

A code of medical regulations, for the Honorable East India Company's establishment of surgeons, belonging to the Presidency of Prince of Wales' Island, Singapore, and Malacca. / drawn up at the express desire of Government, by W.E.E. Conwell.

Contributors

Conwell, W. E. E. 1785-1836.
Royal College of Surgeons of England

Publication/Creation

Singapore : Mission Press, 1828.

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A
CODE
OF
MEDICAL REGULATIONS,
FOR THE
HONORABLE EAST INDIA COMPANY'S
Establishment of Surgeons,
BELONGING TO THE PRESIDENCY
OF
Prince of Wales' Island, Singapore, and Malacca,
DRAWN UP AT THE EXPRESS DESIRE OF GOVERNMENT,
BY
W. E. E. CONWELL, B.L.A.B & M.D. of Paris,
*Surgeon on the Madras Establishment, Member of the
Royal College of Surgeons in London, Corresponding
Member of the British Imperial Vaccine Institution
for India, and Officiating Staff Surgeon,
Madras Troops.*

— "DIXIT," —
"SIT LUX," — GEN. 1, v. 3 —

SINGAPORE
MISSION PRESS.

1828.

Extract from the Minutes of Council

No. 66

GENERAL ORDER

BY THE HON'BLE THE GOVERNOR IN COUNCIL

Fort Cornwallis 27th November 1828

THE HON'BLE THE GOVERNOR in Council is anxious that the History and treatment of the Endemial diseases of the day should be fully and faithfully recorded by the Medical servants of Government, as a part of their public duty, of which their immediate ministry on the sick, only, takes precedence.

He trusts that the professional servants employed under this Government will henceforward (by an accurate discharge of that part of their duty) transmit the information progressively derived from experience, to future periods, for the prevention of public and private calamities.

Doctor Conwell will be pleased to submit to Government forms for Medical records arranged in detail calculated to effect the objects contemplated by this order; to ensure regularity in every branch of the Medical Department; and which, by keeping the labours of all its members constantly in a course of review: will serve the Government at all future times as an Index and a scale, of the merits and talents of its Medical Servants.

(A TRUE EXTRACT)

(Signed)

J. ANDERSON

Secretary to Government

A

TO

HIS EXCELLENCY

THE HON'BLE R. FULLERTON ESQUIRE
GOVERNOR IN COUNCIL,

Of Prince of Wales Island Singapore, and Malacca,

HON'BLE SIR,

In obedience to the
G O G. 27th, November last, I have the
honor to submit a Code of Medical Regulations
for your consideration and ~~prolation~~, and I humbly
and earnestly hope, they will compass and effect, the
extended and laudable views therein contemplated.

The Chief innovation proposed is the annual
publication of a Medico chirurgical analytical review,
which by keeping the practice of the profession
before the publick, will ensure the constant exercise
of all the energies and talents the Department possesses
in the cause of suffering humanity, and it will trans-
mit to posterity useful facts that would otherwise
perish with their authors.

I humbly submit that the expence of the few copies
the Government may require, is quite trivial, compar-
ed with the illustrious objects that course is calculated
to accomplish.

I have the honor to be,

HONORABLE SIR,

With profound respect,

Your most obedient and very humble servant,

(Signed,)

W. E. E. CONWELL, M. D.

*Officiating Staff Surgeon of the Madras Troops, Serving
at Prince of Wales Island, Singapore, and Malacca*

PENANG.

Staff Surgeon's Office }
17th, April 1828 }

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**A CODE
OF
MEDICAL REGULATIONS**

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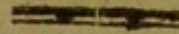
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PART I.

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Style of writing a Case

A CODE
OF
Medical Regulations,
FOR THE
HON'BLE EAST INDIA COMPANY'S SERVICE,
AT
Penang and its Dependencies.

CHAPTER 1st.

SECTION 1st.

1.—The Hon'ble East India Company provides Surgeons to afford professional aid to their Civil and Military servants.

Surgeons provided and paid by Govt.

2.—The Medical Department is divided into three classes. The Seniors, or first class, are, under different denominations vested with the superintendence and control of the other two branches ; and, on all questions, generally connected with that Department, they are the advisers of Government.

Three classes of Surgeons, the first controls the two latter.

3.—The second and third classes consist of Surgeons and Assistant Surgeons, who are nominated by Government or other competent authority, to any specific charge or duty.

The 2d and 3d classes called Surgeons and Asst. Surgeons.

They are bound to afford medical aid to all individuals comprised in their charge ; they form strictly the efficient executive branch of the Medical Department ; they make returns to, and are subject to the orders of the superintending or senior Surgeon.

Medical subordinate servants authorized.

4.—It has been found convenient to add a class of inferior servants, instructed in the subordinate and manual duties of that Department ; they are designated Apothecary, Assistant Apothecary, Native Dresser and Medical Pupil.

Native Dresser, his qualifications.

5.—This term of Native Dresser is given to Natives, who have acquired some knowledge of preparing Medicine, Dressing wounds, and waiting on sick.

Medical Pupil, situation of, to whom given.

6.—Under this designation of Medical Pupil, the Government will eventually, at the recommendation of the Superintending Surgeon, receive well educated young persons, to be employed in hospitals under the Surgeons for a given period, until their acquirements warrant the Superintending Surgeon to recommend them as Assistant Apothecary.

Assistant Apothecary, appointment to whom given

7.—This designation of Assistant Apothecary is given to persons sufficiently educated in the English language, in the subordinate department of surgery, and in the preparation of Medicine, to receive the Surgeon's instructions on these subjects, and carry them into effect in all less serious cases ; whereby the Surgeon's time is preserved to the public for more important purposes.

Apothecary, the situation to whom given

8.—This designation of Apothecary is awarded to the most intelligent and meritorious of the Assistant Apothecaries, after a considerable period of service, when they are placed in situations of increased respon-

sibility and interest ; their duties, however, scarcely vary ; the increased pay and rank is merely afforded in consideration of their lengthened service, and to reward their good conduct.

9.—The before mentioned subordinate Medical servants are all eligible to receive pensions, and they are subject to all other rules that affect the Military branch of the service, to which they invariably belong.

The foregoing Medical servants are Military.

CHAPTER 1ST.

SECTION 2D.

Preliminary Statements of the Subordinate Grades.

1.—The Hon'ble the Court of Directors nominate their Medical Servants to the Indian Local Establishments, under the designation of Assistant Surgeons ; which is continued for an indefinite period : until they attain promotion by gradation.

Assistant Surgeons named by the Hon. the Court of Directors.

2.—On first arrival, except in cases of emergency, they are not placed in charge of an hospital, but directed to do duty under another Surgeon, until they have attained adequate experience in the treatment of oriental diseases (generally twelve months). It then becomes the duty of the Superintending Surgeon to report the young Medical Officer, as being, in his opinion qualified, both in a professional view, and in his knowledge of the regulations and usages of the service, to be intrusted with the charge of separate duties.

On arrival to be instructed on the treatment of Indian diseases.

Surgeon is the superior rank conferred on Asst. Surgeons.

The Surgeons duties unchanged by promotion to that rank.

Medical officers employed from other Presidencies make local returns

3.—This designation or rank of Surgeon is conferred by the local Government on a certain definite number of Medical officers, after their having attained the experience and knowledge of several years active professional service as Assistant Surgeons in India.

4. Their duties do not vary from those of Assistant Surgeons, but they are considered a more valuable, as a more experienced, and consequently more intelligent and useful class of Surgeons ; and hence increased rank and pay is awarded them.

5.—Medical officers serving at Penang from any of the other Presidencies are to observe the forms and regulations of their respective Governments ; but they are directed to make the local returns, prescribed by the present regulations, through their own professional superior.

CHAPTER 1st.

SECTION 3D.

Preliminary statement of the Medical Department in the superior grades.

Superintending Surgeon by whom appointed. To watch over the interests of humanity and of the service.

1. This rank of Superintending Surgeon has been bestowed by the Hon'ble the Court of Directors on the Senior Surgeon, conducting the duties of control at Penang. There not being any professional authority superior to him under this Government ; it becomes his duty to watch over all departments of Medicine and Surgery vigilantly, and all in-

Individuals of this department are subject to his orders.

2. It is his duty to inspect Hospitals, the books of Medical practice, &c. the Medicines and Surgical Instruments frequently, and to report thereon periodically.

He inspects Hospitals, &c.

3. Moreover, he is to collect all prescribed reports, to preserve them, to comment thereon, and forward such of them to Government, as may contain information of an urgent nature ; and he is not only bound to watch vigilantly over the professional conduct of those in the executive department, but also to instruct them when necessary, regarding the discharge of their duties.

His duties farther explained.

4. A Surgeon or an Assistant Surgeon selected by Government, may eventually be attached to his office as Secretary.

A Secretary to be attached.

5. A systematic arrangement of Medical duties is detailed by Government to insure their being performed with exactitude, and to establish a system of uniform regularity in the Medical Returns, whereby the Government will become possessed of their just right, i. e. a Medical History of the times, for the progressive improvement of Medical knowledge.

Medical duties detailed for public convenience and utility.

6. All Surgeons or other individuals of the Medical Department belonging to this Presidency, are hereby strictly ordered to act in obedience to these regulations, and the Superintending Surgeon is specially required to use every exertion on his part, to give them full and perfect effect.

All Medical servants to act in obedience to the Medical Regulations.

7. Servants of Government in the Medical Department, like all others, are considered useful according to the scale of their duties, and the exactitude and talent with which they discharge them ; moreover it is esta-

Official employment involves care and expence.

blished by ample experience, that all official employments involve not only increased responsibility and care, but also a necessary increase of establishment and expences.

Contemplated to recommend the Hon'ble Court to fix pay for each rank.

8. For these reasons, Government contemplates recommending the Hon'ble the Court of Directors, to fix an exact sum, as the net pay of each rank, at all times to be drawn by individuals of that grade, and when out of employ or acting under the orders of another Surgeon, that sum is to form their entire allowance.

Official pay, additional.

9. When employed, or holding a separate charge, an additional allowance to be granted to each rank, under the head of "official pay."

CHAPTER 2D.

SECTION 1ST.

Executive Medical Duties.

Medical charge conferred by Government.

1. When Surgeons or Assistant Surgeons are entrusted by Government with a distinct Medical charge, they will be nominated thereto by letter, or in public orders by Government.

Public property and documents to be transferred with the charge of office.

2. In the transfer of duties from one Medical Officer to another, the transferring Officer is to present the relieving Surgeon all the public documents, and all the public property then in his charge annexed to the office, and he will also lay before him two lists of the documents, (vide Table No. 21), and two lists of the public property (vide Table No. 22 A, & B.)

3. The receiving Surgeon is to examine the documents and compare them with the list, and if certain that they exactly agree, he is to affix his receipt and official signature to the duplicate lists of public documents. In like manner, having examined and ascertained, that the lists of Medicine and other public property exactly correspond with the stock, he is to affix his official receipt to them. Those receipts are to be copied into their respective official letter books, and one copy to be transmitted to the Superintending, by the relieving Surgeon; the other, to be retained by the Surgeon relieved.

Surgeon granting the receipt responsible, that the public property corresponds there with.

4. European Medicines will be gratuitously issued on Quarterly Indent, passed by the Superintending Surgeon, from the Hon'ble Company's stores, agreeably to the present usage of the service.

Surgeons to be supplied with European Medicines on Indent.

5 Henceforward all Surgeons, &c. are required to be provided with the following Surgical Instruments at their own expence:—

They are to provide Instruments.

6. Amputating Instruments,..	1 case.
Trepanning ditto,	1 „
Scalpels, 2 cases, or, Dissecting, ..	1 „
Pocket Instruments, Surgeons' ..	1 „
Trocars, of sorts, ..	No. 3
Midwifery Instruments, ..	1 set.
Stomach Pump, ..	No. 1
Tooth Instruments,	1 set,
Lancets, Bleeding, ..	No. 6
Metallic Bougies,	1 case.
Common Ditto,	1 „
Catheters, Male, silver, ..	3 „
„ Female,	2 „
„ Flexible Male,	2 „
London Pharmacopiæ, ..	No. 1

The Instruments required.

7. All Medical Officers now having Surgical Instruments in their possession, the

Old Instruments at half,

new at the regulated prices

Surgeons to record their professional practice, and such record declared to be public property and claimed.

Number and size of public Books.

No. 1 The Register.

No. 2 The Journal.

To contain all cases, public and private.

property of the Hon'ble Company, are permitted to retain them at half price, if they prefer to do so ; but otherwise, they are desired to return them into store, and they will be supplied on Indent (passed in the usual manner) with new Instruments at the regulated price.

8. Executive Surgeons are required, as an essential part of their duty to Government, to record their professional practice and proceedings, in the manner and forms herein after prescribed, and all records and documents written in the discharge of their professional duties to Government, thereby become public property : they are hereby declared to be so, and ordered to be ultimately delivered to the Superintending Surgeon, or in event of his absence, to the next Senior Medical Officer.

9. The public books, which Surgeons in charge of executive duties are required to keep, consist of five Fasciculi or Volumes ; the first four of foolscap size, and the fifth of royal paper.

10. No. 1, will contain a register of cases : on one side, agreeably to Table No. 4 ; on the other side, Weekly states, vide Table No. 3, and Present states, vide Table No. 2.

11. No. 2, the Medico-chirurgical Journal of practice, is to contain an exact professional history of every case treated by the Surgeon, invariably to be written in the Surgeon's handwriting, who is actually in Medical charge, on foolscap paper and half margin.

12. This Journal or Fasciculus, is to contain a distinct statement of every individual's case treated by the Surgeon, including equally those whom he may attend as private

patients, with those connected with or comprised in his charge.

13. In hospital practice the patient's name is necessarily shewn at the commencement of the case; under all other circumstances a due regard to individual feeling and delicacy is to be observed, by the unvaried suppression of the name and rank, unless where a sick certificate is granted; it will suffice, that the sex, age, &c. succeed to a blank line, where the name would otherwise have stood in the Journal, and that line, to be preceded by a numerical reference to the individual, of which the confidential Surgeon only, will possess the key.

Name and Rank to be suppressed except those of Hospital & Sick Certificate cases.

14. No. 3, a book to contain copies of all Indents, shewing ~~all~~ the Expenditure, both of Medical and Commissariat supplies.

No. 3, The Indent Book.

15. No. 4, the Official Letter Book, to contain copies of all orders and instructions affecting that department, also letters received and dispatched.

No. 4, The Letter Book.

16. No. 5, a book, to contain forms and copies of all Monthly Returns, all Quarterly and Half-Yearly Returns.

No. 5, Copies of Returns.

17. Two little boards, not exceeding the dimensions of foolscap paper, and having each two corresponding perforations at one side with tapes passed through them, both ends of which tape are brought forward, and tied in front of the side opposite to that on which the holes are, will be used for the collection and preservation of public papers.

To preserve official letters received.

18. The Government will furnish blank books to Surgeons in charge, but in the absence of those books, the Surgeons are required to keep public records of their professional proceedings, on sheets of foolscap paper

The Government will furnish Blank Books to form records.

sewn together, each fasciculus to contain two quires, and they are permitted to send in contingent Bills to the Superintending Surgeon, for the amount of paper thus used.

Superintending Surgeon is to inspect books and instruments, to pass Indents.

18. The Superintending Surgeon is to inspect the Instruments and Books, at every official visit; and any Instruments that may be required, on Indent, passed by the Superintending Surgeon, are to be issued from the Honorable Company's stores, and paid for at the established rate.

CHAPTER 2D.

SECTION 2D.

Executive Duties, Continued.

Attendance to whom given.

1. Surgeons are required by Government, to afford Medical aid to all persons comprised within the charge confided to them.

Surgeons may attend private patients, but they must record the cases.

2. After Surgeons shall have afforded the requisite attendance to all individuals comprised in their charge, and recorded the cases in the Journal of practice, agreeably to the principles laid down, and that there is no public duty remaining to be done, they are permitted, in these cases, to occupy leisure time, in giving aid to individuals not in the service, on their own account; but they are bound to write a faithful history of every such case, agreeably to the principles now laid down, into their Medico-chirurgical Journal, and they are not on any occasion, to neglect public duty for such or any other purpose.

Hospital visits at what time.

3. Where Surgeons have any public Hospitals to attend, the morning visit is invari-

ably to commence before six o'clock ; the evening visit to be between five and six.

4. Small pieces of Board, each larger than a quarter sheet of foolscap paper, shall be suspended over each patient's cot in hospital, having a paper pasted on it, conveying the information required, agreeably to form Nos. 5 & 6 in the Appendix.

Hospital tickets suspended over sick cots.

5. The cases are to be entered and continued, pursuant to the following form and principles : i. e. A concise clear History is to be entered in regular succession as follows. The date, name, age, what country, (if European) how long in India—physical description of the body—original habits—occupation—history of health and how long ill—from what cause—here detail all the symptoms now complained of; add the result of an accurate examination, including the functions, pulse, tongue, and skin, together with the information afforded by the thorax, abdomen, and countenance.

Mode of entering a case on reception.

6. A clear and analytical review of the pathological indications thus established, will give the diagnosis ; that word is to be written in large letters : and whatsoever is considered to be the exact point or points, in which the existing disease is situate, and the condition of that disease, the same is to be written opposite the word Diagnosis : then the name of the disease being thus pathologically established, it is to be written in large letters over the heading of the case—prescription for Medicines, instructions for diet, and any additional important directions are then to be written in succession.

Analysis of the case gives Diagnosis.

7. When indications warrant any modifications or change in the Diagnosis, it is al-

Change of Diagnosis re-

quires explanation.

In cases of danger, symptoms and treatment to be registered daily. In trivial cases every 15 days.

Convalescent cases rank with trivial.

Particular attention called to dangerous cases.

Change of treatment to be explained by a new statement of symptoms.

ways to be entered under the respective date, between the statement of symptoms on which the alteration is founded, and the prescription for treatment and diet.

8. If the case continues under the same treatment for fifteen days, during that period no new entry is positively required, provided it is not attended with any danger, but if it is attended with danger, the symptoms are to be noted daily. In the former instance, after fifteen days the symptoms are to be taken anew, followed by the Diagnosis and the necessary instructions for treatment.

9. When a case shall have become convalescent, and is so recorded in the Journal, no subsequent notice of it is required until the name is struck off as recovered, unless some change takes place which requires new entry, or, more than fourteen days elapse.

10. In cases of danger at every morning visit the Surgeon is to record what curative measures were adopted—what effects have resulted, state of the pulse, tongue, and skin, thirst, appetite, perspiration, evacuations, urine, sleep, general feelings, difference since last seen; the prescription for Medical treatment and the order for diet then follow. No new Diagnosis is required till the fifteenth day, provided there is no material change of treatment, and that it is still directed to accomplish the effects contemplated by the first prescription.

11. Whensoever it may be deemed expedient to alter the prescription, or issue different instructions regarding the patient, the symptoms are to be taken anew, the change which suggests the alteration of treatment is to be stated, the Diagnosis recorded, and then

the new instructions for treatment are to be entered.

12. However trivial any case may be, the symptoms, Diagnosis and treatment must be entered every fifteenth day.

Fifteenth day symptoms must be stated anew.

13. Whensoever a case terminates fatally, if the examination of the morbid appearances can be obtained, an accurate investigation of all the viscera contained in the thorax, abdominal, cranial and spinal cavities is directed to be made, and a minute detailed statement of each particular part is to be written down progressively, by an amanuensis from dictation, as the observations are made; and this dissection is to be entered into the Journal, immediately following the detail of that individual's treatment.

Fatal cases to be examined if possible, and the dissection to follow the case in the Journal.

14. In all other cases where Medical officers may have opportunities to make post mortem examinations, and in those connected with legal proceedings, the Dissection is to be made in strict conformity to the instructions and forms now laid down; and a copy is to be entered into the Medico-Chirurgical Journal.

All other Dissections to be reported.

15. To prevent the possibility of misunderstanding, detailed cases are attached, illustrative of the principles now laid down, and which Surgeons are instructed to observe for their guidance in their reception report, in the examination and in the general analysis of all the information resulting therefrom, when carefully contrasted with the history and treatment of the case.

A detailed case is attached for guidance.

CHAPTER 2D.

SECTION 3D.

Sick Diet and Hospital Arrangements.

Former diet
Regulations
cancelled, new
established.

1. All former regulations relative to victualling sick Europeans, are hereby cancelled, and the following Table is instituted to regulate the diet of soldiers, both of His Majesty and the Hon'ble Company's service in all Hospitals throughout Penang and its Dependencies.

N. B. The Diet Regulations are made similar to those of Madras.

2. DIET TABLE.

	<i>Full.</i>	<i>Half.</i>	<i>Fowl.</i>	<i>Low.</i>	<i>Spoon.</i>
Breakfast.	One pint of Tea.	One pint of Tea.	One pint of Tea, or of thin boiled Arrow Root.	One pint of Tea, or of thin boiled arrow root.	One pint of Tea, or Ginger Tea, or thin boiled Arrow Root.
Daily allowance of Bread.	Twelve Ounces.	Twelve ounces.	Eight Ounces.	Eight Ounces.	Left to the discretion of the Surgeon.
Dinner.	One pint of broth and 12 ounces of mutton or beef, four ounces of rice boiled.	A pint of broth, eight ounces of Mutton or Beef.	A Chicken, or one half of a Fowl, either made into soup, or boiled, with a portion of rice and black pepper, in the form of pish-pash.	Half a Chicken or one third of a Fowl, made into soup, or one pint of sago.	One pint of boiled Arrow Root, or four ounces of bread made into panada.
Supper.	Tea or thick congee. One pint.	The same as in full diet.	The same as the Breakfast.	The same as the breakfast.	The same as the breakfast.

Explanations.

Tea, Arrow
Root, or Con-
gee for break-
fast & supper.

3. The proportions of ingredients to a pint of tea, are a quarter of an ounce of tea, half an ounce of sugar, and a soldier's dram measure of milk. A like proportion of sugar and milk is to be allowed when ginger tea, arrow root, or congee are given for breakfast and Supper.

Barley broth.

4. Each pint of broth to be made with three quarters of an ounce of barley, and a due proportion of greens, onions, black pepper and salt. Greens to be omitted in the broth for such patients as they may not agree with.

Arrow Root &
Sago dinners.

5. In cases where arrow root or sago form the dinner, the quantity ordered, may be either given at once or at different times in the course of the day, with a proportion of milk or wine at the discretion of the Surgeon.

Weight of
flesh, meat &
rice how un-
derstood.

6. The specified quantity of meat is to be understood to refer to its weight in an undressed state, including bones, and the broth is to be made from the quantity laid down in each diet. The quantity of rice to its weight before being boiled.

Extra diluents
when given
congee always

7. Toast water, barley water, milk and water, very thin arrow root, or other diluents will be furnished for common drink, according to the judgment of the Surgeon, in cases and forms of disease in which they are considered preferable to rice congee, which is to be kept in readiness at all times for the common use of the patients in general.

Fowl Diet and
Low Diet why
given.

8. The fowl diet and low diet of this Table, have been framed with the particular view of affording a proper diet for convalescents from acute diseases; much injury

probably arises from patient's passing at once from spoon or fever diet to that of beef or mutton, and it is hoped that the present forms will be applied with a particular view to avoiding the risk of sudden changes in such cases.

9. The spoon diet introduced in this Table, is considered the most appropriate that can be used in the acute stages of almost all diseases, and it may be accommodated to particular cases of severe and lingering illness, by substituting rice or sago pudding, or some other extra for dinner, instead of arrow root.

Spoon diet may be changed to rice or sago pudding.

10. When it is wished to put any patient on a milk diet, this also may be done by ordering a pint of milk morning and evening, instead of the breakfast and supper, that are laid down in this description of diet.

Milk how given for breakfast & supper.

11. With these exceptions, it is expected that the forms of diet, here exhibited, will be undeviatingly adhered to.

These modifications considered sufficient.

12. The Hon'ble the Governor in Council is pleased to order, that bread and provisions of every description shall be furnished to the sick by the Commissariat officer.

Commissariat officer furnishes the supplies.

13. Should it happen on any occasion that the articles specified cannot be procured, the best substitutes are to be provided in lieu of them, for the time; the circumstances which led to such substitutions being always particularly reported to the Superintending Surgeon, in the first instance, and by him explained to Government.

The want of articles specified to be supplied by the best substitutes.

14. Printed copies of the above Diet Table, with the explanatory remarks, are to be hung up in all hospitals, and renewed as often as may be necessary.

Diet Table & remarks to be exhibited in hospitals.

15. G. O. G. 18th December, 1827,—“All Europeans attached to the Local Military

Local European Military sick, and

those of the
Madra troops
subject to the
same rules.

All others to
be victualled
by the Surge-
on in like
manner, at 1
sicca rupee
per diem.

Hospital Ste-
ward and Ser-
vants belong
to the Com-
missariat De-
partment.

“ Establishment of this Presidency, while sick
“ in hospital, shall be clothed and victualled
“ by the Commissariat, in the same manner
“ as obtains with the European sick of the
“ Madras Troops.”

16. “ Seamen of His Majesty’s Navy, and
“ private Ships, will continue to be received
“ into the General Hospitals, under the exist-
“ ing regulations, but the per diem allowance
“ granted to the Surgeon is fixed at (1) Sicca
“ Rupee.”

17. “ The hospital Steward and all other
“ servants annexed thereto, are Commissariat
“ servants, and their allowances will be paid
“ by that Department.”

CHAPTER 2D.

SECTION 4TH.

Explanation of the Records and Reports required.

The usual Re-
port to be
written on
foolscap pa-
per.

Surgeons
weekly states.

Monthly Re-
turn of Vac-
cination and
Variola.

Forms of

1. All nominal rolls of sick present and
weekly states or other reports of sick, are to
be invariably written on entire sheets of fool-
scap paper.

2. Surgeons of the executive branch will
keep the Officer at the head of the Depart-
ment informed of their proceedings, by for-
warding Weekly States every Monday morning
agreeably to Table No. 3.

3. A monthly return of Vaccination and
Variola will be made agreeably to the pre-
scribed form, Table No. 9 & 10.

4. The Monthly Return is to be compris

ed in the Tabular Forms, No. 8 B, 9, 10, 11, 12, and 13 ; and Surgeons will despatch this Return on the 2d of each succeeding Month.

5. Tabular forms No. 17 and 14 respecting Commissariat Supplies and Expenditure are *always* to be sent separate. The Superintending Surgeon having examined these reports and affixed his opinion thereto, he will transmit them to the Commissariat Officer.

6. No. 16 being the return of expenditure of Medicines, is to be invariably separate ; and the Superintending Surgeon having affixed his signature thereto, he will transmit the same to the Medical Store Keeper.

7. Should any loss appear in either case, the Commissariat Officer or Medical Store Keeper, as the case may be, will make out a Bill against the Surgeon, who may have occasioned the loss, and the same is to be sent to the Superintending Surgeon, provided, he concurs in the view taken of the case ; he will countersign and return the Bill. It is then to be transferred to the Paymaster and directed to be recovered from the next issue of pay to that individual.

8. A Quarterly Return is to be furnished in the forms, vide Tables 23, 15, 14.

9. The Half Yearly Return is to be constructed by the Tables No. 17, 16, 23,

10. The Monthly, Quarterly, and Half Yearly Returns under the head of Miscellaneous Observations are to contain : first, a general review of the Weather during the period the Return embraces, followed by observations on the effects such states of the weather appear to have exerted either in the production, or on the course of disease or health. Any other general causes that had

Monthly Return.

Expenditure of Wines to be separate and ulteriorly transmitted to the Commissariat officer.

Expenditure of Medicines to be ulteriorly sent to the Medical store-keeper.

Surgeons and Assistants pay for Medicines or Commissariat supplies when lost from their charge.

Forms of Quarterly Return.

Forms of Half Yearly Return.

Miscellaneous observations consider the weather and other general causes influencing health.

Pathology &
Rationale of
care called for

On granting
Sick Certifi-
cates or trans-
fer of sick, a
copy of the
case extract-
ed from the
Journal to be
furnished.

Certificates to
be counter-
signed by the
Superintend-
ing Surgeon.

Individuals
applying for
leave forward
the certificate
to Govt.

Explanation
of Returns.

effects in influencing health, are to be stated.

11. A rapid view of the pathology of the principal diseases, followed by the indications of cure and rationale of Medical treatment, will close these observations; but this and all other original professional writings are invariably to be written half margin.

12. In cases where it may be necessary to grant a sick certificate to an individual in the public service, the Surgeon is directed to furnish the patient with a copy of the case extracted from the Medico-Chirurgical Journal, together with a certificate in one of the prescribed forms, vide Appendix Tables 18, 19, 20, and the Surgeon is to present a duplicate copy of the case and certificate to the Superintending Surgeon, written on foolscap and half margin.

13. Surgeons granting sick certificates to Local Servants are to have them approved and countersigned by the Superintending Surgeon, or in the event of his absence by the next senior Medical officer on the spot.

14. An application for the leave recommended is then to be made to Government on part of the sick, accompanied by the Medical certificate, and in event of the Superintending Surgeon's absence, the Medical officer in charge is to transmit to him a copy of the case and certificate.

15. Medical officers whose charge may not involve the receipt of Commissariat supplies, as detailed in certain of the foregoing Tables, their Returns are not to include those Tables comprising Commissariat supplies; but all Medical officers holding any charge whatever, are required to make the prescribed periodical Returns.

CHAPTER 3D.

SECTION 1ST.

Correspondence.

1. G. O. G. 17th, December 1827. "The Superintending Surgeon being a local Medical officer of this Government, is directed to observe in his correspondence with Government the following rules.

Superintending Surgeon corresponds with the Government.
2. "On all subjects relative to the charge, custody and issue of Medical stores, disbursements of money on Local account, and Civil establishments generally, that officer will correspond direct with Government.

When direct.
3. "On all matters connected with Military duty or establishments, he will correspond through the channel of the Officer Commanding the Troops."

When thro' the Officer Commanding the Troops.
4. "The like rule will be observed by the Medical officers, serving on the Local establishment at Singapore and Malacca, in respect to their correspondence with the Resident Councillor."

Surgeons at Singapore & Malacca.
5. Medical Officers at Singapore and Malacca will discontinue sending their papers direct to Government, or doing so by the intervention of the Resident Councillor : and they will make those communications to their professional superior : but the Resident Surgeons will submit such copies of their Indents and public correspondence to the respective Resident Councillor as he may require for his information.

Residency Surgeons channel of correspondence.
6. Members of the Medical Department are to correspond direct with the Superintending Surgeon. At remote stations the en-

Channel of correspondence.

Channel to
communicate
claims.

velopes of their public letters will be signed by their Civil or Military superiors.

7. All indents for Medical supplies, statements for the support of claims, to recover expences incurred in cases of extraordinary sickness, are to be submitted through the Superintending Surgeon; those of the Military branch, forwarding theirs through their own superior to the Superintending Surgeon.

Medical officers address-
ing Govt.

8. When a subordinate Medical officer desires to bring any circumstance to the notice of Government, it is to be expressed in a public letter addressed to the Superintending Surgeon, with a request that the subject may be submitted to the notice of the Hon'ble the Governor in Council.

Supg. Surgeon forwards
the address.

9. The superior Medical officer is to forward a copy of that letter, with one also from himself, addressed to the Secretary to Government, conveying the opinion his experience enables him to form on all the relative merits of the question.

Superior Medical officers
opinion required on all
subjects that
pass through
his office.

13. This course is meant to secure the entire correspondence of the Medical Department with the Government office, invariably passing through the hands of the chief Medical officer, whose attention to, and experience in that branch for a series of years, render him conversant with its usages, regulations, the course of its duties, and the merits of questions pending on professional considerations; and hence the Government desire to have the advantage of his opinion distinctly, on all subjects connected with his Department.

Supg. Surgeon invariably
to give his opinion.

11. The Superintending Surgeon is not permitted to forward any official document to Government without passing an opinion or remarking thereon.

12. Besides the official correspondence already contemplated, the Superintending Surgeon is authorized to correspond with Medical officers of this Presidency generally, on professional subjects under an official envelope.

Supg. Surgeon corresponds generally.

13. All official letters are to be written on entire sheets of foolscap paper, and at least one quarter as a margin left blank, unless the letter is accompanied with opposed comments or extracts, in which case the letter occupies one half of the page, and comments the other half.

General forms of public letters.

14. Public letters commence by reciting the station and date to the right; lower on the page and to the left the name and public official designation of the individual addressed, the prefatory style of SIR suffices for all ordinary ranks, and the proposed object of the letter is then to be introduced.

Manner of commencing public letters.

15. Public letters are to be invariably terminated in the following ceremonial form.

Manner of concluding public letters.

I have the honor to be,

Sir,

Your most obedient Servant,

Here enter the signature and official employment, vide Appendix Table No. 26.

16. It remains to be observed, that individuals recently arrived in the country, should avoid engaging in official correspondence on local affairs, until observations shall have taught them the leading principles of the regulations and usages of the service.

Caution to Juniors.

CHAPTER 4TH.

SECTION 1ST.

Examination, Reception, and Preservation of Medical Stores.

Medical store-keeper responsible.

1. The principal depot for Medical stores, is to be, as heretofore, at the principal seat of Government, under the charge of a Medical officer, who is responsible for the bestowing his time, care, and exertions in the safe custody, the due arrangement, and the careful preservation of all the Hon'ble Company's property confided to his charge.

Medical store keepers responsibility for safety of stock

2. The Medical store-keeper is farther held responsible to keep himself well informed of all circumstances and all questions connected with the custody, the preservation, the issue, supply, and transport of Medical stock. He is to be in constant communication with the Superintending Surgeon on those subjects, especially, where he entertains any doubt, or apprehends any difficulty.

Establishment of the Medical stores at Penang.

3. The following is considered a sufficient establishment for the Medical Store Department at Penang—

1 Medical Store-keeper.

1 Assistant Apothecary.

1 Medical Pupil, or writer.

2 Chinese or other Coolies to work in the Stores, at 6 Dollars each.

Certain articles to be prepared in store.

4. Such articles as can be prepared on the spot, with much greater advantage to the public, than they could be drawn from Europe, may be so prepared under the instructions of the Superintending Surgeon.

The stores

5. The following is the manner and form

to be observed in the transfer of the Medical Store Department from one to another individual. The order of Government having been issued for the transfer, the Superintending Surgeon is to order three individuals the most competent in that department to form a Committee, and he will instruct them to assemble at a certain hour on a particular day at the Medical Stores, for the purpose of taking Stock, by minutely weighing, measuring, and examining all articles borne on the face of the Medical Store-keeper's stock book.

transferred by
a Committee.

6. The Medical Store-keeper originally in charge, and the individual nominated to receive charge, are to be present; they are not to form members of the Committee, but their signatures are required to its proceedings as assenting witnesses to their accuracy.

Transferring
and receiving
officers sign
with the Com-
mittee.

7. This Committee is to inspect every article in succession, as borne on the face of the stock book, and after due examination, to state the quantity and quality of all articles remaining. This Committee is to continue its labors from day to day by adjournment, until all the business is gone through, but they are never to separate earlier than two o'clock.

They are to
inspect and
examine stock
till 2 o'clock.

8. All damaged articles of Medicines are to be put aside each day, and at the hour of adjournment the Superintending Surgeon will occasionally visit the Committee, that he may inspect the damaged articles, and with his concurrence, the Committee are directed to destroy them wholly in the Superintending Surgeon's presence, and to note the same down in their proceedings.

Damaged ar-
ticles to be
destroyed.

9. The Committee having gone through the examination of all stock, &c. found in store,

To transmit
proceedings of
the Commit-

tee to the Superintending Surgeon.

Superintending Surgeon communicates the proceedings with the recently appointed store keeper's receipt to Government,

they are to make a detailed explanatory statement of their proceedings to the Superintending Surgeon, and to afford him such supplementary information as he may eventually require.

10. The Superintending Surgeon will submit a detailed report of the Committee's proceedings to Government, bearing the recently appointed Medical store-keeper's receipt prefixed to his signature, a second time added thereto, in acknowledgement of his having received charge of the Hon'ble Company's Medical stock, &c. registered on that schedule: finally, the Superintending Surgeon will affix his signature and add such observations as he may deem expedient.

CHAPTER 4TH.

SECTION 2D.

Records, Returns, Indents and Committees for Medical Stores.

Medical store-keeper to keep public records, and at the Presidency to submit them monthly to the Superintending Surgeon.

Public Book No. 1, to govern eventual sales,

1. The following are the public books required to be kept in the Medical Store-keepers Office at each settlement; and at Penang he is to present them at the Superintending Surgeon's Office on one day in every month, for his inspection and signature. The day is to be named by the Superintending Surgeon.

2. No. 1, a book shewing the receipts, quantity, actual cost in English currency, and the calculation also into the local currency to govern eventual sales.

3. No. 2, a book shewing the amount of issues and sales, and the residue quarterly. The proceeds of sales to be distinctly shewn, with a reference to the Treasurer's receipt for each quarterly payment.

Issues Quarterly and Residue.

4. No. 3, a book shewing the balance of receipts and expenditure of stock.

Annual balance of stock.

5. No. 4, a Letter Book.

A letter book.

6. No. 5, a Bazar book shewing the trifling purchases authorized by the Superintending Surgeon, which form the Monthly Contingent Bill.

Petty expense book.

7. With a view to secure to the settlers at Penang, Singapore, and Malacca, a steady supply of such Medicines, &c. as may be contained in the Hon'ble Company's stores, an individual is named at each of those stations, who is permitted to receive Medicines, &c. from the Store-keeper, on paying an advance of ten per cent, and the cash is to be tendered officially to the Store-keeper with the Indent.

Sales authorized for public convenience.

8. The Medical Store-keeper is to supply the individual, taking care to reserve a sufficiency for the demand of the public service; he will receive payment for the amount of stock actually issued, and he will pay the same into the Hon'ble Company's Treasury, reporting the circumstance to the Superintending Surgeon.

Medical store keeper receives payment and delivers the same into the Treasury.

9. The Residency Surgeons at Singapore and Malacca, will transmit to the Medical Store-keeper at Penang, quarterly Returns of expenditure and of sales, shewing the proceeds thereof, to enable him to draw up his quarterly statements, comprising the expenditure and sales of the three settlements.

Singapore and Malacca Surgeons make Quarterly Returns of Medical stock & sales.

10. Early in May annually, the Superintending Surgeon will assemble a committee of

Annual Committee to ex-

amine Medical stores.

Medical officers, to examine and report upon all stock in the Medical Store Department, with instructions to separate all impaired or decayed articles ; and he is to be present when those articles are destroyed. The proceedings of the Committee, signed by the store-keeper, and countersigned by the Superintending Surgeon (but neither of whom are to be members of the Committee except in cases of necessity.) are to be laid before Government by the Superintending Surgeon, with appropriate observations.

Draft of Annual Indent prepared by the store-keeper and submitted to the Supg. Surgeon.

11. The Medical Store-keeper will prepare his annual European Indent, and forward it to the Superintending Surgeon on or before the 1st of July, and with the view to render that document more perfect, the Residency Surgeons at Singapore and Malacca will forward hypothetical annual Indents to the Superintending Surgeon, on or before the 1st of May, and the Penang store-keeper having received those documents from the Superintending Surgeon, will then submit a general review of the Store Department.

The Supg. Surgeon corrects the draft and returns it.

12. The Superintending Surgeon having marked the quantities he deems necessary, and made such observations as the interests of the service suggest to him, he will return the draft of the Indent to the store keeper, with instructions to prepare the annual Indent.

The Medical store-keeper sends the Annual Indent in triplicate to the Supg. Surgeon, who forwards it to the Secretary to Government.

13. The annual Indent is to be forwarded in triplicate, by the Medical store keeper to the Superintending Surgeon, and that officer is to transmit the original to the Secretary to Government, and also the duplicate and the triplicate at the next succeeding periods, when opportunities occur for their transmission in a packet to Europe.

14. When the supplies arrive from Europe, the Superintending Surgeon will, in like manner, assemble a Committee, to open, inspect, and examine them; and the Medical storekeeper's signature to the proceedings, is, to acknowledge his having received charge of the stock, as therein described.

Supg. Surgeon will assemble a Committee to examine stock on its arrival.

15. The Medical store-keeper on receiving Indents, or Returns of Medical Expenditure, sent either for supply or for examination by the Superintending Surgeon, he is to examine these documents in both cases by comparing them with the books of his office, and if any error is detected he will bring the circumstance to the Superintending Surgeon's notice, who will direct the Surgeon that furnished the document to correct the error.

Medical store-keeper examines Indents and Returns, and reports their errors to the Supg. Surgeon.

CHAPTER 5TH.

SECTION 1ST.

Superintending Surgeon's Duties, or Duties of Control---General position in the service and duties to Government.

1. The Superintending Surgeon is placed at the head of the Medical Department, and occupies the same relative position to the Government and to the subordinate members of the profession, that the Medical Boards hold under the other Presidencies, and hence, he corresponds direct with the Secretary to Government, in certain cases.

Supg. Surgeon's position under this Govt. is at the head of his Department.

The office
why establish-
ed.

2. The objects for which this office is established, are : that an individual who has acquired considerable knowledge of Indian diseases, by ample experience of their treatment in India, may watch over the practice and proceedings of the subordinate members conducting the executive professional duties, and therein, he is to control, advise, and aid them.

Subordinate
Medical serv-
ants subject
to his orders.

3. All Officers of the Medical Department are hereby instructed to respect and obey his orders.

He is to act
according to
his judgment
for the good of
the public
service.

4. The control and guidance of the Medical Department being confided to his care, he is in all cases to act according to the best of his judgement, in the discharge of his professional duties, for the good of the public service, and to discharge with honor and fidelity agreeably to the spirit of the regulations, the usages of the service, and the tenor of his commission, the duties of that trust confided to him by Government.

He is to keep
the public
books of his
department
written up and
on quitting his
office, trans-
fer them com-
plete.

5. He is to keep written up and arranged the official books and documents herein prescribed for his office ; and when eventually relieved from those duties, he is bound to deliver over to his successor the prescribed official books, &c. in a perfect state, so that the public service may not suffer the loss of any record, or any information belonging to that Department, by the change of the individual holding the office.

He is to watch
over the Me-
dical Store
Department.

6. He is to watch over the Hon'ble Company's Store Department and its subordinate branches, and to keep the Government sufficiently informed on all subjects connected therewith.

To correspond

7. It is his duty to correspond generally

with all members of the profession belonging to this Presidency, to lay such parts of that correspondence, when public, before Government with his own comments thereon, as he may deem expedient for the public service, or otherwise useful : and his exertions are required to prevent addresses from subordinate servants, being laid before Government thro' informal channels, or unaccompanied by the explanations or opinions of the more experienced superiors who forward them.

8. He is to communicate his opinion of the relative merits and talents of the Medical servants of Government, either when called on to do so, or when any particular circumstances or occurrence may render it his duty to make such communication.

To keep Government informed of the relative merits of Surgeons.

9. To collect all Medical Returns in the forms prescribed, and lay them regularly before Government with all the additional information that his experience enables him to contribute, added in the margin, on every subject connected with Medicine or natural knowledge.

To collect Medical Reports, comment thereon and submit them to Govt.

CHAPTER 5TH.

SECTION 2d.

Duties of Control, Continued.

1. The Superintending Surgeon is required to examine frequently the Medico-chirurgical Journals of Surgeons, and he is responsible to report to Government, if that Journal is, or not, kept regularly as ordered ; and he

To inspect the Surgeon's books and enter notes when necessary.

is to affix his initials to any important case where he may have given the Surgeon instructions for its future treatment, and to record briefly at the moment the opinion he has given. This procedure applies equally to the record of cases either servants of Government, or those of persons unconnected with it whom the surgeon may attend in leisure hours.

To call for a nominal Roll.

2. The Superintending Surgeon will call for a nominal roll of the sick he is to inspect, on the day preceding the visit. This roll is to be drawn out in the following form, vide Appendix Table No. 1.

To visit the hospitals at the time appointed.

3. The inspecting officer is to visit the Hospital at the time appointed where the subordinate Surgeon is to be in attendance to receive him, and he is to have his books, instruments, and the sick ready for inspection.

Manner of inspecting an hospital.

4. The inspecting officer taking the nominal roll for his guidance, and having the Medico-chirurgical Journal before him, is to inspect every patient, to look at the reception report, and take a glance at the case from its commencement to that period.

Superintending Surgeon to note any special opinion when necessary.

5. If he deems it expedient to recommend any alteration, or, to take a different view of the Diagnosis, he is to record the same on the face of the Journal, and affix his initials thereto, agreeably to the following form.

Manner of entering the opinion.

6. Note by the inspecting Surgeon, June th, 182

This case appears to be , present treatment recommended to be discontinued, bleeding, purgatives and flannels, with appropriate diet to be employed.

A. B.

Supg. Surgeon.

7. Independent of these special inspection Hospital visits, the superintending surgeon is to visit the Hospitals at all times whenever he thinks fit, without any previous notice, and he is to make any remarks or comments tending to the advantage of the sick, or good of the public service.

Superintending surgeon to visit the hospitals without notice.

CHAPTER 5TH.

SECTION 3D.

Duties of Control, continued.

1. The superintending surgeon having received the monthly returns from the Executive Medical officers at Penang, Singapore, and Malacca, he is to frame one general monthly return in the prescribed forms for each settlement, vide Appendix No. 8 A and B, also Tables Nos. 9, 10, 11, 12, and 13. Having concentrated into those general forms, all the information conveyed by the returns of executive surgeons, he will transmit the same to the Secretary to Government.

To prepare a general Monthly Return constructed by Tables 8 A & B, also 9, 10, 11, 12 and 13, for Government.

2. The quarterly and half yearly Returns when received, are also to form the basis of similar periodical reports in the form prescribed, vide Table No. 23, to be transmitted to the Secretary to Government.

To furnish Quarterly & Half Yearly Returns.

3. The Superintending Surgeon in October annually, will transmit blank books to all surgeons employed under Government, together with instructions that they are to transmit all the public manuscripts of the year to him, on the 1st of January, in the manner that he

To transmit blank books & recal the manuscripts & annual public documents.

To bind the Medico-chirurgical Journals and other books.

To peruse them and enter his comments in the margin.

Prefatory of the annual Report.

Manner of framing the Report.

directs, and they are hereby ordered to be sent accordingly after having received the official signature of their respective authors.

4. The Superintending Surgeon will arrange the Medico-chirurgical Journals and other manuscript books, and have them carefully bound into volumes for their preservation.

5. The Superintending Surgeon having collected, will carefully peruse the Medico-chirurgical Journals, and as they will be written half margin, he is hereby ordered to record his opinions in the blank margin, in his own hand writing, with his initials annexed to every important case related in those Journals; so that the Government may actually derive the full advantage of that more extended experience and knowledge in Indian diseases, which are considered to render his services so much more valuable than those of the inexperienced; and for which consideration, both his rank and remuneration are increased.

6. The following is the manner in which the Superintending Surgeon's annual report is to be drawn out, invariably on royal paper, and submitted to Government for the purposes already stated.

7. Separate Medico-meteorological Tables of the twelve months at Penang, Singapore, and Malacca are to be afforded, agreeably to the scale drawn out in Table No. 8 A and B, including Vaccine and Variola as two diseases. Each Table will be followed by the information conveyed in No. 11 and 12 of the corresponding month, written on half margin. The Superintending Surgeon comments on peculiarities of season, their influence on health, the pathology and principles of treatment in the prevalent diseases, and all other elucidations.

tory observations, the subject of public health may elicit from his experience, are to be written in the left margin opposite to the operations and observations. A selection of the most remarkable cases transcribed from the Medico-chirurgical Journals furnished by the surgeons, and accompanied with the Superintending Surgeon's marginal comments thereon, are to be annexed for the illustration of the pathology, and principles of treatment adopted in each particular species of disease; and those comments are necessarily expected to take an extended and accurate review of the subject.

8. It is left to the Superintending Surgeon to select those cases from the Medico-chirurgical Journals, that are to form part of his annual report; but he is directed to send in not less than two cases, nor more than four from any surgeon's journal.

Superintending Surgeon selects the cases.

9. Independent of the cases and Medical information hitherto contemplated in these regulations, the Government takes occasion to remind the Superintending Surgeon and every member of that profession, that the Medical topography and every department of natural knowledge that their acquirements enable them to illustrate, are subjects which they may dilate on; and as the Natural History of the Malay Peninsula and Indian Archipelago remain unexplored, and the Medical practice of Native Doctors is little known, these subjects form a very extensive field for the investigation of those, duly qualified for such important and useful researches.

Papers on natural knowledge solicited from the profession.

10. The superintending Surgeon will arrange all papers in the natural history of India and practice of medicine amongst the

Papers on natural knowledge where placed.

Report closes with a statement of the profession, their duties and the list of public papers in their charge.

All papers to bear and shew official signatures respectively in the annual report.

Annual Report deemed important and when to be delivered.

Annual Reports to be published, the Superintending Surgeon at his own expence may have additional copies.

natives, in the most systematic form, following in due order the medical history and cases of the year.

11. To keep the Govt. sufficiently informed of the public records actually kept and transferred, the annual report is to be closed with a list of the medical servants of Government, shewing the situations they occupy and a description of the quantity and quality of the public documents they received charge of from their predecessors.

12. All papers, cases, and statements delivered into the Superintending Surgeon, are to bear the official signatures of their respective authors; and those signatures are to be duly copied into the annual reports shewing the authors name. The Superintending Surgeons marginal remarks are also invariably to occupy their exact place in the report.

13. The Government attaches the highest importance to the Superintending Surgeons annual report as a document to which they are justly and fully entitled. He is hereby ordered to present a manuscript copy thereof on or before the 1st May in each succeeding year in the prescribed forms and duly arranged in the exact order it is to be printed and published.

14. The Government will have those annual reports regularly printed, and copies will be forwarded to the Hon'ble the Court of Directors, to the Medical Boards of the different Presidencies, and to the fixed Medical offices under this Government; but beyond the number of copies the Government may require, the Superintending Surgeon may at his own expence, strike off any additional number of copies he pleases.

15. By the Publication of the annual reports, the Medical history of the year and the professional labours of the Hon'ble Company's Medical Servants, will become available to science and the publick in general; an advantage to this class of servants so much the more cheering and satisfactory, as it will bring an entire display of all their labours, converged, concentrated, and illustrated by the Superintending Surgeons more extended experience in the diseases of India, to the notice and constant annual review of the Honorable Court of Directors: in a manner that will shew, the exact merits, talents, and qualifications, of every individual who contributes thereto,

The publication of the report is considered an act of justice to the Hon'ble East India Company, an advantage to science, to the public, and honourable to the professional members that contribute thereto.

16. It being the duty of the Superintending Surgeon to watch over the publick health at Penang, Singapore and Malacca, he is to visit these settlements once annually, or more frequently should Government deem it expedient for the interests of humanity or the publick service.

Superintending Surgeon is to visit the dependencies annually.

17. In the course of those official visits, after due enquiry, the Superintending Surgeon is to report to Government on the state of publick health, embracing vaccination and a general view of all remarkable occurrences in the Medical Department from the period of the preceding until the date of the present report.

To inspect the Medical establishment and report thereon.

18. Inspection reports will embrace distinct returns of the several institutions and establishments for sick at each settlement, with a nominal roll of the Medical Officer in charge, and the servants employed. Explanatory observations are desired in these reports on all subjects that require elucidation.

General outline of the official inspection Report.

To report up-
on Epidemic
and Endemic
diseases.

Cases unpro-
vided for sub-
ject to the ge-
neral usage of
the service.

Weekly states
Monthly Re-
ports, Quar-
terly Returns,
and halfyear-
ly Returns.

Letters from
the Secretary
to Govt.

19. Whensoever an endemical or Epidemic disease makes an irruption towards or into the confines of this Governments territories, Medical Officers are required to report the same to the Superintending Surgeon, and he is to make the earliest report thereof to Government. He is also required to add the information he possesses regarding the nature of the evil and the most efficient means of checking its progress and lessening its ravages.

20. Should any circumstance or cases occur not contemplated or specially provided for in the foregoing regulations, they are to be arranged agreeably to the usage and custom of the service. All rules and regulations at variance with those now published are hereby abolished.

CHAPTER 5TH.

SECTION 4TH.

Arrangement of the Superintending Surgeon's Official Documents.

1. The Superintending Surgeon is to keep the original documents of each Surgeon, secured in their order of succession, between two small pieces of board fastened by tapes; these reports may be bound up with the Medico-chirurgical Journals, from which each respectively has emanated.

2. Those documents are to be kept by themselves secured between two pieces of thin board fastened by tape, and when sufficiently numerous they are to be bound up together.

3. All other public letters are to be kept and preserved in like manner, promiscuously.

Public letters to be kept together in the same manner.

4. All public statements, certificates, and other documents, (not letters), are to be kept, the Penang, Singapore, and Malacca, each in a distinct fasciculus, and to be preserved as the letters.

Penang, Singapore, and Malacca, public papers in three parcels.

5. The Letter Book is to contain copies of all public letters written and received; each letter written to be numbered, and the book is to contain an Index, vide Table No. 24.

Public Letter Book.

6. The public book is to contain copies of all public records, not strictly letters; certificates, proceedings of Committees, special Reports: in short, all miscellaneous matter is to be recorded in it. It is also to contain an Index, vide Table No. 25.

Public Book.

7. The Superintending Surgeon is to preserve manuscript copies of all Returns and Reports dispatched from his Office, written into bound books.

To keep copies of Reports.

3. All other public letters are to be kept and preserved in like manner, promiscuously, together in the same manner.
4. All public agreements, certificates, and other documents (not letters), are to be kept in the Penang, Singapore, and Malacca, each in a distinct fasciculus, and to be preserved as the letters.
5. The letter book is to contain copies of all public letters written and received; each letter written to be numbered, and the book is to contain an Index, vide Table No. 24.
6. The public book is to contain copies of all public records, not strictly letters; certificates, proceedings of Committees, special Reports; in short, all miscellaneous matters to be recorded in it. It is also to contain an Index, vide Table No. 25.
7. The Secretariat Surgeon is to preserve manuscript copies of all Returns and Reports dispatched from his Office, written into bound books.

Table No. 24.
Table No. 25.

PART II.

PART II.

APPENDIX.

TABLE No. 1

Form of Nominal Roll.

Nominal Roll of Sick in Hospital of

<i>Names.</i>	<i>Rank or Profession.</i>	<i>Diseases.</i>	<i>Admitted or taken Sick.</i>	<i>Page of Journal.</i>	<i>Remarks.</i>

Station and date.

A. B.

Surgeon.

TABLE No. 2.

*Form of Present State.*Present State of Sick in Hospital of the
Prince of Wales' Island

March 182

	<i>Anasarca</i>	<i>Catarrh.</i>	<i>Diabetes.</i>	<i>Diarrhœa.</i>	<i>Dysentery.</i>	<i>Fever Remitt.</i>	<i>Fractura.</i>	<i>Ophthalmia.</i>	<i>Rheumatism,</i>	<i>Ulcers Common.</i>	<i>Ulcers Sloughing.</i>	<i>Wounds & Acc dts.</i>
(Here enter De- partment)												

A. B.

Secretary.

TABLE No. 3.

Form of Weekly Report.

Weekly Report of the Sick in Hospital of the
from Sunday 13th to Saturday 19th of April 182

ANALYTICAL REVIEW OF THE WEATHER.

SUN. M. W. FR. heavy clouds, N. E. every Evening, were followed by squalls from that direction; heavy showers of rain, much L. and very heavy T. near. Atmosphere, in consequence light and pleasant, the nights cool, highest temp. 87° at 3 P. M. 13th. Min. (on the 14th) at 6 A.M. 74° Range 13½ average temperature.

Rain during the Week, 3 inch. 1-16. Greatest quantity fell 17th.

Diseases.	Remained last Week.	ADMITTED.							General Total.	Cured.	Dead.	Remaining.	Remarks.
		Sunday 13th.	Monday 14th.	Tuesday 15th.	Wednesday 16th.	Thursday 17th.	Friday 18th.	Saturday 19th.					
Dysentery, -	0	0	1	0	1	0	1	3	6	6	2	1	3
Diarrhœa, -													
Fever. { Remitt. -													
" Penang,													
Quartan,													
Tertian, -													
Quotidian,													
Inf. External,													
" Cephalic,													
" Thoracic,													
TOTAL ..													

A. B.

Station and date.

Assistant Surgeon.

TABLE No. 7.
Form of Indent for European Medicines.

<i>Medicines.</i>			
		<i>Remained from pre- ceding half Yearly Indent, dated</i>	<i>lbs. oz. dr.</i>
		<i>Received on last Half Yearly Indent, dat- ed</i>	<i>lbs. oz. dr.</i>
		<i>Received on Extre Indent, dated</i>	<i>lbs. oz. dr.</i>
		<i>Total.</i>	<i>lbs. oz. dr.</i>
		<i>Expended.</i>	<i>lbs. oz. dr.</i>
		<i>Remaining at the date of this Indent.</i>	<i>lbs. oz. dr.</i>
		<i>Wanted.</i>	<i>lbs. oz. dr.</i>
		<i>Supplied.</i>	<i>lbs. oz. dr.</i>

Station and Date.

*C.
Supg Surgeon.*

*A. B.
Surgeon,*

Medico-Meteorological Report for the Month of

Penang.

N. B. The diseases actually observed are to be arranged in the manner here indicated; and this Table is to be extended to embrace the number of days in the Month.

Superintending Surgeon.

TABLE No. 8. B.

Medico-Meteorological Report for the Month of

June 18

(Station.)

182			Temperature and weather as observed at	Ther.			Remd. last Return -	Anasarca.	Dysentery.	Diarrhoea.	Fever.				Hepatic diseases.	Inf. External.	" Cephalic.	Thoracic.	Ophthalmic.	Ulcers common.	" Stomachic.	TOTAL CASES.
Mo.	Month	Day.		6 A.M.	3 P.M.	9 P.M.					Remitt.	Tertian.	Quartan.									
1	Sun.	N. B. The diseases actually observed are to be arranged in the manner here indicated; and this Table is to be extended to embrace the number of days in the Month.				{ Europeans, - -																
2	M.		{ Natives, - - -				{ Europeans, - -															
3	T.		{ Natives, - - -				{ Europeans, - -															
4	W.		{ Natives, - - -				{ Europeans, - -															
						Total, - - -																
						Cured, - - -																
						2 Total Cases, - -																
						Remaining, - -																

N. B. 1. 2. Where these figures are placed insert "Fatal Cases."

TABLE No. 9.

Vaccination.

Monthly Return of Cases at in June 182

Denominations.	Names.	Age.	Sex.	Succeeded.	Failed.	Remarks.
European - -	T. Bradford,	1	2 Male.	1		" No fever, or very little— glands swell'd.
" "	Jas. Wells,	2	"	"		" Much fever for 24 hours, beginning the 2d day.
Indo-Briton -	N. Shemeer -	1	"	1		" Fever on the 3d.
Armenian - -						
Portuguese -						
Arabs - - -						
Parsee - - -						
Bengalees -						

TABLE No. 10.

Variola.

Monthly Return of Cases which occurred at in
June 182

Denominations.	Names.	Age.	Sex.	Remarks.
European - -	John Wilson,	1	" Male.	Sicknd. on the 1st, & became convalescent on the 15th.
" "	Thos. Wells,	4	"	Sickened & became convalescent on
Indo-Briton -	James Smith,	"	8	"
Armenian - -	N. Shemeer -			
Portuguese -	Anthony, -			

TABLE No. 11.

Surgical operations performed in the Hospital of
in the Month of 182

Amputation of the great toe,	-	-	-	1
Venesections,	-	-	-	6
Number of Leeches applied,	-	-	-	120
“ Blisters	-	-	-	20
“ Abscesses laid open,	-	-	-	2
“ Sinuses,	-	-	-	1
Dissection and Examination of the four cavities of the Human body, wherein the condition of all contained parts were minutely stated in writing at the moment for the extension of Medical knowledge.	}			1

N. B. Any other operations that may have been performed will necessarily be recorded in this Table.

TABLE No. 12.

Medico-Chirurgical and Miscellaneous Observations for April, 182

N. B. Here record whatsoever observations the Surgeons may have to offer on the general causes he supposes to have influenced the origin or course of the diseases noticed in this month's Return.

TABLE No. 13.

Form of Monthly Return of Medical Officers, &c. March, 182

Monthly Return of Medical Officers and Servants.

Names.	Rank.	Date. of Rank.	Remarks.
John W. Smith	1	1	
James Smith	2	2	
James Smith	3	3	
James Smith	4	4	
James Smith	5	5	

TABLE No. 14.

APRIL, MAY, AND JUNE.

Expenditure of Wines and Beer, &c. supplied by the
Commissariat.

Names of Patients (showing the quantities of Wine used.)	Madeira.		Port.		Brandy.		Beer.		Arrack.	
	B	gl.	B	gl.	B	gl.	B	gl.	B	gl.
James Smith from 1st to 15th, - - - -	2	6	"	"	"	"	"	"	"	"
Syed Mahomed from 10th to 20th, - - -	1	8	"	"	"	"	"	"	"	"
Total Expended,	4	2	"	"	"	"	"	"	"	"
Received,	12	"	"	"	"	"	"	"	"	"
Remaining,	7	10	"	"	"	"	"	"	"	"

Station and date.

A. B.
Surgeon.

TABLE No. 15.

Quarterly Return.

Of Dead Stock in use at the

Hospital.

	Cots.	Beds.	Pillows.	" Cases.	Quilts.	Sheets.	Shirts.	Trousers.	Bed Gowns.	Caps.	Flannels.	Gloves.	Spurs.	Here enter all articles of public property, in use or store.
In good condition,														
Unserviceable, -														

Station and date.

Signature of the Steward.

Countersignature of the Surgeon,

L

Half Yearly Return of Expenditure of Medicines from

[illegible]

A. B.

Surgeon.

TABLE No. 17.

List of Articles received from the Commissariat, shewing
Expenditure and Residue from to the

ARTICLES.	Received.	Expended.	Remaining.	Remarks.

A. B.

Station and date.

Surgeon.

TABLE No. 18.

Sick Certificate, No. 1.

I do hereby Certify, that
in a bad state of health, I therefore recommend, that
he may be permitted to proceed to
and to be absent until the

DISEASE.

(Signed)

A. B.

Station and date.

Surgeon,

In Medical Charge of

TABLE No. 19.

Sick Certificate, No. 2.

I do hereby solemnly declare, that
in a very bad state of health, and that, in my opinion,
leave to proceed to
for the recovery of his health, is highly expedient.

DISEASE.

(Signed)

A. B.

Station and date.

Surgeon,

In Medical Charge of

TABLE No. 20.

Sick Certificate, No. 3.

I do hereby certify, that ^{is}
 in a dangerous state of ill health, and I am of opinion,
DISEASE. that leave to proceed to
 is absolutely necessary to his recovery.

(Signed)

A. B.

Surgeon,

Station and Date.

In Medical Charge of

TABLE No. 21.

MAY THE 10TH, 182 SINGAPORE.

Schedule of Public Official Documents, transferred by Mr.
 Surgeon recently in Medical charge of
 the Singapore Residency, to Mr. Asst. Surgeon
 nominated by His Excellency's order in Council, under
 date the 27th of April, 182

Description of the Documents.	Number.	Whether complete, or incomplete.	Particulars of inaccuracies and irregularities in the Documents.

I hereby declare to having read
 the above in Mr. presence,
 and that the Documents transferred
 by me are now in the state above
 described.

(Signed)

Surgeon,
 Recently in Medl. charge.

I hereby acknowledge having
 received the above, in the state above
 described.

(Signed)

Asst. Surgeon,
 Appointed to the Medl. charge
 of the Singapore
 Residency.

TABLE No. 22 A.

List of Public Property transferred by

to

Cots.	Beds.	Pillows.	Cases.	Quilts.	Sheets.	Shirts.	Trousers.	&c. &c.	Madeira.	Bottles.	Port.	Brandy.	Beer.	Arrack.	&c. &c.

A. B.

Station and date.

Surgeon.

TABLE No. 22, B.

List of Medicines, &c. transferred by

to

MEDICINES.	Quantity.			REMARKS.
	lbs	oz.	dr.	

A. B.

Station and Date.

Surgeon,
Recently in charge of

TABLE No 23.
QUARTERLY RETURN OF SICK.

	JANUARY					FEBRUARY.					MARCH.					TOTAL CASES.		TOTAL.	
	Remained last quarterly return, 31st Dec. 182	Since Admitted.	Total.	Cured.	Dead.	Remaining.	Remained last Return.	Since Admitted.	Total.	Cured.	Dead.	Remaining.	Remained last Return.	Since Admitted.	Total.	Cured.	Dead.	Remaining.	
DYSENTERY.	Europeans																		
	{ Natives,																		
DIARRHOEA.	Europeans																		
	{ Natives,																		
FERRIS. REMITT. PEN.	Europeans																		
	{ Natives,																		
Maximum temper. (on the 4th and 8th,) at 3 P.M. 87 deg. Minimum temp. (on the 10th) at 6 A.M. - 71 deg. 13 deg Range of the Ther. - Total quantity of rain during the month, - 9.08 i ches. Greatest quantity which fell on one day (12th) - 2.75 in.																			

N. B. The Quarterly and Half Yearly Returns, are to be drawn out in this form, increased in a corresponding ratio with the period.

TABLE No. 24.

Index of the Letter Book commencing

182

<i>Letters, Date and Number.</i>	<i>By whom.</i>	<i>To whom.</i>	<i>Page of Letter Book.</i>	<i>Subject.</i>
No. 5 10th March.	Staff Surgeon.	Mr. Asst. Surgeon	15	Remitting Contingent Bills.

TABLE No. 25.

Index of the Public Book commencing

182

<i>Date and Number.</i>	<i>The Authority.</i>	<i>Object of the Document.</i>	<i>Page of the Public Book.</i>
No. 1, 10th Jan. 182	Asst. Surgeon	Statement of Services and ill health, to recover in consideration, certain allowances, for Letter vide Letter Book, vol. 1st. p. 28.	10

TABLE No. 26.

To

THE HONORABLE

Resident Councillor

HONORABLE SIR,

I have the honor to state

I have the honor to be,

HONORABLE SIR,

Your Obdt. and humble Servant,

(Signed)

M. D.

*Asst. Surgeon,**In Medl. charge of the Residency.*Station,
th Nov, 182 }

Mode of taking a Case.

—Etat 30, Sepoy of the—
—Admitted.—

Six months since was taken ill of weakness, Previous His-
Dropsy and Pains at tory.

the symptoms supervened in the following order: 1. Dyspnœa; 2. Thoracic pains; 3. Gums became sore, 4. Teeth loose, 5. Œdema, 6. Pustular eruptions especially on the extremities, 7. Pains, 8. Heaviness of the limbs and 9. Numbness, 10. Burning of the palms of the hands, soles, and then of the entire feet, 11. Partial paralysis of the lower extremities. Now complains of 1, 2, 3, 4 5. 6, 7, 8. Present con-
9, 10, 11. Extreme emaciation. Anasarca, dition.
no appetite, Digestion bad. Thirst, Bowels loose, urine scanty and red, cannot sleep. Pulse 120 large soft and undulating. Tongue, tissue pale, no fur, smooth and sulcated superiorly, the margins irritated and red, skin thickened, dry, hot, scaly, many eruptions of a pustular kind but covered with thick dry scales, palms dry, dark spots marking the site of recent blotches and pustules over all the surface, more especially on the extremities. Thorax deformed by increased convexity laterally, sounds well superiorly, inferiorly dull on percussion. The abdominal parietes are constricted and hollow anteriorly adapted to the diminished Volume of the viscera. There is no pain on pressure, a little gas but no effusion indicated by percussion. The stethoscope indicates the rushing of air through large cavities and occasional tinkling in both lungs superiorly. Inferiorly both lungs are imperfectly traversed and on the right, Hygophœm.

N

Egophœm

Diagnosis

The Heart's action is deep, dull, diffused, and extending over all the Thoracic parietes.

Pulmonary tubercles superiorly and inferiorly on the right. Hydrothorax and Hydropericardium. Effusion into the Spinal Theca and into the external cellular tissue. The blood having lost part of its fibrin by effusion, is thence in an unnatural state. Digestive, and external and internal capillary derangement, with intestinal Ulcers.

N. B. Here is to follow the order for Diet, prescription for Medicine, and all Instructions that are calculated to influence the treatment, or assist in restoring health.

No. 28.

Analysis of any remarkable disease.

In reference to Chapter the 2nd, Section the 4th, Para. 11th. this rapid analysis of a case is given, to illustrate distinctly the form and mode in which the opinion of Medical servants is to be offered in their abstract Monthly Returns, on any species of disease noticed, that may be worthy of particular comment or remark.

No. 29.

Diagnosis naturally affords the theory of cure.

It will also serve to shew, how easily and naturally the indications of cure and rationale of treatment, are deduced from the Diagnosis; and again the great value of accuracy in framing all those views, as the success of curative means, or, (in other words,) the life of the patient and the character of the Surgeon or the Physician, are both necessarily at stake, on their exactitude

No 30.

Method of viewing a Case Analytically.

Suppose there is no approach to ple- *Diagnosis*
thora, and the Diagnosis to be

Chronic engorgement of the Cerebral tissue, tending to softening of some part of its substance, and this engorgement originally influenced by a previous Pulmonic affection, wherein effusion took place on both but more especially on the right side, as evinced by the increased convexity, and impaired pulmonic murmur. *Diagnosis*

INDICATIONS OF CURE.

Promote and preserve the general health and the various functions, by the strictest attention to regimen, regular repose, gentle exercise, and amusements; remove the engorgement and the local determination to the Brain, by the establishment of a greatly increased action in the neighbouring absorbent vessels.

Indications of cure.

Preserve carefully a healthy condition of the lungs, by the liberal use of flannels, and, most carefully avoid all exposure; as the thoracic organs must exercise a direct influence on the system of the brain, from the connection already established between them.

MEDICAL TREATMENT.

Employ a series of blisters, to be cut about $1\frac{1}{2}$ inch broad, to extend posteriorly from ear to ear, and dipping down-wards in a Semi-lunar form; the succeeding blister to be applied immediately the preceding is healed.

Medical Treatment

NOTE.—This mode of viewing a Case, of making the Dissection, and analysing the information it affords, is extracted from a paper drawn up by me to be presented to the Royal Society.

Keep the bowels open with the following Pills occasionally.

R. Pil. Hydrarg 1 drachm Pulv. Ipecac, and Pil. Rufi. ā ā 20 grains in Pil No. XX

Sign One occasionally at bed time.

ANALYSIS OF TREATMENT.

Vesications
by cantharides.

The repeated and continued application of blisters to the back of the head or neck will occasion a greatly increased and energetic action in the absorbent vessels locally, whereby the partial engorgement will become ultimately and permanently removed, and a healthy condition of that part will ensue.

Pil Hydraag

The effect of Mercurial Pill in stimulating the system of the Liver where a combination of causes tend to render that organ inert, and promoting its secretion where they are so constantly vitiated, is calculated to induce and preserve the general health.

Pulv. Ipecac

The effect of Ipecacuanha in a divided dose is to induce the stomach to act more perfectly, by cleansing its mucous membrane and that of the Duodenum and the tube generally, from the viscid mucous which agglutinates their follicles and by interpositoin prevents the healthy action of the Capillaries and impairs that of the muscular fibres.

Pil Rufi.

The Compound myrrh and aloetic Pill not only will be useful in keeping the colon free from fœcal collections, but it will also assist in deterging the mucous Intestinal coat, and thereby conduce to render its functions more healthy and perfect.

No. 31.

Dissections
how recorded

The following case is laid down as a form to be adopted by Medical Officers in making

and writing out their dissections, in every case where post mortem examination is made. In all cases the contents of the Thoracic, abdominal, Cranial and Spinal cavities are to be minutely examined and detailed at the moment: Subsequently the Resumé is to be formed and the inductions and considerations afforded thereby, are to be duly entered in the forms, and in conformity with the views here laid down.

No. 32.

MALACCA 16TH JANUARY. 1828.

Death by Hæmorrhage from a Wound of the Spleen and Peritoneal injury.

A man apparently about 22 years of age, and recently employed as a ship Lascar, was brought into the General Hospital about 1½ O'Clock A. M. on the morning of the 16th January 1828, said to have fallen down a well with a bottle in his hand, at 11 O'Clock P. M. on the 15th, from which he received two transverse wounds in the left hypochondriac region, about an inch below the ribs, the largest about ½ inches in length, the lips of the smaller half an inch apart, an inch in length, and nearly in a line with the former. Through the largest, a great portion of the small intestines protruded, and at the time of his admission into hospital, they were in a state of high inflammation and cover-

Previous history.

Accident.

Injury

Protrusion of Intestines.

NOTE.—It is to be observed, the dissection of those who die from sudden causes, are peculiarly valuable to science for two reasons :—

1st, They generally shew the early rudiments or traces of disease, on the tissue that has first submitted to morbid action.

2d, They make the ministers of health, conversant with the exact natural appearances of the several tissues

Replaced

Dressed

Symptoms

ed with sand. They were cleaned and returned into the abdominal cavity. The wound was brought together by sutures and superficially dressed. He appeared to have lost a considerable quantity of blood. His pulse was 140, very small and hard. Tongue not observed. Skin cold and moist.

Treatment.

He answered questions with difficulty but rationally. He complained much of Abdominal pain. Venesection was performed and 32 ounces of blood drawn from the arm. Warm fomentations were applied over the abdomen. He lingered until 10 minutes before 5, and then he expired.

Inspection of
the Dead
Body.

The foregoing particulars were reported to me by Assistant Surgeon Ward, M. D. and I proceeded with his assistance to examine the body. $\frac{1}{2}$ past 1 P. M. 16th January 1828. The body was extended horizontally for examination, the subject is of a middle size, black, very muscular, has castre features, and apparently, was in the recent enjoyment of perfect health. With the exception of the two wounds already described, no marks of external injury are apparent. The Tongue was not, (but should have been.) removed and minutely inspected.

No. 33.

AUTOPSY.

Thoracic
cavity.

Removing the sternal arch, the Lungs present a healthy color, but are not perfectly collapsed; both afford crepitus. The Pleura generally pale and there are very slight adhesions on both sides of the lower pleuro-pulmonary surfaces, to the Diaphragm.

Heart.

The pericardium laid open, contained about an Ounce of fluid: the heart removed and the right and left cavities laid open; both ventricles

Ward's Case in Capital.

and auricles are empty. The internal appearance of the heart is natural, its muscular tissue bloodless but firm, the valves natural. Laying open the Aorta; it has an Ivory colour with a tendency to a streak of blush on each side of the intercostal arteries; the coats are thin. The common Illiacs are of an ivory colour but the external and internal Illiacs are marked with small transverse rugæ or strice. Laying open the larynx and trachea, the mucous membrane is found pale, and this is continued through its pulmonary ramifications, which on both sides are healthy yet the parenchyma posteriorly and inferiorly is slightly engorged with blood, but sections of its Tissue only present a blush; otherwise, its appearance is perfectly healthy and natural.

On laying open the parietes of the abdominal cavity, the peritoneum is found partially adhering to the Omentum around the wounds, and dark sero-sanguineous fluid issues largely from the incision. The entire peritoneal surface of the stomach and small intestines, is of a brick red colour from capillary injection.

The abdominal cavity contains much effused blood,* and in proceeding to remove the Viscera, 10 ounces of coagulated blood are found near, (and which appears to have issued from) the spleen, as it is wounded on its external convex surface, near its centre, extending from the anterior, towards the posterior margin, (corresponding with the large external wound) then turning upwards, and forming the segment of a circle. A piece of the glass of a French bottle is found deeply embedded in the wounded Parenchyma of the spleen. The spleen is very large and weighs 13 ounces one drachm. The color of its internal tissue is a light puce, with white dots. At the superior part of the external wound, about the centre, there is a patch of ecchymosis, shewing that this part had sustained a severe bruise. The Liver is of the natural

Arteries.

Mucous membrane of the Pulmonary Tubes.

Pulmonary Tissue.

Abdominal cavity.
Peritoneum.

Blood effused and coagulated.

Spleen wounded.

A piece of Bottle Glass discovered deep in the spleen.
Spleen's character.

External contusion.

Liver.

* There was no information of the quantity of blood lost, before he was carried to the Hospital.

	size, soft and flaccid; Sections of its tissue pale and bloodless, but in its general appearance, natural yet coarse. It weighs 42 ounces avoirdupoise. The Gall bladder contains five drachms of healthy bile. The pancreas is pale, diminished, and weighs 2 ounces $3\frac{1}{2}$ drachms. The Kidneys are natural and their parenchyma pale. The mesenteric glands are enlarged, and their internal tissue vascular.
Pancreas.	
Kidneys.	
Mesentery.	
Bladder.	The urinary bladder contained 10 ounces of urine. Its internal mucous coat pale, no columnar elevations. The Prostate gland is natural. Laying open the Œsophagus, its cuticular lining is pale, and it terminates abruptly in the cardiac orifice, 12 ounces of half digested rice was found in the stomach. The mucous tissue of the stomach is pale and corrugated, with the appearance of small sunken stricæ in the inferior part of the small Curvature. Passing the Pyloric orifice, the surface continues pale and the rugæ irregular, until it has received the common duct. The rugæ then become transverse and well developed; fourteen inches from the duct, the rugæ assume a slight blush, but they continue well developed with occasional small tortuous terminations. Progressively, the rugæ of the Illium become smaller, less regular, and the blush assumes a darker red, towards the centre of the Illium, there is a honey comb ulcer five inches in length, and three lumbrici were removed from the superior part of the Illium. Progressively, numerous considerable honey comb ulcers are observed. The mucous coat becomes extremely thin, and the rugæ sparingly and scantily developed, until they (the rugæ) altogether cease. The surface becomes a brick red colour, and the mucous coat is apparently altogether disorganized. Numerous small white tubercles are here observed, studded in the muscular coat, towards the Cœcum and Cœco-Iliac valve; and there are no traces of rugæ.
Prostate.	
Œsophagus.	
Stomach.	
Mucous coat.	
Duodenum.	
Jejunum.	
Illium.	
Lumbrici.	
Ulcers.	
Mucous coat destroyed.	
Tubercles.	
No Rugæ.	
Cœcum contracted.	The Cœcum is contracted extremely, its internal surface pale. The mucous coat of the

large intestines is pale, with small contorted, firm, irregular rugæ, in parts only.

Removing the scalp and skull cap, the Dura mater was extensively wounded by the saw on both sides. The arachnoid is quite transparent. The Pia mater is natural, The cerebral tissue is flaccid. Sections through the centrum Ovale parallel with the corpus callosum, shew very few bleeding points. The cortical substance is well marked. Separating the corpus callosum and fornix in the centre and turning the extremities relatively backwards and forwards shews the plexus choroides on both sides slightly blanched, and both ventricles contain a little fluid. The anterior superior surface of the Thalami on both sides are slightly softened. The Optic nerves are wasted and very small. The vessels over the pons varolii are injected.

The tissue of the Cerebellum is soft. The Odontoid process is large.

Removing the anterior arch of the spinal column, separating the intervertebral nerves and removing the cord in its Theca, the loose tissue lining the canal opposite the heart, and in the lumbar region is injected with sanguineous gelatinized fluid. Laying open the Dura mater of the cord anteriorly, there are a few adhesions of the arachnoid. The capillary vessels of the inferior half of this surface are injected. About the centre of the cord, a small fasciculus of nerves arising from the right side, extends obliquely downwards and to the left and is there lost in a fasciculus of nerves from the left side; the fasciculus arising on the left side, passed obliquely downwards and to the right, and having united itself with that fasciculus just mentioned, opposite the centre of the cord it returns to the left. Laying open the Dura mater posteriorly some adhesions of the Arachnoid are observed, The capillaries throughout on this surface are irregularly injected. The Pia mater throughout the whole extent is dark and slaty. The Equineal nerves are also darker than usual in health.

Colon, sigmoid flexure and Ructum.
Cranial cavity

Arachnoid.
Pia mater
Cerebral tissue
Centrum ovale.

Choroid plexus.

Thalami.
Optic nerves.

Base of the brain.
Spinal canal

Tissue of canal

Anterior surface
Adhesions.
Capillary injection.
Nerves uniting anterior to the cord.

Posterior surface.
Adhesions.
Capillary injection.
Pia mater slaty
Equineal nerves dull and dark.

Cord's tissue.

The organization, colour, and consistence of the cord are apparently natural.

No. 34.

Resumé, or Analysis of the Autopsy.

Thoracic cavity.

The Pulmonary vessels contain very little blood. 1 oz. of serous fluid in the pericardium, all the heart's cavities quite empty. its tissue pale. The descending aorta internally has a streak of blush, external and internal illiacs are marked with transverse strice.

Abdominal cavity

Blood effused and coagulated from the spleen, which has an incision about its centre and a piece of glass is extracted from the bottom of the wound in the spleen and dark blood continues oozing from it, the peritoneal capillaries are injected with blood, the Liver is bloodless and pale, the Kidneys pale, Stomach contained half digested food, its mucous coat pale and corrugated with strice in the small curvature mucous surface at first pale irregular rugæ, after the duct well developed, soon assuming a blush, inferiorly irregularly tortuous, inflamed, affected with honey comb ulcers, thin, loses the rugæ and the mucous coat partially or altogether disorganized.

Cranial cavity

Membranes and cerebral tissue pale, natural, the thalami softened, optic nerves wasted cerebral substance generally flaccid.

Spinal canal

The lining tissue of the Canal is injected with semi gelatinized sero-sanguineous fluid, anteriorly in the Theca adhesions of the arachnoid, and inferiorly on the cord capillary engorgement, posteriorly there are adhesions of the arachnoid, capillaries throughout are injected irregularly, the Pia mater throughout is slaty, the Equinal nerves dark. The external cellular substance is copious, and muscular system well developed.

External cellular substance and muscular tissue.

The information afforded by the foregoing is to be analysed, and divided into four considerations, with a view to confer accuracy and promptitude in recognising the symptoms of Diseases, in reasoning on their causes, origin, courses, effects, their modes of termination, and the principles calculated to influence their cure.

The foregoing divided into four considerations.

This Division embraces a review of the tissues actually diseased or altered by injury; the ordinary causes of disease in each one of these Tissues; the order in which they apparently commenced, and their probable courses.*

1st. Consideration.

This second Division embraces a review of the Influence apparently exercised by the diseases specified in this case over the general health, the effects which the Treatment adopted were likely to have produced; and causes of any marked symptoms previously observed.

2nd. Consideration.

This 3rd Division embraces a review contrasting all the foregoing Information, and shewing what the Diagnosis should actually have been at each time when formed, what should have been the indications of cure, and what would have been, the best course of Treatment to accomplish that object.

3rd. Consideration.

This Division embraces a review of what is considered to have been the more immediate

4th. Consideration.

NOTE.—Medical Officers having written out the first consideration in their Reports, they are then to insert their opinions in a separate paragraph on each point that consideration embraces. These being terminated, another consideration is to be entered, and the subjects it involves are to be discussed, every distinct subject in a separate paragraph. The same course is to be adopted in succession until the case is concluded.

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There should be a break between the 3rd & 4th as there is

cause of Death; and of the mode in which, animal life in this instance terminated.

1ST CONSIDERATION EXAMINED.

The tissues diseased.

The Cerebral and nervous Tissues, the spinal arachnoid, the condensed cellular Tissue lining the arteries, and the Intestinal mucous membrane were the parts diseased.

Tissues injured.

The Peritoneum and the Parenchyma of the spleen and its envelope were the parts altered by injury.

Diseases present, how induced.

Excesses either in drinking, eating, sexual intercourse, or exposure to the sun, to wet and cold or sudden vicissitudes of temperature, usually produce diseases of the serous, mucous, cerebral and nervous Tissues; and hence doubtless of the vascular Capillary system, (including the vasa vasorum) and the Cellular Tissues.

Origin of disease in the cerebral serous and nervous tissues.

The softening of the Thalami, wasting of the nerves, and adhesions of the arachnoid were, apparently all connected, by their originating from common causes or a common cause; and they were the most ancient of diseased affections; as the former would occupy some years in attaining its present state.

Course of disease in the Thalami or cerebral tissue.

Most probably an engorgement of the Vascular Tissue, entering into the composition of the Thalami, impaired the capillary action of that part, by interfering with the pervious condition of its very delicate system of Vessels; and hence, as the circulation became progressively less perfect, the natural Organisation of the Tissue, fell under the influence of the new laws imposed by the change from organic capillary action and in the same ratio that capillary action became impaired or its limits circumscribed, the cerebral Tissue became softened as a necessary consequence in a corresponding extent.

Course of disease in the nervous tissue

It seems uncertain whether the original affection of the Thalami was then extended to the Optic nerves or that they wasted from

the softening of the Thalami only, of these theories the latter is probably nearest the fact, as the consequence of the extension of impaired capillary action from the Thalami to the Tissue of the Optic nerves.

It appears by the experiments of my learned friend Mr. M. Magendie, that there is always some fluid in the spinal Theca. I always found fluid, but they were cases of Disease: and to that cause I then attributed the presence of fluid. It seems obvious that the existence of fluid in excess, or the presence of adhesions, must indicate a deranged action of the exhalants of this surface. It is probable that the fluid exhaled in disease, may have properties different from those possessed by fluid of the same part in a healthy state. In the present case it seems very probable that a morbid effusion took place into the Theca, soon after the Thalami became engorged; because, a considerable lapse of time must have been required to admit of that fluid becoming condensed into false membranes and forming adhesions, which existed in this case. Moreover, the slaty color of the Pia mater clearly evidenced deranged capillary action.

This serous membrane in conditions of inflammation, exercises that kind of marked influence over the cerebral serous membranes, that the Intestinal mucous membrane does, over the Pulmonary; or, vice versa. For this reason, peritoneal inflammations when not rapidly reduced, have a direct tendency to occasion meningeal engorgement and rapid effusion, which latter, terminates in death. In this instance notwithstanding the very extensive peritoneal injury which occasioned a brick red injection of the peritoneal capillaries, there was no approach to cerebral engorgement or effusion, in consequence of the extensive loss of blood.

This coat is subject to all modifications of sanguineous engorgement and inflammation,

Course of disease on the serous tissue.

Course of disease in the peritoneum or abdominal serous tissue

Magendie

Course of disease in con-

densed cellular tissue lining the arteries.

Present case

Course of disease in the intestinal mucous tissue

Present case

Course of disease in the envelope and

and consequently to ulceration, softening, and disorganisation of its Tissue. In certain morbid states, the lining of the Aorta often resembles mucous membrane, by a humid, glistening, spongy appearance; and it is then darker than the interior of the arteries in health, specks of ulceration are observed on its surface, generally of irregular form and the superficies of the ulcer is coated with a puriform substance, giving the idea of a syphilitic ulcer. The streak of blush in the Aorta, and decomposition of the lining membrane in the Illiacs, most probably ensued to that morbid action which resulted from the engorgement of the Vascular system of the Thalami and the accumulation of blood in the Vasa Vasorum of the Aorta continued of a Chronic or passive kind, whereas, in the Illiacs the deranged or impaired capillary action of the Vasa Vasorum, terminated in the softening and decomposition of the lining of that part.

This surface is of very great extent, performs the most important offices, and in conditions of irregular life, it becomes peculiarly subject to various causes, which induce modifications of inflammation, engorgement, ulceration and softening of its Tissue. The Blush on this surface, the irregular and inflamed rugæ, honey-comb ulcers, disappearance of rugæ, disorganisation of the mucous coat all indicate preceding capillary engorgement, which progressively deranging the natural capillary action of that part, and the Tissue influenced by those laws, to which the existence of varied degrees of passive engorgement or active inflammation subjected each part, became either ulcerated, softened, disorganised, or as the affection extended upward the vessels progressively became dilated and sanguineous engorgement.

The wound obviously must have produced copious hæmorrhage, but no special morbid change could have ensued immediately in the

Tissue beyond the direct solution of continuity, and the general effects resulting from abstraction of blood from the Vessels; peritoneal capillary injection necessarily commenced from the period of the Injury.

tissue of the spleen.

2ND, CONSIDERATION EXAMINED.

The softening of the Thalami, and the wasted state of the optic nerves, shew, that the sight was particularly impaired.

Cerebral and nervous tissue

The injected tissue of the spinal canal, the adhesions of the arachnoid in the Theca, and the dark colour of the Pia mater on the cord posteriorly, and on the Equinal nerves, indicate, the former excess of previous exhalation, the latter, a chronic stage of Disease in the capillaries of that part. All these indications, mark that the energies and functions of the nerves, both of Animal and Organic life have been in this Individual's case, greatly deteriorated and deranged.

Spinal arachnoid piamater.

The blush in the Aorta and striæ in the Illiacs indicate, the former a febrile state or tendency: the latter, an impaired vascular condition, which according to observation, succeeds either to the course of some lingering affection or to an active disease*.

Lining of the arteries.

Bichat believed, that $\frac{1}{4}$ of those who died had disease of the lining membrane of the Arteries.

Bichat's opinion.

The Blush, irregular rugæ, the inflammation, honey comb Ulcers, thinness, and apparently anterior decomposition of the mucous Intestinal coat indicate that the Individual experienced much general ill health, with a very nervous condition of mind and body.

Mucous and digestive surface.

The natural state of the External cellular and muscular Tissues, indicates that the digestive function and the absorbent and Lymphatic sys-

Digestion repaired the waste of adipose tissue.

* I have detected this Blush in many cases, and it seems to me, intimately and extensively connected with morbid action.

terms continued healthy, so far as to prevent up to the period of death, any undue wasting of parts.

Symptoms and treatment unknown. The wound. The symptoms that attended the progress of these diseases are utterly unknown and the Effects of Treatment, if any are equally so.

In reference to the wound of the Abdominal parietes, peritoneum and spleen, and the protrusion of the Intestines; there is no exact history of the extent to which he lost blood, but as there was little or no pulmonary, cerebral, or organic engorgement of any kind, except the capillaries of parts injured, it may be considered that the Hæmorrhage was very considerable.

No cerebral engorgement or effusion. The absence of delirium and of coma, indicated there was little or no cerebral engorgement or effusion, and the continuance of Vascular action for a considerable period after the accident, together with the loss of blood, concur to account for the capillary system of the spleen and the parenchyma or Tissue of all the great and important organs, containing very little blood, notwithstanding the food remained imperfectly digested in the stomach.

3rd. CONSIDERATION EXAMINED.

Morbid phenomena not hastening death, and, the accident. The considerations involved necessarily separate into those affecting certain Tissue, not immediately concerned perhaps, in hastening the death; and those injuries received by the accident which did unquestionably produce death.

History wanting but the facts are very instructive. The anterior history of the case embracing the symptoms the Diagnosis and Treatment, are wanting; but a very important observation arises, which is: that an Individual may have all the external ordinary appearances of health, and continue the discharge of his usual labours, for a considerable period after the most serious diseases have commenced their ravages, on Tissues of parts performing the most important offices in the maintenance of animal life.

Admitting the Diagnosis to have been, enlargement and a tendency to softening of the cerebral Tissue either of the Thalami, or in their vicinity, and Chronic inflammation and ulcers of the Intestinal mucous membrane.

Assumed diagnosis.

INDICATIONS OF CURE.

1st Reduce the Column of circulating blood sufficiently to relax all the vascular system, to stimulate the Heart to draw in resources from all extreme parts to enable the extreme circulatory capillaries to contract themselves, and to stimulate the extreme absorbents more especially of the diseased part to increased action.

2nd. To occasion a determination from the part affected, by forcing a concentrated determination to some neighbouring part.

3rd. The giving a continued series of shocks to the capillary system, to call all their energies forcibly into action.

4th, Perhaps to effect some change in the fluids; the Blood?*

5th. Deterge the mucous Intestinal coat, of the thickened viscid mucous that in most morbid conditions adheres tenaciously to its entire surface closing the openings of the more delicate Vessels, agglutinating the follicles and cryptæ; and being in effect interposed between the mucous coat and the Intestinal contents, it prevents that surface from exercising a healthy action on the alimentary substances thus imperfectly presented to it.

Cleanse the viscid mucous from the intestinal coat.

MEDICAL TREATMENT.

General blood letting, subsequently the occasional application of Leeches, especially around the Rectum.

1st. Indication.

This would be effected by a series of Blisters, and eventually, Issues, or Setons.

2nd. Indication.

* All considerations affecting vascular action, are previously provided for as before stated.

3rd. Indication.

This would be effected especially by a series of blisters.

4th. Indication.

Alteratives, as small doses of mercurials, antimonials and the continued abstraction of serum by cantharides vesications, undoubtedly produce such marked effects as to warrant an opinion that in certain morbid conditions, the fluids are rendered more healthy, and capillary action is improved.

5th. Indication.

Either repeated doses of Ipecacuanha large or small, with or without Pil: Hydrarg: or combined with Nitrate of Potass.

Febrile cases.

In other cases where there is a more marked febrile tendency Nitrate of Potass* 1 scr. muriate of Ammonia gr. XV Aqua 2 oz. taken twice a day is most extensively useful.

Means used for the wound appropriate.

The return of the Intestines and bleeding actually practised, were obviously the most appropriate means for Recovery: but in the case of such extensive injury, their advantages would be comparatively slight, and perhaps as regards the bleeding, only in a small ratio with its extent.

4th, CONSIDERATION EXAMINED

Hæmorrhage.

A large quantity of Blood was very suddenly poured out from the wounded spleen. all the organs from that moment suffered a large reduction from the columns usually distributed to them, the rational faculties were not abolished (but the animal powers weakened) because, the cerebral Tissue was not engorged; on the reverse if it received a smaller supply of blood.

Tissues most subject to engorgement.

In a general collapse of the system, in sinking however produced, and obviously in all cases where vascular action is enfeebled, the tissue of all others the most subject to, and the most endangered by engorgement, is the Pulmonary parenchyma, and the parts next in succession.

* This has been recommended by Hillary on the disease of Barbadoes, and I have found it extremely useful in the Diseases of Penang.

the most endangered, are, the Cerebral Tissue, and the Pia mater of that substance, and of the cord.

The absolute reduction of the general circulating column; general exhaustion from the loss of blood, and the nervous exhaustion resulting from the injury, and its effects progressively aggravated by (perhaps the disease,) the partial failure of the cerebral energies from an insufficient supply of blood, and the consequent inability of the heart to draw in supplies, more especially those distributed to the pulmonary Tissue, or to distribute them in sufficient and equal proportions especially to the Brain; the cooperation of these causes necessarily conspired, to render the circulation less and less perfect at every systole. ^X Acting more feebly, and sending forth a column still more diminished yet some of which would no longer be returned again to the centre; by degrees the column more and more diminished, the brain no longer received a supply sufficient for the maintenance of life, the current ceased altogether, and the heart having thrown out its latest supply into the arterial tubes that organ remained empty, no farther supply was determined to the lungs or brain and as with the progressive failure of supplies the powers of life declined in the same Ratio: so with the cessation of the current, animal life terminated.

Exhaustion induced, sinking, and collapse.

The Heart

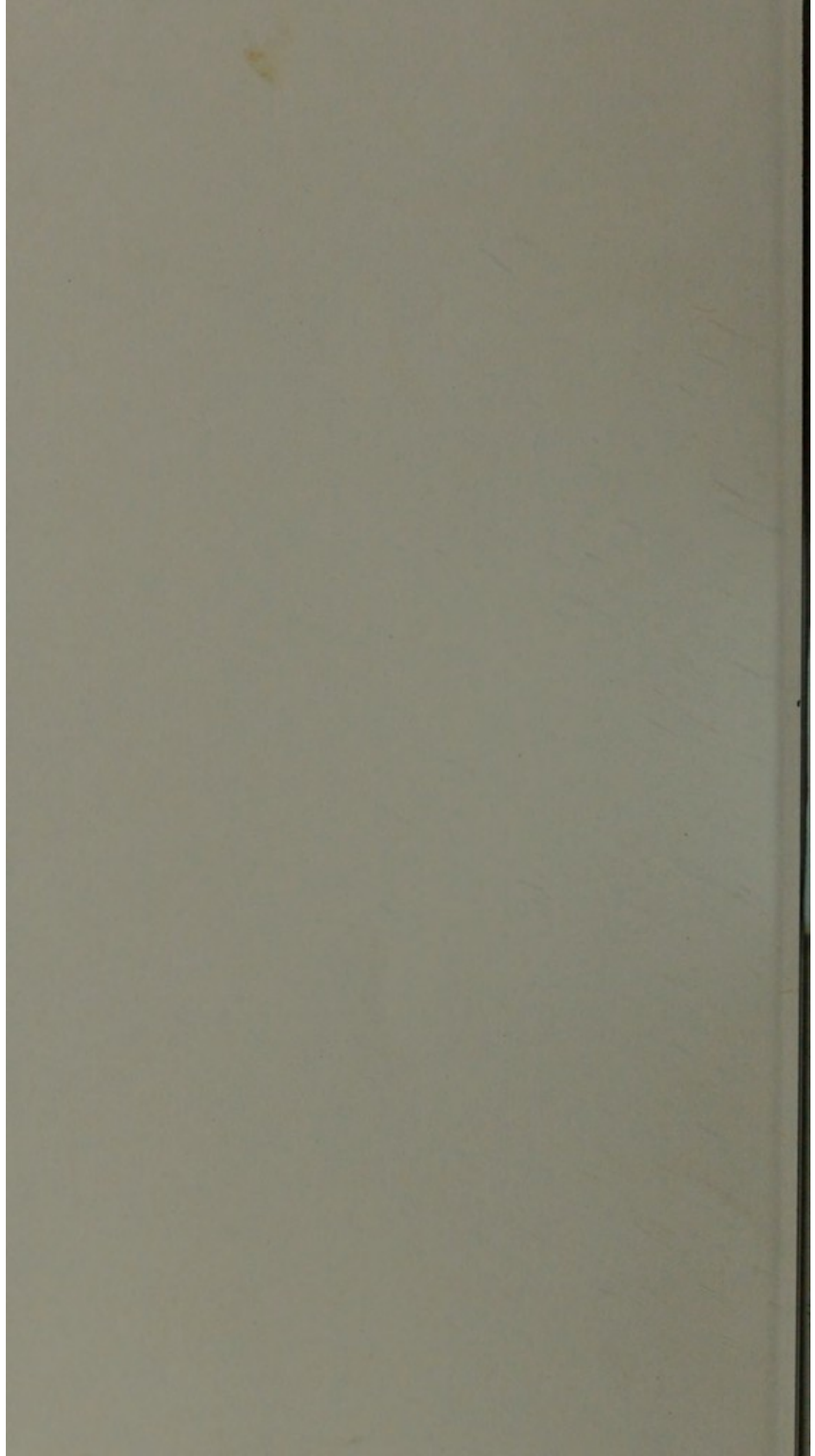
N. B. The humoral pathology is not entered into, because the schools are undecided on that question. Investigation is recommended, and the experiments and results are solicited from the profession. ●

F I N I S.

the most important, are the Cerebral Tissue, and the Pia mater of that substance, and of the cord.

The absolute reduction of the general circulation; general exhaustion from the loss of blood and the nervous exhaustion resulting from the injury, and its effects progressively aggravated by (perhaps the disease) the partial failure of the cerebral energies from an insufficient supply of blood, and the consequent inability of the heart to draw in supplies, more especially those distributed to the pulmonary tissue, or to distribute them in sufficient and equal proportions especially to the brain; the operational loss of the necessary component, is rendered the circulation less and less perfect at every system. Aorta in its healthy and sending forth a column still more diminished yet some of which would no longer be returned again to the general body, because the column more and more diminished, the brain no longer receiving a supply sufficient for the maintenance of life, the current ceased altogether, and the heart having thrown out its latent supply into the arterial system, that organ remained empty, no further supply was determined to the lungs or brain and as with the progressive failure of supplies the powers of life declined in the same fashion, so was the cessation of the cerebral animal life terminated.

Dr. W. The general pathology is not entirely fatal, because it is not a total lesion. In addition to the heart, and the experiment, and results are collected from the experiments.





DICTION

SOME TIGHT
GUTTERS

