STATISTICS
OF
BETHLEM HOSPITAL,
WITH
REMARKS ON INSANITY.

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THE subject of insanity, at all times an interesting matter of inquiry to medical men, has of late engaged so much attention, and there prevails such a general desire for information respecting the disease, especially when any additional facts are brought forward in its illustration, that I am led to believe a statistical report of the principal occurrences met with at Bethlem Hospital, during the last and present century, may be of some use, particularly if the tables are so arranged as to give as well the number of admissions as the deaths, and the proportion of patients reported cured, during different periods, but of the same comparative duration. These classified statements are accompanied by a few general remarks on insanity; and, lastly, an account is

given of the chief pathological changes of structure observed on the dissection of seventy-two insane patients which have been recently performed in that hospital.

Tabular documents of the kind alluded to, when obtained from authentic sources, cannot prove otherwise than useful; and as the records of the above institution are replete with valuable information, I have thought it might be advantageous to lay the present communication before the Royal Medical and Chirurgical Society, where I trust it will be received, not as a paper containing much that is new upon the subject under discussion, but rather as an attempt to contribute a few data respecting the prevalence of insanity in the metropolis, its curability, and pathology; believing that the facts stated will assist, as well those actually engaged in the study and treatment of mental diseases, as also the investigations of physicians only taking a general interest in questions of that description.

With the view of promoting these objects, I would therefore beg to bring under the notice of the Fellows several tables recently compiled from the registers kept at Bethlem Hospital. Before, however, doing so, it is but just towards Mr. Nicholls, the present efficient Steward of the establishment, to state, that I have received great assistance from that officer, when drawing up the tables accompanying the statements, upon which many of the deductions in the present paper are virtually founded. Indeed, without his co-operation in supplying the requisite official

returns, I should scarcely have been able to accomplish the task I have now undertaken, which I fear may still seem somewhat diffuse, from the different numerical calculations it contains.

According to the ancient records fortunately still preserved in the archives of Bethlem Hospital, it appears that 22,897 insane patients, exclusive of incurable and criminal lunatics, have been admitted into the above asylum since the year 1683. But as it would prove tedious, if not superfluous, to include so extensive a field of inquiry in the present remarks, they will be confined to the detail of the principal occurrences met with in that charity during the last hundred years. In pursuing this investigation, the number of patients received into Bethlem Hospital, with the total amount of cures, and the actual deaths reported, as also the per centage calculated on each, will be enumerated under separate heads; embracing, however, different periods of twenty years in each division; the first commencing the 1st of January, 1743, and the last terminating the 31st of December, 1842. It is, nevertheless, right to mention, that, owing to defects in some of the official registers of the institution, the exact number of patients discharged cured from Old Bedlam, and the amount of deaths which took place in one or two of the years prior to 1748, could not be accurately ascertained, and are therefore given from a comparison with the results of subsequent years. Still, the number of admissions reported are correct, as well as every other particular in these tables;

and as the returns are all taken from authentic public documents, and drawn up without reference to any preconceived theory, they become the more valuable.

Table exhibiting the Total Number of Lunatic Patients admitted into Bethlem Hospital, discharged cured, or died, during five different periods of twenty years each, ending the 31st December respectively.

In 20 Years, ending	Number Admitted.	Number Cured.	Number Died.
1762	3,286	1,069 or $32\frac{1}{2}$ per cent.	714 or $21\frac{2}{3}$ per cent.
1782	3,945	1,366 or $34\frac{1}{2}$ per cent.	560 or $13\frac{1}{2}$ per cent.
1802	3,906	1,379 or $35\frac{1}{3}$ per cent.	203 or $5\frac{1}{5}$ per cent.
1822	2,149	892 or $41\frac{1}{2}$ per cent.	111 or $5\frac{1}{6}$ per cent.
1842	4,404	2,269 or $51\frac{1}{2}$ per cent.	224 or $5\frac{1}{14}$ per cent.
Totals . .	17,690	6,975 or $39\frac{1}{3}$ per cent.	1,812 or $10\frac{1}{4}$ per cent.

By the preceding statement, the number of insane patients received into Bethlem Hospital during the latter half of the eighteenth century appears to have varied very little from the previous average, although, during the early part of the present century, the actual numbers admitted, from various causes, which it is now unnecessary to particularize, indicate a material diminution; in fact, the total admissions during the twenty years ending the 31st December, 1822, scarcely exceed half the amount of patients treated in Bethlem Hospital during the same series of years immediately preceding; whilst the aggre-

gate number of curable lunatics received into that charity, for the twenty years terminating the 31st December, 1842, was more than doubled; being 4,404 in the latter, and only 2,149 in the former period. Nevertheless, this remarkable decrease in the amount of insane patients admitted at this asylum, during the early part of the current century, compared with the number received during the last, and also the twenty years just terminated, was temporary, and confined to this institution; since, at the time when this considerable defalcation in the admissions was noticed at Bethlem Hospital, so great an increase, compared with the amount of insane patients previously received into the wards of St. Luke's, then took place, that the augmented number at the latter, almost counterbalance the decrease reported at the former institution.

According to an authentic statement now in my possession, the total number of lunatic patients received into St. Luke's Hospital for the twenty years ending the 31st December, 1802, appears to have been 3,987, whilst the admissions increased to 5,346 during the twenty years ending the 31st December, 1822; although from that date to the 31st December, 1842, they again fell to 4,044. From these varied and conclusive facts, it cannot therefore be asserted, that mental alienation prevailed less frequently in London, during the early part of the present century than it did previously, or has done more recently; notwithstanding fewer insane patients were admitted into the most extensive of

the only two public lunatic asylums situated in the metropolis.

The uniformly increasing proportion of patients discharged cured from Bethlem Hospital, as well as the diminished ratio of mortality likewise met with in cases of mental disease in that establishment, are points which well deserve attention ; more particularly, as it appears by the above tables, that the annual amount of cures have not only steadily advanced, but the comparative number of deaths reported have also remarkably diminished, since the middle of the last century. For instance, the ratio of recoveries during the first twenty years embraced in the preceding statement, was only $32\frac{1}{4}$ per cent. on the admissions, whilst it rose to $51\frac{1}{2}$ in every hundred patients admitted during a similar number of years ending the 31st December, 1842 ; at the same time that the amount of deaths actually decreased from $21\frac{2}{3}$ per cent. to $5\frac{1}{4}$ per cent., or less than one-fourth the previous average, after an interval of nearly a century. The difference will, however, appear even more marked, when the results met with during three years in the middle of the last century, are compared with similar results reported to have occurred in the three years just terminated. In illustration of this point, it is only necessary to refer to the official tables already quoted, which show that the number of insane patients received into Bethlem Hospital, discharged cured, or died, during the specified period, were as follows :—

ADMITTED.		CURED.	DIED.
In 1750-51-52	462	145 or $31\frac{1}{2}$ per cent.	118 or $25\frac{1}{2}$ per cent.
In 1840-41-42	897	492 or near 55 per cent.	51 or $5\frac{1}{2}$ per cent.

Connected with this important question respecting the results met with in cases of insanity, it is proper to mention that the rate of mortality among the patients treated at Old Bethlem Hospital was so considerable during the year 1753 as to exceed the total number of recoveries, the former being fifty, whilst only forty-three patients were actually discharged cured; and as the admissions in that year amounted to 150, the recoveries were consequently at the rate of $28\frac{2}{3}$ per cent., whilst the deaths rose so high as $33\frac{1}{3}$ per cent., being exactly one-third the number of admissions. This very unusual mortality was, however, not altogether owing to insanity, since small-pox then prevailed among the patients, as it likewise did in 1770, when the number of deaths and recoveries were equal, each being 60 to 213 admissions; that is, 28 per cent. for both.

Mental diseases, as physicians well know, are much more prevalent in this country among women than men. With the view of showing that this opinion is correct, and likewise to point out the comparative difference in the results usually following attacks of insanity when affecting the two sexes, I would next refer to the subjoined table of curable patients admitted into Bethlem Hospital during the last twenty years, ending the 31st December,

1842. In that statement, the admissions, the amount of cures, as well as the number of deaths reported in each sex may be thus separately classified.

ADMITTED.		CURED.		DIED.	
M.	F.	M.	F.	M.	F.
1,782	2,622	823	1,446	112	112
or		or		or	
47 per cent. more females than males.		46 $\frac{1}{2}$ per cent.		6 $\frac{1}{4}$ per cent.	
		55 $\frac{1}{2}$ per cent.		4 $\frac{1}{4}$ per cent.	

Reasoning from these facts, no doubt can exist regarding the greater frequency of mental alienation among females than males; indeed, the excess of insane women admitted at Bethlem Hospital is shown to have been 47 per cent., and as the same facilities regarding the admission of patients into that institution prevail, without any reference to sex, provided the cases are recent, the above results must be considered conclusive. A similar opinion is likewise fully borne out by the number of insane patients of each sex admitted into St. Luke's Hospital, during the same period of twenty years, to which reference has just been made. By returns obtained through the kindness of a friend, it appears that 1,734 lunatic male patients were received into the wards of that charity, from the 31st December 1822, to the 31st December 1842; whilst the number of insane females admitted during the same period, amounted to 2,310, or 33 $\frac{1}{2}$ per cent. more of the latter than the former sex. According to these data, derived from the only two public institu-

tions for the insane in London, and therefore the best guides to follow in making any calculations upon the subject, it may be stated that mental affections are much more frequently met with among women than men, at least in this part of the empire ; where, speaking generally, the difference amounts to about 35 or 40 per cent. at an ordinary estimate.

But this greater liability of females than males to diseases of the mind, is at the same time accompanied by other peculiarities worthy of notice ; since it is shown by these tables, that mania is not only a more common complaint, but more curable, and proves less fatal to women than to men. This conclusion is confirmed by the facts stated in the accompanying tables, which indicate, that the ratio of recoveries from attacks of insanity was nine per cent. in female more than in male patients ; whilst in the latter sex, the number of deaths exceeded by two per cent., the rate of mortality met with in the former.

Besides, it is curious to find the same conclusions borne out by the results met with among the insane patients classed as incurable. Thus, on that list, 70 male, and 80 female lunatics were admitted into Bethlem Hospital, during the twenty years ending the 31st of last December, and although all were considered confirmed maniacs at the time of their reception, 18 women were actually discharged cured, whilst only six men in the same class of patients left the house convalescent. The results being, that $22\frac{1}{2}$ per cent. of the incurable female patients

recovered, and only $8\frac{4}{7}$ per cent. of the male lunatics similarly affected. It is also interesting to mention, that the average deaths were even less numerous among the incurable women than men, of whom 31 patients died, being at the rate of $44\frac{1}{3}$ per cent. ; whilst among the incurable females, 34 died, or $42\frac{1}{2}$ per cent. upon the admissions. From which data it consequently appears, that among 100 incurable female lunatics similarly affected, there were two deaths less than among the same number of incurable male patients.

An interesting, although somewhat speculative deduction, respecting the comparative influence of mental diseases upon the two sexes might be fairly drawn from the various facts stated in the previous pages, namely, if a similar proportion of the female patients had died, which actually occurred among the male lunatics admitted into Bethlem hospital, there would have been an increase of 53 deaths among the former sex, beyond the number reported, thereby augmenting the total to 165, instead of 112 which actually happened. Besides, it may be remarked, had the proportion of recoveries been likewise the same among the female lunatics, as on the male side, there would have been 235 fewer patients discharged cured ; which diminution, if added to the 53 calculated deaths, gives an aggregate of 288 individuals, or near 10 per cent. on the total admissions, who then would either have died, or continued the victims of mental alienation.

These remarkable coincidences in the results met

with, both among the incurable, as well as the curable patients admitted into Bethlem hospital, deserve attention, as they completely substantiate the opinions previously expressed respecting the greater frequency and curability of insanity, when that disease attacks women, than occurs when men are its victims ; consequently, any prognosis which the physician may be required to give in a case of mania, may be, *cæteris paribus*, of a more favourable character, if the patient affected is a female, than in a case of the same complaint when an insane man is the subject of this disease ; particularly as the deductions which the practitioner may now reasonably form, instead of being supported by a limited number of facts, appear proved by the results uniformly met with during a long series of years, and by tables comprehending many hundred patients of both sexes, affected with insanity, treated at an extensive metropolitan lunatic establishment.

The propensity to commit suicide, unfortunately, appears so prevalent a feature in cases of mania, that the attendants upon insane patients cannot be too careful with those showing any symptoms of the kind, lest such a calamitous event should supervene. However, on this particular point, it is very satisfactory to know, that instances of self-destruction are now much less frequently met with in public institutions for the insane than formerly ; notwithstanding the fact that patients enjoy at present greater freedom, are more frequently engaged in varied occupations, and even sometimes are allowed

to use dangerous tools in their respective handicrafts, than in the olden time, when restraint and coercion were more commonly employed. In those days of darkness, when confinement in cells, chains, and personal punishments, were often used even as ordinary means of management in cases of lunacy, suicides were more frequent among the insane patients of Bethlem Hospital than at the present day, when a more humane, and much better mode of treatment is happily pursued.

On this point, some interesting information may be obtained from the registers of the hospital alluded to ; in which it is stated that suicides were more common in that charity during the last, than they have been in the present century. By these records it appears that 18 cases of self-destruction occurred in old Bedlam, from the 1st of January 1750, to the 1st of January 1770, six being male patients, and twelve female ; and as the total number of lunatics admitted into that hospital, during the above period, amounted to 3,629 patients, there consequently occurred one suicide in about every 202 admissions. Now, however, although restraint, instead of being the rule, as formerly, constitutes a rare exception, whilst the insane patients are otherwise treated in a very different manner, compared with the ancient régime, it is gratifying to state, that the proportion of suicides has very much diminished. For example, during the twenty years ending the 31st of December 1842, notwithstanding the total admissions, including 150 incurable, and 122 criminal

lunatics, amounted to 4,676, only five suicides occurred in this royal hospital ; which gives one case in every 925 insane patients admitted, or less than one-fourth the average number met with among the lunatics confined in old Bedlam, during the middle of the eighteenth century. It is also worthy of notice, that all the five examples now alluded to were women, which rather singular circumstance, coupled with the previous remarks respecting the suicides reported in the middle of the last century, clearly indicates that a greater propensity to the crime of self-murder prevails in female than in male lunatics.

Another peculiarity may be also mentioned, in order to show that restraint and the strict confinement of lunatic patients do not always insure additional security to the victims of insanity, but even the contrary. According to the records of the charity, notwithstanding the different means taken to secure the patients, more lunatics formerly escaped from old Bedlam, than in the present day, when the straitwaistcoat is almost unknown, and the treatment adopted is quite different. By the registers of the Institution, it appears, that during the 20 years ending the 1st of January 1770, to use the expressive words met with in these official documents, 44 male and 11 female lunatics actually “ran away” from the hospital, during that period ; being one escape in every 66 patients admitted. Compared with the above authentic statement, it is very satisfactory to learn, that the number of lunatics reported to have

escaped from this establishment during the twenty years ending the 31st December 1842, were 11 men and 5 women, being only one evasion in every 292 admissions, or less than one-fourth the previous amount. Considering however, that as 14 of the patients who escaped were afterwards brought back to the hospital, in reality, only two lunatics permanently succeeded in their attempt; which makes the account to be very different from that just given of similar events met with in the middle of the last century.

From the preceding statement, it is therefore conclusively proved that a stronger disposition to escape from the confinement to which lunatics were formerly subjected in this asylum, prevailed among the male than the female patients, although the latter class were the most numerous; whilst the propensity to commit suicide, according to the same evidence, was just the reverse. These conclusions are interesting; and seeing they are not peculiar to any particular period, but the uniform results met with in this asylum, during a long series of years, and are obtained from a large number of insane persons of both sexes placed under similar circumstances, they must be considered as correct; and consequently deserving attention from the philanthropist and the physician, when directing the treatment adapted to patients afflicted with that greatest of all human calamities, mental alienation.

As the influence which insanity exerts upon the longevity of its victims is also a question of con-

siderable interest to all classes, the subject merits some remark on the present occasion; especially, with reference to the number of years which a lunatic may continue to perform all the functions of animal life, notwithstanding his intellectual faculties are either totally lost, or placed as it were in abeyance. That individuals may live a long time after becoming confirmed lunatics is so well known that the fact does not require much additional proof; however, it is worth mentioning, that insane females are more likely to attain old age, although their mental disease may be considered incurable, than male lunatics placed under similar circumstances; provided the present state of the incurable list of patients at Bethlem Hospital is considered any authority. For example, among the incurable men now in that establishment, seven were inmates prior to 1830, and have been so ever since; whilst on the female side, seventeen incurable patients come within a similar category. Of the latter sex, one patient has continued insane upwards of fifty years; forty-nine of which she has constantly passed in Bethlem Hospital; another female lunatic has been insane for forty-five years, and an inmate of the charity during thirty-six; and a third individual belonging to the same class has been in the asylum during thirty-eight years, having lost her reason a year before. On the other hand, although the results met with among the incurable male lunatics are somewhat different, the facts nevertheless show, that the opinion previously expressed respecting the

patients' prospect of longevity, notwithstanding the existence of insanity, is supported by ample experience. Thus, of the seven male lunatics reported insane previous to 1830, one has been an inmate of Bethlem Hospital during forty-three years, another thirty-eight, and a third for the same period ; but respecting the length of time they have been actually insane, the registers are silent. From these data, it may very fairly be assumed, that in most cases the expectation of life is greater among incurable female lunatics, *cæteris paribus*, than among male patients ; although the mental disease of the patient has actually assumed a confirmed character.

The pathology of insanity has long occupied the attention of physicians ; and however much has been recently effected in this department of medical science, especially by the French pathologists, many points connected with the subject yet require further elucidation. Considering therefore, that any facts which illustrate the nature, or may explain the effects of mental diseases, to be intimately connected with the present inquiry, I trust it is unnecessary to apologize to the Society whilst occupying their attention for a little time, with some practical details on so important a subject as the pathology of mania ; particularly as the recent records kept at Bethlem Hospital supply considerable information respecting the diseased alterations of structure usually met with in cases of that complaint.

As it is now customary to examine the bodies of

most of the insane patients who die in Bethlem Hospital, as well as to preserve an account of the pathological appearances observed in each case, and especially, as the dissections were all made by Mr. Lawrence, the present distinguished surgeon of that charity, the autopsies therefore possess more than an ordinary value, consequently any record of them deserves publication. To avoid being tedious, and also to render the description of the pathological appearances recorded in so many cases, as short as possible, consistent with clearness, I have drawn up a synopsis of seventy-two dissections of lunatic patients which have been recently made at that institution by the above eminent anatomist and physiologist.

Considering it would be incompatible with the chief object proposed in this paper, to describe the symptoms characterising the mental disease of the numerous cases in which the pathological appearances met with after death are subjoined, I have not entered upon that part of the subject; particularly, as any attempt of the kind would have been imperfect, unless the present observations were extended much beyond all reasonable length. Unwilling to occupy the time of the Society with so many details, the previous histories of the patients alluded to are therefore wholly omitted.

Before making the proposed synopsis, I of course applied to Mr. Lawrence, for permission to use the excellent reports he had written in the register of autop-

sies, seeing they constituted the ground-work of the summary compiled in these pages. As I expected, that gentleman, with the greatest liberality, kindly replied to my request, "It will give me pleasure, if you should find the facts I have observed and collected, available in illustrating the observations you intend to offer to the Society." Having obtained such authority, I felt little hesitation, either in drawing largely from this valuable repertory of pathological knowledge, or in now laying the following details before the Society.

Synopsis of the Principal Pathological Appearances met with in 72 Insane Patients examined at Bethlem Hospital, since the 1st January 1837, by William Lawrence, Esq., F.R.S., &c.

No.	Sex.	Head.	Chest.	Abdomen.
1	Fem.	Blood-vessels of brain and membranes turgid.	About a pint of bloody fluid in right pleura; a small quantity of similar fluid in left. Lungs partially connected to chest by old and very firm adhesions. Lining membrane of trachea and bronchi dark coloured from vascular congestion. Blood-vessels of lungs somewhat turgid.	Liver pale, its external covering somewhat thickened, and opaque at one part, as if from previous inflammation. N.B.—Body very fat.
2	Male	Blood-vessels of brain and membranes turgid. Cellular texture of pia mater slightly infiltrated with serum, an increased quantity of fluid in lateral ventricles.	Lungs did not collapse. Marks of recent and violent inflammation in left pleura; copious effusion of soft yellow lymph covering surface of lung, in two situations; and also on the corresponding part of chest. Lung agglutinated to pleura costalis for rest of extent. Anterior lobe of lung solid by previous inflammation, and sank in water. Blood-vessels of other lobe very turgid. Mucous membrane of trachea and bronchi of a deep red colour throughout.	

No.	Sex.	Head.	Chest.	Abdomen.
3	Male	Blood-vessels of head loaded with blood, of which a large quantity flowed out on dividing integuments and sawing bone. Those of brain and membranes very turgid throughout. Cellular texture of pia mater slightly infiltrated; substance of brain firm and healthy throughout; and a considerable quantity of fluid in base of skull when brain was removed.	Lungs did not collapse, but quite healthy. Lining membrane of trachea and bronchi deep red colour; these tubes filled with mucus. Right cavities of heart, especially the auricle, loaded with coagula of blood.	Contents of abdomen healthy.
4	Male	Arachnoid coat somewhat thickened and opaque; pia mater considerably infiltrated over cerebral hemispheres; lateral ventricles enlarged and filled with transparent fluid; and a considerable quantity of fluid remained in base of skull, after brain was removed. Substance of brain healthy.		
5	Male	Vessels of brain loaded with blood; slight serous infiltration of pia mater; increased quantity of fluid in ventricles and about basis of brain.	Lungs did not collapse, and in-adherent; blood-vessels filled with blood. Lining membrane of trachea and bronchi intensely red throughout, and all the air passages filled with frothy mucus.	
6	Male	Thickening and opacity of arachnoid coat over whole extent of cerebral hemispheres; considerable serous infiltration of pia mater; increased effusion of water into lateral ventricles, and much fluid at basis of skull after brain was removed.	Recent inflammation of right pleura, and agglutination of lung to pleura costalis; firm old adhesion of same lung at back part; cellular texture of anterior mediastinum and adjacent part of each pleura, infiltrated with reddish and extremely fetid pus. Pleura costalis of left side thickened, and lung unusually and strongly adherent consolidated at various parts, with depositions of fetid matter in different situations.	
7	Male	All the vessels on inside of head loaded with blood, particularly in substance of brain, with numerous and large bloody points on cut surface; arachnoid coat opaque and thickened; copious infiltration of pia mater; an unusual quantity of fluid in ventricles, and much fluid in basis of skull after brain was removed.	Right lung inflamed; a considerable portion of posterior and inferior lobes consolidated and impervious to air, so that it sank in water. The inflammation was in an active state, and apparently extending.	

No.	Sex.	Head.	Chest.	Abdomen.
8	Fem.	All the vessels of head loaded with blood, of which a large quantity escaped during the examination. Slight serous infiltration of pia mater; considerable effusion of serum into ventricles.	All parts loaded with fat. Indeed, the body generally was excessively fat; and the depth of the adipose structure in the line of incision, from the sternum to the pubes, varied from two to three inches.	A diseased mass, larger than the fist, occupied the upper part of pelvis: it consisted of several firm fleshy tubercles growing from the uterus. All parts loaded with fat.
9	Male	Vessels in the head rather turgid; slight serous infiltration of pia mater on convexities of cerebral hemispheres.	Left lung, excepting a small slip in its anterior portion, consolidated and sank in water. Right lung universally adherent, but healthy.	Body was emaciated, and the viscera entirely free from fat.
10	Fem.	Internal vessels of head turgid; serous infiltration of pia mater; numerous bloody points everywhere on cut surface of brain; slight pink discolouration of medullary substance, of small extent, in two or three places; slight ecchymosed appearance of pia mater on surface of right posterior lobe opposite lambdoid suture. Substance of brain softened, and accompanied with slight discolouration of a light brown tint, affecting both cortical and medullary substances to the size of a large walnut; coagulated blood as large as a filbert lodged in substance of brain, on superior surface of left posterior lobe under pia mater. The cornea of both eyes destroyed by ulceration; edge of aperture had a sloughy appearance, and a bloody fluid issued.	Chest badly formed, sternum and ribs projecting considerably, so as to produce the configuration called "pigeon breast." Lungs extensively connected to containing cavity on both sides by old adhesions. In anterior part of right lung, there were three or four large bladders produced by enlargement of air cells. Posterior portion of same lung partially consolidated, and extremely turgid with blood.	Body was emaciated, and the contents of the belly were completely free from fat.
11	Male	Internal vessels extremely turgid; those of pia mater, and in substance of encephalon, injected to minutest branches; bloody pores unusually numerous and large on cut surface of brain, substance firm; iij oz. of clear fluid in each lateral ventricle.	Contents free from disease.	All the organs healthy.
12	Fem.	A few slight effusions of blood on inner surface of dura mater; vessels of brain turgid; serous infiltration of pia mater; about ij oz. of clear colourless fluid in each lateral ventricle; an ecchymosis, the size of a horse bean, in roof of right lateral ventricle. Much fluid in basis of skull after brain was removed.	Old adhesions of right lung extensive and firm; less extensive, but recent adhesions of left lung; large portions of latter were consolidated, with suppurated cavities in consolidated parts.	Numerous adhesions of liver to abdominal parietes and to the other viscera. N.B. — Cellular substance generally anasarcaous: the muscles shrunk and flabby.

No.	Sex.	Head.	Chest.	Abdomen.
13	Male	Remarkable turgidity of all the blood-vessels, especially of those in substance of brain; superior longitudinal sinus filled with a coagulum like a recent clot; its interior, at two or three points, contained a dull reddish brown fluid like pus. About the middle of each hemisphere, a large vein greatly distended, and filled with a firm coagulum, presented some points filled with a similar fluid; other veins of hemispheres filled with firm coagulum. Near vein first mentioned, a considerable ecchymosis of pia mater, with slight serous infiltration.	Firm adhesion of right lung, at upper and back part; large abscess in adherent portion surrounded by considerable consolidation of pulmonary substance, abscess contained iij or iv. oz. of thick matter. Another portion of lung consolidated, presenting on a section deposits of grey tuberculous matter, and two or three small vomicae.	Contents free from disease, and the fat had been absorbed from viscera. N.B.—Body emaciated.
14	Male	Blood-vessels of the head somewhat turgid, slight serous infiltration of pia mater.	Nearly the entire right lung consolidated, with tuberculous depositions of various sizes, and several purulent excavations. A similar change in several small spots of left lung.	N.B.—Body emaciated, and quite free from fat, internally as well as externally.
15	Fem.	No deviation from the normal condition of the brain and membranes, excepting congestion of the blood-vessels, both on the exterior and interior.	Right lung connected to chest by firm and general adhesions. Left lung inadherent, but two thirds of posterior part hepatized and so dense, that it sank in water to the bottom of vessel. Small bony masses like those in abdomen also met with under pleura of left lung.	Liver connected by old and general adhesions to diaphragm above, and to the adjacent organs below. On surface of mesentery of the large and small intestines, immediately under peritoneum, small masses of bone were irregularly scattered, white, tolerably smooth, and varying in size from a pin's head to a pea. Ovaries were the size of a walnut, firmly adherent to adjacent parts. Uterus very small.
16	Fem.	Vessels of brain and membranes loaded with blood to their minutest ramifications. Numerous bloody points wherever brain was cut into; a little serous infiltration of pia mater of cerebral hemispheres.	Large part of left lung partially consolidated. Trachea and bronchi filled with frothy mucus.	No morbid appearances were observed in the abdomen.
17	Fem.	Little if any moisture between dura mater and surface of brain; consequently, membrane closely applied to the parts within. Convolu-	Both lungs universally and firmly adherent to chest. Left lung extensively tuberculated. A few tubercles also in right lung.	The abdominal viscera healthy.

No.	Sex.	Head.	Chest.	Abdomen.
		<p>tions of hemispheres flattened. Blood-vessels of brain empty; cortical matter light coloured, and the medullary substance was of a pure white. About iiij oz. of clear watery fluid in each ventricle, and considerable effusion of same fluid at basis of brain.</p>		
18	Male	Arachnoid coat thickened and opaque, particularly over cerebral hemispheres. Considerable serous infiltration of pia mater in same situation. Lateral ventricles enlarged, and filled with colourless transparent fluid, about iiij oz. in each. Much fluid in basis cranii.	Contents healthy.	Viscera healthy. N.B. — Body emaciated.
19	Male	Vessels of head both internal and external loaded with blood, and a large quantity flowed out during the examination; numerous and large bloody points observed everywhere in cutting substance of brain, about iiij oz. of colourless transparent fluid in each lateral ventricle. Convolutions of cerebral hemispheres partially flattened, as if contents of cranium had been subjected to pressure before death. Pineal gland converted into a cyst, the size of a large pea, containing watery fluid.	Contents perfectly healthy.	Viscera healthy. N.B.—Body fat.
20	Fem.	Vessels within the head somewhat turgid, especially those in substance of brain; slight serous infiltration of pia mater covering cerebral hemispheres.	A small portion of left lung condensed.	No alteration of structure in the viscera. N.B.— Body emaciated both externally and internally.
21	Male	Blood-vessels of brain and membranes turgid; numerous bloody points in every situation of cut surface of brain. The arachnoid coat thickened and partially opaque, especially along edges of fissure between the cerebral hemispheres. Cellular substance of pia mater on hemispheres considerably infiltrated.	Left lung closely adherent to chest at upper and back part. A small vomica in substance of lung at this spot, pulmonary texture around it condensed; the lung, although inadherent, did not collapse when chest was opened. Right lung connected throughout to chest, by firm old adhesions. A bronchial gland at bifurcation of trachea was converted into a hard tumour as large as a middle sized orange, being	Abdomen contained a little serous fluid, but the viscera were healthy.

No.	Sex.	Head.	Chest.	Abdomen.
			<p>principally a cyst filled with matter like putty in colour and consistence. Similar deposits, but smaller, in one or two other bronchial glands. Lining membrane of trachea, bronchi, and ramifications, bright red, and covered with a thick yellow secretion nearly filling several of the tubes. Heart rather large.</p>	
22	Male	<p>Vessels of brain and membranes turgid with blood; those of cerebral substance so full, that the medullary matter had a faint tinge of pink colour. Pia mater infiltrated with serous fluid. Brain particularly firm throughout.</p>	<p>Right lung universally and closely connected to cavity of chest by old adhesions. There had been recent inflammation of pleura and right lung. Lung everywhere agglutinated to surface of cavity, and soft yellow lymph effused in several places of pulmonary pleura in some quantity. Substance of lung inflamed, and part of it so far condensed as to sink in water. Mucous membrane of trachea and ramifications dark red, covered by copious thick yellow discharge. A scirrhus tumour, about an inch immediately above the bifurcation of trachea on outside, with a similar formation on the interior, which contracted the tube to the size of a writing-quill. This new production resembled the scirrhus which precedes cancerous ulceration. Two or three absorbent glands found near this swelling were indurated, but not enlarged.</p>	<p>Liver and arch of colon, particularly the former, were connected to peritoneum lining cavity, by numerous old adhesions, principally in the form of long, slender, but firm threads.</p>
23	Male	<p>Blood-vessels of brain and membranes generally injected, and sections of former presented everywhere the bloody dotted appearances in a high degree; very slight serous infiltration of pia mater covering cerebral hemispheres.</p>	<p>Lungs connected to chest by old strong adhesions; mucous membrane of trachea, bronchi, and ramifications, deep livid red throughout; minute branches and air-cells loaded with a thin frothy fluid, which issued in great quantity wherever the substance was cut into. Bronchial glands enlarged and indurated, containing several small depositions of yellowish white cheesy matter. A lymphatic gland by the side of trachea inflamed, and contained a deposit of pus, about the size of a large pea.</p>	

No.	Sex.	Head.	Chest.	Abdomen.
24	Male	Blood-vessels of brain and membranes turgid; the former particularly distended, so that the medullary substance appeared everywhere unusually vascular; cut surfaces of brain covered with large and numerous dots of blood; when scraped away, orifices of vessels appeared large and numerous. Arachnoid coat on cerebral hemispheres opaque and thickened; considerable serous infiltration into cellular texture of pia mater, and much fluid on basis of skull after brain was removed.	Contents healthy.	Viscera healthy.
25	Male	Blood-vessels of brain and membranes rather empty; cellular membrane of pia mater covering cerebral hemispheres greatly infiltrated: v or vj oz. of clear transparent fluid in lateral ventricles, and much fluid also in basis of skull. A few convolutions of cerebral hemispheres slightly shrunk. Pineal gland converted into a thin cyst, equal in size to a horse-bean, containing a clear light yellow fluid.	Caries of sternum with an abscess; and the inflammation had extended to anterior mediastinum. Pericardium also inflamed. Right bag of pleura connected to the sternum, and adhered firmly, on the inside, to the lung. Right lung connected to pleura by extensive old adhesions; tuberculated, and contained a vomica about the size of an ordinary orange. A portion of right lung red and indurated. A pint of fluid in left pleura; old adhesions of left lung, and on its surface there was the appearance of an indurated depressed cicatrix; substance of lung was here blackish, hard, and contained small deposits of a greyish cheesy matter. Heart enlarged much beyond its natural size.	Contents healthy.
26	Fem.	Vessels of brain and membranes loaded with blood, slight infiltration of pia mater, a little fluid in basis of skull after removal of brain.	Cavities of heart filled with blood, particularly on right side; otherwise, all the organs free from disease.	A corpus luteum in right ovary. Uterus beyond its virgin size; contained no ovum, but there was a little coagulated blood and mucus in its cavity. Other organs healthy.
27	Fem.	Vessels of brain and membranes extremely turgid; very numerous bloody spots everywhere on cut surfaces of brain; a small diffused coagulum of blood, about 4 or 6 drops, on internal	No disease observed in any of the organs.	An appearance, considered a corpus luteum, in one of the ovaries. Uterus enlarged beyond its virgin size. All the other viscera healthy.

No.	Sex.	Head.	Chest.	Abdomen.
		surface of dura mater, over left cerebral hemisphere. Pia mater covering cerebral hemispheres considerably infiltrated with serum; increased quantity of serum effused in lateral ventricles.		
28	Male	A large quantity of blood escaped on detaching scalp and opening skull; vessels of brain rather turgid; partial infiltration of pia mater.	Left lung connected to chest by strong general adhesions, firm, and of a dull red colour; greater portion of lung consolidated; vessels turgid, and air-tubes loaded with frothy mucus. Right lung inadherent, did not collapse, and was condensed in several portions; surface of lung deep red, blood-vessels turgid, and air-cells filled with thick mucus.	Viscera healthy.
29	Fem.	Blood-vessels of brain and membranes turgid; those of former part numerous and large, wherever incisions were made into its substance; considerable serous infiltration of pia mater; slight effusion into the ventricles.	Right lung connected to cavity of chest by general old adhesions. A few adhesions, also, existed in the left side. Other contents healthy.	Viscera free from disease.
30	Fem.	Blood-vessels of brain and immediately investing membranes extremely turgid; bloody points very numerous on cut surfaces of brain; medullary matter, here and there, had a light violet tint. Brain tumid, and dura mater distended, which adhered slightly to cerebral surface; no intervening fluid; convolutions partially flattened; substance of brain firm.	A pint and a half of darkish, turbid, and most offensive fluid in left cavity of pleura. Posterior lobe of left lung congested, condensed, and of a dull red colour, with depositions of a yellow substance dispersed through its substance; inferior edge mortified, of a dusky brownish hue, and of a soft semi-fluid consistence.	Contents healthy.
31	Male	Blood-vessels of brain and membranes turgid; numerous bloody points on cut cerebral substance, and medullary matter, at various points, had a faint violet tint; slight serous infiltration of pia mater in cerebral hemispheres; 1 oz. of clear fluid in each lateral ventricle.	Lungs did not collapse, partially connected to chest at back part by strong old adhesions; both loaded with fluids, which issued in the greatest abundance on cutting into substance of lungs, which were of a deep livid red, on posterior part; small abscess in the dorsal part of right lung; lining membrane of trachea and bronchi deep red; air passages filled with frothy mucus.	Viscera healthy.
32	Fem.	Blood-vessels of brain and membranes turgid; cellular texture of pia mater, on	More than a pint of fluid in right cavity of pleura, rather less in left; right lung con-	A few pints of drop-sical fluid in cavity of abdomen.

No.	Sex.	Head.	Chest.	Abdomen.
		convexities of cerebral hemispheres, turgidly infiltrated; fluid of lateral ventricles somewhat increased in quantity; much fluid in skull, after brain was removed.	nected to chest by partial old adhesions, cedematous; left lung one third its natural dimensions, agglutinated to mediastinum, and covered, as well as surface of cavity generally, by a thick rough coat of lymph. Left ventricle of heart evidently enlarged. Two of the aortic valves partially thickened at loose edge, which formed in each a small irregular excrescence; valves slightly shortened.	N.B.—Lower extremities considerably swelled by anasarcaous effusion.
33	Fem.	External vessels of head completely empty; those of brain and membranes extremely turgid. Serous infiltration of pia mater; considerable quantity of fluid in skull, after brain was removed.	Organs healthy.	Viscera free from disease.
34	Male	Blood-vessels of brain and membranes turgid; arachnoid coat on cerebral hemispheres considerably thickened and opaque; great infiltration of pia mater, and increased quantity of fluid in ventricles.	Right lung closely and universally connected to parieties of chest by old adhesions; left lung inadherent; a small part of its posterior portion condensed, extremely dark coloured, and full of blood; it sunk in water; slight effusion of lymph in pleura covering lung.	N.B.—Body considerably emaciated; particularly the upper limbs and trunk.
35	Fem.	Blood-vessels of brain turgid, and numerous bloody spots on cutting into its substance; serous infiltration of pia mater covering cerebral hemispheres; much fluid in basis of skull, after brain was removed.	Both lungs closely and universally connected to thoracic parieties by old adhesions.	Viscera healthy.
36	Male	Blood-vessels of brain and membranes moderately turgid, considerable serous infiltration of pia mater, ij or iij oz. of transparent colourless fluid in lateral ventricles; much fluid in basis of skull, after brain was removed. Pale yellow deposit of cartilaginous firmness, in coats of large arteries, at basis of brain.	Acute inflammation of right pleura, with copious deposition of soft yellow lymph on surface of lung and cavity, in which there was about two pints of turbid yellow fluid. Left lung connected to chest by old adhesions; several ounces of clear yellow fluid in pericardium. Heart considerably enlarged, principally by hypertrophy of left ventricle.	
37	Fem.	A very small extravasation of blood in tract of arteria meningeal media on left side of head, between skull and dura mater; all the vessels of brain and membranes extremely turgid; great infil-	Right lung attached to chest by partial old adhesions.	Viscera free from disease.

No.	Sex.	Head.	Chest.	Abdomen.
		<p>tration of pia mater over whole cerebrum; membranes, when detached from brain, seemed like a sponge soaked in water; $i\frac{1}{2}$ oz. of limpid fluid in each lateral ventricle, arachnoid coat partially thickened and opaque near pons varolii; much fluid in skull, after brain was removed.</p>		
38	Fem.	<p>Much blood escaped in dividing soft parts and removing skull-cap, latter deep livid colour; blood-vessels of brain and membranes loaded; convolutions of cerebral hemispheres completely flattened, so that no trace of natural convexity remained. Dura mater in so close contact with its contents as if forcibly squeezed together; no trace of moisture between it and arachnoid coat. Right hemisphere contained in a cavity about $ii\frac{1}{2}$ or iv oz. of coagulated blood; cerebral substance surrounding extravasation soft, and of a light brown colour, for an inch in all directions. Cerebral substance generally softer than usual; septum lucidum lacerated, and lateral ventricle filled with bloody serum and fluid blood.</p>	<p>Left lung adhered universally to chest; other parts free from disease.</p>	<p>Contents healthy. N.B.—The viscera, both of abdomen and chest, were loaded with fat, and there was a thick stratum of fat under the integuments of trunk.</p>
39	Male	<p>Slight effusion of blood between cranium and dura mater, on left side of longitudinal sinus, near parietal bone, where half a teaspoonful of coagulated blood was effused. All the vessels of brain and membranes gorged with blood to utmost extent. Bloody points extremely numerous, whenever cerebral substance was cut; arachnoid coat slightly thickened and opaque over entire cerebrum, and between lobes of cerebellum. Pia mater greatly infiltrated over the whole of both cerebral hemispheres, and was like a sponge soaked in water when detached: ij oz. of limpid fluid in each lateral ventricle; a large</p>	<p>Left ventricle of heart thick and strong, partially hypertrophied.</p>	<p>Viscera healthy—rather fat.</p>

No.	Sex.	Head.	Chest.	Abdomen.
		quantity of fluid in basis of skull, after brain was removed.		
40	Male	Blood-vessels of brain and membranes rather turgid; slight infiltration of pia mater; slight increase of fluid in ventricles.	Right lung condensed and adherent to mediastinum. Surface of lung and of cavity covered by a thick sheath of lymph. More than a pint of matter in cavity of chest.	
41	Male	Blood-vessels of brain and membranes turgid, those of cerebral substance injected throughout; very slight serous infiltration of pia mater; adhesion of anterior lobes to dura mater, so that small portions of brain stuck to membrane when lobes were removed; cerebral substance at adherent part of a light brownish yellow colour, but not deeper than surface. Dura mater similarly discoloured; slight adhesion of same character between dura mater and right middle lobe; near adherent parts of anterior lobes, cerebral substance was softened, and similar softening of septum lucidum and fornix.	Organs healthy.	Viscera free from disease.
42	Male	Blood-vessels of brain and membranes extremely turgid; Mr. Lawrence says, he never saw those of brain both on surface and in substance more injected with blood; slight infiltration of pia mater.	Pleura on right side of chest acutely inflamed, with large deposit of yellow fibrine both in lung, and on sides of cavity; copious sero-purulent effusion. Substance of lung acutely inflamed, towards front of bright scarlet colour, turgid with blood, thickened and almost black behind. Small portions of substance hepatized in left lung, with slight inflammation of pleura.	
43	Male	Blood-vessels of brain and membranes turgid; arachnoid coat of cerebral hemispheres thickened and slightly opaque; fluid of ventricles somewhat increased in quantity.	Organs healthy.	Viscera free from disease.
44	Male	All the blood-vessels of brain both on surface and in substance extremely turgid; great infiltration of pia mater over whole cerebral hemispheres; membrane thickened, and of a gelatinous appearance, the infil-		

No.	Sex.	Head.	Chest.	Abdomen.
		trated fluid of aqueous consistence; lateral ventricles enlarged, and filled with transparent fluid; much fluid on basis of skull after brain was removed.		
45	Male	Blood-vessels of brain turgid, particularly in substance; being numerous and large when brain was cut. Arachnoid coat a little thickened and opaque on convexities of cerebral hemispheres; pia mater considerably infiltrated; lateral ventricles enlarged and filled with transparent colourless fluid, much fluid on basis of skull after brain was removed. Arterial trunks at basis of brain thickened and opaque in a few spots; a small irregular deposit of bone with sharp points on inside of frontal bone, to which dura mater adhered firmly; opposite to deposit there was a circular depression of anterior lobe. Convolutions had disappeared in this situation, and depressed part covered by thickened pia mater of a firm fibrous texture. In the anterior lobe there was a cavity the size of a hen's egg, filled with clear transparent fluid. A considerable cicatrix on forehead, with marks of wounds on face, neck, and wrist.	Both lungs connected to chest by old adhesions. The posterior and upper part of each lung so closely and firmly attached, that the substance was lacerated in drawing out contents of the chest. Both lungs tuberculated in upper and posterior part: considerable portion of left lung filled with small tubercles, consolidated, and partially excavated; similar tubercles irregularly scattered through rest of lung which was pervious to air. Back of right lung tuberculated, having small purulent excavations, but disease was less extensive than on opposite side.	Contents healthy.
46	Male	Blood-vessels of brain and membranes moderately turgid; those of former part larger than natural, on cutting cerebral substance.	Right lung connected to chest by firm, old, and general adhesions; greater part of lung hepatized, loaded with blood and other fluids, of a dark brownish livid colour, and so much increased in density as to sink in water. Mitral valve considerably thickened, particularly at its loose edge; chordæ tendinæ thickened and indurated. Valves of aorta similarly changed in structure, and so rigid as to be incapable of closing the mouth of vessel.	
47	Male	Cranium considerably below average adult size, bone thicker than usual, so that skull cap was very heavy.		N.B. — Head, face, and front of the body livid and turgid.

No.	Sex.	Head.	Chest.	Abdomen,
		Cerebrum proportionably small, but cerebellum not at all below its usual dimensions. Anterior cerebral lobes particularly small, and convolutions very narrow. Cerebral substance so firm as to resemble a brain hardened by alcohol or strong acid. Lateral ventricles enlarged, and contained each about ij oz. of clear colourless fluid. Septum lucidum extremely thin and torn towards front part. Substance of brain above ventricle not thicker than the third of an inch.		
48	Male	Very considerable infiltration of pia mater over whole cerebral hemispheres; somewhat increased quantity of fluid in lateral ventricles. Vessels of brain and membranes unusually empty.	A few old adhesions of lungs, but of inconsiderable extent.	Viscera healthy. N.B.—An aneurism of femoral artery, which burst three days before, caused this patient's death.
49	Male	Blood-vessels of brain and membranes larger than natural, but not turgid; considerable serous infiltration of pia mater, and increased quantity of fluid in ventricles.		N.B.—Left thigh-bone dislocated from destruction of the ligaments of hip joint, and was lying on ilium, just above the acetabulum.
50	Male	The hernia cerebri which, during life, had the size of a large hen's egg, was now much shrunk, and it consisted principally of posterior part of left lobe. Two ulcerated openings of dura mater were seen close to posterior part of falx cerebri; one on left side, an inch and a half in diameter, the other smaller; slight adhesion between left cerebral hemisphere and dura mater of vertex. Fluid in lateral ventricles partly purulent, and slight purulent infiltration of choroid plexus. Vessels on surface of lateral ventricles injected. There had been a large exfoliation of the skull, which deficiency was filled up by a dense, thick, and very firm structure, in which the dura mater and external cicatrix were inseparably blended. The external surface of this structure had the character of an ordinary cica-		

No.	Sex.	Head.	Chest.	Abdomen.
		trix; the interior was the dura mater presenting its usual characters of structure, and smooth surface.		
51	Fem.	Exterior vessels of head completely empty, and not a drop of blood escaped on making the external incisions. All the internal vessels extremely turgid; a little fluid between dura and pia mater; a thin layer of coagulated blood on left side of head covering nearly whole left hemisphere, about an ounce in quantity, but no ruptured vessel could be detected; slight infiltration of pia mater on cerebral hemispheres. Vessels in substance of brain everywhere strongly injected.		
52	Fem.	A considerable quantity of blood escaped on sawing skull-cap. A thin coagulum of blood, about 6 drops, between dura mater and surface of membranes covering right hemisphere near falx. It did not adhere either to dura mater or arachnoid coat; no ruptured vessel was detected. All the internal vessels turgid; numerous and large bloody spots wherever cerebral substance was cut into; considerable serous infiltration of pia mater over cerebral hemispheres; lateral ventricles enlarged and distended by ij or iij oz. of fluid in each cavity; coats of arteries in brain partially thickened and opaque, even in ramifications, but not yet ossified.	Both lungs œdematous; did not collapse when chest was opened; a few ounces of bloody fluid in each pleura. Pericardium closely and universally adherent to heart, the adhesions being of old date. Concentric hypertrophy of left ventricle.	
53	Fem.	Internal blood-vessels of brain generally turgid. Pia mater infiltrated; arachnoid coat slightly and partially opaque; dura mater lined to a considerable extent by an adventitious membrane of tolerably firm and compact structure, of a brownish red colour, owing to minute vessels filled with blood; it adhered to dura mater by short and numerous threads; this membrane was the		

No.	Sex.	Head.	Chest.	Abdomen.
		<p>thickness of a shilling at its centre, but thinner towards the edges, texture tolerably firm, homogeneous, and of considerable extent. Vessels of cerebral substance were much injected; lateral ventricles enlarged, and each filled with transparent fluid. On under surface of right hemisphere, the remains of a very extensive cerebral hæmorrhage; surface depressed, so as to show loss of substance, and it was of a light ochre tint: neighbouring portion of brain soft, and quite changed in structure. Trunks of large branches of cerebral vessels diseased, the internal coat being also yellow-coloured, thickened, and separating easily from external tunic.</p>		
54	Male	<p>Dura mater adhered to bone so closely, that it was difficult to detach skull cap. Membranes of brain injected; slight infiltration of pia mater.</p>	<p>Lobes of lungs were adherent, and universally agglutinated to bags of pleura by recent inflammation. A large quantity of soft yellow lymph covered opposed surfaces of left lung and pleura. Posterior lobe of left lung showed great vascular congestion, approaching to hepatization, and it sank partially in water. Back of right lung similarly affected, but in a less advanced state. Serous covering of right auricle of heart partially thickened and opaque.</p>	Contents healthy.
55	Male	<p>Adhesion of dura mater to skull unusually close. All the blood-vessels of brain and membranes extremely turgid; great infiltration of pia mater; increased quantity of fluid in ventricles, and substance of brain generally rather soft.</p>	<p>Portion of lower lobe of right lung, size of an orange, of a dark liver colour, condensed so as to sink in water, and containing a small abscess in its centre; this part adhered closely to cavity of chest. Portion of lower lobe of left lung similarly affected, but not yet suppurated. A few old adhesions on left side of thorax.</p>	
56	Male	<p>A very large quantity of blood escaped on opening skull. Blood-vessels of bone, membranes, and brain, all extremely distended; cellular substance of pia mater infiltrated; at least <i>iiij</i> oz. of perfectly</p>	<p>Slight adhesions of lungs. Pericardium contained about 2 table spoonfuls of reddish turbid fluid. Heart slightly adherent to pericardium at anterior part of upper surface, adhesions soft. Reflected pericardium inflamed</p>	<p>Lacteal trunks in mesentery filled with chyle. Viscera otherwise healthy.</p>

No.	Sex.	Head.	Chest.	Abdomen.
		transparent colourless fluid in ventricles; much fluid in basis of skull and round spinal cord after brain was removed. Coats of carotid, vertebral, and basilar arteries thickened by an opaque yellow deposit, but smooth internally; slight partial thickening of arachnoid coat at base of brain.	on upper surface of heart, and over neighbouring part of left ventricle. Membrane red, and presented numerous brightish red spots like ecchymoses. Muscular structure of ventricle had a dull yellowish hue, and apparently free from blood. This change of structure affected whole thickness of ventricle at one point to the size of a shilling, but in rest of its extent, only the internal two-thirds, exterior portion having the normal appearance.	
57	Male	All the vessels of skull, membranes, and brain loaded with blood, of which much escaped during the dissection. Arachnoid coat a little opaque on cerebral hemispheres; cellular texture of pia mater infiltrated; increased quantity of fluid in ventricles; a small quantity, about a tea-spoonful, of recently effused blood between dura and pia mater, near longitudinal sinus on each side, although extended irregularly over a considerable surface; much fluid in basis of skull after brain was removed.	Small effusions of blood, similar in character to those noticed in abdomen, were found in the cavity.	A large ecchymosis in the abdominal parietes between muscles and peritoneum, just above pubes; the blood had been apparently recently effused.
58	Male	All the vessels of head, internal and external, loaded with blood, particularly in those of brain and membranes; blood flowed freely on detaching skull cap from dura mater. Arachnoid surface of dura mater, and arachnoid covering cerebral hemispheres entirely free from moisture; convolutions completely flattened over whole cerebral hemispheres. No effusion of blood in any part of brain, but iiij oz. of limpid colourless fluid in each lateral ventricle.	Right lung connected to cavity of chest by general and firm adhesion of old date. Similar adhesions also existed to a considerable extent on left side.	Viscera free from disease.
59	Male	Gangrene of right external ear and caries of bones. Dura mater of a light grey discolouration; extremely fetid yellowish pus escaped when falx was turned back, and dura mater cut. This membrane and arachnoid	Both lungs connected to the cavities of chest, by firm old adhesions.	

No.	Sex.	Head.	Chest.	Abdomen.
		<p>intensely and extensively inflamed. (Mr. L. says more than he had ever seen.) Dura mater of right side covered by a stratum of yellow fibrine adhering to membrane and soaked with matter. Diseased appearances most considerable opposite the part where bone was denuded externally. Right hemisphere so changed in structure as to be quite obscured. Middle lobe greatly discoloured, roughened by effused fibrine, and adhered to dura mater. Posterior lobe adherent to tentorium, cortical substance over whole convexity of hemisphere had a dull slate colour. Abundant effusion of pus and fibrine on opposed surfaces of hemispheres, and in intervals between them; evidences of inflammation in dura mater, and arachnoid coat of left side were similar in character, but to less extent; slight effusion of pus and lymph under tentorium.</p>		
60	Male	<p>External vessels of head quite empty; internal all turgid. Arachnoid coat covering hemispheres of cerebrum and pons varolii thickened and opaque; considerable infiltration of pia mater. Water of ventricles slightly increased in quantity.</p>	<p>Posterior lobe of both lungs considerably congested; on left side, the greater part hepatized; partial hepatisation also on the right.</p>	Viscera healthy.
61	Fem.	<p>Considerable quantity of blood escaped during division of external parts and sawing bone. Dura mater covering left hemisphere lined to a considerable extent with a layer of recently coagulated blood, loosely adhering, and about oz. i or more; considerable infiltration of pia mater covering cerebral hemispheres; increased quantity of fluid in ventricles, and much in base of skull when brain was removed.</p>	<p>Both lungs connected to chest universally by firm old adhesions. Congestion and œdema of right lung. Posterior lobe of left lung hepatised and excavated by a large cavern, of which the sides were gangrenous, and exhaled a most offensive fetor.</p>	
62	Fem.	<p>Blood-vessels of brain and membranes injected; slight serous infiltration of pia</p>	<p>Upper half of left lung consolidated and indurated, substance of a whitish grey</p>	<p>Cavity of abdomen contained about 2 pints of thinnish</p>

No.	Sex.	Head.	Chest.	Abdomen.
		<p>matter covering cerebral hemispheres.</p> <p>N.B. — General emaciation, with slight œdema of lower limbs.</p>	<p>colour; excavated by a large cavern, with irregular sides; this part of lung connected by close and firm adhesions to parietes of chest. Disease of a similar character, but to less extent, in right lung; consolidation in this part by firm whitish grey tubercles of various sizes, and closely arranged; these were excavated by smaller vomicae.</p>	<p>purulent fluid, discoloured by intestinal contents, and extremely offensive. Viscera connected by recent adhesions into one undistinguishable mass occupying back of cavity, covered by a layer of yellow fibrine; a similar layer lined abdominal parietes, and cavity of pelvis; considerable quantity of yellow fibrine effused in some convolutions of intestines, and in others thick puriform fluid. Blood-vessels of omentum mesentery, and small intestines strongly injected, producing considerable redness in streaks and patches. Mucous membrane of small intestines ulcerated at several points, especially near the termination of ilium, where there was an ulcer about two inches long. Coats of intestine had given way at this part, forming a small opening, through which the intestinal contents escaped.</p>
63	Fem.	<p>Considerable serous infiltration of pia mater on cerebral hemispheres, where some of the convolutions were shrunk, in the velum, about cerebellum and pons varolii.</p>	<p>Left lung closely and universally adherent, consolidated throughout, and excavated by large caverns. Partial disease of a similar character in right lung, which was quite healthy in the intervals of consolidated portion.</p>	<p>Liver considerably enlarged, with hypertrophy of the acini, or "nutmeg liver."</p>
64	Male	<p>Very firm adhesions of dura mater to skull. Blood-vessels of brain and membranes injected; serous infiltration of pia mater, making the membrane one-third of an inch thick, over all the upper part of hemispheres; arachnoid coat thickened and</p>	<p>Both lungs extensively tuberculated, and generally adherent.</p>	<p>Abdomen contained about a quart of dropsical effusion. Numerous ulcers of mucous membrane, both in small and large intestines. In three or four places, ulcerative process</p>

No.	Sex.	Head.	Chest.	Abdomen.
		opaque, opacity diffused in some parts, in others consisting of numerous closely arranged small spots. Convolutions of hemispheres shrunk.		nearly extended through intestinal tunics; peritoneum had lost its vitality, and would have given way in a short time. Bowels not adherent in these situations. All the mesenteric glands swollen by inflammation.
				N.B.—Body generally emaciated, the lower extremities swollen from dropsical effusion.
65	Fem.	The external vessels of head completely empty; those of brain and membranes extremely turgid. Serous infiltration of pia mater covering hemispheres.	Extensive old adhesion of both lungs. Anterior lobe of left partially hepatized. Similar affection of posterior lobe of right lung, in a less advanced state.	
66	Male	Considerable serous infiltration of pia mater, much fluid in ventricles, and at base of brain. Cerebellum very soft.	Absorbent glands in chest enlarged, and containing cheesy matter. Right lung considerably tuberculated, and closely connected to cavity by old adhesions. A few grey tubercles scattered through left lung.	Universal peritonitis. Large and small intestines generally agglutinated; much soft yellow lymph effused in the intervals of convolutions; mucous membrane of small intestine ulcerated at several points; one of the ulcers had perforated the serous covering, and thus given rise to the fatal peritonitis. Several of the mesenteric glands considerably enlarged, containing much cheesy matter. Large swelling of right femoral glands.
67	Fem.	Blood-vessels of brain and membranes in the highest state of turgescence throughout. Serous infiltration of pia mater covering cerebral hemispheres. Increased quantity of fluid in lateral ventricles.	Organs free from disease.	Viscera healthy.
68	Male	All the blood-vessels of brain and membranes large and turgid. Orifices of those cut in sections of brain large and numerous in all parts. Serous infiltration of pia	Old and firm adhesion of both lungs, particularly extensive on left side of chest. Active and probably recent inflammation of pericardium; both portions of	The bodies of the three upper lumbar vertebræ enlarged in their anterior surface, presenting considerable irregular

No. Sex.

Head.

Chest.

Abdomen.

mater covering cerebral hemispheres; much fluid on basis of skull after brain was removed.

the membrane covered by a coat of fibrine of variable thickness; loose surface rough and shaggy, easily peeled off from membrane, which was then found thickened, with its surface of a deepish red colour. Over a great portion of left ventricle, heart adhered to the bag. Cavity contained about 1½ oz. of a dull yellowish turbid fluid. Slight purulent infiltration of cellular texture, external to pericardium, at two or three points. There was an abscess on the external part of chest, towards left side, containing a pint of thick yellow pus; it had existed for some months before death.

protuberances; bone not bare at any point, nor its texture softened. A little purulent infiltration in neighbouring cellular texture.

69 Male Vessels of brain filled with blood; numerous bloody points on cut surfaces of brain; moderate serous infiltration of pia mater; lateral and third ventricles greatly enlarged, and more than 1½ oz. of fluid in cavities. Foramen monroeum large; septum lucidum distended, thinned, and had actually given way at one point, having a few separate shreds, in which individual vessels were seen, the ventricles communicating freely at the intervals of shreds; much fluid in basis of skull after brain was removed.

Right lung adhered strongly and universally to cavity of chest; a vast cavern in upper lobe; entire lower lobe tuberculated and excavated by suppurating cavities throughout. Left lung not adherent, tuberculous masses, from the size of a pea to a gooseberry, but not yet softened, scattered through it; active vascular congestion in these masses and the immediately surrounding pulmonary texture.

Universal adhesions of the several viscera to each other, and to parietes, partly ancient, and partly recent. Peritoneum lining cavity, and covering intestinal canal, and omentum, thickened by an universal tubercular affection; tubercles minute, but crowded into the closest arrangement. Partial firm adhesions of the omentum and other parts to each other, and to the parietes. Universal and recent violent inflammation of peritoneum, with an ulcerated aperture in jejunum, from which the intestinal contents had escaped in small quantity. Convolutions of intestines closely agglutinated; collections of thick puriform fluid on separating the convolutions, and effusions of soft yellow lymph, from the size of a pin's head to a half

No.	Sex.	Head.	Chest.	Abdomen.
				crown, seen in countless number. Peritoneal covering, both of small and large intestines, deeply discoloured in many parts by intense vascular congestion; that of the mesentery in same state, with mesenteric glands slightly swollen by recent inflammation.
70	Fem.	Bone of the skull had throughout a deepish livid red colour, and adhesion to dura mater unusually firm. Blood-vessels of brain turgid; bloody points on cut surfaces of brain everywhere numerous; moderate serous infiltration of pia mater; and increased quantity of fluid in the lateral ventricles.	Left lung firmly and universally adherent. Pericardium presented marks of recent inflammation in both its portions. Surface of the membrane partially reddened, and in some parts covered by a very thin layer of lymph, which was soft, yellowish, and slightly adherent.	Viscera healthy.
71	Male	Much blood escaped on sawing cranium; vessels of brain and membranes universally turgid, and bloody points on cut surfaces everywhere very numerous; considerable infiltration of pia mater over hemispheres; convolutions on several places shrunk, having intervals occupied by infiltrated membrane, which was distended by a perfectly limpid colourless fluid of watery consistence. Lateral ventricles enlarged, containing an increased quantity of clear fluid. Septum lucidum so extremely thin as to be apparently on the point of giving way at the posterior part. Much fluid in basis of skull after brain was removed.	Right lung connected to the cavity by universal adhesions of the closest and strongest kind. It was filled throughout with small tubercles, which had become softened in several points, and presented small collections of thick yellow matter. When left bag of pleura was opened, a considerable quantity of air escaped from the cavity, and the lung was reduced to less than half its natural size; it was connected to the cavity by small but very firm adhesion of the upper and back part. Pleura lining left cavity slightly thickened, and of a palish pink colour; no lymph effused on the surface, but the cavity contained a small quantity of turbid fluid. This lung was filled with tubercles and cavities like the other, but the opening by which the air had escaped into the chest was not detected. A very small part of the left lung was in a state fit for respiration, although the rest of this and the whole of the right lung appeared solid.	Viscera healthy.

No.	Sex.	Head.	Chest.	Abdomen.
72	Fem.	Partial serous infiltration of pia mater covering cerebral hemispheres; cerebral vessels not turgid, but bloody points on cut surfaces of brain were more numerous and conspicuous than in a normal state. About 1 oz. of fluid in basis of skull after the brain was removed.	Acute inflammation of both pleuræ of right side; the surfaces both of cavity and lung covered by recently effused lymph, and partially adherent; several ounces of turbid sero-purulent fluid in the cavity. Recent inflammation of left pleura, with partial effusion of lymph, and two or three points of sero-purulent effusion. The inferior lobe firmly adherent and hepatized, so that it sank in water.	

According to the above statement, it appears, that some pathological changes of structure, more or less evident, were found in the brain or membranes of the whole seventy-two dissections reported, of which it may be stated, as a summary, that 55 cases likewise exhibited diseased alterations of structure of some kind or other in the organs of the chest, whilst only 14 patients showed any morbid appearances in the abdominal viscera. Undoubtedly, this peculiarity may perhaps have been owing to the circumstance, that the abdomen was not opened in every instance, although the presumption is otherwise in the great majority of the cases now detailed.

When compiling the history of the various autopsies contained in the previous synopsis, I ought to mention, as an important feature, that it does not comprise only selected dissections; since the table, in reality, forms a consecutive series of cases, drawn up in the exact order in which they were originally entered on the register of the hospital by Mr. Lawrence; the only two omissions being, the case of a female patient, who died from femoral rupture,

which contained a portion of small intestine completely mortified, and as black as a coal; and another, where the lungs were extensively diseased. As the brain, in both these patients, was not examined, the accounts are imperfect, and, consequently, the cases have not been included in the list now submitted to the Society, seeing they do not sufficiently bear upon the present discussion to warrant their insertion.

I mention these circumstances, lest it might be thought that the above dissections are brought forward to support a particular theory; there was no such intention; and I would add, that they are now detailed solely as a collection of facts, in order to illustrate the pathology of insanity.

Respecting the seventy-two examinations described in the preceding pages, the following general statement may be given of the pathological changes of structure observed in the head. In 59 cases, there was infiltration of the pia mater. In 59, turgidity of the blood-vessels of the brain and membranes. In 41, effusion of water in the ventricles. In 27, water was met with at the basis of the brain. In 19, bloody points on the cut surfaces of the medullary substance. In 16, thickening and opacity of the arachnoid coat. In 14, the colour of the medullary or cortical substance of the brain was altered from its natural hue to brown, pink, grey, violet, ochre, or white. And in 13 cases, there was an effusion of blood in the brain. Besides these diseased appearances, various other alterations of structure were met with in par-

ticular patients ; such as effusion of pus on the brain ; changed consistence of its texture ; greater dryness than usual of the membranes ; flattening, a shrunk, or a swollen state of the organ itself ; with other changes different from a normal condition ; for an account of which I would refer to the synopsis, to avoid superfluous repetition.

Although diseased alterations of structure were not so frequently met with in the organs of the chest, as in the brain and its membranes, nevertheless, 55 insane persons in the above list of dissections exhibited changes of a morbid description in the thorax. Indeed, the apparent cause of death, in many of the patients, could be clearly traced to disease in the organs of respiration. Of the 55 instances of pectoral disease met with, on examining the bodies after death, 43 cases showed either recent or old adhesions in the chest, and 31 had the lungs consolidated. In 24, suppuration had commenced. In 15, the pleura or lungs bore marks of recent or previous inflammation. In 12 cases, there was effusion of lymph into the pleura, &c. In 9, considerable effusion into the bronchi and air passages. In 9, the lining membrane of the trachea and bronchi was deep red. In 8, tubercles were met with. In 6, the lungs had assumed a dark, or blackish tint. And in 7, the lungs did not collapse when the chest was opened. Besides these diseased alterations of structure, others were noticed, which it is unnecessary again to particularize, as they are amply described in the previous synopsis.

Respecting the morbid appearances which the abdominal viscera exhibited on dissection, the instances of diseased alteration of structure in any of the patients were so few, as scarcely to admit of many remarks. However, it is right to state, that the liver was found to be affected in 5 cases ; dropical effusion had taken place in three patients ; and in 3 other cases, there appeared decided marks of recent and violent inflammation of the contents of the abdomen ; in two of which examples, the intestines had actually given way, so as to allow fæcal matter to escape into the peritoneal cavity ; and a similar result would have likely supervened in the other case of intestinal inflammation, had the patient lived for a longer time.

Considering the present communication to have already much exceeded the limits originally proposed, I will not attempt to discuss cursorily the important question which now occupies many pathologists, regarding the rationale of the diseased appearances usually met with in the brains of lunatics on dissection after death, namely, whether the morbid alterations of structure, then observed, be the cause, or only the consequence of the patient's previous mental malady. In short, whether the opinions promulgated by the section of pathological physicians, denominated "the Anatomists," or the views entertained by the other party, "the Vitalists," be the true doctrine. The former considering that the diseased alterations of structure observed in the brain produce the attacks of insanity : whilst the

latter confidently assert the contrary. I therefore shall leave the decision of such important questions to others more competent than myself to give an opinion ; although I must confess, the numerous illustrations now detailed, the facts recorded in medical works, as well as the reasoning of authors upon insanity, greatly preponderate in favour of the Anatomists ; whose conclusions, in my judgment at least, appear to be the most rational, and quite consistent with the present state of our pathological knowledge respecting mental diseases.