty-eight hours to a child of eight or ten years of age.

In prescribing very powerful drugs it is well to avoid danger by prescribing them always in solutions of known percentage.

(3). In giving very active drugs to very young children it is generally best to write out the name and amount of the drug fully, not in figures, and to state at the top of the prescription that it is for a very young child and that the drops should be counted.

In certain cases, where the tolerance and docility of the child are not good, recourse may be had to certain medicaments that are capable of being absorbed through the skin or mucous membranes, such as fumigations of naphthaline, tar, benzoin, carbolic acid,

creosote, balsams, resins, &c., inhalations of oxygen, eucalyptol, turpentine, tinct. of iodine, and camphor.

INSECT BITES.

They doubtless have more experience in America with insect bites than we have in England, and we therefore give the following prescription from *Archives of Pediatrics*:—

Insect Bites:—

Ammonia	...	...	45 minims.
Collodion	...	...	15 "
Salicylic acid	...	...	1½ gr.

S One drop to be applied to each spot affected.

A SALICYLIC ACID OINTMENT FOR GONORRHOEAL AND OTHER FORMS OF ARTICULAR RHEUMATISM.

℞. Acidi salicylici	}	...	dr. iiss.
Lanolin			
Olei terebinth	}	...	oz. iii.
Adipis			

BOURGET.

It is reported of this application that the acid is so thoroughly absorbed that it is afterwards found in the urine in large quantities, also that the local and general effects are most satisfactory. (*Therapeutic Gazette*, June, 1895).

FOR ECZEMA OF THE FACE.

Carefully remove all the crusts. Avoid water. Keep the following ointment constantly applied to the lesions by means of a soft linen mask.

℞ Ung. picis	...	...	dr. i.
" diach.	...	...	" ii.
" zinci ox.	...	...	" ii.

Mix. Sig. For external use.

—*Archives of Pediatrics*, May, 1895.

FOR ECZEMA OF HANDS AND FINGERS.

(*Unna: Monatsh. f. Prakt. Derm.* 19, 1894).

℞ Zinc oxid.	...	40 parts by weight.
Cretæ preparatæ	20	" "
Liq. plumbi acetatis	20	" "
Olei lini	...	20 " "

The first two ingredients are to be well blended, the last two well mixed, and then the whole to be worked into a paste. Sig.—zinc paste.

GLYCERINE OF IODO-TANNIC ACID FOR VAGINAL APPLICATION.

(*Gez. de Gynæc.* 221, 1895).

℞ Tincture of iodine ... 4 parts.  
Tannic acid ... .. 4 „  
Glycerine ... .. 15 „

Dissolve and filter.

To be applied by means of tampons to the cervix uteri and left in place twelve hours in cases of vaginitis, uterine engorgements, with or without cervical endometritis.

—*Quarterly Medical Journal*, Oct. 1895.

FORMIC ALDEHYDE IN OPHTHALMIC PRACTICE.

By JAMES MACKENZIE DAVIDSON,  
M.B., C.M.,

*Surgeon to the Aberdeen Ophthalmic Institution and to the Royal Hospital for sick Children, and Physician to the Asylum for the Blind, Aberdeen.*

The results I have obtained with this substance in the treatment of some diseases of the eye have been so notable that I am induced to publish this short article upon its use. The preparation I am using is Schering's formalin (which consists of forty per cent. formic aldehyde in water forming a stable solution if kept in a well-corked bottle). One part of formalin in 2,000 or 3,000 of water is the strength of the solution which I find most serviceable. When I tried it first in hypopyon ulcers it was dropped into the affected eye three or four times daily, and it seemed to be of very little use, but on applying it freely every hour I have never seen anything act so effectually in these cases.

Everyone engaged in ophthalmic work in a manufacturing town knows how numerous and troublesome, and indeed often disastrous, are the cases of septic abrasions of the cornea ending in hypopyon ulcers. The granite and engineering works in Aber-

deen gives us ample experience in these kind of cases.

The usual antiseptic applications so often fail to benefit such injuries that recourse has to be had to the electric cautery; if this is to be thoroughly effectual the focus must be burned out completely and consequently more or less of sound corneal tissue is destroyed as well: whilst the scar left is frequently wonderfully slight still no one can doubt that if the process can be at once arrested by local antiseptic applications the results are even better.

My experience warrants me in claiming that in a solution of formalin, 1 in 2,000 or 1 in 3,000, applied every hour freely we have such a substance and it would be of interest to know if others come to the same conclusion. Used in the same way, or less frequently as experience may dictate, it acts admirably in abrasions of the cornea which have become septic and infiltrated and might or might not go on to suppuration. Another great advantage is that the severe pain so characteristic of hypopyon ulcer is speedily relieved by the formalin solution, which, further, is non-poisonous and produces no irritation in the strength recommended. The directions I give to the patient are to lie down and then, with a dropper or failing that a teaspoon, the formalin solution is poured gradually into his eye, while the eyelids are kept winking, so that its surface will be freely bathed; this being done hourly during the day and at night also should the patient happen to awake.

One is always afraid in advocating the use of a comparatively new drug that one's judgment may insensibly become unduly biassed in its favour if it acts at all well, but I have used formalin now for some months, having had the opportunity of hearing the opinion of fresh and impartial observers familiar with the usual methods of treatment and results, and without exception a most favourable opinion has been formed of its value, especially in septic

abrasions and hypopyon ulcers, provided it be applied freely and frequently, not less than hourly in severe cases. Atropine is only used sufficiently to keep the pupils dilated in these cases. Since using formalin in this way I have not had to use the electric cautery once. Of course there are cases in broken-down subjects, and those that are too late in seeking advice, where suppuration of the cornea may not be arrested by any means, but I consider that formalin should have a fair trial, even in such, and supplement operative treatment.

DIARRHŒA IN INFANTS.

℞ Benzonaphthol.  
Bismuth. subnitr.  
Resorcin ... .. āā gr. jss.

M. Sig.: For a child one or two years of age one such powder every two hours until six have been taken.

EWALD.

INFLUENZA.

℞ Quininæ sulph. ... dr. i.  
Pulv. digitalis. ... āā gr. xx.  
" scillæ ... gr. v.  
Ext. opii ... gr. v.  
" glycyrrhizæ ... q. s.

M. et ft. pil. No. xxx. Sig.: Take a pill four times daily.

PEPPER.

BRONCHITIS.

℞ Ammonium chloride.  
Sodium iodide ... āā dr. iii.  
Syrup of Tolu.  
" " senega āā f. oz. iss.

If a spasmodic element be present, sodium iodide 2½ grains may be added to each dose.

ESHNER.

TREATMENT OF PHTHISIS BY CHLORIDE OF AMMONIUM.

Chloride of ammonium has been found very useful by Mr. Kebbell, of Flaxton, York, in doses of 7½ grains in milk every three or four hours. This treatment gives rise to a great increase in expectoration, an

improvement in appetite, a diminution of night sweats, and also it promotes sleep.

Mr. Kebble states that chloride of ammonium thus given surpasses any drug that he has seen used in the treatment of phthisis, especially as regards helping expectoration.—*Lancet*, December 14, 1895.

PSORIASIS BEGINNING ON THE NAILS.

In the *Archives Cliniques de Bordeaux* for September, Dr. Dubreuilh gives the following case. A little girl aged six was brought to him early in January, 1895, with an affection of the nails which he diagnosed as psoriasis. The disease had appeared in September, 1892, on the nail of the left thumb, since when the nails of the first, second, third and fourth fingers of the right hand had become affected. The lesions were typical of the disease, but had not appeared on any other part of the body. The diagnosis was, however, confirmed when, on January 25, a typical patch of psoriasis appeared on the right thigh. The case is interesting, as Ludwig Nielsen, in a work based on the study of 616 cases of psoriasis, writes that 'there does not exist any authenticated observation of psoriasis limited to the nails, for in no case has the typical skin eruption appeared afterwards to confirm the diagnosis.'

THE DANGERS OF COCAINE.

In connexion with Mr. J. H. Marsh's notes on the dangers of cocaine as a local anæsthetic, in the *British Medical Journal*, September 28th, p. 780, the following case may be of some interest:—

Having occasion to evacuate a chalazion from each eyelid in a man aged twenty-five, I instilled into each conjunctival sac three or four drops of a five per cent. solution of cocaine hydrochlorate and a few minutes afterwards proceeded to incise the cysts and scrape them out; but while operating on the second the patient suddenly became blanched, perspiration broke out on the forehead,

the pupils dilated, the respirations became sobbing and after a slight convulsion he became rigid, only his shoulders and hips touching the chair in which he was sitting. All these symptoms passed off in a few seconds, though the patient remained pale and complained of feeling faint for some time.

Both this and another case I observed some time ago occurred during very warm weather, but this may be a mere coincidence.

#### LOCAL ANÆSTHESIA.

Dr. Theophilus Parvin, at a meeting of the County Medical Society, Philadelphia, on November 13th, read a paper on Schleich's Method of Local Anæsthesia by Subcutaneous and Parenchymatous Injections of Weak Cocaine Morphine Solutions, and demonstrated the effect in his own person by allowing an incision an inch in length to be made in his forearm, and to be stitched up, under its influence, in the presence of the Society. He declared it to be an absolutely painless procedure and predicted great future usefulness for this method in surgery, expressing his belief that at least fifty per cent. of the operations now performed under general anæsthesia will ultimately be done by this method, which he declared suitable even for major operations,

#### LORETIN: A NEW ANTISEPTIC!

By HERBERT SNOW, M.D., LON., ETC.,  
*Surgeon, Cancer Hospital.*

Loretin is an organic iodine compound discovered by Professor Claus, of Freiburg. Its formula is  $C_6H_4In.Oh.So_3H.$ , and its euphonious proper title in chemical nomenclature meta-iodo-ortho-oxyquinoline-ana-sulphonic acid. It is a bright yellow odourless crystalline powder, very slightly soluble in water and alcohol; cold water takes up one to two parts per 1,000, boiling water five to six; it is insoluble in ether and oils, forms emulsions with the latter and with collodion. Being an acid it forms neutral salts with sodium and potassium, with ammonium and magnesium, which are readily

soluble in water, forming solutions of a deep orange yellow colour; the neutral calcium and barium salts are only slightly soluble. The manufacture process consists in boiling together in water equal parts of potassium iodide, potassium carbonate and oxyquinoline-sulphonic acid with chloride of lime, representing one atomic equivalent of chlorine. After cooling, a little hydrochloric acid is added. Thus is formed the calcium salt of loretin, which is again decomposed with hydrochloric acid to obtain the crude drug, subsequently carefully purified. The pure acid is extremely stable for an iodine compound, being unaffected by prolonged exposure to air or even to direct sunlight; it is easily decomposed only by oxynitrogen compounds, by free chlorine and bromine, or by certain organic compounds already undergoing decomposition.

Ammelburg administered, for several weeks in succession, loretin to dogs in doses up to 10 g., rabbits to 5 g. Hypodermic injections amounting to five c. cm. of a five per cent. solution of the sodium salt of loretin, were made daily into guinea pigs for long periods. In not a case did any objectionable symptoms follow and in the urine, which was carefully collected by means of specially constructed cages, no iodine, blood, sugar, or albumen appeared. These physiological experiments were continued by Professor Albrecht in the Veterinary High School at Munich, the results being published in the *Deutsche Zeitschrift für Thiermedizin und vergleichender Pathologie*, 1894, vol. xx., p. 353.

Ammelburg's bacteriological investigation proved loretin to be a powerful microbicide, much superior to iodoform, with which comparison more particularly holds weight. They deal with the micro-organisms of cholera, anthrax, suppuration, typhus, etc. Some of the more significant tables are appended; the experiments are being still continued.

Schinsinger has extensively used loretin



for burns and operations of all kinds, including empyema, herniotomy, resection of the upper jaw, arthrotomies, carious and tuberculous processes, etc.; in six months he had not a single instance of toxic symptoms, much less of death. Feusling has largely employed it in veterinary practice, with the most favourable consequences. The former remarks: "The absolute absence of any irritant effect upon the skin is a very important advantage. Artificial erythema or eczema I have never yet observed caused by it; but, on the other hand, very persistent eczema has been cured by loretin." Extensive burns were healed by dusting with loretin and left very slight scars.

Loretin is recommended for use as a dusting powder, either alone or mixed with calcined magnesia, starch or French chalk; as colloidion (two to ten per cent.); in pencils of cocoa butter (five to ten per cent.); in ointment, five to ten per cent., with vaseline or lanoline; in solution of 0.1 to 0.2 per cent. of the free acid, or one to two per cent. of the soluble sodium salt; lastly, as gauze impregnated with precipitated calcium salt. My own experience is confined to the powder, which I have never found occasion to mix with any other substance. Dusted on the skin, or over a granulated wound, this causes not the slightest irritation or unpleasant sensation. It immediately destroys the malodour of the most fetid cancerous sore, controlling this in a manner which no other agent I have yet tried will do. Copiously puffed with an insufflator into the deep cavity formed by evacuating the axilla of carcinomatous glands, it efficiently precludes suppuration, even when free hæmorrhage has taken place after the closing of the wound, an occurrence almost inseparable from anæsthetic vomiting when the patient has been removed from the operating table. Not the slightest bad symptom from its employment in this way has so far been detected. When there is no deep cavity a wound dusted with loretin heals rapidly by first intention. I have had

recourse to loretin in some sixty cases, mainly operations on the breast and axilla, notoriously a test region for antiseptics. In my hands it has proved an ideal antiseptic and deodorant with no single drawback; and I am sure that no surgeon who has once tried it will ever again resort to the noisome and toxic iodoform, from the free use of which I have seen more than one death. Though whenever old established agents answer sufficiently the purpose I have a strong prejudice against novelties, yet this substance—non-poisonous, devoid of smell and absolutely preventive of suppuration—seemed to me so marked an advance upon anything previously brought forward, that I felt constrained to direct thereto the notice of the section.

In a postscript in *B. M. J.* of December 28th Dr. Snow writes: "I am forced to supplement my paper on Loretin in the *British Medical Journal* of December 21st by pointing out a peculiar quality, which the six months' experience gained since the July meeting has shown me it possesses. While taking first rank as a non-poisonous, non-irritating, odourless antiseptic and deodorant, I find that when dusted on a raw surface it relaxes the blood vessels. Hence the wound is prone to become subsequently filled by a clot, which, however, does not suppurate, as would be the case under almost any other circumstances, but is eventually reabsorbed. The incident is not desirable, and I now apply loretin only to the skin surface, never dusting it into a cavity unless there be special risk of suppuration, and then only very sparingly. I would take leave to add that long experience has shown me the ideal condition in which to leave any operation wound is the utmost attainable maximum of dryness, avoiding all swabbing with fluids, however antiseptic. It is probable that the efficacy of iodoform, loretin, and the like, is very largely due to their capacity for absorbing moisture, without which microbe proliferation does not occur.—I am, etc.

## TANNIN AND IODOFORM IN THE TREATMENT OF WOUNDS.

Ceccherelli (*Ref. Med.*, October 19th, 1895) draws attention to a method of treating granulating wounds, which he has tried with success for the last six years. The method consists in dusting the surface with an equal mixture of iodoform and tannic acid. He finds that tuberculous ulcers, granulating wounds, etc., heal better under this treatment than under a simple iodoform dressing. At first he tried tannic acid and pot. iod. in solution, but this proved too irritating and had to be abandoned. An iodo-tannic syrup (Ki. g. 2, ext. rhatan. g. 8, syr. ad 1 kil.), given internally, seemed to be of much use in tuberculous cavities of bone. In fungating wounds with flabby granulations the mixture of iodoform and tannic acid acted very well. The astringent and stimulating action of the tannin, as well as its chemical action, added to the antiseptic and anti-tuberculous action of the iodoform, made the wounds heal more quickly than they had done on a simple iodoform or tannic acid dressing.

—

 ICHTHYOL IN THE TREATMENT OF BURNS.

Leo Leistikow (*Monatsh. f. prakt. Derm.*, November 1st) has during the last six years used ichthyol in the treatment of burns of the first and second degree with the best results. The application of this substance at once eases pain and the anodyne effect is lasting. Even in extensive burns of the second degree the œdema quickly subsides, the hyperæmia disappears, and as the destroyed tissue has been shed the regeneration of epithelium begins. The remedy can be applied in many different ways—in powder, in wet compress, in collodion, in salve or plaster mulls, varnishes, ointments, or pastes. Leistikow mostly uses it in powder, in paste, or in salve mull. The latter is best used in the form of zinc-ichthyol salve mull (Beiersdorff) and is most serviceable

in circumscribed burns of the first and second degree, particularly on the face and extremities. The dressing should be changed once every twenty-four hours. The powder is most useful in extensive burns of the first degree on the trunk, and it must be sprinkled thickly and frequently on the part. The paste is used in extensive burns of the second degree and when there is much inflammation it is advantageously combined with the powder treatment. The formula of the powder is:  $\mathcal{R}$  Zinc. oxydat., 20.0; magn. carbonic, 10.0; ichthyol, 1.0 to 2.0. That of the paste is  $\mathcal{R}$  calcar. carbonic., 10.0; zinc. oxydat., 5.0; amyli, 10.0; ol. zinc., 10.0; aq. calois, 10.0, ichthyol, 1.0 to 3.0.

—

 A METHOD OF WASHING ECZEMA.

A corollary of the extensively-held modern view of the probable parasitic etiology of eczema is the necessity for cleanliness as an element of treatment, while the long-known injurious influence of water on eczematous surfaces raises a difficulty. The use of olive oil as a substitute for water for the purpose of cleansing the skin, and, indeed of removing the grime of manufacturing trades, is commonly known, but its value is not sufficiently recognised. Although I have long advised patients with eczema to use this method, it is only recently that I have been impressed with its adaptability for continued use and of its value when persevered in. The following case is an instance in point:—

A lady, aged forty-eight, was attacked with acute erythematopapular eczema of the face, which continued to spread rapidly until the application of water, either for washing or in lotion, was suspended. When washing with oil was adopted the disorder rapidly subsided, and so satisfied is she with the general effect on the skin that the patient has for two months not allowed water to touch her face. The method employed is to smear the skin well with a pledget of cottonwool saturated in olive oil.

The oil is then removed by gently rubbing the surface with a corner of a dry soft towel covered with toilet oatmeal.

Pustular eczema I find generally requires washing at intervals with soap and water.

A NON-IRRITATING EXCIPIENT FOR  
OPHTHALMIC OINTMENTS.

W. Allan Jamieson (*Brit. Journ. Derm.*, April) finds the following "an ideal ophthalmic salve:" R lanolini (Liebreich) dr. iij; ol. amygdalæ aq. destill. āā dr ss. M. If smeared thinly on the lids this occasions no unpleasantness and it may be employed when it is desirable to use a salve to prevent the lids becoming glued together by any increase of the lachrymal secretion. It is, however, better as a rule to add a couple of grains of boric acid to correct any slight tendency to rancidity, though this is not prone to happen, even if the ointments be kept for a time. In eczema of the lips the salve forms an excellent medium for the yellow oxide of mercury so beneficial in such conditions. Two grains may be added to the half-ounce. According to the testimony of patients, the salve gives a pleasing sensation of coolness without trace of smarting or irritation. Its curative influence, the author says, is equal if not superior to that of any of the other eye salves prepared with bases.

ANTIPIRYN IN TANNIC ACID SOLUTION  
AS A STYPTIC.

Roswell Park (*Philadelphia Medical News*, November 16th) has for years used a 5 per cent. solution of antipyrin in the form of a spray (sterilising the water before making the solution) in surgical practice. He sprays this on any surface, peritoneal or other, from which parenchymatous oozing may be taking place to an extent complicating the operation or jeopardising the success of an ideal dressing. He uses it also in the urethra and in the bladder in cases of hæmaturia. Even in the eye it may be used without fear, its application being preceded by that of a

weak solution of cocaine; in this situation, however, the solution need not be so strong. On the other hand, it may be used in much larger percentage when the 5 per cent. solution fails; even when small vessels spurt, compression for a few moments with iodoform or acetanilid gauze steeped in the solution will be effective. There are cases of bleeding, however—for instance, from the nasal cavities or from divided bone—in which even stronger solutions of antipyrin will be inoperative. Roswell Park now calls attention to a combination of antipyrin and tannic acid in solution, by which there is precipitated an intensely agglutinative and cohesive substance of which he does not know the chemical composition, but which seems to him to be an ideal styptic. He hit upon the combination by accident in an emergency (intractable bleeding after removal of adenoid growths), when he added antipyrin in powder to an alcoholic solution of tannin, with the result that there was at once formed a gummy mass of surprising adhesiveness. The application to the post-nasal space of a small sponge dipped in this material at once stopped the bleeding. The author has since experimented with these substances and finds that they may be mixed in almost any proportion. It is possible by pouring the powder of one into the solution of the other, to precipitate so much of the agglutinative composition as to make a gum that may be placed about the margin of the bleeding bone—for instance, in operations upon the cranium; or a small piece of sponge or cotton sopped in this material may be forced into a tooth socket, or in various other ways its use may be advantageous. There is but one attendant difficulty—that it is so remarkably cohesive that when the time comes for detachment or separation of the tampon it is difficult to remove it. It may even be necessary to wait a sufficient time for the formation of granulations and separation by natural processes.

## SENILE EPILEPSY AND GRIESINGER'S SYMPTOM

## OF BASILAR THROMBOSIS.

(Ueber "Senile Epilepsie" and Griesinger'sche Symptom der Basilarthrombose).—B. Naunyn, Strassburg (*Zeitschrift für klin. Med.*, Bd. xxviii., Hefte 3 and 4).—Naunyn quotes three cases of so-called senile epilepsy which he had observed in recent years and which are of interest in so far that, in all three, attacks, similar to those observed in patients spontaneously, could be induced by compression of the carotids in the neck. The first was sixty-five years old and had suffered from "fits" for one and a half years. These occurred several times a week. He had extensive arterial degeneration and slight hypertrophy of the left ventricle. Compression of both carotid arteries in the neck had the effect in a half to one minute of producing a convulsion, the patient losing consciousness and the pulse-rate falling from 80 to 48. Digitalis had a good effect on the seizures; bromide of potash was practically useless. The second patient was a somewhat similar case. He was seventy years old and had, in addition to the "fits," degeneration of arteries and enlarged heart. In the third case—a man of sixty-three—there was mitral and aortic valvular disease. Compression of the carotids brought on, as in the others, a well-marked convulsion. The patient eventually developed senile mania and died. At the post-mortem, patches of softening were found in the right hemisphere. The vertebral, basilar and carotid vessels were of normal width. In one communicating posterior artery was a small yellowish spot. Experiments by carotid compression have been frequently done on man; indeed, they were recommended as a mode of treatment in epilepsy and they have been carried out without harm. Naunyn points out that they are not so harmless as they appear, as one of his own

cases proved, the patient requiring artificial respiration for some time before he recovered. He carried out some trials in persons under thirty, but compression of the carotid led to no result; in two men over fifty, unconsciousness, with slowing of pulse and slight general convulsions, set in. Griesinger had in 1862 recommended compression of the carotid vessels as a diagnosis for closure of the basilar artery. Kussmaul and Concato observed the symptom in a number of cases and the latter found it in old patients with sclerosis of vessels. In all three cases quoted by Naunyn the attacks apparently depended upon brain anæmia, which readily occurred on account of arterio-sclerosis, or weak heart action. A sign of cerebral anæmia we have in a distinct decrease in the pulse-rate during a fit. Stokes has already called attention to the association of "fits" with brain anæmia in patients who suffer from cardiac weakness, degeneration, aneurism, etc. Sometimes these are merely fainting attacks, at other times genuine epileptiform fits. Naunyn classes his cases under this explanation. Two of them, further, showed no improvement under the bromides, while digitalis succeeded in relieving them. The third case showed that Griesinger's symptom cannot be always due to basilar thrombosis. There was no anomaly in the circle of Willis. All its branches—carotid, basilar and vertebral arteries—were intact. Griesinger had maintained that an epileptiform attack would be produced by compression of the carotids if thrombosis of the basilar artery circle was present; but it may take place otherwise as well, where there is disturbance of the general blood supply to the brain, as in valvular disease, weakness of the heart and in general sclerosis. Though disease of the carotid, basilar, or vertebral arteries will favour the occurrence of this phenomenon, the symptom will not possess any special diagnostic importance.

SUBCUTANEOUS ADMINISTRATION OF  
ARSENIC.

(Zur Methode der subcutanen Anwendung des Arsens).—Professor von Ziemssen (*Deutsch. Arch. klin. Med.*, October 25th, 1895).—The excellent results obtained from the subcutaneous administration of arsenic has induced Ziemssen to improve the form in which it is used. His success in a case of Hodgkin's disease and in two cases of lichen ruber has suggested to him a much wider application. The injection of the official liquor containing potassium arseniate gives rise to much pain and inflammatory swelling and even abscess and gangrene, so that the preparation is, as a rule, un-suited for the purpose. The reason of this lies in the mode of preparation and in the presence of a mould which rapidly settles in the solution. To overcome this Ziemssen has adopted the following:—One gramme of arsenious acid is boiled in a test-tube with five cubic centimetres of normal soda solution until it is completely dissolved; the solution is then shaken in a flask, diluted to 100 grammes and filtered. For use, it is placed in small tubes of 2 c. cm. size, which are corked with cotton-wool and sterilised in steam. Of such a 1 per cent. solution of sodium arseniate a quarter of a centimetre is used at first once a day; after several days, twice daily; and gradually increased until a whole syringeful is given twice a day—a daily dose of about three-tenths of a grain of sodium arseniate being given. These large doses, if administered with caution and if slowly increased, can be borne and produce no disturbance of the appetite. In delicate, nervous patients there sometimes appeared after large doses a condition of increased nervous excitability, a feeling of bodily weakness and mental exhaustion. These symptoms soon vanished on intermitting the injections and did not return.

## PRACTICAL NOTES.

Prof. Vaughan cautions against the continued employment, although so plausible,

of predigested foods. "The digestive organs, like all the organs of the body, are enfeebled if relieved of their physiological duties. The too rapid absorption of peptones may be harmful and, physiologically, it is questionable whether proteids which have been completely converted into peptones are ever largely utilised in the body in building up tissue. It is probably fortunate that in the great majority of instances artificial digestion is incomplete and the supposed peptones are actually albumoses." "As a rule, the indigestion is confined to the digestive fluids which act either upon carbohydrates or the proteids. In the former case the stools are acid and the formation of gas marked, and a diet should be adopted consisting exclusively of proteids, meat broths and egg albumin. Proteid indigestion is likely to produce foetid alkaline stools and a diet of carbohydrates will prove beneficial: barley gruel, rice water and solutions of dextrine obtained by roasting or boiling wheat flour." "If parents were willing to pay for wholesome uninfected milk half the fancy price they readily give for some prepared baby food their children would be better nourished and disease among them would be less frequent."

Prof. Vaughan insists that few intestinal antiseptics have any real value and astringents still less. He excepts bismuth, which is both antiseptic and astringent, and advises its administration not only by the mouth, but in enemata, containing one or two drachms suspended in half a pint of water. The writer's underestimate even of salol is perhaps influenced by the strength of his conviction that the main treatment of intestinal indigestion must be dietetic. Cases of cholera infantum "are cases of acute poisoning, and prompt energetic treatment is demanded as truly as if the child had swallowed a toxic dose of arsenic or antimony. The physician who hesitates or temporises loses his patient." The first thing to do is to forbid the further administration of the poison by cutting off every

drop of milk—even sterilised, or even from the breast. The second step is to remove the poison by irrigation of stomach and bowels with hot salt water; the third thing, to administer 3-5 grains of calomel for an anti-fermentation action on the small intestines, inaccessible to irrigation; then whisky as a stimulant in boiled water cooled in an ice-cooler and containing 0.1 per cent. muriatic acid. Ice should not be put into the water. In subacute milk infection Prof. Vaughan prefers fresh, uncooled, uninfected milk from a cow to sterilised milk, which he only advises as a substitute in case the other cannot be obtained.—*Practitioner*, January, 1896.

---

FOR SPASMODIC COUGH.

R	Pot. Bromid.	...	dr. i.
	Vin. Ipecac.	...	iss.
	Tr. Belladon.	...	iss.
	Syr. Tolu.	...	vi.
	Aq. ad	...	oz. iv.

S. One or two tablespoonfuls every three hours.

---

MENTHOL IN VOMITING OF PREGNANCY.

Dr. Weill states that every form of vomiting during gestation can be relieved by a twenty per cent. solution of menthol in olive oil; dose, ten drops on sugar whenever nausea appears.

---

TREATMENT OF GANGLION.

S. Duplay (*Arch. Gén. de Méd.*, Dec., 1894) recommends a new and simple method for treatment of ganglion. He injects from five to ten drops of tincture of iodine into the ganglion. A bandage is applied, partly with the object of exercising pressure and partly of fixing the adjacent articulation. The cure is usually complete in five or six days. Sometimes a second injection may be necessary on the fifth or sixth day. Recurrence has been known after all the usual methods of treatment; in one of the author's cases the ganglion had already been twice removed.

BELLADONNA.

Professor H. Kobner (1) of Berlin, recommends belladonna for such affections of the mouth as *Lucoplakia*, *Mercurial Stomatitis*, *Syphilitic Ulcerations*, *Mucous Patches*, etc. The theory upon which the remedy is accepted is its antisialagogue properties and it should be employed in conjunction with cauterization. He remarks it is advisable in many cases to continue the administration of the remedy for some time in full doses and that under its influence ptialism, and pain on mastication and deglutition, rapidly disappear.

Dr. William Murray (2) of Newcastle, after referring to the peculiar susceptibility of some patients to the action of belladonna, refers to its usefulness in the following class of cases:—

(1.) *Renal Colic*.—Here he considers that the drug must be pushed until slight delirium supervenes, that is, by giving 30 or 40 drops of reliable tincture every two or three hours; secondly, it must be given during an attack of colic. It is of no use except the colic be present. It may relieve the ordinary wearing pain of stone in the kidney, but it will not move the stone except the patient is in the throes of an attack of renal colic. When once this occurs he ought to be prepared with the necessary doses and begin immediately, even before sending for his medical attendant. In such cases careful instructions ought previously to be given to the patient. Dr. Murray cannot say that anything in his experience has given him more pleasure than finding the calculus awaiting him after a few hours of this treatment by toxic doses of belladonna.

(2.) *Dysmenorrhœa*.—Let it be admitted that dysmenorrhœa is due to spasm, or to mechanical obstruction plus spasm, or plus neuralgia, or plus inflammatory or congestive action in or connected with the uterus, and there is a large field for the action of belladonna. A patient well under the influence of the drug is not likely to suffer much from spasm, so that the spasm-

dic element can be eliminated in a case by a full dose or two of belladonna. If after these doses pain still continues there are no doubt other elements in the case mechanical, congestive, or inflammatory. The neuralgic element is also to a great extent eliminated by belladonna, so that one can get rid of these two causal elements by means of this remedy and thus the diagnosis is simplified. By far the best method of administering the drug for pelvic pain is the use of the suppository of i. grain of the extract repeated every two or four hours. The suppository should be used as soon as the first sign of pain indicates the moribund, although it is a somewhat disagreeable mode of administration. Dr. Murray thinks the general use of belladonna suppositories in this ailment ought to be advocated; many sufferers from even slight dysmenorrhœa ought to be provided with this remedy and instructed in the use of it. Dr. Murray also recommends belladonna strongly in cases of *Painful Defæcation* and *Obstruction of the Bowels*, and quotes some successful cases in proof of the latter point. He does not consider that the effect is simply due to the relaxation of fibre caused by the drug. It appeared more as if the intestines were roused from their dormant state into violent activity by the drug. There is nothing opposed to physiological experience in Dr. Murray's views. It is known that when frogs have been poisoned by belladonna and put aside for dead they frequently exhibit, during the process of recovery, powerful spasms of the muscles, closely resembling strychnine poisoning, and, if it were safe to carry the administration of belladonna far enough, probably the same results would be produced in the human subject. How far it may be safe to push the action of belladonna until tetanic spasm is produced is another question. That some have great toleration for the drug, and others extreme susceptibility, is widely known. We have seen toxic symptoms produced by one drop of 1 in 1,000 solu-

tion of its tincture, and cases of grave physiological disturbance caused by the use of the ordinary solution of atropin in ophthalmic practice. On the other hand Dr. Murray records a case where eight grains of belladonna extract, taken by mistake, produced little effect on the patient.

---

SOME OF THE CONTRA-INDICATIONS  
OF OPIUM.

In a clinical lecture upon some of the uses of opium, Dr. W. B. Cheadle, of London, speaks a word of caution as to its use in Bright's disease, where profound and fatal coma may be produced, especially by its hypodermatic use. In cases of fatty or largely-dilated heart, the hypodermatic injection of morphia in full dose is attended with risk. Children are susceptible to its influence in inverse proportion to their age. He has seen fatal coma occur in a child of 6 months after a rectal injection of  $\frac{1}{2}$  drachm (2 grammes) of tincture of opium, and complete narcosis in a child of 14 months from  $2\frac{1}{2}$  grains (0.16 gramme) of Dover's powder. Another fact, usually ignored, should also be remembered, viz., that, if opium has been given freely, its sudden stoppage causes great nervous depression, often severe vomiting and diarrhœa. This is the effect in cases of the opium-habit and Dr. Cheadle has seen the same results follow the discontinuance of the drug in patients in which it had been given systematically. In exophthalmic goitre, for example, in which its use produces excellent effects, sudden discontinuance would be most disastrous. In these cases it is wise to let the patient down slowly and safely by gradual reduction.—*The Clinical Journal*, September 26, 1894.

---

A SUBDIAPHRAGMATIC ABSCESS SIMULATING  
EMPHYEMA.

Such a case forms the subject of an article by Dr. F. Tilden Brown, to appear in the forthcoming *Report of the Presbyterian Hospital* of which an advance proof-

sheet has kindly been sent us. The patient was a woman, twenty-nine years old, a native of Ireland, who had been married for five years. She was admitted on June 9th, 1893. Two years before she had been delivered of a dead child after protracted and instrumental labour. A year later she had begun to have pain in the left inguinal region. This pain had continued for seven months, when complete obstruction from faecal impaction had made her critically ill. Being relieved, she had subsequently kept herself free from abdominal pain by using small daily doses of castor oil. She entered the hospital for the repair of a lacerated cervix and perinæum. Perinæorrhaphy and trachelorrhaphy were performed on the 11th. On the 19th she complained of pain in the right umbilical region. On the 21st her temperature rose suddenly to 103.6°; pulse, 125; perspiration, 20. Free catharsis and quinine effected a temporary fall of temperature. On the 26th the temperature was still between 103° and 104° every afternoon and she had pain in the left lumbar region. She vomited frequently and looked sick. Nothing was found on examination. On the 30th it was noted that for the last few days her temperature had not been over 100°, but pain in the left side continued. She vomited at times. On date she complained of pain in the abdomen, was restless, vomited, had diarrhoea, and again had a high afternoon temperature. Lavage of the colon was given. On the 20th she continued to have afternoon fever, followed by profuse sweating, and had been delirious the night before. Pain in the side was complained of. On the 21st an aspirating needle was introduced in the eighth intercostal space, above and behind the angle of the left scapula, and a yellowish fluid withdrawn. Examination showed it to be pus and by culture a pure growth of colon bacillus was obtained. On the 25th she had a large and painful double parotiditis. On the 29th it was noted that until then the

patient and her family had declined an operation. She was now in a critical condition. Under ether anaesthesia aspiration was practised in the eighth intercostal space, in the mid-axillary line, and pus drawn. An incision was made upon the seventh rib, and an inch and a half of the bone was excised. There was no bulging forward of the parietal pleura. On making an incision through the tissue which presented, which looked rather more like muscle than compressed lung, the subdiaphragmatic abscess was for the first time suspected. Through the completed incision the finger could touch the concavity of the diaphragm above and, on evacuation of a large quantity of offensive pus and broken-down tissue, the apex beat could be reached on the inner side and what appeared to be disintegrated spleen toward the lower side of the wound. Hot douching brought away much additional debris. Generous drainage with tubes and gauze was employed. The wound was covered with the usual dressings. The patient rallied but little, despite stimulation and saline infusion and died at noon on the following day.

At the autopsy, nine hours after death, the left lung, at the base, was found hyperæmic and adherent to the diaphragm; otherwise both lungs and pleuræ, also the heart, were normal. The stomach at its cardiac end had a hard, finger-sized, white fibrous adhesion connecting with the upper part of the spleen. On the mucous surface of the stomach, opposite the adhesion, there was no gross evidence of any former perforation or ulcer. The spleen was of three times its normal size and nearly separated into two equal parts by a large necrotic infarct, the base of which was at the convexity of the organ. The upper half of the spleen was drawn toward the stomach by the fibrous band and occupied a position at right angles to the normal axis. Firm adhesions connected the splenic halves to all surrounding parts except the



diaphragm above. The peritoneal cavity was thus protected. Both kidneys had numerous small white infarcts. On the posterior lower surface of the uterus there was a fibroid of the side of a duck's egg. The tissues of the perinæum and cervix uteri appeared normal, and the process of repair seemed perfect. There was no gross evidence to intimate that infection had occurred in connexion with the operation.

The history of fæcal impaction, says Dr. Brown, was explained at the autopsy by the presence of a uterine fibroid indirectly invading the lumen of the rectum. The suspicion of subdiaphragmatic abscess should have occurred when the first pus drawn by aspiration yielded only a culture of *Bacillus coli communis*, added to the fact that there had been no pre-existing pulmonary history, although the physical signs corresponded to and naturally suggested empyema. The occurrence of double symptomatic parotiditis should also have aided to attract attention to the probability of a process involving the peritonæum rather than the pleura. Meltzer, in his paper on subphrenic abscess, says Dr. Brown, refers to the error apt to ensue from placing too great reliance upon physical signs and cites in evidence Wintrich's mistaking a subdiaphragmatic abscess containing air for a pyopneumothorax; yet he does not wholly agree with Leyden, who maintains that the ætiology and history of the existing sickness is the only means of diagnosing a subphrenic abscess from an empyema or pyopneumothorax, for in two of the cases which he (Meltzer) has had himself such a dependence for diagnostic purposes would have proved deceptive where subphrenic abscess existed, yet the primary cause was located in the cavity above the diaphragm in both cases. Moreover, he believes he has demonstrated that there are cases of intrapleural effusion with an exclusive and pronounced abdominal history. Penrose and Dickinson have reported ten cases of subdiaphragmatic

abscess, in all of which a gastric perforation was found at the autopsy. In another case there was no perforation, but a cicatrized ulcer, where the cicatrization had apparently taken place subsequently to the formation of the abscess. In my case, says Dr. Brown, it is rational to presume that the same conditions pertained; and that the compact fibrous band uniting the stomach and spleen was a former walled-in fistula leading from a gastric perforation to the seat of the abscess. Whether the prostrating attacks of abdominal pain, experienced by the patient three months before entering the hospital, were due to obstructive intestinal colic or to a gastric ulcer and localized peritonitis can only be relatively inferred. At all events, the operation on the cervix and perinæum appears not to have had any connexion with the fatal septic processes afterwards manifested. The case affords an opportunity to emphasize what may prove to be of value in the diagnosis between subdiaphragmatic abscess and empyema—namely, when pus which is aspirated from a region common to both affections yields on culture a pure or mixed growth of *Bacillus coli communis* there is a strong probability that the point of suppuration is situated below the diaphragm.

#### RADICAL CURE OF INGUINAL HERNIA.

Mr. J. Hutchinson, Jr., performed the operation of radical cure after the same method on two consecutive subjects—one a young soldier, the other a man of fifty years. In both cases the aponeurosis of the external oblique was fully exposed, with the external ring and upper part of the cord. The sac was dissected out cleanly up to the internal ring, the epigastric artery marking this point; the sac was then brought through a small linear incision in the abdominal muscles above and outside the position of the internal ring; it was twisted up and laid in front of the cord (separated from the latter by the muscles).

Four or five silk sutures passed through the external oblique above and below the twisted sac, and also through the latter, were securely tied, thus completely closing the small opening made in the abdominal wall and fixing a sort of a pad in front of the canal. As the external ring was large in each case, an additional suture was employed for its pillars. No drainage-tube was inserted and with antiseptic dressings firmly applied it was not anticipated that it would be necessary to change them for eight days. Having performed a large number of operations for inguinal hernia after this method (which is the one advocated by Professor Kocher, of Berne), Mr. Hutchinson thoroughly advocates it from experience of its results. The alleged drawback that the twisted and sutured sac may slough he has, he said, never observed. A few cases of suppuration have been met with but this, he thought, was no fault of the method.—*Medical Press and Circular.*

---

#### COCAINE IN PERTUSSIS.

In the treatment of whooping-cough, three hundred cases are reported where very small doses of cocaine were given, with good results,—one-sixteenth of a grain, increased if necessary to one-fourth grain. Large doses must be avoided. It is claimed that children bear cocaine better than adults do.—*Medical Times.*

---

#### WEST SUSSEX DISTRICT SOCIETY.

*On Delivery in Certain Cases of Impaction of the Trunk of the Fœtus.*—Prof. Herbert R. Spencer, of University College, London, gave some practical points in connexion with those cases of head presentation in which, after delivery of the head, it is found that the child's body will not pass through the pelvis without reducing its size. In such cases it is sometimes impossible to deliver the child's body unamputated after the head has been born, especially through a contracted pelvis.

Apart from the rare cases of double monster and of tumors external to the child's trunk, the difficulty may be due to the large size of the child. The largest fœtus he had ever seen weighed 13½ pounds (6.2 kilogrammes), and required mutilation on account of its great size; but through a small pelvis a child of half this weight may be unable to pass.

With a normal pelvis the obstruction formed by the child's trunk may be due to pathological conditions either in the serous cavities or in the viscera. Disease enlarging the thorax to any considerable extent is very rare. A slight serous or bloody effusion in the pleura is very common and he had once met with acute pericarditis in a new-born child; but these effusions very rarely enlarge the thorax sufficiently to cause obstruction in labour. The trouble will almost always be found in the abdomen. One of the most common causes of obstruction is distension of the child's abdomen with the gases of putrefaction,—a somewhat rare occurrence even in fœtuses which have been dead for some time. It is, however, a good rule, in all cases of obstructed labour, to percuss the uterine tumor; a tympanic note will indicate the cause of the obstruction. Another not infrequent source of distension is ascites or peritonitis, by which sometimes the belly is distended to an enormous size. He had seen the vagina distended sufficiently to form an abdominal tumour and great distension of the bladder and uterus had been met with by other observers; but the only other causes of obstruction which he had personally met with have been distension of the colon by meconium in cases of imperforate anus, cystic kidneys, hydrocephalus, distended ureters, and enlargement of the liver and spleen in syphilitic children. The diagnosis of the cause of obstruction can usually only be made by careful exploration under anaesthesia. The question of treatment then arises. Traction upon the child's head in

order to deliver the trunk should be made with caution and judgment; the employment of great force has caused rupture of the uterus.

If judicious traction fail to bring down the trunk it may be necessary to reduce the width of the child's shoulders. With this object he had found it a useful plan to snip through the clavicles with scissors; then, if necessary, to pass a blunt hook into the axilla and thus bring down the arms. If delivery is still impossible, it may be necessary to remove the head in order to gain room for further manipulations; but before decapitating it is advisable to seize the neck with a strong volsella furnished with interlocking teeth, which will prevent the trunk from receding out of reach. Usually not much advantage is gained by opening the thorax and the broken ribs are troublesome. The hand should be passed up to the abdomen, which should be opened with the scissors or the perforator, when, if the obstruction is due to gas or liquid effusion, the obstruction is immediately relieved and delivery effected; in other cases it may be necessary to remove the abdominal viscera.

In transverse presentations it is rarely that version cannot be performed and in impacted transverse presentation it is very rarely that decapitation is impossible. He had twice met with cases in which neither operation was possible. In both instances the pelvis was contracted and the soft parts œdematous and in one there was the complication of placenta prævia. The uterus was retracted and as hard as a board; the back of the child presented; it was impossible to introduce the hand far enough to perform version or decapitation. He successfully adopted and recommended the following method of treatment in such cases: Make an incision through the skin of the child's back and cut through its spine with scissors; then apply Braxton Hicks's cephalotribe (the points of which meet when the instrument is closed) to the sides of the

trunk of the child and screw up the instrument. By making traction with the cephalotribe the soft parts are brought down and may be cut through with scissors. The delivery of the two halves of the child's body then presents no special difficulty.—*British Medical Journal*, April 13, 1895.

DRY ECZEMA WITH PRURITUS.

*Menthol*, 2 grammes (31 grains); *resorcin*, 1 gramme (15½ grains); *precipitated sulphur*, 10 grammes (2½ drachms); *zinc oxide*, 15 grammes (3¼ drachms); *vaseline*, 30 grammes (1 ounce).—THIBIERGE, *Thérapeutique des maladies de la peau*, Paris.)

PRURITUS VULVÆ OF MENOPAUSE.

*Morphine sulphate*, 6 grains (0.39 gramme); *boric acid*, 1½ drachms (6 grammes); *camphor-water*, 6 fluid-ounces (186 grammes). Mix. Label: Poison. Apply to the affected parts after ablution with warm water and Castile soap.—(B. F. BAER, *Philadelphia Polyclinic*, March 30, 1895.)

IMPACTED CERUMEN.

When the impaction is hard, dry and adherent, and injections of lukewarm water fail, use the following: *Sodium carbonate*, 0.50 gramme (7½ grains); *glycerine, water*, each 5 grammes (1¼ fluidrachms). Drop 10 drops into the ear and let it remain 10 minutes. Renew the injections of warm water in two or three days, which will generally suffice for the removal of the body. Do not use the curette or stylet except to slightly displace the mass and permit the jet of fluid to surround it. Sometimes an oily solution of 2 per cent. *salicylic acid* may be necessary, followed by injections of *alkaline water*. When the cerumen has been removed, close the meatus with cotton for from twenty-four to forty-eight hours—(COURTADE) *Manuel pratique du traitement des maladies de l'Oreille*. Paris: Maloine.)

## BALSAMS IN OCULAR DISEASE.

G. Norsa has used balsam of Peru and balsam of Tolu, in the form of 1 to 3 per cent. ointments, in ciliary blepharitis, superficial keratitis, opacities of the cornea, phlyctenular kerato-conjunctivitis, superficial corneal ulcerations, deep ulcers with iritis, hypopyon, and other affections. He finds that the remedies are well borne, have an antiphlogistic and antiseptic action, and that they serve as excellent cicatrizants, especially for the cornea.

## TREATMENT OF FURUNCLES.

R. Antonewicz, in cases of furuncle (*Voyenno Medical Journal*, January, 1895) from twenty-four to forty-eight hours old, takes a drop of crystallized carbolic acid on the point of a sound, beats it to the melting-point and presses it on the furuncle, rubbing it slightly. Pain ceases on the second day, and no further treatment is required. In cases three or four days old carbolic acid does not abort the disease, but it does change its course, rendering suppuration painless.

ADAPTATION OF CIRCULAR METHOD  
OF AMPUTATION.

A. G. Miller, of Edinburgh, has successfully employed, in several instances of disarticulation at the knee and elbow, an adaptation of the circular method of amputating, by which a long single flap is secured (*Edinburgh Medical Journal*, July, 1895). The whole point and simplicity of the procedure depends on the well-known tendency to contraction of the soft structures of the flexor aspect of a limb, as compared with the extensor, after the tissues are divided. At the elbow and knee this tendency is increased by extending the joint and thus putting the skin on the flexor aspect on the stretch, while the skin on the extensor surface is completely relaxed.

The method of procedure is as follows: The limb being held out quite straight, a

circular incision is made in the ordinary manner below the condyles ( $1\frac{1}{2}$  inches in the arm and  $2\frac{1}{2}$  in the leg), down to the deep fascia. The skin on the flexor aspect (anterior in arm and posterior in leg) at once retracts considerably, making the line of incision oblique. Two small incisions are now made from immediately below the condyles to the original cut. The flexor flap will now still further retract, and, aided by a few touches of the knife, will almost disappear.

The extensor flap is now dissected up as far as the head of the tibia in the leg and to above the olecranon in the arm, care being taken to cut on the deep fascia, and so to reflect the subcutaneous cellular tissue and its contained blood-vessels along with the skin. This flap is loose and ample, being taken from a part where the skin is naturally redundant in order to accommodate itself to the normal action of flexion. (The appearance of the elbow and knee during flexion and extension demonstrates this clearly.) After reflexion of this flap—practically the only one—disarticulation should be performed (on the arm and knee both) from the front, the patella being saved in the latter case. It will then be found that there is a long flap on the extensor aspect (anterior at knee and posterior at elbow), with practically no flap at all on the flexor aspect of the condyles. After the blood-vessels are secured and the nerves drawn out and cut short, this single flap folds nicely over the condyles, being, indeed, in its natural place, and is easily secured by stitches. When healing has taken place, the appearance of the stump is very natural and most satisfactory.

The circular incision requires, at the elbow, to be made only about  $1\frac{1}{2}$  inches below the condyles. It is, of course, necessary to have sufficient flap to cover the condyles. If a mark be made  $1\frac{1}{2}$  inches below the condyles, with the arm extended, and the elbow be then completely flexed, it will be seen that the anterior portion of the

line has slipped up on to the upper arm, while the posterior portion comes up over the condyles quite easily, even with the olecranon in position, which, of course, is dissected out in disarticulation. It is therefore evident that a low amputation and much skin is not necessary for this operation. In disarticulation at the knee the author, by this method, obtains a long, square anterior flap by a single cut, practically speaking, as the two small incisions might be dispensed with, and with little trouble in the way of measurement. The important point is to have the leg fully extended, so as to provide for looseness and length in the anterior flap and immediate and considerable retraction on the posterior aspect. If the lateral cuts below the condyles are not made, then the amputation (after retraction) becomes oblique or oval. After disarticulation the long anterior flap of skin can be stitched, so as to make the cicatrix either transverse (like a long anterior flap operation) or longitudinal (like a Stephen Smith amputation). In this operation the cicatrix is well up on the flexor aspect, and does not adhere to the bone as in circular amputation.

#### RAPID DILATATION OF THE UTERUS.

In performing rapid dilatation of the uterus Amand Routh (*Lancet*, June 22, 1895) practices the operation the first day possible after menstruation has ceased, as at that time the cervix is soft and relaxed and partially patent. As it is difficult to dilate a non-secreting cervix, he induces secretion by having a wool tampon soaked in glycerin introduced into the vagina against the external os uteri, two hours before operation. The addition of some cocaine to the glycerin may possibly allay spasm. If the cervix is likely to be unusually rigid he passes into the cervix and, if possible, through the os internum, a strip of antiseptic gauze, soaked in glycerin and iodine, six or eight hours before the operation, or

even over night. A few bougies may be passed if necessary to enable this to be done. These aids are almost always sufficient, but in 1 or 2 per cent. of cases it may be impossible to pass the little finger, and the uterus can be swabbed out and packed fairly tightly with gauze for twenty-four hours, when it will easily admit the finger. A tent would here be absolutely contra-indicated, and by these aids the author has been able to entirely dispense with tents for the past five years, in both hospital and private practice.

James Braithwaite, of London (*British Medical Journal*, June 29, 1895), also recommends dilatation of the cervix on the last day of the menstrual period, instead of between the periods, as is the almost universal practice. Many years ago he accidentally discovered that if the dilatation is done just when the discharge has ceased the parts are perfectly elastic and soft, and has very little resisting power. Hegar's dilators can, in many cases, be passed in, one after the other until No. 17 is reached, admitting the passage of a medium-sized index finger. An anæsthetic is necessary, as the patient will not remain sufficiently quiet. Two Sims's hooks close together, so that the handles are held as one, are better than a vulsellum. They hold better, and are less likely to scratch the operator's finger. The process should be done leisurely, but it does not take above twenty minutes. The smaller sizes of the dilators should have the terminal inch a little curved forward and less in size, so as to enter more readily. This plan opens up quite a vista of utility in other cases than those of dysmenorrhœa; for instance, it is often next to impossible to examine with the finger the interior of the uterus of a sterile woman over 40 years. The parts absolutely refuse to dilate sufficiently. But, by dilating on the last day of the period it can be done very easily. Every uterus does not yield so readily as described and, indeed, now and then a tough cartilaginous

os internum is met with which almost refuses to yield at all; but even this is more dilatible than it would be in the intermenstrual interval.

BELLADONNA TO OVERCOME THE CATARRH  
CAUSED BY POTASSIUM IODIDE.

George Cohen, of Hull, Eng. (*Lancet*, July 13, 1895), has been able in three cases to stop the catarrh following the use of 10 grains (0.65 gramme) of *iodide of potassium* and  $\frac{1}{2}$  ounce (16 grammes) of *water* by adding to this mixture 5 minims (0.32 gramme) of *tincture of belladonna* per dose in order to reduce the salivary secretion. It also counteracts the so-called depressant action of the potassium.

FACE-ACHE.

W. M. Capp, of Philadelphia (*Medical News*, June 15, 1895), recommends the insufflation of *sodium chloride* into the nasal cavity for the relief of acute pain in the face and head. In five cases of face-ache from decayed teeth the pain disappeared at once upon the contact of pulverized *table-salt* with the mucous membrane of the nose, a glass nose-insufflator being used. In a number of cases of severe headache, without regard to cause, the remedy was equally satisfactory, and also in a case of pain from a furuncle in the external auditory canal, and in another of pain from excessive use of the eyes. The method was first recommended by George Leslie (*Edinburgh Medical Journal*, January, 1890.)

GREEN DIARRHŒA OF INFANTS.

As soon as the first symptoms appear, Baratier, of Jaugny, France (*Trib. Méd.*, July 17, 1895) gives a dose or two of ordinary purgative tea, and, when it has acted, he suppresses all food or drink and gives regularly every two hours 6 tablespoonfuls of the following: *Fat-bouillon*, 1000 grammes (32 ounces); *glycerin*, 100 grammes (3 $\frac{1}{2}$  ounces). The bouillon is made fresh

every day, with 1 kilogramme (2 $\frac{1}{2}$  pounds) of beef-bones (no meat or vegetables) in 2 litres (quarts) of water, with a pinch of salt. It is boiled over a good fire for four hours until it is reduced to half the quantity, then allowed to cool, the fat skimmed off, and the *glycerin* added. This is essentially a *glycerophosphate* treatment within the reach of all. In the author's hands it causes the disappearance of the diarrhœa in a day or two; but it is continued three or four days and then alternated with milk for about a week, when it is discontinued.

TREATMENT OF MASTITIS.

Kaarsberg (*Hospitals-Tidende*, p. 573, 1895) was induced to try a new treatment of mastitis by having observed that a woman who would not allow incision of her inflamed breast was cured by evacuation of pus from the nipple through sucking and pressure on the inflamed portion of the breast. He has since treated seventeen cases of mastitis by evacuation of the breast partly by sucking and partly by a sort of massage by which the breast is compressed and gently rubbed in the direction of the nipple. This treatment is repeated two or three times every day. Thirteen cases of mastitis which came under observation from the first day of the disease recovered in a few days, and sucking of the child could be continued; four cases in which the inflammation had already led to formation of an abscess had to be treated by incision. The author remarks that veterinary surgeons always treat inflammation of the udder of the cow by milking it.

CORNEAL ULCER.

Cases of intractable corneal ulceration, which have long resisted the usual methods of treatment quickly improve under the use of *glycerite of tannin* and *carbolic acid* prepared according to the following formula: *R Carbolic acid*, 15 grains (1 gramme); *tannic acid*, 30 grains (2 grammes);

glycerin, 1 drachm (4 grammes). M. carefully cleanse the eye with warm sterilized water strongly impregnated with *boric acid*, introduce a few drops of weak *cocaine solution* to annul pain, and, after a wait of five minutes, freely touch the ulcer with the *glycerite* by means of a fine camel's hair pencil. Repeat twice or thrice daily for the first few days and then gradually discontinue as healing progresses. In conjunction with this treatment it is well to maintain the usual instillation of *atropine*. Unpleasant reaction never occurs. (A. S. Hall, *Medical Record*, August 31, 1895.)

#### HEADACHE.

Dr. C. C. Crolley, of Pleasantville, N. Y. (*Pharmaceutical Era*, July 4, 1895), treats headaches as follows: One tablespoonful of *extract of malt* (with a few drops of dilute *hydrochloric acid*, to stop fermentation), after meals. This will digest the starchy food. Five to fifteen drops of fluid extract *casarca sagrada*, if constipation is present,—just enough for one evacuation. Half to one teaspoonful of *phosphate of soda* three times a day. This can be continued indefinitely, without danger, and is more successful than salicylic acid. When phosphate of sodium is taken internally there are formed in the urine, while it is descending through the lumen of the uriniferous tubules, by the chemical union of the uric acid with the salt and the decomposition of the two, an acid urate of sodium and an acid phosphate, the dihydrogen phosphate, and in this way the patient gets rid of his rheumatism, his headache, neuralgia, or other attacks dependent upon too great a quantity of uric acid.

#### INFANTILE DIARRHŒA.

Louis Fischer, of New York (*Medical Record*, July 13, 1895), adopts the following plan in cases of gastro-intestinal catarrh due to the combined effects of extreme heat and improper feeding: Irrigation of the stomach and bowels, flushing the colon

and rectum until the water returns clear; warm bath, gradually cooled from 90° to 70° F. (32.2° to 21.1° C.), lasting five minutes and renewed every few hours if necessary, followed by an ice-bag on top of the head, the patient being kept in as cool a room as possible. No milk, unless for a nursing, when the breast is discontinued at least one-half a day, to give the stomach rest; *beta-naphthol-bismuth* in doses of 5 to 10 grains (0.32 to 0.65 gramme), for a child of one year, every two, three, or four hours, according to the case; if vomiting persist, rectal feeding and administration of drug in suppository, doubling the dose; no *alcohol*, if possible; cold sponging to check perspiration, using *bay-rum* or equal parts of *alcohol* and *water*.

The following treatment is often employed by Dr. J. P. Crozer Griffith after the bowel is relieved of the irritating material by a dose of *castor-oil* or *calomel*: *Phenyl salicylate*, 1 drachm (4 grammes); *bismuth salicylate*, 3 drachms (12 grammes); *oil of gaultheria*, 12 minims (0.78 gramme); *chalk mixture* to make 3 fluidounces (93 grammes). M. Dose: 2 fluidrachms (8 grammes) every two hours. *Opium* may be added if there is much pain.—*Philadelphia Polyclinic*, August 24, 1895.

#### WALCHER'S POSITION IN LABOR.

W. E. Fothergill employed Walcher's position in six cases of delivery, five of which are described as promontory projecting, justo-minor, or a combination of these conditions (*Edinburgh Medical Journal*, July, 1895). In the sixth the pelvis was normal, but the head was very large. By allowing the legs to hang down without touching the ground, an average increase of 0.93 centimetre may be obtained in the diagonal conjugate, the rationale of this increase being found in the fact that the pelvic girdle can rotate about an axis passing through the two sacro-iliac joints. When the symphysis moves downward in this rotation the conjugate is increased. The weight of the legs

when hanging is transmitted to the innominate bones mainly by the Y-shaped ligaments, causing the rotation described, thus sparing work on the part of the uterus and musculature generally, and avoiding pressure of the head on the symphysis. In high forceps cases Walcher's position saves the perineum from undue pressure by the forceps as well as increasing the conjugate. The strength of the operator is saved, and pressure on the head and pubic symphysis is avoided. In cases not requiring forceps, but where there is difficulty at the brim, the position saves exertion of the uterus and abdominal muscles as well as pressure on the head and symphysis. In all cases where the perineum is in danger in delivery, with or without forceps, this position, or at least extension of the legs at the hips, is of advantage in relaxing the integument and subjacent structures.—Edinburgh Obstetrical Society.

#### ENURESIS.

Stumpf (*Münich Med. Woch.*, June 11, 1895) has successfully treated fourteen cases of nocturnal enuresis in children by elevating the pelvis. A small flat pillow is placed under the child's head and one or two ordinary pillows under the thighs, so that they lie at an angle of 130 to 150 degrees with the horizontal spine. After three weeks the patients were able to return to their former sleeping position without relapsing. The theory of the author is that elevation of the pelvis causes the urine in the bladder to gravitate back and distend the fundus instead of passing the sphincter, which is apt to become relapsed during sleep.

#### HAEMORRHAGE AFTER TOOTH EXTRACTION.

Pass a double-silk thread through both sides of the torn gum, either with an ordinary curved needle or a handled needle, and tie firmly over the alveolar border. Remove the stitch at the end of forty-eight

hours. (James McNaught, *British Medical Journal*, July 20, 1895).

#### THE VALUE OF REPEATED LAVAGE AT SHORT INTERVALS IN OPIUM-POISONING.

Hamburger (*Johns Hopkins Hospital Bulletin*, October, 1894) reports a case of opium-poison in a Chinaman, illustrating the importance of repeated lavage. It was thought that all the poison had been removed from the stomach at the first washing, but two subsequent washings, performed at intervals of several hours, yielded alkaloidal reactions. This re-accumulation of the alkaloids must have resulted from an excretion by the gastric mucous membrane; for it has been shown that it is in the stomach that the elimination of morphine proceeds most actively. In view of this fact, the writer concludes that repeated lavage to remove the alkaloids as fast as they are eliminated must certainly be a life-saving process, whether the poison has been taken by the mouth or hypodermically.

The washing should be practised at short intervals, and the sooner this can be done after the opium or morphine has been taken the better.—*Univ. Med. Mag.*

#### INFANTILE SCURVY.

In the Bradshaw lecture on "Infantile Scurvy and its Relation to Rickets," recently delivered by Dr. Thomas Barlow before the Royal College of Physicians in London, and published in its entirety in the *British Medical Journal*, is an admirable presentation of modern views regarding this infantile disease which at the present time is attracting considerable attention. We therefore present to our readers that portion of Dr. Barlow's lecture which deals especially with some of the causes apparently conducing to the disease:

"What are the conditions under which adult scurvy arises? There are many predisposing circumstances of faulty hygiene,



but surely there is a sufficiently conclusive experience that prolonged deprivation of fresh vegetables or their equivalents is the most constant factor amongst the antecedents of the disease. I have said prolonged, because it is clear that the organism has the power of drawing on its reserves for lengthened periods to meet the deprivation of a complete aliment; and I have used the phrase 'fresh vegetables or their equivalents' because we now know that fresh uncooked meat and fresh milk are anti-scorbutic as well as, though perhaps not in so rapid a way, as fresh vegetables and fresh fruit juices. Looked at as anti-scorbutics, probably much larger quantities of fresh uncooked meat and fresh milk are needed than fresh vegetables and fresh fruit juices.

"The chemistry of scurvy is still an unsolved problem—or perhaps I should say incompletely-solved problem—for, thanks to the labors of Garrod, Ralfe and others, we know that there is a diminished alkalinity of blood, and probably some fault in the presentment of the saline constituents of the food and in the facility with which they part with their bases. But the problem is possibly biological as well as chemical. It seems fair to say that the further we get from a living food the less is the anti-scorbutic power. Fresh vegetables are more powerful anti-scorbutics than preserved or cooked vegetables. Raw meat is more anti-scorbutic than cooked meat, and raw meat juice than beef-tea. I suspect it will ultimately be found that raw uncooked milk is more anti-scorbutic than cooked milk. What is there, then, in common between the antecedents of our infantile patients and those of recognized scurvy. So far as faulty hygiene is concerned, there is little in common. The majority of the infantile cases have been found in healthy homes and amongst good surroundings.

"Let us turn to the question of food. In the group which I have described, in

no single case at the time of onset of the malady has the child been breast-fed. In the great majority, where complete details have been obtained, these infants are found to have been nourished on what may be called 'preserved foods.' In the front rank come the various proprietary infant foods, prepared by the addition of water to certain powders. Then come the different forms of condensed milk, and the proprietary foods made with condensed milk. Then come cases in which, either accompanied by proprietary food or not, fresh milk has been given, but with extreme dilution, during the latter stages of infancy. Other categories I will speak of subsequently. Now let it be assumed, for the sake of argument, that such a diet as I have described is a scorbutic diet; and that an infant presenting the symptoms described is, at the time, being fed on this diet. The obvious test of the reasonableness of the scorbutic hypothesis is to alter the food in the anti-scorbutic direction, and note the results. For the condensed milk let fresh cow's milk be substituted, as, for example, a full pint for a child of six months old. Instead of the proprietary food let some sieved potato be mixed with the milk every day, and a tablespoonful of meat juice or gravy likewise. Finally, let a tablespoonful of orange juice or grape juice be administered every day in divided doses, mixed with water as required. And what is the result of these very simple alterations? The result in two or three days is startling. As a rule, the food is taken greedily and without digestive disturbance. The child becomes more contented; the tenderness of the limbs rapidly diminishes; the sponginess of the gums almost immediately recedes; the pallor becomes notably less; if there has been any renal hæmorrhage it ceases; fresh ecchymoses rarely appear.

"It is clear that the progress of the disease is definitely arrested. So far as the local treatment of the limbs is con-

cerned nothing is essential but the maintenance of rest in the horizontal position; and this meets another indication, namely, to prevent possible heart failure, consequent upon the extreme anæmia and fatty degeneration. Experience has abundantly shown that the blood tonics, such as iron, arsenic, and phosphorus, are useless if the proper change is not made in the diet; and if the proper change is made they are scarcely necessary; although fresh air and sunshine will not prevent the oncoming of the disease, they probably aid recovery when the food change has been effected. It is occasionally found that after the scorbutic need has been satisfied, and the cachexia has subsided, the child is no longer able to assimilate the large quantities of vegetable material and fresh undiluted cow's milk, which at the beginning of the treatment were taken with avidity and digestion. This also is parallel with what has been found in the treatment of adult scurvy.

"This completes the recapitulation of the results submitted to the profession in 1883. I now pass to the second part of my lecture, and shall state as concisely as I can how far the former conclusions have been modified by subsequent experience and criticism. First let me mention the experience of others. A considerable number of examples have been recorded both at home and abroad. Dr. Cheadle has reaffirmed his original propositions with further illustrations and the account of one important necropsy, to which I will subsequently refer. Dr. Gee, Dr. Eustace Smith, Dr. Goodhart, Dr. Railton, Dr. Sutherland, Dr. Green, and Dr. Charpentier have published cases, or series of cases. In Germany series of cases have been recorded with considerable detail by Dr. Rehn, of Frankfurt, and Dr. Heubner of Leipzig. The general conclusions previously stated have been strongly supported by these two eminent physicians. The most striking confirmation has come from America—a country which

rivals our own in the favor with which proprietary infant foods have been received, and in the reluctance of well-to-do mothers to suckle their offspring.

"The first case which appears to have been observed was in 1889, and was reported by Dr. Northrup, physician to the New York Foundling Hospital. In 1891, eleven cases were collected by him; and in February of this year no fewer than 106 cases were reported to the New York Academy of Medicine by Dr. Louis Starr, Dr. Rotch, Dr. Holt, and others.

"Detailed histories of thirty-six of these have been analyzed by Dr. Northrup. It is obvious from his paper that the clinical and anatomical features described are identical with those of the group under consideration, and the conclusions arrived at are almost word for word those which were stated in 1883. My own experience of this disease since 1883 comprises thirty-three typical examples, besides a number of what may be called "borderland" cases, to which I will presently refer. But after this general enumeration of available material, let me refer to some of the results of the collective experience. First, as to anatomical results. A very striking case was communicated to me by my friend, Dr. Stephen Mackenzie. On *post mortem* examination extensive subperiosteal and endosteal extravasations and fractures of ribs and lower limb bones were found. But in addition there were innumerable small hæmorrhages in the intestines, mesentric glands, lungs, and the pyramidal structure of the kidneys.

"Dr. Colcott Fox has published drawings of a remarkable case with extremely widespread subperiosteal hæmorrhages. In the American series, collected by Dr. Northrup, there are four *post mortem* examinations recorded. The most important one is Dr. Northrup's case. This was a child eighteen months old with extensive subperiosteal hæmorrhages, but no rickety changes. The necropsy recorded by Dr.

Cheadle presented only slight rickets, and the bones and muscles were free from hæmorrhage. Besides the characteristic hæmorrhages into the gums, there were extensive extravasations into the lungs, and minute extravasations into the intestinal mucous membrane and lymphatic glands. One of the most interesting recent communications is that of Dr. Sutherland, who, whilst laying great stress on the frequency of the limb extravasations, reports a fatal case like Dr. Cheadle's in which the bones were free. Dr. Sutherland has also reported two examples of extensive hæmatoma of the dura mater, which he believes to have been due to infantile scurvy. A similar condition is recorded as occurring in adult scurvy. Since Dr. Sutherland's paper was published I have also had a case of a boy, aged fifteen months, who under my observation presented slight scurvy of the gums. From the history of the disease, I believe it probable that he had had an earlier attack of this disease. At the *post mortem* examination an old extensive hæmatoma of the arachnoid cavity was found. This was possibly due to a long past scorbutic hæmorrhage. At the Children's Hospital, Great Ormond Street, since 1883 three *post mortem* examinations on cases of scurvy have been made; one under Dr. Cheadle, to which I have already referred; one under Dr. Abercrombie, and one under Dr. Lees presented characters identical with those described in the first part of the lecture. Besides the actual necropsies there is a certain amount of anatomical experience which has been obtained by surgical exploration during the life of the patients. The most striking example of this kind was recorded by Mr. Page, in which prolonged incisions were made down to the bone in both thigh and leg, and great masses of blood clot removed. There was recovery, but in addition to the operation an entire change was made by Mr. Page in the diet, and the proprietary food with which the child had been fed since

three weeks old up to nine months was replaced by fresh food. In some of Rehn's cases and in some of the American cases simple exploratory incisions have been made, and the existence of blood extravasation under the periosteum established. Thus far as to anatomical results. And now as to the clinical addenda to our knowledge. Mr. Holmes Spicer has drawn the attention of ophthalmic surgeons to three examples of the curious eye affection which I have already referred to in the first part of this lecture. After pointing out the association of this special form of orbital hæmorrhage with other scorbutic signs, he suggests, in the case of a hand-fed child of seven months, that a similar orbital hæmorrhage was the only scorbutic sign. This is a difficult doctrine to accept, but I believe it to be sound. Out of seven of my cases in which orbital hæmorrhage occurred, four presented the orbital symptoms before the limb symptoms, and in some of these the limb symptoms were slight, there being great local tenderness, much irritability, but little swelling.

"I have spoken of hæmaturia as one amongst the symptoms of our typical group. Dr. Gee, and subsequently Dr. John Thomson, have pointed out that occasionally hæmaturia may be almost the solitary manifestation of scurvy in infants, and that it may immediately vanish after the employment of fresh food. Sir William Roberts has told me that he has observed examples of this scorbutic hæmaturia, without other symptoms, but responding to antiscorbutic diet. I have notes of two cases of hæmaturia in which, though no bone lesions were to be felt other than rickets, there was an excessive irritability, resentment to the slightest touch of the lower limbs, and some amount of anæmia. They had been fed on preserved food, and one of them immediately responded to antiscorbutics; the other I have been unable to trace. These cases lead me to mention another example of what may be called

a borderland condition. There are cases of rickety infants in whom, though no lesions pointing to scurvy can be detected, the irritability and tenderness are out of all proportion to the signs found. The substitution or increase of what may be called "living food" in the diet, will often entirely eliminate this irritability and tenderness, just as in the typical cases which I have already described. I find that Dr. Cheadle and Dr. Eustace Smith have noted a similar experience. Just as we are familiar with a vanishing point of rickets, we may possibly have to recognize a vanishing point of scurvy. The collective experience shows that some of the cases have had an early infancy with much stress and storm in the way of digestive disturbance. The artificial food upon which ultimately they have been nurtured is a sort of survival of the fittest, as being the one attended with least diarrhoea and vomiting; and it is whilst assimilating this artificial food that the scorbutic symptoms have developed. But I wish to emphasize the statement that in chronological order the symptoms of our disease cannot justly be regarded as the last term of a condition of marasmus. It is not in the least comparable to the appearance of purpura at the close of a chronic wasting disease. Further, it is recorded that in a great many cases at the onset there is no obvious digestive disturbances, or one only of very moderate degree. Many of the later reports state that the children were well clothed with fat, and regarded by the friends as well nourished. The immediate determining cause of the catastrophe is difficult to ascertain. In some of the cases, as in adult scurvy, a slight accident—bruise or fracture—seems to have started the complaint.

"One of the most suggestive results of the collective experience relates to the social state of the children amongst whom the disease predominately occurs. The clinical *tout ensemble* of a typical example is as striking in its own way as that of

myxœdema or acromegaly. If this were a common disease in our large out-patient departments of the general hospitals and the children's hospitals it would be recognized; but amongst the very poor it is not a common disease. Of the thirty-three typical examples which have come under my care since 1883, only six were hospital cases. The others were the children of well-to-do people with healthy surroundings and good homes. There was nothing to suggest either wilful neglect or faulty hygiene in any gross sense. We may speak with confidence of what we ourselves observe as to the relative frequency of a disease in different groups of people; but it is somewhat rash to generalize as to the change of type of any disease in different times. Nevertheless, I will hazard the statement that this disease is probably more frequent now than, say, twenty-five years ago. It is, I think, inconceivable that men of the authority of Jeuner and West and Hillier should not have insisted upon it if this group of symptoms had often occurred within the common range of their experience. I observe that Dr. Northrup, in his valuable summary of the American experience, states that it seems probable that the disease is increasing in frequency in America. Is there anything noteworthy of late years about the bringing up of the infants of the well-to-do classes? I think it may be safely stated that, besides the increasing difficulty of getting the mothers to suckle their infants, there has been an enormous increase in England and America in the employment of proprietary infant foods. The proprietary foods are much more extensively used among the well-to-do than among the poor. But different forms of condensed milk have also come into extensive use, and to a considerable amount among the poor.

"Is there any other reason why the poor, though by no means exempt from the disease in question, should suffer from it in a remarkable less degree than the rich?

I believe that an important suggestion made by Dr. Cheadle gives a second clew to this remarkable difference. The children of the poor at a much earlier period than those of the well-to-do receive small portions of the same food as that of which their parents partake. No doubt, in consequence of such indulgence, there are occasional primary digestive disturbances. Nevertheless, some breaks are made in the monotony of the diet, and probably some antiscorbutic article of food is taken. Among the children of the poor, potatoes especially are given at a much earlier period than to the children of the well-to-do. Thus, although the children of the poor are rickety, they are much less frequently scorbutic than the children of the rich.

“Thus, to sum up, the children of the poor suffer less from scurvy than the children of the rich, because poor parents cannot afford to buy the proprietary food which the rich parents buy and because the poor parents, even when they use condensed milk, give their children a mixed diet at a much earlier period than rich people give it.

“Are there any addenda to be made to the former results obtained in respect to the diet of the children who were attacked with this disease? I think there are. Permit me to speak first of the results of my own later experience on this point. It still stands out as a striking fact that the proprietary foods are the great offenders, especially those which are prepared with water and with condensed milk, or with a very small amount of cow's milk. Condensed milk is responsible for a fair number. The disease also occurs when very diluted cow's milk is used, and especially when for some reason, after a long employment of considerably diluted milk, the dilution is suddenly carried to a further stage, even with or without the substitution of some artificial food. The disease also occurs when peptonized milk has been given over long periods. Several definite examples have been observed in infants to whom,

for several months, as much as a pint and a half and one quart of humanized sterilized milk have been given in the twenty-four hours. By this preparation I mean milk which has been deprived of half its quantity of casein, and which has been subsequently sterilized, and in several cases stored for some weeks. I think there is reason to suspect that the boiling of cow's milk and prolonged sterilization (especially at high temperatures) lessens, in some degree, its antiscorbutic quality. In Germany and in America the sterilization of milk has become more systematized and extensively adopted than with us. Professor Heubner, of Leipzig, in his summary of conclusions in regard to scurvy in infants, speaks with the greatest caution on this point. He is very emphatic against prolonged sterilization, or sterilizations at high temperatures. The same suggestion is embodied in the summary of the American experience to which I have referred. Any extensive employment of the storing of sterilized milk for long periods by the dairy companies is, I believe, attended with risk; but when we consider the risks of the dissemination of various diseases by unscalded milk, and the serious primary digestive disturbances that arise in connection with it, it would be a retrograde step to say a word in discouragement of the routine practice of scalding milk. There is, I think, a way of meeting the difficulty. If I have made my meaning clear, it will be abundantly manifest that, as a rule, it is the prolonged use of a defective diet which induces the symptoms which we have considered. The early cases of infantile scurvy are very exceptional. The age at which we ought to be on the *qui vive* for the initial symptoms of scurvy is about the eighth of infantile life. If by that period a moderate quantity of scalded milk have been given (say  $1\frac{1}{2}$  pint in the twenty-four hours) then, instead of adding one of the proprietary foods, as is the common practice, we may ward off the occurrence of scurvy by the addition of gravy or meat

juice to the milk, but still better by the addition of some carefully sieved potato. The fear of non-assimilation of starch has prejudiced us unduly against the use of living food. Should it be found that potato, cooked and sieved and given with milk and gravy, is not tolerated (which is a very rare event), we have in small quantities of the juice of fresh fruits a ready method of anticipating scorbutic symptoms. There is still one other point to which I must refer as one of the alleged results of the later experience. I refer to the possibility of scurvy appearing in infants at the breast.

"At the discussion on infantile scurvy at the Berlin International Medical Congress, Dr. Pott stated that he had seen one example of twin children suffer from the disease although breastfed. No details are given as to whether the mother was scorbutic, or as to the total amount of milk taken by the infants, but it is stated that their suckling was impossible on account of the soreness of the mouth. No information is given as to other scorbutic symptoms and it seems an open question whether the stomatitis was really scorbutic. The case scarcely invalidates my original contention. In the *Deutsches Archiv für klinische Medizin* for 1880 there is the record of an epidemic of scurvy by Dr. Kuhu, of Moringen. There are thirteen cases of infants recorded, several of them quite young and being suckled by mothers who were scorbutic at the time. These infants suffered from severe catarrh of the mouth, from bronchitis, and from some skin affections, for example, pemphigus, erythema, and in a few cases petechiae. Some of them died, but I fail to find any account of *post mortem* examination. The details are too meagre to help us in our inquiries. The time at my disposal will not permit me to refer at length to the criticisms which have been offered to the view held by Dr. Cheadle and myself as to the pathology of the disease. They may be summarized under these three headings: (1) That the disease is nothing more

than acute rickets; (2) that the food conditions under which the disease arises are different from those in which undoubted scurvy arises; (3) that although the group of symptoms and the pathological appearances present a close resemblance to those of scurvy, these infantile cases cannot be considered true scurvy because they do not occur in an epidemic or endemic form.

"With the first view—that the disease is nothing more than rickets—I have dealt at length in the course of this lecture, and I need not further discuss it. The German physicians, so far as my reading has gone, have relinquished it entirely. With respect to the second criticism—that the food conditions under which the disease arises are not truly scurvy-producing—I have given reasons for the opinion that the diet employed does not come under the category of living food, adequate in quality and amount. I have also shown that inadequacy of living food, plus a basis for rickets, gives the simplest explanation of the typical case. The immediate result of antiscorbutic treatment seems the most conclusive answer to this criticism and in a crude way would seem to be a measure of the proportion of scurvy present in any given case. The third objection—namely, that the scorbutic nature of these cases cannot be accepted because the cases do not occur in epidemics—has been urged recently by Dr. Hoffmann in his work on constitutional diseases. In common with many of the German school, Dr. Hoffmann is dominated by the epidemic doctrine of scurvy and by the hypothetical view that the efficient cause of it is some micro-organism. English physicians since Lind's time are not dominated by the epidemic doctrine. The many undoubted sporadic cases are to them just as significant as, and in some respects more instructive than, those which occur in epidemics. With these examples our cases come into the closest relationship and a perfect series may be traced from infancy, through childhood, to adult life, in which the differences

of symptoms are explainable by the different physiological activity of the tissues specially involved."

—

THE IMPORTANCE OF INTESTINAL ASEPSIS AND ANTISEPSIS IN ABDOMINAL SURGERY, AS DEMONSTRATED BY THE RESULTS IN A SERIES OF 415 CASES, INCLUDING 160 SUCCESSIVE OVARIOTOMIES WITHOUT A DEATH.

By J. H. KELLOGG, M.D.

Read before the Battle Creek (Mich.) Academy of Medicine, June 19, 1894.

(Since this paper was read, the statistics have been slightly modified, being increased by a number of additional cases, including one death. I have also added the results of some experiments which, at the time of the reading of the paper, were in progress, for the purpose of determining the influence of laparotomy upon urinary toxicity.)

The importance of intestinal asepsis in all febrile conditions, and in conditions likely to take on a febrile action, has been most clearly pointed out by Bouchard, whose studies of the toxicity of normal and pathological urine by the intravenous injection of rabbits are models of physiological exactness, and have taught us most important lessons in therapeutics, as well as in diagnosis.

Bouchard has shown that great quantities of extremely toxic substances are produced by the action of microbes upon the intestinal contents. An infusion of fecal matter, when carefully filtered and injected into the veins of a rabbit in very small quantities, produces death and that almost instantaneously, so virulent is the poison contained in ordinary fecal matter. Numerous bacteriologists have called attention to the fact that microbes which are non-virulent when growing in infusions of vegetable substances, become extremely virulent and produce most deadly ptomaines when grown in meat infusions, such as beef tea or peptone-gelatin cultur media.

Vidal and Roux and other investigators have recently called attention to the readiness with which the common bacillus coli found in the colons of all mammals, acquires most virulent characters, which render it capable of producing abscesses in remote parts of the body, pleurisy, peritonitis, and other inflammations of an infectious character. The intimate relation of this microbe to peritonitis, appendicitis, hepatic abscess, and other septic conditions in the region of the abdomen, has been clearly established, and the conclusion is irresistible that we may properly regard this versatile bacillus as a source of danger in operations involving the peritoneal cavity.

That the microbes which commonly inhabit the intestines may produce peritonitis is evidenced by the experiments of Roux and various other observers, with pure specimens of bacillus coli communis. Both purulent peritonitis and abscesses were produced by these investigators with pure cultures of this germ. Pure cultures of bacillus coli have been found in abscess of the kidney and spleen, in typhoid fever, in peritonitis, in pleurisy, in meningitis, in hepatic abscess, and in abscesses in various remote portions of the body, showing the readiness with which this microbe migrates from the intestines, invading organs even so far distant as the brain. A pure culture of bacillus coli was found in one case of peritonitis resulting from perforation of the intestines. Bacillus coli has also been found in the pleuritic fluid obtained in a case of pleurisy occurring as a complication of typhoid fever.

I regard an unclean condition of the intestinal canal as the most important of all causes of peritonitis. It may operate in two ways:—

1. As a source of direct infection, as is clearly shown by the facts above stated.
2. By encouraging the development of microbes which have been introduced through the operation wound.

Microbes, like all other vegetable organisms, will not grow without a suitable soil. Extensive peritonitis without stagnant fluids in the peritoneal cavity is an impossibility. If the absorbents of the intestines are loaded with ptomaines and other products of putrefaction generated in the intestinal canal, they cannot be at the same time active in draining the peritoneal cavity. The importance of drainage of the peritoneal cavity through the intestines, has been well and frequently brought to the attention of the profession by Dr. Lawson Tait.

When a pupil assistant with Mr. Tait some years since, I one day said to him, "Doctor, what do you consider the most essential things to be done in peritonitis following laparotomy?" He said in reply, in his blunt fashion, and greatly to my surprise, "Nothing at all; the patient who has peritonitis after a surgical operation is certain to die. The time to cure peritonitis is before it begins. If the peritoneal cavity is kept well drained, peritonitis will not occur. The important thing is to keep the peritoneal cavity free from stagnant fluids. I am not afraid of germs; they cannot grow without food.

I have given a great deal of thought to Mr. Tait's remark, and have made it the basis of the post-operative treatment of my cases.

Whenever the patient's temperature begins to rise after an operation, whether it is twelve hours or twenty-four hours, or any time within three or four days following the operation, I take it for granted that there are stagnant fluids in the peritoneal cavity, or putrescent fecal matters in the intestine, and I immediately proceed to adopt most active measures to remove the danger as regarded from this standpoint. A soap and turpentine enema, or an enema of glycerine with sulphate of magnesia is at once administered, and repeated until the bowels are made to move with very great thoroughness; and if this is not sufficiently effective, a saline laxative is administered in doses

sufficient to secure several watery stools. The effect of these vigorous evacuative measures is not only to empty the small intestine, but by draining the portal vessels, to stimulate absorption from the peritoneal cavity. I am satisfied that I have by this method saved the lives of a number of patients, and I am obliged to record only two deaths from peritonitis in 415 ovariotomies performed within the last five years.

A microbe which can produce a pleurisy can certainly set up a peritonitis if only favorable conditions are supplied, and these are to be found in the temporary intestinal paralysis and consequent stasis of intestinal contents which so often follows operations involving the peritoneal cavity, together with the exudation of fluids from the torn and irritated serous surfaces, which offer the best possible medium for the development of pathogenic microbes. The advantage of getting rid of this fluid as rapidly and as completely as possible is a lesson long ago learned by abdominal surgeons from experience, and it has placed the drainage-tube near the head of the list of life-saving devices which have been contributed by the masters of this branch of surgery within the last quarter of a century.

Next to the drainage-tube, perhaps before it in importance, must be placed the Lawson-Tait method of managing the bowels, which consists essentially in thorough evacuation of the bowels before the operation, and the withholding of all food for forty-eight hours after the operation, or until a movement of the bowels has been secured. The superiority of this method over the old method of confining and paralyzing the intestines with huge doses of opium, is attested by every abdominal surgeon who can show a good record of recoveries.

The only modification of this method which I have undertaken is simply an extension of it. I begin the work of getting the bowels into a thoroughly aseptic condition a week or two before the operation in every case where it is possible to do so. Daily,



or every other day, the bowels are washed out by a large colocolyter administered with the patient in the knee-chest or right Sims's position. A gentle laxative is employed for at least two or three days before the operation, and administered so that the patient will come to the operation with the intestines completely emptied of both faecal matter and flatus, a condition which greatly aids the surgeon during the operation, and constitutes one of the most important safeguards against unfortunate complications following the operation.

In addition to this, when possible, I prescribe for the patient for a week or two before the operation, daily gentle massage of the abdomen, when not contra-indicated, daily fomentations, and the most abdominal bandage, to be worn night and day, after the German fashion,—a most excellent means of removing a congested state of the bowels, so common in persons whose bowels are not normally active.

Another measure of preliminary treatment of no small importance, is an aseptic diet. In making up a dietary for a prospective case of ovariectomy or hysterectomy, I keep in mind the antiseptic or aseptic dietary of Dujardin-Beaumetz, which consists essentially of fruits, grains, milk, and eggs. No meats of any kind are allowed.

Oysters and shell-fish must all be discarded on account of their proneness to undergo decomposition in the alimentary canal, as well as outside of it. We may also recall in this connection the fact pointed out by Brieger, that the livers of mollusks commonly contain a noticeable quantity of mytilotoxine, one of the most deadly of ptomaines. The patient is instructed to avoid with most scrupulous care coarse vegetables and all indigestible foods and dishes.

Thus the mischief-making microbes of the intestines are swept away on the one hand, and starved out on the other, so that

a condition of the most thorough asepsis possible is secured.

The same course is pursued, and with even greater vigor, for the first week following the operation, or until the patient is well established in convalescence. A variety of toothsome dishes from which all objectional elements are excluded is provided to tempt the patient's appetite, and complaint is rarely ever heard because beef tea, oyster broth, and similar unwholesome concoctions are excluded from my surgical wards.

Within the last few months I have adopted another measure which I believe to be of very considerable value as a preparation for laparotomy, namely, lavage of the stomach. I was led to the adoption of gastric lavage as a preparation for abdominal section by the observation of the great frequency with which acid fermentation is found in the stomachs of chronic invalids, especially those of the class to which patients requiring the removal of the uterine appendages for the most part belong. Dilatation of the stomach and prolapse of the abdominal viscera, or what Glenard has termed enteroptosis, is found in a very considerable proportion of these cases. The consequence is motor insufficiency and stasis of the gastric contents, which favors fermentation, and thus establishes an unhealthy state, not only in the stomach, but in the small intestine below the stomach, into which the infectious toxic stomach contents are emptied. I find that lavage of the stomach administered the same day of the operation and after the last meal preceding the operation, is an excellent means of preventing the vomiting which so frequently follows the administration of an anæsthetic. Lavage is not needed in all cases, but whether it is needed or not is easily determined some days previously by a test breakfast. In cases in which the patient presents a coated tongue or other evidences of disordered digestion, a test breakfast is administered

a week or ten days before the time set for the operation, or at an earlier period if convenient; and if analysis of the stomach fluid obtained shows fermentation, the dietary is carefully regulated with reference to this condition. Lavage of the stomach is employed daily or every other day, and if there is a considerable degree of fermentation, antiseptic medication is resorted to, to insure thorough disinfection of the intestinal canal.

I am confident that the use of beef tea and other animal foods should be carefully avoided in cases in which it is desired to maintain the highest possible degree of asepsis in the alimentary canal. Beef tea and other meat juices afford the most favorable culture medium for the development of microbes of a most virulent character, especially bacillus coli and other allied microbes which are found in the alimentary canal.

Some months ago I conducted a series of experiments in the Sanitarium Laboratory of Hygiene which very clearly demonstrated this fact. The experiments consisted of the intra-venous injection of rabbits, first with sterilized bouillon, and second, with a bouillon culture of normal fæces. In the first experiment, a rabbit weighing 2.320 kilos received 427 c.c. of bouillon before death occurred. The symptoms resulting were a copious diuresis, a watery diarrhœa, slight clonic spasms, slow respiration, slight dilatation of the pupils, corneal insensibility and exophthalmus. The amount of bouillon required to kill, per kilogram, was 186.5 c.c. The temperature of the rabbit at the beginning of the experiment was 39° C.; at death 36.1° C., indicating a loss of 5.482 calories. The amount of heat absorbed by the injected fluid was 7.728 calories, showing an actual gain of 2.246 calories, notwithstanding the great fall in temperature. In the second experiment a forty-eight hours culture of normal fæces in bouillon of the same strength as that used in the previous experiment was injected

into the vein of a rabbit weighing 1.650 kilos. The death of the rabbit occurred when only 29 c. c. of the filtered bouillon had been injected, about one-fifteenth of the amount required in the previous experiment. The symptoms were as follows: At the end of thirty seconds, pupils contracting; one minute, pupils strongly contracted; two minutes, clonic spasms, slow respiration, micturition; two minutes and thirty seconds, continuous clonic spasms, cornea insensible; at the end of three minutes, pupils dilated, violent trembling and death. The amount of fluid required to kill a kilogram of rabbit in this case was only 17.57 c. c., less than one-tenth the amount of bouillon required.

The extremely toxic character of the bouillon modified by the presence of the microbes of the alimentary canal is most clearly demonstrated by the above experiments. The late Dr. Austin Flint called attention to the fact that the nutritive value of beef tea, animal broth, etc., is probably nil.

As already stated, it has been found by laboratory experiments that those germs which are the most dangerous and deadly to human life, grow best in beef tea and other preparations of animal tissues. It is this fact which gives rise to the peculiar offensiveness of decomposing processes in animal products, especially the tissues of animals, as compared with the same processes in vegetable products. Compare, for example, the processes of decay in an apple, a peach, or a loaf of bread, with decay in birds, fish, or a piece of beefsteak, or an oyster. That the same thing is true respecting these processes within the human body is shown by the peculiar and extraordinary offensiveness of the fæces of a carnivorous animal as a dog, of a herbivorous animal as a cow or horse. If the excreta of a cow or horse were as obnoxious and offensive as that of a dog, a stable or a dairy as ordinarily kept would be absolutely unendurable in proximity to human dwellings.

The decomposition of food products in

the alimentary canal and the coincident production of ptomaines is one of the sources of poisons found in the tissues and in the residuum of the tissues, the urine. The amount, quality, and toxic properties of the urine are almost absolutely dependent upon the dietary. A diet which gives rise to faecal matters so offensive as those of a carnivorous animal or a carnivorous man, must be a prolific source of blood-and-tissue contamination from the absorption of these toxic and poisonous products. Evidence of this tissue poisoning is to be found in the strong odor of carnivorous animals, as well as in the strong odors of the faecal matters of this class of animals. It is also a well-known fact that the flesh of vegetarian animals becomes strong and unpalatable when these animals are fed upon flesh foods.

Bouchar'd's researches upon this subject are extremely interesting, and entirely confirm Dr. Flint's observations as well as my own.

Griffiths of Edinburgh, and Klebs, have recently shown that in certain febrile conditions certain leucomaines, such as creatin and guanin, which are naturally possessed of only slightly toxic properties, are, under the influence of specific microbes, converted into most powerful toxic agents, some of which they have been able to isolate from the urine. Griffiths found that in scarlet fever and diphtheria the normally non-toxic creatin is converted into an extremely toxic substance which is secreted in the urine. Klebs found that in cholera nostras guanin is similarly converted into a remarkably toxic substance which is characteristic of this disease. These changes are doubtless the result of the peculiar conditions established by the disease named.

The point which I wish to make is that the peculiar condition established by the operation of laparotomy is favorable for the conversion of these tissue poisons into substances of a more highly toxic character,

and for the development of virulent properties by the bacillus coli communis which is always present in the alimentary canal of mammals, and also for the development of an unusual amount of toxic matters.

For the purpose of obtaining positive evidence upon this point, I determined to apply the ingenious toxicity test devised by Bouchard. This test consists of the injection of the urine to be tested into the veins of a rabbit, at the rate of about 1 c. c. per second, continuing the injection until the death of the rabbit occurs, noticing carefully meanwhile the symptoms produced during the injection, the mode in which the rabbit dies, the effect upon temperature, and the relation of the amount of urine required to produce death, to the weight of the rabbit and to the weight of the patient. The result is termed the coefficient of toxicity, by which is expressed the amount of living being in kilograms, which would be killed by the quantity of urine produced by one kilogram of the patient in twenty-four hours. This result is obtained as follows: Dividing the amount of urine required to kill the rabbit by the weight of the rabbit, gives the amount of urine required to kill one kilogram of rabbit, and also the total number of urotoxics, or the number of kilograms of rabbit or of living being which would be killed by the total amount of urine produced by the patient in twenty-four hours. Dividing this result by the weight of the patient in kilograms gives the urotoxic coefficient, or the possible amount of living being killed by the urine produced by one kilogram of the patient in twenty-four hours. This test was applied in the following cases prior to abdominal section, and again the second day after the operation, with the following results:—

*Case 1.*—Mrs. H. Removal of appendages to check the growth of a bleeding myoma. Patient did well after the operation, and showed no symptoms of shock, no febrile disturbance, no tympanitis, very

little pain. The toxicity test before the operation gave a urotoxic coefficient of .46, the normal figure. After the operation the urotoxic coefficient was found to be .336, a very low coefficient, indicating diminished elimination of toxic substances in the urine.

*Case 2.*—Mrs. W. Laparotomy for removal of the appendages to check the development of bleeding myoma. This patient also did well after the operation; no febrile disturbance, no tympanitis, and uninterrupted progress to convalescence. The toxicity test before the operation gave a coefficient of .82. After the operation the coefficient was found to be .399. The coefficient before the operation was unusually high; after the operation a trifle below normal.

The diminished toxicity of the urine in both cases was doubtless due to the fact that on the day following the operation food was entirely withheld. The alimentary canal being entirely empty, the production of toxins was diminished through the lessened activity of the microbes in the alimentary canal.

*Case 3.*—Mrs. L. In this case the patient had suffered for a number of years from frequently recurring attacks of pelvic inflammation, involving both the tube and the ovaries. This patient exhibited, on the second day after the operation, a rise of temperature, the thermometer indicating 101° F. The temperature continued elevated for several days, but was controlled, and a threatened peritonitis averted by the vigorous employment of saline laxatives, hot vaginal douches, and other therapeutic measures. The results of the toxicity test were as follows: Before the operation the coefficient was found to be 24; after the operation, 1.08,—a coefficient more than double the normal, and four times than found before operation, indicating an enormous increase of toxins, clearly explaining the rise of temperature.

*Case 4.*—Mrs. C. Abdominal hysterec-

tomy. A large multinodular bleeding myoma was removed, together with the appendages. The patient did perfectly well for the first two days following the operation. The third day after the operation this patient's temperature was 100.4° F. The abdomen was enormously distended with tympanitis, a condition which had arisen suddenly during the night. The patient was retching and vomiting mucus every few minutes. I felt much apprehensions as the symptoms were decidedly indicative of peritonitis. The patient suffered considerable pain. The facial expression was that of great depression, and there was certainly cause for anxiety.

The toxicity test in this case showed before the operation a coefficient of 1.65, an unusually high coefficient. The second day after the operation the coefficient was found to be 4.90, the highest coefficient I have ever observed. The significance of this condition of the urine, or rather, of the condition of the alimentary canal which produced this extremely toxic urine, was clearly apparent the next morning, after the collection of the specimen when the patient was found in the condition already described. Previously the patient had apparently been doing exceedingly well; but the decomposition taking place in the alimentary canal after food was administered had overwhelmed the system with toxins which the kidneys were doing their best to eliminate. Fortunately the vigorous application of saline laxatives, soap enemas, etc., quickly relieved the patient, so that in twenty-four hours her condition was entirely changed, and she made rapid progress to a good recovery.

Case 3 illustrates the fact that marked toxæmia may exist in abdominal cases without the production of any decided febrile action, either because the morbid process is not such as to give rise to fever-producing toxins, or because temperature-depressing toxins may be present in sufficient quantity to neutralize the effect of

toxines which might otherwise give rise to temperature elevation.

These experiments certainly show, beyond any opportunity for question, the fact that a special cause for toxæmia exists after laparotomy, and it seems clear to me that they prove this cause to be associated with the condition of the alimentary canal.

I do not wish to be understood as claiming this to be a new discovery. This fact has long been recognized by Tait and his followers. The purpose of the investigation has been to place upon a scientific basis a fact which has heretofore rested solely upon clinical evidence.

Another fact which is worth noting is this: After laparotomy there is always more or less stagnant fluid in the peritonea cavity, and doubtless a larger or smaller number of microbes capable of producing organic decomposition is admitted to the abdominal cavity under the most favorable conditions for operation, as regards a sepsis. As the result there must always be produced a larger or smaller quantity of ptomaines which are removed from the abdominal cavity by absorption, to be eliminated by the kidneys. It is thus apparent that a large amount of extra work is required of the kidneys in the excretion of these subtle poisons, after an abdominal operation. Anything which materially increases the work of the kidneys must on this account be objectionable. Flesh food has the effect to greatly increase the amount of renal work, as is well shown by an experiment which I conducted last year in the Laboratory of Hygiene of which I have charge. The experiment consisted in first obtaining an accurate estimate of the urea produced in twenty-four hours by a healthy man subsisting upon an aseptic dietary, from which meat, cheese, and other ptomaine-containing foods were excluded. This data obtained, the young man was allowed to eat flesh food freely for several days. An enormous increase in the amount of urea occurred. At the beginning of the

experiment the amount of urea eliminated each twenty-four hours was twenty-eight grams, and after four days of meat diet, the urea was increased to 110 grams per diem. The coefficient to 110 grams per diem. The coefficient of urinary toxicity at the beginning of the experiment was .45, or normal; at the end of two days the toxicity had increased to nearly four times the normal amount, or 1.7.

In a recent interesting paper on the treatment of Bright's disease, Sapelier, an eminent French physician of Nanterre (*Bulletin General de Therapeutique*), in prescribing the dietetic regimen suited to patients suffering from this disease, absolutely prohibits the use of bouillon and all juices and extracts of meat, remarking of bouillon, that it is a "*véritable solution de ptomaines*." The revelations of modern physiological chemistry have quite upset our old notions respecting the value of beef tea, beef extracts, etc.

The tissue juices of a dead animal are almost absolutely devoid of nutrient value. The nutrient portion of flesh is the organized part, which is not soluble, otherwise it would be dangerous for an animal to fall into the water, as it would dissolve like a lump of sugar. The soluble elements found in the tissues of a dead animal are almost purely excrementitious in character, since the tissue continues for some time after the death of the animal, while the elimination ceases, a small amount of nutrient material found in the blood and tissue juices at death being thus converted into leucamines, ptomaines, and other toxines after death, by the tissue changes which occur post-mortem, or after the somatic life of the animal ends and before tissue death occurs, and by the decomposition which begins within a few hours after death, even when the carcass of the dead animal is exposed to the low temperature of an ordinary refrigerator.

Proscription of flesh food as a diet in abdominal surgery may be considered a

refinement in surgical nursing which has a theoretical rather than a practical value, but it is only by the employment of just such refinements that surgical statistics have been brought to the present state in the hands of the best operators. Any refinement in technique or management of a critical operation which involves the life of a human being, by means of which the mortality rate may be reduced even one or two per cent. from the results obtained by the best operators—and my statistics show a reduction greater than this—is certainly worthy of consideration.

While thus taking extraordinary precautions against attack from foes within, the enemies to life which may arise from the environment of the patient are not forgotten. Every article of clothing and bed clothing which comes in contact with the patient just prior to or after the operation, are not only freshly laundered, but are afterward sterilized in an apparatus by means of which they are subjected to a current of steam at high pressure. No dust is tolerated in the wards, the halls, under furniture or beds. Neither brooms nor dusters are allowed. The floors are cleansed by means of carpet sweeper and a moist cloth. The pure country air which surrounds the hospital comes fresh from green fields and forests, and hence is not freighted with microbes like the air of a densely populated city, which often contains millions to the cubic yard of a miscellaneous assortment of germs; and yet I take the precaution to filter it by means of an automatic air filter run by electricity, which I have contrived, and which demonstrates its efficiency by the accumulation of dust and germs upon one side of the cotton strainer, while the other side is absolutely free from both. A stream of air from this filter covers the field of operation while the abdomen is open and until the dressings are applied. [For the last year I have adopted the German method of freeing the air of the operating room from germs by

means of a jet of steam which fills the room with a fog, by means of which any floating germs are moistened and weighted so that they settle to the floor.]

With these precautions against microbes both without and within, it is rare that even so much as a suture abscess occurs in my ward, and indeed a drop of pus from any source other than a chronic abscess or an ulcer (which, however, are not admitted into the same ward with abdominal cases), is rarely seen. Abdominal hysterectomies, as well as complicated ovariectomies, often go from operation to convalescence without exhibiting a temperature above 100° F.

With so thoroughly aseptic an environment, and taking the precaution to filter the air which rushes into the abdomen as the fluid is withdrawn, by means of an antiseptic drainage-tube, I am able to leave a drainage-tube in situ as long as needed in any case, and without the appearance of the slightest suppuration. In a recent case in which my aseptic drainage-tube had been in place for four days, I inoculated several tubes with material taken from the bottom of the drainage-tube, and with cotton with which the upper end of the tube had been rubbed both inside and outside, and also the raw surface of the wound adjacent to the tube. Several plate cultures were also tried, but not a single microbe made its appearance even after the lapse of more than two weeks, and the plates were carefully watched from day to day. Those who discard the drainage-tube altogether on account of the readiness with which a septic condition appears when it is used, are evidently working under conditions unfavorable to asepsis. I have noticed that some of those who discard the drainage-tube make frequent mention of stitch abscess as a complication in the history of cases. I regard suture abscess as itself an evidence of faulty technique as regards asepsis, which ought to lead to a searching self-examination on the part of the surgeon and a thoroughgoing inquiry into all pos-

sible causes of sepsis which may exist in his hospital, among his nurses and assistants, his instruments, sutures, dressings, or methods. I find that it is only by making a most profound impression upon nurses and assistants, that they can be brought to appreciate the need of close attention to minutiae in the details of asepsis, and a conscientious observance of the rules laid down. This is accomplished in part by a short course of instruction in bacteriology, which includes a sufficient amount of practical work to render the nurse fully acquainted with the enormous possibilities for mischief-making locked up in a singly microbe, or in an amount of infectious matter too small to be seen by the naked eye.

Another matter which I consider of no small importance in the post-operative management of abdominal cases with relation to intestinal asepsis, is the early movement of the bowels. Instead of waiting until the second or third day, I move the bowels by enema as soon as the first symptom of gas accumulation appears, as indicated either by distention colic pains, or by pain in the side or back, a common symptom of gas accumulation in the colon. Water as hot as can be easily borne is employed, not a little soap is added if necessary. The effect of the early administration of the hot enema I find to be good not only in getting rid of gas, but also in relieving the patient, combating collapse, and arousing the vital activity of the semi-paralyzed nerve centres. I usually order an enema the first night following the operation.

Another advantage is gained by the early enema which I estimate highly. It stimulates peristaltic movement sufficiently to properly place the intestines, and straighten out any fold which may have resulted from manipulation, and which by adhesion may cause obstruction. In 430 abdominal sections performed within the last six years since adopting this procedure, I have never

once been obliged to open the abdomen to relieve an obstruction or brack up an adhesion following the operation.

Celerity in operation, not through undue haste, but by the aid of quick methods and manual dexterity, supported by well-trained and attentive assistants, good instruments, a good light, and the elimination of all distracting elements, so that the attention and energy of the surgeon and all his assistants may be concentrated upon the work in hand, is certainly a matter of no small advantage to the patient, since it secures to him the least possible handling of the tissues, the shortest possible exposure, and the smallest possible amount of anæsthetic,—all considerations of great importance. I find that patients in whom the operation is completed in the shortest time, other things being equal, make the most rapid convalescence. I do not pride myself on being a rapid operator, and should be ashamed to be known as a hasty operator; but I aim to reduce the time of my operations to the smallest number of minutes and seconds consistent with complete, thorough, and neat work. Everything that needs to be done must be done, and must be done well; but fussiness, hesitancy, and loss of time in demonstration to students or lookers-on, are in my opinion wholly out of place in operations of this sort.

A plan which I find of great value in expediting operations is the thorough rehearsal of the nurses and assistants who are to take part in operations, previous to entering the operating-room.

Fifteen minutes is sufficient time for an uncomplicated case, such as a simple non-adherent cyst, or removal of the appendages when not unusually adherent. In more than half my cases the operation was completed in thirty minutes or less. The longest time required in any case was two hours and fifteen minutes, in which an imbedded cyst was so completely entangled by

adherent intestines and bands that I almost despaired of being able to complete the operation. In thirty-one cases the average time was about one hour, owing to the very great difficulties presented and the necessity for patient and careful work. The successful surgeon must know when to proceed cautiously as well as how and when to work rapidly.

As an evidence of the importance and value of special attention to asepsis, I present herewith a tabulated account of all the cases of abdominal surgery which have come under my hand in the Sanitarium Hospital between October 1, 1889, and July 11, 1895. The cases reported include all the abdominal operations which I have performed during this time. In all but two of the cases upon which I have performed abdominal operations within the time mentioned, the rules respecting intestinal asepsis which I have detailed above, have been carried out, with the following results (the two cases referred to were in the country at a distance, I being called by the attending physician at the last moment; both were men, and both died):—

*Summary of Cases of Abdominal Section, performed between October 1, 1889, and July 11, 1895.*

Total number of cases of pyosalpinx, hydrosalpinx, and hematosalpinx, one or both sides, 44; 5 deaths. One patient recovered from the operation but died eleven weeks later from exhaustion from the opening up of a fecal fistula.

Ovarian tumors, 78 cases; 1 death.

Abdominal hysterectomy, 27 cases; 4 deaths.

Myomectomy and ovariectomy, 4 cases; no death.

Exploratory incisions, 24 cases; 4 deaths (all malignant cases of advanced stage).

Incomplete operations (one ovary and tube removed), 2 cases; no death.

Operations for removal of the appendages to check the growth of fibroid tumors, 52 cases; 1 death.

Total number of cases for removal of diseased appendages, 224; 6 deaths.

Batley's operation, 2 cases; 1 death (hemorrhage); ligature slipped from violent struggling of patient).

Appendicitis, 3 cases; no death.

Gastrostomy (saturating of stomach), 1 case; recovery.

Section and suture of intestine, 1 case; recovery.

Removal of diseased appendages (non-septic), including 78 tumors of ovary and 55 tumors of uterus, 332 cases; 3 deaths.

Total number of cases excluding hysterectomies and malignant cases, 395; 8 deaths,—a mortality of practically two per cent.

Total number of deaths, 20.

Between April 3, 1891, and August 15, 1893, I had an unusual run of good fortune, which, however, I attribute less to good luck than to the fact that at the beginning of this period I had brought my technique of operating, plan of management of cases after operation, and the discipline of my nurses and surgical assistants, to a higher state of perfection than before, and thus succeeded in maintaining somewhat more favorable conditions for recovery than previously. Between the dates mentioned, covering a little more than two years and four months, I had a series of 165 abdominal sections for removal of diseased appendages, pus tubes, tumors, etc., with an equal number of successive recoveries. During the same time I had nine successful abdominal hysterectomies, the addition of which would increase my list to 174. This includes twenty cases in which the appendages were removed to check the growth of bleeding uterine fibroids, the appendages being also diseased. In many cases the tubes contained pus, in two of which the tubes ruptured internally in spite of my best efforts to avoid such an accident, the abscess walls being so rotten as to make even the gentlest manipulation impossible without rupture.



This series included also thirty-six ovarian tumors.

Of seventy-eight ovarian tumors recases in which tumors were present upon both sides, I have had the good fortune to lose but one case. This was a case of very large ovarian fibroid. The patient died from an obscure and rapidly developed toxemia, the cause of which I have never been able to understand.

The total number of cases of abdominal section for removal of diseased appendages, including 78 tumors, 52 cases in which the appendages were removed to check the growth of bleeding fibroids, 4 cases of simultaneous myomectomy and ovariectomy, in which pus was not present at the time of the operation, is 332, with a total mortality of only 3 cases. (Tait-Hegar operation for fibroids, 52, 1 death; myomectomy and ovariectomy, 14 cases, no death; diseased appendages, pus absent, 198 cases 1 death; ovarian tumors, 78, 1 death).

I do not boast of any greater skill than is possessed by numerous other operators, and it is no injustice to myself, to attribute the remarkable results which I am able to show as regards reduction of the mortality rate to the great pains taken to secure intestinal asepsis in accordance with the principles laid down in this paper. The hospital in which I operate is located remote from any large city and in a region especially noted for its purity of air; but I feel confident that the chief element in this phenomenal success in saving life is intestinal antisepsis, or as I should perhaps more properly say, intestinal asepsis.

In justice to the views presented in this paper, I ought perhaps to add that the cases operated upon have not been selected ones. I may also state that within the period covered by the report of these cases, I have not declined to operate in any case apparently requiring operation in which there seemed to be any reasonable prospect of affording the patient either permanent or temporary aid, in fact, have declined to

operate in only two or three cases on account of the hopelessness of the case, and in these cases it was very clear that the disease was malignant, and surgical interference absolutely useless. I have, however, declined to operate upon a number of persons who solicited operation for removal of the ovaries, and who had been referred to me by physicians for the performance of the operation. Several of these cases, together with their subsequent history and recovery, I have detailed in a paper entitled, "The Non-Surgical Treatment of Ovarian Disease," a subject which I consider of vastly greater importance than that to which this paper is devoted. Certainly no physician can deprecate more than do I the removal of any bodily organ when the necessity for surgical interference is not positively, very positively, indicated. I take care to preserve all the structures removed in every case of abdominal section, and have done this for many years, not only for the purpose of pathological study, but as an evidence of the morbid condition present and of the necessity for the operation. The cure of a chronic sufferer without resorting to the knife is far more satisfactory than the best results of surgical skill. On the other hand, the prospects of life for a patient with but one chance in a hundred for recovery from the operation is better without operation than with it.

When a careful physical examination discloses no evidence of structural change in the ovaries, a cure should be undertaken, and may be expected, by the adoption of non-surgical means. That the great majority of cases of chronic ovarian pain, dysmenorrhœa, and allied cases may be cured by non-surgical means, I have endeavored to show in the paper already referred to.

In my own experience I find occasion for surgical measures in a very small proportion of the cases of chronic ovarian disease which come under my care. But when

structural changes of an incurable and disabling character have occurred, so that the patient is reduced to a state of chronic invalidism, surgical measures are in order as a proper means for relieving the patient from her misery, and the surgeon should not hesitate to advise a radical procedure, even in cases in which the patient's life may not be in danger, provided she values health and usefulness sufficiently to be willing to undergo the suffering and risk involved in an operation of this character. Many patients suffering from chronic ovarian disease endure more pain, and often run as much risk of life, at each menstrual period as would be occasioned by an operation for the removal of the diseased organs under the most favorable conditions. An operation which involves a risk to life of less than one per cent. in 332 non-septic cases, is certainly not so much to be dreaded as ten or twenty years of constantly recurring pain and inflammation, and the risk to life is certainly far less than that incurred by a woman who carries about with her, continuously, the active foci of septicemia in the shape of distended pus tubes which are liable to rupture or otherwise to communicate their infection on the slightest provocation, as from the excitement of the menstrual epoch, the congestion produced by a little overdoing, a slight cold, or even an inactive state of the bowels.

That some surgeons have reported little relief from pain in cases in which the operation has been performed for the relief of chronic pelvic pain due to cirrhotic or cystic ovaries, salpingo-ovaritis, and other allied affections, is, I think, due in many cases to neglect to subject the patient to proper after-care and treatment. In many of the cases requiring this operation, the removal of the diseased appendages is but the preliminary step necessary for the re-establishment of the patient's health. The tendency to local inflammation which has

become chronic through the long-continued presence of diseased structures must be subdued by the employment of the vaginal douche, together with hydrotherapy, the local application of electricity, and other suitable measures after the operation has been performed.

Local inflammation immediately succeeding the operation, resulting in extensive inflammatory exudates, is, I am confident, not an infrequent cause of failure. A number of cases have come under my care in which ovariectomy had been performed by other surgeons for incurable ovarian disease, but without relief, and in which I only found it necessary to subject the patient to thoroughgoing treatment for a few weeks, in some instances enforcing rest in bed in the meantime, to secure all the good results hoped for from the operation. In these cases I have found evidences of inflammatory exudates in the pelvis which were evidently the result of the traumatism of the operation. I endeavor to avoid such consequences by the employment of the hot vaginal douche immediately after the operation and continuing it in a most thorough manner until all danger of inflammatory reaction has passed away.

I am satisfied that by these means I have succeeded in saving many patients from a protracted convalescence. I am inclined to think, also, that these patients are sometimes allowed to get upon their feet too soon after the operation. Some surgeons allow their patients to stand upon their feet the fifteenth day after the operation. In my experience it is better to give the patient a longer time in bed,—from three to six weeks, according to the degree of danger from inflammatory reaction.

It must be remembered, also, that the patient who has been relieved of a source of pain or chronic infection is still an invalid, and is capable of being benefited by all those curative agencies which are useful for the restoration of the health of a neurasthenic, anemic, dyspeptic, or otherwise

vitaly exhausted invalid. The resources of hydrotherapy and electrotherapy, and a carefully graduated course of massage, Swedish movements, and Swedish gymnastics, applied by the aid of the exact indications of the dynamometer, under the supervision of an experienced and discreet instructor, are of infinite value in the restoration of such a patient to a state of physical soundness. To send direct from the hospital ward to her home, or to a fashionable seaside hotel, where she must be subjected to conditions which, to say the least, are not the most suitable for a delicate invalid, a patient upon whom the operation of ovariectomy has been performed for the relief of an exhausting malady which has existed for years and has reduced her to a state of chronic invalidism,—to send away a patient, neglecting to give her the benefit of the powerfully recuperating and vitalizing means afforded by a proper use of baths, electricity, massage, and systematic gymnastics, is, in my opinion, a course well calculated to invite the continuance of chronic invalidism, and to deprive the patient of a large share of the benefit which the resources of modern rational medicine are capable of securing her. The surgical procedure, in cases of this sort is only the initial step of the process by which the patient may be led out of her life of misery, uselessness, and suffering, into one of physical soundness and usefulness. It is often difficult to convince the patient of the necessity of supplementing the surgical procedure by the non-surgical therapeutic means referred to, and it not infrequently happens that patients do recover, in time, a very satisfactory degree of health and vigor without the employment of such means; but my experience in the management of this class of cases has been sufficiently large to enable me to say with a good deal of confidence that, while this is true, it is equally true that the convalescence following a successful surgical operation may be greatly shortened, and the value of the ultimate

results obtained may be vastly increased, by the subjection of the patient to a course of systematic health-culture and training after the operation.

By such a course of treatment, intelligently managed and continued until convalescence is not only well established, but until the progress toward health has been brought to such a degree of advancement that the patient may be considered to be upon a solid footing, she may be insured against the frequent relapses and prolonged weakness and invalidism which not only dishearten the patient, but often discourage the friends and bring surgery into disrepute, and lead other women whose lives are in the highest degree wretched and miserable, from chronic intractable ovarian or tubal disease, to decline the only means which offers them any hope for radical and permanent relief.

Many cases which would otherwise receive little or no benefit from removal of the tubes and ovaries, the seat of chronic disease, owing to the presence of the condition termed by Glenard and other French writers enteroptosis, in which general prolapse of the intestines and other abdominal viscera maintains a constant state of irritability in the abdominal sympathetic, and through this the entire nervous system, may be, by a proper course of treatment and training subsequent to the operation, restored to sound health and useful activity. The after-treatment of these cases is certainly a subject to which abdominal surgeons should give more attention. After the surgeon has done his work as a specialist, if he is not prepared to give the patient such advantages as are required for building up her wasted energies and expediting the establishment of nervous equilibrium, he should send her where she may have such advantages, and in so doing he will have the satisfaction of achieving success in many cases which with different management will bring him only disappointment and professional discredit.

## Evangelistic.

---

### A DAY AT LEBANON DISPENSARY.

It opens at 8.30 a.m., but long before that, as early as 5 o'clock, patients begin to arrive, for they come from very long distances, some even from Hauran (the old Baohan) and some from the "coasts of Tyre and Sidon;" they are obliged to start early, so as to perform the journey before the heat of the day begins. The work commences with a short Arabic service, to which all present listen attentively.

Then there is a busy time when, one by one, the patients go in to see the doctor, passing from his room to the dispensary to obtain their medicine. This goes on briskly till twelve or one o'clock, when the dispensary is closed, and quietness settles down on the scene, for everyone must rest indoors during the time of great heat.

In the evening work begins again. There are prescriptions brought to be made up, dressing to be done, etc., and the dispensary is always open for accidents. Sister Alice spoke of the great need of surgical appliances for the treatment of cases that come.

Then she described some of the work out of the dispensary. Some who have seen the doctor must be visited in their homes and there is scarcely a house in the village where the "mission ladies" are not welcome guests and friends; so day by day the work is being carried on, the

#### MEDICINE FOR THE SOUL

being carried in hand with that for the body.

Sister Alice pointed out that this was just the work needed in the Lebanon. The words they hear are scattered all over the country. They retail to their friends who have not been to the dispensary all that the "mission ladies" have said, for there are no daily papers to gossip over; so the seed is being scattered broadcast over the land and God has promised "My words shall not return to Me void."

The visiting of the families round us makes a large circle for us and, taken in connexion with attending to the dispensary patients we see, gives to three of us quite as much as we can do. In the morning it is a deeply interesting sight to see the patients collected and sitting patiently waiting their turn. A sister sits beside them often and is able to minister to many a weary and burdened soul and to tell them at the same time of the Good Physician.—*Open Doors.*

## AFRAID TO DIE.

A man brought a card for me this morning with a request to go and see a woman in the East Street. She is very ill and cannot live very long and I was obliged to tell her so. She was very frightened, saying, "Give me some of your medicine that will cure me, for I fear to die," and taking my hands in hers she laid her head down on them and cried. I stayed as long as I could with her, telling her of Jesus, that He would take away the fear of death and begging her to believe in Him. She had two dear little children and I asked if they were hers; she answered, "Yes, can you not

CURE ME FOR THEIR SAKES?"

While I was speaking to her the room filled with men; but I was too taken up with her to ask them to go out. Turning my back on them, I told her over and over again that Jesus loved her, that He died for her and that her idols could not help her. I cannot explain fully in writing the solemn time we had together; for I felt sure that I should never see her again on earth, as over and over again it happens that we see sick ones and then if we cannot cure them they will never let us into their houses again.—*Mrs. Belcher, of Liang-chau, Kan-suh.*

---

"We would close the report of medicine work by saying that we are rejoiced at this opportunity of again seeing some one regularly sitting in the dispensary and pointing to the Great Physician, of whom it is written: 'Who forgiveth all thine iniquities; who healeth all thy diseases.' The daily and constant prayer is that the Great Physician may honour our labour and forgive and heal."—*Report of Arabian Mission.*

---

 BATANGE, WEST AFRICA.

"The number of patients increased until we treated forty-five a day and sometimes as many as twenty-five were sleeping in a space fit for fifteen.

From April 10th to September, Mrs. Gault held meetings in the hospital every day. At least a few people have expressed a determination to accept Christ as their Saviour. Many of them often express their gratitude to God for sending help to their suffering bodies. Patients came from four days by canoe up the coast and fifty miles down, and twenty miles up the Lobe river. During ten months we had six hundred out-patients and eighty in-patients.—*Florence Roberts, in Woman's Work for Woman.*

## MOOLTAN MEDICAL MISSION.

Miss Eger, M D, writes that since the reopening of the dispensary and hospital a good work has been done. Some difficulties at first arose, but by-and-by the women began to come freely, 1106 out-patients being registered in the first three months.



## SHANSI MISSION.

## IMPORTANT MEDICAL WORK.

Dr. Atwood, of Fen cho-fu, sends a striking account of the work done by his native medical assistant, who had accepted an invitation received from the Governor General of Yü-lin-fu, in Northern Shensi, to go to that place and establish an opium refuge. It seems that this invitation came about through the agency of an official, Huang Ssu-yia, who last year was treated with success in Dr. Atwood's opium refuge at Fen-cho-fu. Dr. Atwood says that recent events seem to show that their hopes that this man had been really changed by the power of the Gospel were well founded. The people of his city say that he is a changed man and that he is living a righteous life. Dr. Atwood writes:—

“On arriving at the city the medical assistant, Mr. Li, visited the principal officials of the city, including the Governor General and Taotai or mayor of the city, in company with our Huang Ssu-yia.

“After consultation it was decided that the refuge should be opened in the city examination hall, which is very large and spacious. On opening the refuge, sixty-four people were received to go through the treatment, most of them being either civil or military officers, four being the wives of officers. One of the number was the acting mayor of the city. The assistant treated him daily at his yamên, only a few steps away from the refuge. Another distinguished patient was a son of the Governor General. Many excellent opportunities were faithfully used to present the truths of the Gospel and in some cases the truth was listened to with marked interest. The acting mayor especially listened to the truth with many expressions of interest. His real official post is in the capital of the province, Si-an-fu. He is located at Yü-lin-fu temporarily. He is soon to return to his post in Si-an-fu and he told the assistant that when he did so he should send an invitation to us to come to that city and establish an opium refuge. Thus we have in prospect an ‘opium refuge extension,’ and indefinite possibilities of opportunity for doing good.

“Quite a large number of religious books were disposed of to these officials and daily prayers, with preaching, were regularly maintained even

against opposition at first from some sources. It has been quite an experience for the assistant and he has developed under it wonderfully. He returned covered with dust and glory, bringing a 'tablet,' with the inscription on it in large gilt letters, 'Humility Saving Men.' 'To Mr. Li, of the Christian Church of Fen-cho-fu, from the officers and citizens of Yü-lin-fu.' Then follows a list of between forty and fifty names. The tablet was presented with a large firing of crackers, and a large number of officials, mounted on horses and in their official robes, escorted him out of the city gates. Besides the number of opium habitués treated, there were a large number of sick people treated and some minor surgical operations were performed that seemed very wonderful to the people in this far-off corner of the empire. The city is within three miles of the great wall and forms a customs barrier for the trade going into this part of Mongolia."

Of the opium refuge in Fen-cho-fu, Dr. Atwood says:—

"The work in Fen-cho-fu has grown out of all proportion to our accommodation and some of the time we have turned away larger numbers than we took in. The number successfully treated is more than double that of last year and the number of dispensary treatments is just about double that of last year. Our medicines are running short. I have sent out no orders for drugs this year because of prospect of a cut in appropriations. What shall we do with this tide of work pouring in on us and nothing to stem it with? The women's work and the regular hospital work is turned out of doors. What shall we do about it?"

---

## KOREA.

We insert the following extract from a letter written by I. Hunter Wells, M.D., Pyeng-yang, Korea:—

Pyeng-yang was the site of the decisive land battle of the Japan-China war. This beautiful place is the historical centre of the country. Its history teems with interesting stories—legendary, semi-legendary and true—of love, conquest and conflict since Kija, its founder and founder of modern Korea, set up his government here, about the time that king David was reigning in Jerusalem. Judea, in the meantime, has suffered most radical changes, while here there is much that is as Kija left it. This is true of the people and some of their customs.

Following the war came the cholera and the few of the timid inhabitants who had not fled from the horror of the former ran away from the terror of the latter, so that when I first arrived here in September, 1895, the city presented a sad sight. Deserted and dismantled houses, blackened ruins,

demoralization and decay. The shifting political scenes which culminated in the murder of the queen, and later the flight of the king to the Russian Legation, have not given the people an exalted idea of the stability of things. They are, however, used to that sort of thing. At the present moment business of all kinds is prospering. A newspaper conducted honestly and fearlessly is becoming a power for good and all the signs seem to point to national and material prosperity.

The readers of *The Church at Home and Abroad* are familiar with the work here from the letter of Messrs. Moffett and Lee.

The first sowing of the seed was many years ago by men long since departed. Rev. Dr. Underwood with his wife visited this place several years ago and there was constant itinerating through a period of several years by Rev. S. A. Moffett and later by Messrs. Moffett and Lee. The heroic service of the late Dr. Hall and wife, of the Methodist Mission, continued by their successor, Dr. Follwell, also deserves mention. The Roman Catholics have not been idle.

Since last November it has been my privilege to make two very interesting itinerating tours with Mr. Moffett into adjoining regions. In the two there were 105 catechumens received of some 150 who applied and twenty-eight were baptized. Over 400 patients were seen and prescribed for, spiritually and medicinally. Here, in Pyeng-yang, during the same time, our church has been enlarged twice and now has an average attendance of about 250, counting women and children, who are often left out in the Orient. Children are not counted until they have the small-pox or measles or scarlet fever. The additions to the rolls since October here and in the adjoining districts are 297 catechumens and sixty-two (62) baptized, with work growing in every direction.

The medical work has had to do with over four thousand patients during the same short time and with very poor and slight facilities. I have nevertheless performed two major amputations, one of a leg and one of an arm, both highly satisfactory and successful; extracted cataract with perfect result in restoring sight to a man totally blind for several years; besides other eye operations and surgical work.

Things are now running along smoothly and in a few months our little hospital and dispensary will be put up where with a trained nurse we could, in the course of a year, take care of several hundred patients, doing any operation of modern times, and attend to the thousands of dispensary patients who are constantly coming—though the average now is only between twenty and thirty a day.

Our houses, under Mr. Lee's skillful superintendence, will soon be ready for occupancy.



Such, in brief, is the situation here at the present moment. That the Holy Spirit has blessed and is blessing us in all our work is evident and we all feel the responsibility resting upon us.—*The Church at Home and Abroad.*

---

Speaking of the way in which the reading of God's Word becomes fruitful, the Rev. T. J. Arnold, Wuhu, Province of Anhui, says: "I will only mention one individual case. A boy of fifteen went for treatment to a Mission Hospital in Nanking. During his stay he learned to read the New Testament. When he returned home a copy was given him. He told me that he reads it every day, has worship in his father's house and that their shop is closed on the Lord's day. When anyone is sick or in trouble, this bright little fellow takes his New Testament and reads to them a portion. With a beaming face he told me that on doing this the sickness or trouble was removed. He showed me the book with a look of genuine pride and indeed it bears evidence of having been frequently read. Such simple faith is refreshing and we are constrained to believe that it is honoured of God, even in those who know Him but imperfectly."—*The Gleaner B. F. A. S.*

---

## SOUTH CHINA MISSION.

### CONTINUED GROWTH.

Dr. Hager, of Canton, in making his half yearly report, alludes to the prevalence of the pestilence called "the black plague," on account of which some of the schools have suffered. But this has been the case only in Hongkong. Dr. Hager writes:—

"In the country five schools have been maintained and the work on the whole has been more successful than in any previous year. They are all doing good and thorough work and it is no uncommon thing for the pupils who are still heathen to come with their teachers to our chapels. One teacher's influence over his pupils is especially beneficial, the villagers themselves furnishing rice to the teacher because he is held in such high esteem. I recently visited one of these schools and the scholars all declared that the idols were false. The high school that we started is doing very well thus far and the pupils seem to be industrious, having already committed to memory a shorter catechism. The village in which the school is held is well disposed towards Christianity and there are a great many who are persuaded of the truth.

"In another place we held a service under the shade of a banyan tree and received into the church a man partially paralyzed. He had heard the Gospel for a number of years, but was principally impressed with the truth through

the influence of a fish dealer living in the same village, who is a very earnest man and zealous of good works. Philip-like he brings many a one to Christ, so that there are in his village now six baptized persons and three others not far distant. It was an unusual sight to see about a dozen Christians celebrate the Lord's Supper under the shade of the banyan tree, in the open air, with all the heathen looking on.

"In the out-stations twenty persons have been admitted into church membership during this half-year and *seven* children baptized, while in Canton there have been seven adults received and four children baptized, making in all twenty-seven adults received and eleven children baptized. Slowly the work is growing, and the Master often gives us a glad surprise of finding some seed germinating where we had least expected to find anything. During the same half-year on the five journeys made, during which I camped probably some fifteen weeks, I have been enabled to treat 600 patients and extract nearly 300 teeth, which is more than I was enabled to do last year during the entire twelve months.

"The principal feature of the half-year, however, has been the opening of *three new out-stations*, a thing never attempted before in any one year in the history of the mission. Because of the present financial crisis, and reduction of my own estimates to fifty-one per cent. of the sum asked for, it might seem to be a question whether this were a wise move, but I went forward and I think we shall be able to make both ends meet.

"At two of these newly-opened chapels we held a communion service, while at one of them there are already a number studying the truth. The chapels are fitted up neatly and commodiously and only in one instance has the expense exceeded our expectations. In one of these places the people are very friendly and in traveling some twenty miles back and forth I seldom heard a vile word uttered against us by the Chinese, who in other parts of our field are very bitter against the Christians, so much so that they have threatened to burn their houses and to kill them and me if we continue to worship in the village. We most earnestly hope that the mission of these newly-opened chapels will be a prosperous one. We need very much a larger building for our Hoi Ping church, which is the largest church of our mission. Cannot some kind friend of the mission give us \$200 or \$300 so that we can carry on God's work a little more satisfactorily where we are not so cramped?"

---

## Notes and Queries.

---

### BORAX FOR PREVENTING RUST ON SURGICAL INSTRUMENTS.

1. In the *Presse Médicale* for June 6th M. Marechal says that borax solution will prevent the accumulation of rust on surgical instruments, such as bistouries, scissors, needles, and forceps. They may be allowed, he says, to remain in a two-per-cent. solution of sodium borate for a year or two and when they are withdrawn they will be found to be perfectly intact.

2. Can anyone recommend a good hair-wash?

3. The following is the cheapest, and one of the best, of cough mixtures for Chronic Bronchitis:—

Pulv. Acaciæ	dr. iii.
Sacch. Pure	oz. iv.
Picis Liq. Pure	dr. iii.
Liq. Potassæ	dr. ii.
Tr. Scillæ	oz. i.
Aquam Bullienti	oz. iii.

Mix the Acaciæ, Sacch. and Pix together, then add the potash and boiling water. Mix. Fill up to make a pint. Shake well and filter through fine muslin into stock bottle. Colour *Light Brown*. Dilute 6 times for med. and of this take oz. i. three times a day.

4. Can any one tell what is the drug which river robbers use for stupefying their patients when robbing a boat? It is much used on the River Han and seems to be a fumigation which is sent into the boat through the cracks. A patient seen not long since at a mission hospital, thus treated, was unconscious for some hours and ill for a day. When seen, more than twenty-four hours after, he had dilated pupils and dry mouth, as though the drug used was of the same class as belladonna. He stated that whilst under the influence of the drug he saw all that the robbers were doing, but could neither move nor cry out.

### 5. HOW TO MAKE A TURPENTINE STUPE.

Take one teaspoonful of pure Turpentine and two breakfast cups of hot water. Mix well together and wring out the flannel in the same several times until all the Turpentine is absorbed. Then place the flannel in a roller towel, pour boiling water over the towel and wring out quickly.

## Review.

---

### 化學辨贊 *Jas. B. Neal, M.D.*

This book, we are informed in the preface, is substantially a translation of Clowe's Analytical Chemistry, supplemented by one chapter from Fownes' Manual of Chemistry. There seems to be a fashion springing up of translating foreign works and putting the name of the translator as that of the original author, so that such an one's translation of an author's work appears in catalogues and other places as such an one's Chemistry, Physics, etc., as the case may be. We are glad that Dr. Neal has followed the worthy example of that veteran translator, Dr. Fryer, and told us whose Chemistry it is that he is giving us in a Chinese dress.

In opening this interesting and useful work we are struck at once with the urgent necessity for an immediate agreement upon the subject of Chemical Terminology. Every new work issued from the press only makes confusion worse confounded, and any system that can be agreed upon, even though far from being the best possible, will be decidedly better than the present multiplication of systems, which are very confusing, both to teacher and student. Dr. Neal has not given us many new terms, but has found it necessary to make use of in some instances of both the terms of Dr. Fryer and Dr. Kerr.

Dr. Neal informs us that his book is the result of work done in class with successive batches of students. This is in itself a great recommendation of the work. A teacher finds out in class work what is best adapted to his students, and a book thus produced is far more likely to meet their needs than one produced in the study alone. This manual is intended specially for la-

boratory work, and we agree with the translator when he says that if Chinese students are to acquire a practical knowledge of Chemistry they must acquire it by work in the laboratory rather than by theoretical study. We are inclined to think, however, that in this book too little is said on the subject of Chemical theory. While it is quite true that experimental work is of supreme importance in the study of Chemistry, it is nevertheless absolutely necessary that the beginner should be well grounded in Chemical theory. Otherwise the formulæ for Chemical reaction, given in tables in such works as this, are in danger of being degraded to the level of the recipes in a cookery book. Such immense strides have been made of late years in Chemical discovery that many of our Chinese school texts have fallen behind, and most are deficient in their account of theoretical Chemistry. In this excellent work for example the term used for valency, 適合, will, we think, convey very little meaning to the Chinese student as the subject is not explained at all so far as we remember, a subject which is most important for the proper understanding of Chemical combinations.

The first two chapters deal with Chemical apparatus and Chemical operations. Under the first head the common necessary appliances are described, and some very good directions are given, calculated to help the learner in the use of apparatus. Great stress is laid upon the necessity for perfect cleanliness in all operations. This is a point which Chinese students often fail to appreciate, and operations are spoiled or results vitiated for want of cleanliness in the use of appliances. All teachers who

have had any, even the smallest experience in teaching elementary science to the Chinese, know how difficult it is to get them to keep apparatus perfectly clean and to be neat and cleanly in their operations. "Ch'a puh toh" is a great phrase with a Chinaman, but it is a poor working formula for Chemistry, and it is well that Dr. Neal had laid stress upon the necessity for care and cleanliness in conducting all Chemical experiments.

In the following chapters the usual methods of analytical Chemistry are described, and some very useful tables illustrating Chemical reactions are given. These tables are very well and clearly arranged, and as they can be seen at a glance they will be found most useful to the student.

The book is well got up and is very convenient as a text book. The headings of the sections are printed in red, so as to

catch the eye and the style is well adapted to the subject matter. We have noticed some misprints and one or two slight inaccuracies of statement. For instance, at the end of page 13 it is said that there are no elemental substances with which oxygen does not unite. Fluorine is mentioned by Roscoe as being an exception.

We conclude by saying that we are greatly pleased with this book, and hope that it will be found useful in our schools. Every book of this kind is a helpful contribution towards the enlightenment of China, and this work in particular has for its benevolent object the aiding of medical students in the acquisition of the necessary knowledge and skill which will enable them to minister to the physical well-being of their countrymen.

J. J.



## Correspondence.

*Ch'ao-chow Fu, Swatow, Sept. 2nd, 1896.*

MY DEAR HODGE :

Herewith answers to your questions on opium. I think it is a pity you did not solicit opinions on opium *v.* alcohol and the social effects of the habit. The misery caused in smokers' families, even when they are what are called "moderate" users, is very great. The pro-opium party's trump card is:—Opium in China is on a par with alcohol at home. Of course it is not. Opium is immensely the more powerful and seductive narcotic, etc., etc., as I have tried to point out in my letter to Dr. Atterbury, published in Vol. X., Nos. 1 and 2. I hope the answers are coming in well, and that there is an absence of the somewhat wild statements that righteous indignation sometimes leads to, statements that do great harm to our cause.

What is wanted now is not opinions; we have oceans of them, but statistics. If all the members of the Association will set themselves to gather statistics from all the opium smokers they come across we shall soon have some weighty arguments to use. I suggest the following headings:—

I. Age.

II. Age when commenced to "play" with opium pipe.

III. Age when noticed that the "yin" was established.

IV. Duration of habit.

V. Reasons for smoking.

VI. Reasons for stopping.

VII. Results of the habit.

a. On the disease it was taken to cure or alleviate.

b. Physical effects.

1. Nutrition

{ Normal,  
{ Diminished,  
{ (Emaciation),  
{ Increased.

Noting carefully the conditions as to food, work and health, as these sometimes cause the emaciation.

2. Appetite { Normal,  
{ Diminished,  
{ Increased.

3. Ability for work { Diminished,  
{ Normal,  
{ Increased.

Food, work and health also to be taken into consideration.

4. Constipation.

5. Generative functions.

c. Opinion of relatives { Employer,  
{ Neighbours.

d. Moral effects.

Do people respect and trust him as much as before he smoked?

e. Effect on family.

Average (earnings) (income).

Amount needed to support himself and family.

Proportion of income smoked.

f. Effect on business.

VIII. Daily average value of opium smoked.

Maximum.

Minimum.

IX. Daily average quantity.

Maximum.

Minimum.

X. Kind of opium used.

Perhaps others may suggest themselves to you. I propose you print sheets with the above headings and columns for answers and send them to all the members, so that each may report one or two hundred cases. If these sheets lie on our consulting room tables we shall be able to fill them up before very long.

With kind regards,

Yours sincerely,

P. B. COUSLAND.

P. S.—Two other headings suggest themselves to me :—

Occupation.

Smoke at home or opium divan.

P. B. C.

[We did not solicit opinions on the relative harm done by alcohol and opium, because we consider that the two things cannot be compared at all.

We will gladly publish forms, such as Dr. Cousland suggests, if the other members of the Committee agree. Will the members of the Opium Committee kindly communicate with Dr. Hodge? ]

*Ch'ao-chow Fu, Swatow, July 21st, 1896.*

DEAR DR BEEBE :

I think there would have been some response to your letter in the December Number if you had formulated a more detailed scheme and had taken up and considered the difficulties. I thoroughly agree with you as to the advisability of some standard of medical education being fixed upon and the necessity of a Board of Examiners, but I fear that the carrying out of the examination is not very practicable. I do not think that students from distant parts would go to the central point. I can speak for the men here. For one thing they could not afford it. Then there is the difficulty of the different vernaculars. How could oral and clinical examinations be conducted with men from places where the vernaculars are not the same as that at the examination centre? It seems to me that these are the most important methods of estimating a candidate's attainment. Mere book cramming the Chinese are adepts at. What is much needed is to test his ability in diagnosis.

How would some such plan as this do? A Board of Examiners to arrange course of study, text-books, etc., and to fix standard of requirements. The Board would meet once or twice a year to set examination papers, which would be sent sealed to such of the medical missionaries as reported

applications from students for examination.

These to be opened on a certain date, the answers written in presence of the foreigner, and sealed and forwarded by him to the secretary of the Board of Examiners.

As to the clinical and oral examination, Boards could be formed as found most convenient, and the central Board of Examiners could try to arrange that as far as possible there be some uniformity of standard at their examination.

The whole subject bristles with difficulties. Many of the present text-books are quite inadequate. How then is a standard to be fixed? Then there is the question of terms. To my mind that is the most pressing problem at present. We can make no advance; there is no inducement to do any translation work until some agreement is arrived at and a number of the present unsuitable terms are changed and needed new ones fixed upon.

Will you kindly send on this letter to Dr. Hodge for publication. It may help to keep the ball rolling,

Yours very sincerely,

P. B. COUSLAND.

CHRISTIAN HOSPITAL,

*Nanking, November 7th, 1896.*

DEAR DR. HODGE :

Nanking is a very malarial place, and we have all forms. I wish to speak of some of the effects, especially on the liver. We are very unfortunate in not being able to hold autopsies on our cases, but I have tried to bring up a mental picture for treatment, by comparing cases that come to me. Very commonly we see cases of very large spleen and the liver rather contracted, which have lasted for years, and if the disease has started in childhood the patient is very much stunted in growth, and there is a great deal of the malarial dyscrasia. These cases are too far gone for treatment. As far as I can see they usually end up with severe ascites and dropsy of the lower

extremities. I believe such cases are due to cirrhosis of the liver, and I am strengthened in this view, because last year one of my colleagues had a foreign dog suffering with dropsy of its hind quarters, and on opening the belly there was found a very hard cirrhosis of the liver of the hypertrophic variety, such as I have seen at autopsies at home and attributed to drink.

Cases similar, but coming under treatment earlier, have the enlarged spleen and a very much enlarged liver, with regular malarial attacks. I have seen many of such cases in children, and they respond to anti-malarial treatment. These cases are very common with us, and I would like to hear the opinions of those who have studied these diseases longer than I. Is cirrhosis of liver common in China and due frequently to malaria? Another common trouble I meet is stricture of the œsophagus, and I often am treating several cases at the same time. First there is inability to swallow solids, then inability to swallow fluids, and the patients die of starvation as they refuse operation. There is no pain and no hæmorrhage, and the only complaint is of the difficulty of deglutition. I pass sounds and help them somewhat and keep them alive for a few weeks or months, but by and bye sounds will not pass. I have thus dilated a great many, but in only one did I cause hæmorrhage, and I think that was carcinomatous, but the others are, I think, fibrous. The worst stricture is about the cardia, but there are often wider strictures further up. I would like to say a word about constipation and its treatment in China. Drugs can usually be abandoned, and during the cooler weather all the requirement is lots of fluid. One, two, three or more glasses at night before retiring, and one, two, three or half dozen as required the first thing in the morning. Plain water, aerated water, lemonade will do. This is not original with me, but is sure

just the same. Diet should of course be cared for and suitable fruits and vegetables and grains eaten. Baked pears are the best fruit I know in this country. Tientsin or Shantung pears are baked soft in the oven, and no water is used with them. These are invaluable to the chronically costive. Among vegetables onions boiled soft are the best. During the summer pears cannot be secured, and then stewed prunes and the Chinese Hwa-hung, crab-apples, are excellent. The chronically costive can be relieved. Of course cracked wheat and other wheat preparations, Graham flour, are excellent as cereals, and Boston brown bread the best thing in the bread line.

Sincerely,

W. E. MACKLIN.

*Ch'ao-chow Fu, Nov. 20th, 1896.*

MY DEAR HODGE:

The enclosed circular letter\* was sent out more than a year ago to every medical man and woman in China whose name I could find. Of late I have heard of several who did not receive copies, and so in order that the scheme may receive the widest publicity I am asking you to publish it in the Journal. I had hoped that by this time some definite steps towards issuing it might have been taken, but in the present transition state of medical terminology it seems better to delay for a while. As the Committee on Terminology is now hard at work perhaps by another year the way may be clear.

A considerable number answered the proposal, and the great majority favourably. Only one did not see the need for such a Journal, the objections of the others were chiefly on the ground that it would not pay its way and that the Association could not afford to run it. The financial difficulty is a real one, but if every hospital and dispensary will take a copy for each student,

\* See Notes and Items.



encourage assistants and ex-students to subscribe, and perhaps take a few extra copies or give a donation privately, or from the hospital funds, the Journal should soon be on a paying basis. The London Medical Missionary Society has agreed to give £5 for the first year at least, and perhaps other

subscriptions may be received. The Journal must not be too expensive for its constituency, nor too small to be of any real value. Time and experience will enable the happy medium to be found.

Yours sincerely,

P. B. COUSLAND.



## Notes and Items.

## "IN THE GOOD OLD DAYS."

Gervase Markham, who wrote "The English Housewife" some years before our ancestors left that country, says, "A knowledge of physic is a principal virtue of a housewife." He gives directions to the housewife how to cure most diseases, but confesses that "some fevers may pass the housewife's capacity." He speaks as if each of his remedies were infallible; they were called "sovereign." While none were injurious, many of them were inert, others ridiculous: and here and there it is seen that the essential virtues of some of the most valuable of modern remedies had at least been partially disclosed. For instance, when he directs powdered saffron to be mixed with poppy seed and lettuce seed, and then mixed with woman's milk, to be bound on the temples for sleeplessness, we see that the king of soothing medicines, opium, was even then beginning to be known. For apoplexy or palsy "the strong smell of a fox is exceeding sovereign." For quinsy the patient was to drink a decoction of mouse-ear in ale, and there was to be "a stone rubbed where a hog had rubbed, and then the swelling was to be rubbed with it." Pains in the bones were to be treated with oil of swallows, the directions for making which are "to beat about twenty kinds of vegetables"—which he enumerates—in a mortar with "twenty quick swallows," and butter and wax are to be added. An ancient aphorism, "Every part strengthens a part," led to the use of the most repulsive and unlovely secretions, even to excrements of animals; and there were some which evidently held a mystic element, such as a bone from the heart of a stag, the *left* foot of a tortoise, blood from under the wing of a *white* pigeon, and many more equally absurd, but

used through the authority of the most learned physicians of the time. When we read that for a new cold or cough sugar and aqua vitæ—euphemism for brandy—was to be taken on going to bed, we are reminded of rock and rye of to-day; and when we find that for that parasitical disease very rife in the old times—itch—quicksilver beaten with other substances as an ointment was used, we see that they were on the track of the great destroyer of microbes now universally used as bichlorid of mercury. Nearly every family had its own combination of wax, rosin, turpentine and lard as a plaster for burns, cuts and other wounds; and many of these salves bore the name of some famous physician. In England many medicinal plants were cultivated in gardens, and treatises upon them were written and printed; and the New Englanders planted from seeds brought from the old country sage, hyssop, rue, tansy, wormwood, celandine, comfrey, saffron, mallows, chamomile, Mayweed, yarrow, shepherd's purse, dandelion, patience, bloody dock, elecampane, motherwort, burdock, plantain (which the Indians named white man's footprint), catnip, mint, fennel and dill. A housewife was supposed to know at just what period the virtues of each particular plant were most potent, and when was the propitious moment for its garnering in one of those aromatic attics that formed the pharmacopæial armamentarium of the wise mother. Some physicians followed this vegetable schedule of treatment called galenical in contra-distinction to the chemical—which meant the use of minerals—found to be most efficient in many diseases but from that time to this encountering a prejudice wholly undeserved. A Dr. Balivant, of Boston, is commended forasmuch as "he does not direct his patients to the

East Indies for drugs when they may have far better out of their gardens"; and this simple practice largely prevailed here, while into England, in 1660, there were imported 250 kinds of drugs, animal, vegetable and mineral, on which duty was paid; and so great was the number of substances used that a writer of the time indulges his satirical propensities thus:—

"Doctors are not slow to pour drugs of which they know little into bodies of which they know less."—*New York Independent*.

#### WHERE HUMANITY LANGUISES.

The natives of the Friendly Island, in order to check any spreading ulceration or disease, hack off the limb at a joint, working a sharp shell to and fro, thus making a horrible jagged wound. In cases of delirium, the poor sufferer is invariably buried alive, and it is related that a young man, delirious with fever, was twice buried, and in his frenzy twice burst up the grave, but was again seized, lashed to a tree, and allowed to die of starvation.

Among the natives of the South Pacific Islands generally, "cutting" is the universal remedy for every ailment. If pain in the head is felt, an incision is made over the part "to let pain out;" if diarrhoea is the complaint, then cuts are made over the abdomen; if rheumatism, deep incisions are made over the painful parts; if fever, various parts of the body are cut; this cruel treatment being always associated with propitiatory offering to the idols.

It would be easy to multiply illustrations of the ignorant, barbarous, and superstitious notions of the people in all heathen lands, with respect to the nature and treatment of disease, but the foregoing will give some conception of the need there is for the beneficent ministry of the missionary physician.

#### *No friend of humanity*

—and surely no friend of missions—can think of such heathenish rites and ceremonies performed over the sick and dying, of the inhuman ordeals imposed upon them, and the untold sufferings inflicted, and the holocausts of victims thereby consigned to an untimely and cruel death, without endeavoring to stretch forth a helping hand to ameliorate their sad condition. What an honor would be conferred upon the church were she to avail herself of the privilege, and be the means of conveying, along with the Gospel, the blessing of our great modern discoveries and appliances in medical and surgical science, into those less favored lands, where humanity languishes under the agonies of unmitigated disease! Surely, in the light of the life of our Saviour Jesus Christ, the worse than helpless condition of those heathen nations in the face of disease and suffering, is a loud call to us to share with them the blessings which God has bestowed on us.—*The Missionary Intelligencer*.

"There is no use my trying to be a Christian," said an old Chinese woman; "look at my feet," pointing to her deformed, bandaged feet. "Why, what have your feet to do with it?" asked the missionary. "Oh," said the other; "if I am a Christian I will have to go into the world and preach the Gospel, and I could not travel with these feet."—(From "The Double Cross.")

#### CALLED ASIDE.

Called aside;—

From the glad working of thy busy life,  
From the world's ceaseless stir of care and strife,  
Into the shade and stillness, by thy Heavenly Guide,  
For a brief space thou hast been called aside.

Lonely hours

Thou hast spent, weary, on a couch  
of pain,  
Watching the golden sunshine and the  
falling rain ;  
Hours, whose sad length only to Him  
was known,  
Who trod a sadder pathway, dark  
and lone.

Called aside ;—

May not the little cup of suffering be  
A loving one of blessing given to  
thee ?  
The cross of chastening sent thee from  
above,  
By Him who bore the cross, whose  
name is Love.

Called aside ;—

Hast thou no memories of that " little  
while,"  
No sweet remembrance of the Father's  
smile,  
No hidden thoughts that wrapped  
thee in their hold,  
Of Him who did such light and grace  
unfold ?

Called aside ;—

Perhaps into a desert garden dim—  
And yet not lone when thou hast been  
with Him,  
And heard His voice in sweetest ac-  
cents say,  
" Child, wilt thou not with Me this  
still hour stay ? "

Called aside ;—

Oh, knowledge deeper grows with  
Him alone,  
In secret oft His deeper love is shown ;  
And learned in many an hour of dark  
distress  
Some rare, sweet lesson of His ten-  
derness.

Called aside ;—

In hidden paths with Christ thy Lord  
to tread,  
Deeper to drink at the sweet fountain  
head,  
Closer in fellowship with Him to roam,  
Nearer, perchance, to feel thy heaven-  
ly home.

Called aside ;—

We thank Thee for the stillness and  
the shade,  
We thank Thee for the hidden path  
Thy love hath made.  
And so that we have wept and watch-  
ed with Thee,  
We thank Thee for our dark Gethse-  
mane.

Called aside ;—

Oh, restful thought—He doeth all  
things well—  
Oh, blessed sense, with Christ alone  
to dwell :  
So, in the shadow of Thy cross to  
hide,  
We thank Thee, Lord, to have been  
called aside.  
[From "The Double Cross."]

#### A CHRISTIAN LEPER'S DEATH.

The *Independent* gives an impres-  
sive account by a Presbyterian mis-  
sionary, of the funeral of a Christian  
leper in India. In the fierce glare  
of a summer day, with the tempera-  
ture at 165 deg. "wilting one's  
strength like an attack of fever," the  
missionary had visited the afflicted  
man before his death. "If," says he,  
"I had fancied that I must hasten to  
sustain the failing faith of an igno-  
rant convert, whose gathering calami-  
ties must be driving him back to the  
trust of his earlier and happier days,  
I was soon rebuked. His faith seem-  
ed as strong, his doubts as few, as my  
own; in evident bodily distress, his  
words were all in praise of God's  
goodness, and trust of His grace.  
My visit was little needed, except  
to show sympathy with the poor  
sufferer, and the kind companions  
in affliction who gathered about him,  
and to commend these "little ones"  
to the Great Heart of Love.

Early the next day we were not  
surprised to hear that the poor leper  
had passed away. In that fierce heat  
the funeral must perforce take place

the same evening. I called in the aid of a few native Christian friends, for there were not whole hands enough among these leper men to hold the ropes which should lower their brother into his last resting place. Even with these helpers it was found best to carry the corpse laid out upon its light bed and the heavy coffin separately to the graveside. Here I found them, in a quiet God's acre just outside the village wall—the still, straightened form, under its white sheet, quiet friends sitting around, and the silent hush of evening above. The grave diggers were still at work, but made almost no sound. Presently the grave was pronounced ready. The voice of prayer and song and exhortation broke the stillness. Then the kind leper friends gathered thick about the grave to cast in “dust to dust” with their maimed stumps of hands, and thus poor Bipat ‘affliction,’ ceased from his affliction.”

---

“FAITHFUL UNTO DEATH.”

“Can we say, with Dr. Grant (when tempted to leave his work): ‘I have solemnly vowed, in the presence of men and angels, that I will consecrate myself and all I have to the Lord; and I dare not go from that altar to stand impeached before an assembled world of having been an unfaithful steward, of having loved the world more than God, more than the souls of my dying fellowmen?’

“Who follows in his train?” With the best medical knowledge, surgical skill, consecrated to go forth like the Son of man, ‘not to be ministered unto, but to minister;’ ‘and into whatsoever city ye enter, . . . heal the sick that are therein, and say unto them, The kingdom of God is come nigh unto you.’

*Are you helping in this work?*

“This I saw, that when a soul

loves God with a supreme love, God's interests and his are become one. . . . It is no matter when or where or how Christ should send me, or what trials He should exercise me with, if I may be prepared for His work and will.’—*David Brainerd.*”

---

FOOT-BINDING.

Mrs. Archibald Little writes, Ch'ung-king, September 16th, 1896: “I do hope the Memorial has gone to the Emperor, but have not yet heard. For eighteen days now not a mail bag has reached us, though they ought to arrive every five days. It rains still, and roads and bridges are washed away. Mr. Little predicted from the beginning of the summer that there would be a flood in the autumn. The prediction is likely to be realised.

All business is stopped by the rain here, and to-day, to make a variety, the bristles men, who sort and make into bundles the pigs' bristles, have struck.

It will certainly interest many more than the recipient of this letter to hear that Mr. Falls, C. I. M., writes from Sui-fu, the large thriving city at the confluence of the Min and Yang-tze on the highroad from Chentu, the capital of Sze-chuan, to Yün-nan Fu, on August 29th: “You will be glad to hear that through our efforts in widely distributing anti-foot-binding literature, preaching and teaching its errors and setting an example among our own people, outside-s have now taken the matter up, and to-day have been distributed upon our streets and posted up about this city several thousand copies of a good tract written by some of the leading Masters of Arts in this prefecture against this cruel practice. It is a magnificent treatise, and backed up by such influential men must do some good.

This movement is no doubt the direct outcome of our vigorous movement here and we trust it will grow. If you have any more of the tracts (done into Wên-li by Rev. T. Richard) I should be glad of some more, as the "Triennial Examination" is announced for next month and I would like to be well stocked by the time the students come."

Mr. Uprcraft (American Baptist) had already "brought the good news from Ghent," *i.e.*, Sui-fu, together with a copy of the appeal, signed and sealed by Mr. Chow, a Chü-jen and well known, also signed by five other well known literati with an endorsement of his views. There have already been indications of a Chinese movement against foot-binding higher up the river amongst better class people in country houses, as far as we know untouched by missionary influence, but this appeal, with its reference to intelligent men who agree with the writers in Hong-ya and the other cities, seems to point to some kind of Chinese organization and we hope soon to hear more. Already several young men of good position have assured us of their resolution not to permit the binding of their little daughters. We are having the Sui-fu appeal reprinted here and hope soon to be able to supply copies, either for posting or in tract form. It is evidently what Chinese think will affect Chinese and more especially adapted to the district in which it is being first circulated, where in the hills around women must often be in peril from robbers, or rebels; yet there are some passages that must tell all over China, in especial where the writer contrasts the punishment of a robber, who is beaten in the Yamên and recovers in a fortnight, with the punishment inflicted upon an innocent girl, who, if she has her feet bound, suffers from them all her life long. We observe also that these Chinese gentlemen, addressing Chinese, do not hesitate to speak of the pains of foot-binding

in terms which would hardly be tolerated by some of the foreigners in Shanghai, who cannot believe in mothers being so cruel to their little girls. 'Tis true, 'tis pity. Pity 'tis, 'tis true!

It only now requires a long pull, a strong pull and a pull all together, and this hideous custom of 1000 years will become despised and the women of China once more set upon their feet again.

Mrs. Little's letter is a rebuke to those of little faith. China is moving. We can see the glimmering of a brighter day. Millions and millions of tortured women will soon be relieved of the pain they have had to bear. The Sui-fu gentry see the thing as we see it and in this there is hope. Their example will undoubtedly be followed in many places. This good movement should then be warmly encouraged. It is one of many social benefits conferred by Christianity that such evils as this disappear before its beneficent advance.

---

#### THE GRACE OF LOVE.

To my mind there is no working of love like the sending of the Gospel to the perishing souls of men at the ends of the earth. I grant that charity, in a true and important sense, begins at home and if we had no home church to draw from, the supplies of charity for the heathen would soon fail. But I confidently ask if home charity, needful and precious as it is, is as lofty a kind of charity as that which deals with want and woe, enforced by the naked claim of humanity in distress. The man who simply provides for his own is a very useful member of society; but he is not taken as the type of a philanthropist any more than the man who wept not, because the death had happened in another parish, is accepted as a type of sympathetic sorrow. Our Lord rebuked these limitations in the parable of the Good Samari-

tan; for there is here a sting of lofty philanthropy indignant at any barrier which would circumscribe the outflow of love to the whole human race. Is it not an exalted feature of British commerce, that every great calamity strikes to its heart, so that immediately a subscription is opened on every Stock Exchange? But why should missions be less expansive and the soul be less provided for than the body?—*Lord Cairns.*

---

CONSECRATED MEANS.

The humblest life becomes sublime when it takes hold upon God's plan, and helps to work it out. The noblest powers of earth take their supreme inspiration, their coronation and glory, from contributing to the Divine plan. And that will be a joy to us when heaven is opened, for we may look on the earth and say: "I saw that purpose and I worked to accomplish it. I gave money and time and labour and life to that supreme endeavour." There will be a joy which the harps of saints cannot fully bear, and the lips of the redeemed cannot fully utter. The magnificent privilege of life is to take part in this work and do it with all our might, and do it unto the end.—*Rev. Dr. Storrs.*

---

"IT LAUGHS ALL THE WHILE."

One of the most pathetic incidents of the yearning of the human being for the Divine is that related by Bishop Whipple, of Minnesota. "Some years ago," he says, "an Indian stood at my door, and as I opened the door he knelt at my feet. Of course I bade him not to kneel. He said: 'My father, I only knelt because my heart is warm to a man that pitied the Red Man. I am a wild man. My home is five hundred miles from here. I knew that all of the Indians east of the Missis-

sippi had perished, and I never looked into the faces of my children that my heart was not sad. My father had told me of the Great Spirit, and I had often gone out in the woods and tried to talk to Him.' Then he said, so sadly, as he looked in my face: 'You don't know what I mean. You never stood in the dark and reached out your hand, and could not take hold of any thing. And I heard one day that you had brought to the Red Man a wonderful story of the Son of the Great Spirit.' That man sat as a child, and he heard anew the story of the love of Jesus. And when we met again he said as he laid his hand on his heart: 'It is not dark; it laughs all the while.'"

---

"HE MUST BEGIN TO STUDY."

"When a man has become an inpatient in a hospital, where probably he must lie in bed for several days or weeks, and while under treatment must observe unselfish, unpaid for, skilful attention from the Christian surgeon or nurse, he must begin to study about it. It is then his heart will melt and open. For the first time since he was born he will realize what benevolence is. This sense is fundamental to any apprehension of the Gospel. It is also index of a radical change in the man's estimate of the missionary as a representative of the Gospel. The Christ-like has dawned on the heathen.

Still further, when the patient shall have recovered and returned to his home, he will carry the report and spirit of the place where he has found healing. Again, as in Christ's time, the mercy shown becomes authentication of a heavenly mission. Dr. Gillison, of Hankow, told us that he had often been thrilled with the deepest emotion to observe the awakening of appreciation, and so of a man's moral sense, as if by miracle,

as the result of some slight attention bestowed on a patient.

It might be from only the tucking in of a man's foot exposed to a draught of air. He further testified that as the result of two operations for cataract on the eyes of two sisters from one household a village was opened to the Gospel, nearly a whole clan was converted, and a promising church organized."—*Rev. Henry C. Mabie, D.D., Sec. A. B. M. Union.*

THE SIMULATION OF DEATH BY  
INDIAN FAKIRS.

An interesting account of this subject was recently given by Dr. Kuhu to the Anthropological Society of Munich and reported in the *Journal de Médecine de Paris*, an abstract of which is published in the *Province Médicale* for October 26th. Dr. Kuhn, says the writer, had had occasion to observe two cases, the genuineness of which he had no reason to doubt. One of the fakirs in question had been interred for six weeks and the other for ten days. The fakirs, who are hysterical to the highest degree, possess the faculty of producing artificially a condition identical with cataleptic ecstasy. They use all possible means, such as mortification of the body by a special diet, the internal employment of different plants known only to themselves and the adoption of a peculiar posture of the body for many hours, etc. When they have practised this for a sufficient length of time, they assume one of the postures prescribed by the sacred books of the Indians and fall into a hypnotic condition induced by looking fixedly at the end of their nose. Hasheesh is still made use of by them to diminish the respiratory force, for this hypnotic, when associated with other plants and employed in a peculiar manner, makes up for the loss of air and nourishment.

The fakirs have hallucinations when hypnosis begins; they hear certain sounds, they see angels, and their faces express a feeling of happiness.

But, little by little, consciousness disappears and the body acquires a peculiar rigidity. This is evidently, says the writer, a matter of self-hypnotism in hysterical persons who are sufficiently predisposed to it. This lethargy is looked upon by the people as death, and when the subjects are aroused it is God who has brought them to life.

We have received from Dr. Macklin a set of Nankin L. P. O. stamps, very prettily designed. The accompanying note states that the residents in Nanking had found it necessary to issue some stamps to meet the expenses of their mails. He wishes us to state that all profits will be given to charitable purposes.

A CHINESE CHARM.



CHARM

OR THE TERROR OF "CHINA'S MILLIONS."

佛  
生  
四  
月  
八

嫁  
到  
深  
山  
去

Buddha was born on  
the 8th of the 4th  
moon,

Marries away to the  
midst of the moun-  
tains,

紅  
娘  
今  
日  
嫁

永  
世  
不  
歸  
家

And the red maiden Ne'er to return for  
marries to-day; ever or aye.

We are sorry to hear that our friend, Dr. Boone, of Shanghai, has been very ill with pneumonia: the last news, however, was more reassuring. Dr. Boone is one of the oldest members of our Association and was one of its original founders.



The Dr. will have our deepest sympathy in his affliction and our earnest prayers for his recovery.

We have been asked to publish this appeal, a copy of which had, a long time ago, been sent round to every medical missionary.—(Ed. *M. M. J.*)

A MEDICAL MISSIONARY JOURNAL IN  
CHINESE.

DEAR DOCTOR,

Doubtless many of us have been feeling increasingly the desirability of having a medical missionary Journal in Chinese, for the benefit of our assistants, students, and ex-students.

At present these assistants and students have, for the most part, no knowledge of what is going on in other hospitals. Each little group works away by itself. There is nothing to bring them all together, no means of intercommunication. The inspiration and stimulus we feel in reading of the work of others is largely unknown to them. A Journal devoted to their interests, and to which they would themselves contribute, would enable them to realize better the importance of their work, both in its Christian and scientific aspects. It would create more desire for accurate scientific acquirements and perhaps modify the wish so many have to learn a little and then go out to make money.

It would be useful, too, to ex-students now practising their profession. How rusty they must become with practices largely limited to certain kinds of cases, with few books and no journal to refresh their memories, to help them to a clearer grasp of the nature of their every day cases and to bring before them new remedies and methods of treatment!

There must be many such. Dr. Kerr said recently that there were one hundred old students of the Canton Hospital now in practice. The number turned out by the various hospitals is steadily increasing. It is important also to help them in their Christian life and save them from falling into the deceitful ways of native quacks.

Such a journal would help with the term question. It seems vain to hope for a set-

tlement at present. New terms will constantly crop up and gradually the best will recommend themselves. By means of the Journal the aid of the natives could be enlisted.

In view of these considerations I would propose that the Medical Missionary Association of China be asked to establish a Chinese Medical Missionary Journal.

The following suggestions are given in the hope that they may serve as a basis of discussion:—

1. That it be in easy Wên-li.
2. That it be published quarterly to begin with, but that as soon as possible it be issued monthly.
3. That there be a general editor, assisted by ten or twenty collaborators, or assistant editors, and that each one be responsible for a certain amount of copy.
4. That members be chosen to write quarterly reports on the progress of various branches of medical and allied sciences; *e.g.*, the Eye, Ear, Skin, Bacteriology, Midwifery and Gynæcology, Surgery, Medicine, *Materia Medica* and Therapeutics, Physiology, Chemistry, Biology.
5. That when new or unusual terms are used they be followed by the English or Latin terms in brackets.
6. That until a definite syllabary is adopted for transliterating foreign proper names the transliterations be followed by the original name in brackets.

It would be too much to expect many original or specially written articles from the busy medical missionaries of China and their native assistants, but suitable translations from foreign periodicals and from the *C. M. M. Journal* would be very much in place. Bearing in mind our constituents communications should not be beyond their attainments.

Will you kindly give the whole subject your best consideration and let me have your opinion and suggestions at earliest convenience, so that it may be laid before the Medical Missionary Association of China without unnecessary delay.

Yours very sincerely,

PHILIP B. COUSLAND.

Swatow, Sept., 1896.

## BIRTH.

At Hoihow, Hainan, 6th October, the wife of H. M. McCANDLISS, M.D., American Presbyterian Mission, of a son.

## DEATH.

At Hongkong, on Sunday, October 11th, MAGARITA, aged four, only daughter of Dr. and Mrs. F. T. B. FEST.

## ARRIVALS.

At Shanghai, 3rd October, Rev. W. E. SMITH, M.D., wife and infant for, Canadian Methodist Mission.

At Amoy, 14th October, Rev. Dr. J. A. OTTE, wife and three children (returned); Dr. F. T. B. FEST, wife and two children, for American Reformed Church Mission.

At Shanghai, 18th November, Rev. JAS. S. WEBSTER, M.D. (U. S. A.), from England for China Inland Mission.

At Shanghai, 19th November, Dr. DAISY

MACKLIN, for Foreign Christian Mission, Nankin.

At Shanghai, 24th November, Dr. W. A. YOUNG, for Scotch Presbyterian Mission, Manchuria.

At Shanghai, 27th November, Dr. and Mrs. EDGAR WOODS (returned), and two children, for Southern Presbyterian Mission.

At Shanghai, 8th December, Dr. and Mrs. CHARLES LEWIS, American Presbyterian Mission.

At Shanghai, 10th December, Dr. and Mrs. F. M. WOLSEY, M. E. Mission.

At Shanghai, 20th December, Dr. WOLFENDALE, for London Mission.

At Shanghai, Dr. and Mrs. J. TILSLEY (unconnected).

## DEPARTURE.

From Shanghai, 28th November, Dr. MARY BROWN, of Presbyterian Mission, for United States.



## SPECIAL NOTICE.

In accordance with the Special Notice on p. 179 of the last issue the following alterations in the Constitution are now proposed:—

1.—Proposed by Dr. Hodge and seconded by Dr. Boone, that Article III. read as follows: “The members shall be graduates of a recognised regular medical college, with proper testimonials from the Missionary Society under whose auspices they are labouring. They shall be proposed by one member of the Association and elected by a majority of those voting. They shall be considered members when they shall have signed, or sent in their names to be added to, the Constitution, thereby agreeing to be bound by its provisions.”

2.—Proposed by Dr. Hodge and seconded by Dr. Boone, that Article V. of the Constitution read as follows: “The officers of the Association shall consist of a President, a Vice-President, a Secretary, a Treasurer, an Editor and a Curator of the Museum, all of whom shall be elected biennially by a majority of the members voting. No member shall be eligible to the office of President for two successive terms. These officers shall have the power to elect Executive Committees from their own body, or from other active members of the Association to fill up any vacancies (caused by death or otherwise) in the executive of the Association and to take initiative action in all matters affecting the welfare of the Association.”

3.—Proposed by Dr. H. T. Whitney and seconded by Dr. Hodge, that the word “President” in Article IV. of the Bye-Laws be struck out and the word “Association” be inserted in its place.

4.—Proposed by Dr. H. T. Whitney and seconded by Dr. Hodge, that Article VI. of the Bye-Laws read: “All motions shall be presented with the signature of the proposer, either directly to the Association or through its Journal.”

5.—Proposed by Dr. Hodge and seconded by Dr. Boone, that the following new Article be added to the Constitution, viz., “Article VII. That every President on retiring become an Honorary Vice-President of the Society for life.”

6.—Proposed by Dr. Hodge and seconded by Dr. Boone, that Article II. of the Bye-Laws be amended by the addition of the words: “In the absence of both President and Vice-President the meeting shall elect its own Chairman.”

7.—Proposed by Dr. Hodge and seconded by Dr. Boone, that Article III. of the Bye-Laws be amended by the insertion of the following words after the word “Constitution,” viz., “Notify in writing new members of their election, keep a roll of all three classes of members and publish a revised list annually in the Journal.”

Members are requested to fill up their voting paper and forward it to the Secretary, Dr. Beebe, Nanking, not later than March 1, 1897. By Article X. of the Bye-Laws it is provided that a three-fourths vote of a regular meeting *alone* can alter a Bye-Law: no such provision is made for the alteration of the Constitution. It is impossible to keep the *letter* of this regulation, but the spirit will be kept if a large number of members will take the trouble to vote. The subject is sufficiently important to merit this attention.

## Official Notices.

---

*The following officers have been elected for the term 1897-1898, viz. :—*

*President—Dr. H. T. WHITNEY.*

*Secretary—Dr. R. C. BEEBE.*

*Treasurer—Dr. MAIN.*

*Editor—Dr. G. A. STUART.*

*Vice-Presidents :—*

*North-China Division—Dr. J. B. NEAL.*

*Shanghai and Nanking Division—Dr. MACKLIN.*

*Canton and South China Division—Dr. P. B. COUSLAND.*

*Fukien and Formosa Division—Dr. BLISS.*

*The Wuchang and Hankow Division is not filled up.*

*Censors.—A large number of gentlemen have obtained single votes, but the only one with more than one vote, and therefore the only one elected, is Dr. GILLISON.*

---

*The following gentlemen have been duly elected members of the Medical Missionary Association :—*

*WILLIAM BENTON SCRANTON, B.A. (Yale); M.D., Columbian Col. of Phy. and Surg., U. S. S.*

*B. L. LIVINGSTONE LEARMONTH, M.B., C.M. (Edin.),*

*ELIOT CURWEN, M.A., M.B., B.C., Cant.; M.R.C.S., Eng.; L.R.C.P., Lond.*

---

*Exchanges will please note that after this date the Editor will be Dr. STUART, Methodist Episcopal Mission, Nanking. All communications must in future, be addressed to him.*