It is noteworthy that scattered instances, apparently establishing the existence of contagion, occur in the history of agues as well as in that of phthisis. Thus in the article on "Intermittent Fever," in the *Cyclopædia of Practical Medicine*, edited by Drs. Forbes, Tweedie, and Conolly, I find the following passage. "Some authors have supposed ague contagious. This was the opinion of Baunarez and Cibat in Spain, Bailly and Andouard in France, and Cleghorn and Fordyce in our own country. Cases have fallen under the writer's observation which have led him to entertain at least a suspicion that such was the fact; but the most forcible case for the affirmation of the question which he has met with is one related by Bailly. 'A lady arrived in Paris with an intermittent fever, which she had contracted in the country in a marshy situation. This fever was accompanied by violent vomitings, and other serious symptoms, which displayed themselves at every paroxysm, and forced me to give bark. Scarcely was she cured, when her husband, who had never quitted Paris, but who had the imprudence not to keep himself apart from her during her illness, was struck with the same symptoms, and in a manner altogether similar.'" As I have endeavoured to show in the case of phthisis, apparent instances, such as this, of an infectious ague may have been either accidental coincidences, or cases of the recrudescence of an old contagion, or due to some unsuspected local, not personal, infection; perhaps, now and then, there may have been an error in the diagnosis of the first case, in the same way that it is by no means difficult to mistake visceral syphilis for tuberculosis.

Without denying the great difficulty of proving a negative, there is still no doubt that the non-occurrence of phthisis under certain conditions does establish a strong presumption that it is not spread by direct contagion. The facts relating to the Brompton Hospital, recorded by the late Dr. Cotton and Dr. Theodore Williams, are too well known to need repetition here. But the same immunity from phthisis has also existed among the various officers of the City of London Hospital for Diseases of the Chest, to which I was myself at one time attached. On this point, I have been favoured with the following statistics by the Secretary, Captain Storrar Smith.

"Of thirty-one physicians who have had care of patients there since 1855, with one single exception, the details of which I cannot learn, none have suffered from phthisis. Of twelve resident medical officers, whose term of office has varied from one or two to five years, one only has died of phthisis; he was attacked by hæmorrhagic phthisis, which ran a very rapid course, before he had been more than about a twelvemonth in the place. Of five chaplains, none have suffered from phthisis. Of three secretaries, one was delicate when he took office, and eventually died of some chest-disease. Of four matrons resident in the hospital, the first and the present one having been each there for more than ten years, none have had phthisis.

"Since 1867, there have been 255 nurses, sisters, and female servants employed in the hospital; of these, one, a nurse, has died in the hospital of phthisis, and thirty-three have left on account of illness. Of these latter, some, but certainly not all, were phthisical.

"Since 1865, there have been thirty-four male servants at the hospital. Of these, one, the house and out-patient porter, died of phthisis, at the age of 48 or 50, after seven or eight years' service. He had been in the army, had a fistula, and drank freely. Another out-patient, after service with the institution from its commencement, was discharged in 1882 on account of ill-health; a week or two ago, he was in the hospital with bronchitis.

"Out of seven dispensers since 1860, one died while away on sick-leave, probably from phthisis. His wife died a few years before from phthisis. He was aged about 50 when he came to the hospital, and 63 when he died.

"Of fifty-one clinical assistants, the appointment involving residence, I know certainly that two or three have become phthisical; but I have not been able to learn the history of a sufficient number to draw any conclusion. I think, however, that, in the case of very many of them, the fact of their being attacked by phthisis would have come to my knowledge."

On the whole, then, facts negative the idea of any direct contagion under the ordinary conditions of hospital residence and service.

In conclusion, let me recapitulate the conclusions which I have endeavoured to establish as to the ætiology of phthisis, with special reference to its contagiousness. None can be more sensible than myself of the many imperfections in the matter and form of my argument.

1. The historico-geographical argument is insufficient to prove that the present distribution of phthisis has been brought about by the carriage along lines of human intercourse of a special morbid germ. Indeed, many of the facts under this head are distinctly antagonistic to any such theory.

2. Before the discovery of the bacillus, one and all of the reported

causes of phthisis were inadequate to account for its distribution, or for the anatomical and clinical characters of the disease.

3. Those causes, even those which appeared to act as exciting causes, were all predisposing causes only.

4. From the nature of those predisposing causes, their relation to each other, and the conditions under which their influence seemed to make itself felt, it was a probable inference that phthisis belonged to the group of specific febrile diseases; and this view was held by some writers in the face of many difficulties and perplexities.

5. The facts on which this inference was based were insufficient to prove that phthisis was personally contagious, and were, indeed, rather opposed to any such notion.

6. The discovery of the bacillus proved that phthisis was a specific febrile disease; and thus the question of contagion cannot now be usefully discussed without acknowledging this fact.

7. As some specific febrile diseases are contagious, and others not so, this property existing in very different degrees and modes in different members of the group, the question as to the contagiousness of phthisis can only be satisfactorily answered by determining its affinities with other members of the group and by distinct evidence of its contagiousness.

8. Although phthisis may be undoubtedly produced in many ways experimentally in animals and also in man, there is not sufficient evidence to prove that its prevalence is materially affected by direct contagion.

9. In many most important respects it very closely resembles ague.

10. It is at least highly probable that the exciting cause of phthisis, like that of ague, the bacillus, or some other micro-organism, is in no way dependent upon man for its existence, and is widely diffused, irrespective of human agency.

From these, I may be allowed to make one short practical deduction; viz., that the prevention of phthisis, like that of ague, is to be attained by sanitary works, especially by improved ventilation and drainage, and not by isolation; and that, for its cure, as we should not send a case of ague to the Pontine marshes, so, too, it would be wise not to send a case of tubercular disease to any place where the death-rate from phthisis is high among the native population.

ON THE MARINE HOSPITAL SERVICE FOR SICK AND HURT MERCHANT SEAMEN OF THE UNITED STATES.

By SIR WILLIAM SMART, K.C.B., K.L.H.,
Honorary Physician to the Queen; Ex-President of the Epidemiological Society.

THE Marine Hospital Service of the United States is a branch of the Treasury Department, allied to that of Revenue or Customs, having charge of quarantine and the health of the Mercantile Marine and Revenue Service, quite apart from that of the Navy; with its own hospitals at the great ports, even where naval hospitals are established. It has existed now eighty-six years; and, during the last eleven years, its annual reports have been published. The volume for the year ending June, 1883, is nearly four times as large as our own *Statistical Report of the Health of the Navy*; and yet it is concise in all its chapters, with complete statistics for each of the eight coast-districts, admirably presented in full nosological detail, followed up by reports of cases, some of which are illustrated with photographs. The last one hundred and twenty pages contain very valuable reports on two epidemics of yellow fever on the east and west shores of the Gulf of Mexico, with topographical maps; and the whole is made the more practical for reference by a copious and clear index. In every way this volume does credit to the contributors and to the Marine Hospital Service in general for its matter, style, and completeness.

This administration for the benefit of merchant seamen is analogous to our own for the treatment of the sick of the Royal Navy on our own coasts, in possessing its special hospitals at great centres, supplemented elsewhere by sick-quarters, under the management of selected medical practitioners, who may or may not be charged, in addition to treatment, with the entire provision for the wants of the sick in contract hospitals or lodgings, with allowances that vary much at different localities. Thus, in contract hospitals, the authorised charges, generally a dollar (4s. 2d.) a day, vary from 3s. to 6s. for lodging, board, nursing, with, sometimes, medicines; increased for contagious diseases from 6s. to 20s., but without any regard to rank; and the medical treatment is by officers of the service. Where that is not the case, and private practitioners are employed, they are remunerated with monthly wages, from £2 10s. to £9 3s. 4d., according to the liabilities; or, it may be, by fees of 4s. 2d. a visit, as at the contract quarters at Edenton, in North Carolina, where the subsistence is 4s. 2d. a day,

and the doctor's fee for attendance and medicines is the same for each visit to the hospital. Medical men so employed are styled "acting assistant-surgeons," and the staff consists of a supervising surgeon, general surgeons, assistant-surgeons, passed and acting, and purveyors at the central office. The allowance for transport to a hospital is 4s. 2d. uniformly; that for burial differs from £1 5s. to £4 17s. 6d., regulated possibly by distance of cemetery. All expenses are considerably lessened in the hospitals established, in city hospitals, or in those of the navy, and in all of these a medical officer of the service treats all the mercantile sick.

The Marine Service hospitals are administered by its own surgeons; and they are built and repaired at the national charge by votes of Congress. In them, the pavilion-plan is that approved of, and the ground-plan is given of one now proposed to be constructed (*vide* block-plan).

It may be understood roughly by extending the fingers on a plane, and imagining a square block in the palm to be divided into four square apartments, separated by two cruciform passages allotted to the reception-room and office at the entrance, and to the operating-room and dispensary towards the main blocks of buildings. Then, taking the three central fingers as wards, each has, at the entrance, a dining-room for the patients of the wards on the left, and two nurses' rooms on the right, with a central passage into the wards, all on the ground-floor, with an ambulatory on each side; and, at the further end, the angles are truncated into smaller parallelograms, of which the left half is the ward smoking-room, and on the right are the lavatory, bath-room, boiler-room, and water-closet, in connection with the wards, which diverge one from the other like the extended fingers. The two smaller fingers represent, that on the right, the quarters for the assistant-surgeons, and that on the left the hospital-kitchen and the employees' dining-room. The plan is very symmetrical, and well arranged for ventilation of a ground-floor and for the convenience of the sick; but neither the dimensions nor the number of beds in each ward are shown. It is suggested that there should be "also a few small rooms, so as to be easily fumigated, for infectious diseases, such as erysipelas, measles, or diphtheria; and that the hospital-buildings should be brought as compactly together as proper sun-lighting and ventilation will admit, and not be spread out over acres of ground for mere show."

A smaller hospital has been constructed on this principle at Memphis, Tennessee, and that at New Orleans is in progress in its ampler development for a first-class port. As votes have been passed by Congress for constructing three other port-hospitals on the same plan, it may be supposed that most of the old hospitals on the barrack and hut constructions will be replaced on the new plan; and thus there will be in the New World a governmental display of regard for the cure of sick merchant-seamen, not dreamt of as yet by the older maritime nations of Europe, of which the sites and the buildings will be at the cost of the nation, and not of private charity. The working expenses of the service are met by a capitation-tax on all merchant-seamen while actually employed, collected at the custom-houses amongst other dues, and paid into the national treasury; but frauds at the hands of impostors, owners, and brokers, have been not unfrequent. A central dépôt for hospital furniture, stores, medicines, instruments, etc., is fixed at the seat of government, from which sup-

plies are distributed by the purveyors on requisition, and none but perishable commodities are purchasable on the spot.

In addition to the hospitals and sick-quarters for severe cases, there are, for the treatment of milder cases as out-patients, a dispensary or two at each station, and in these, about two-thirds of the applicants receive medicines.

The receipts for the year were £88,879, and of this, £86,656 was the tax paid by employed seamen, leaving £2,224 to be met otherwise, as administrative expenses, etc. The disbursements amounted to £97,910, causing a deficiency for the past year, of £9,081. The relief afforded on this expenditure was to 40,195 patients, of whom 13,356 were admitted to hospitals, and 26,839 relieved at the dispensaries as out-door patients.

The mean of hospital-treatment was twenty-four and a half days, at a cost of nearly £2 9s. per case, including both classes of patients—in and out. There are fourteen hospitals in use, and four in construction, and in all, 150 relief-stations on the east and west coasts, the Gulf of Mexico, the Mississippi, Ohio, and the Great Lakes.

Five hundred and two deaths are recorded for the years 1882-83; and, assuming that these were of hospital-cases, exclusive of out-patients, the average mortality would be 37.5 per 1,000 with them, and, with the total sick, 12.4 per 1,000.

The Classified Ratios of Mortality were, per 1,000 :

For the Year 1882.	In the United States Marine Hospital Service. ¹	In the Royal Navy. ²
Diseases, general and constitutional ..	500.0	397.1
" of nervous system	67.7	41.16
" of circulatory system	63.7	58.1
" of respiratory system	163.3	109.0
" of digestive system	101.6	92.0
" of urinary system	39.8	14.53
Injuries by casualty	39.8	174.38
" in action	—	101.7
All other causes	28.9	12.1
Prox. per 1,000 deaths	999.8	1000.02

¹ In 502 deaths, page 124, report of 1882-83.

² In 413 deaths, drawn from report of 1882.

This comparison, derived from published sources, indicates how very much the grouped causes of mortality differ between the mercantile marine of the United States coasts, and the Royal Navy of England scattered over the world. These great differences of condition rest on: first, inattention to the examination of men in the United States Mercantile Service, as in our own, and its stringency in the Royal Navy, before active employment; second, the extended age for work common to all merchant-seamen, beyond that of the fighting navy in all countries; third, the benefit to health derived from naval discipline, and the fruits of service, in form of pension, that enable debilitated seamen to secede from their calling, and avoid its ultimate risks. To perfect this comparison, we require data on the final results of contracted disease that involves an annual invaliding of 45 per 1,000 from our navy, a great proportion of whom go, unfit men, on long mercantile voyages, to the increase of mortality there.

On another view, it becomes obvious that, where the mortality by diseases of every class preponderates, that by ordinary injuries is strongly marked in favour, and still more so if the "killed in action" (which, however, is an unfixed annual quantity) be taken into con-

	In the United States Marine Hospital Service.	In the Royal Navy.
Deaths by diseases, per 1,000	960	723
" ordinary casualties	40	174
Killed in action	—	101

sideration; and further, that, in the United States Marine, there are, per 1,000 of deaths, 257 by febrile diseases, and 229 by constitutional, as rheumatic, syphilitic, and tuberculous affections, against, in our navy, 283 and 114 respectively; proving conclusively that the constitutional group, by 100 per cent., is more destructive among the United States merchant-seamen than in our navy, from which they are invalidated; while the febrile group is, by 10 per cent., more so in the Royal Navy. This is corroborative of the inference as to the average stamina now existing in these two bodies of seamen, probably from the causes alluded to above.

With regard to the casualties of wreck of which none are recorded

in either service; in the year, probably such would not appear in the United States statistics; but they would form a serious item if dealing with the same question on the mortality by casualties in our own mercantile marine, if they be as stated on the authority of the Secretary of the Board of Trade.¹

Although it is not proposed to enter on the diseases enumerated in the tables, of which many interesting cases are related, there are two that call for remark—small-pox and yellow fever. Of the first, there were 141 cases, with 60 deaths, or 42½ in the hundred, exceeding by 6½ the ten years' statistics of the London Small-pox Hospital—the most authentic we have of unprotected cases; and it may therefore be inferred that there were local or special causes for this extreme malignancy. The original infection could not have been an imported one in emigration-ships from Europe, since there was no contagious disease reported in them during the year, although 102 deaths occurred in them in crossing the Atlantic. The centres of infection were Baltimore, New Orleans, and the upper eastward tributaries of the Mississippi, by the Ohio. It appears to have been mainly by inland infection on the rivers.

The year 1882 was an epidemic period at points on the Gulf Coasts of Mexico, and of the United States from the Rio Grande to Florida, in Cuba, and Port Royal, Jamaica.

In this volume, there are full details of the epidemics at Brownsville and its neighbourhood, in Texas, and at Pensacola and its vicinity, in Florida, affording some new views of importance concerning this disease; and the annual report of the health of our navy, for 1882, contains remarks on the smaller, but circumscribed, epidemic in the shipping and dockyard at Port Royal.

By way of preface, it will assist in estimating these to examine the statistics, presented as authentic, bearing on these epidemics, together with others of wider extent. Those from Vera Cruz—an endemic centre—refer to the charity hospital for males in that city, and that of the British Navy is compiled from the official publications.

Nos. ¹	Periods.	Situations.	Attacks.	Deaths.	Per 1,000.	Page.
1	1859-78	Royal Navy	1,374	616	448.3	—
2	1875-83	Vera Cruz, seamen of all nations	65	34	524.6	389
3	1883	total	1,756	864	496.	—
4	"	Pensacola, Florida, total	2,337	225	96.23	386
5	"	Brownsville, Texas, total	2,030	117	57.6	54
6	"	in hospital	76	14	184.5	306
7	"	Port Royal, Jamaica ..	36	14	388.8	—
Totals			7,674	1884	245.5	—

¹ Authorities.—For Nos. 1 and 7, Health Reports of Royal Navy; for others, Report of Marine Hospital Service, United States, 1883; 2 and 3, Appendix, 389, Dr. Guitérrez; 4, at page 386, a physician of Pensacola, Dr. J. S. Herron; 5 and 6, pages 307, 308, Dr. R. D. Murray, principal medical officer, Marine Hospital Service, at Brownsville, Texas.

With reference to this point of mortality from yellow fever, Dr. G. Wood, Physician of the Pennsylvania Hospital, states at p. 330, vol. i, of his *Treatise on the Practice of Medicine*, fifth edition, Philadelphia, 1858, "Epidemics are sometimes extremely fatal. While, in some, one half or more of the cases have proved fatal, in others, the proportion of deaths from yellow fever, prevailing epidemically, may be stated at one-third (333 per 1,000). In 1855, Norfolk and Portsmouth, naval towns in Virginia, were infected, and at the latter it has been stated, that the mortality in an epidemic was 500 per 1,000 among the whites, and 50 among the negroes, which affords the very best criterion of its malignancy there. Even with the same city, Dr. Wood remarks, the violence may vary greatly in different spots. Thus, in Philadelphia in 1820, out of 12 recorded cases in one vicinity, there was only a single recovery; of 70 in another, 30 recovered; and of 4 in a third, 3 recovered, showing how much of the severity of the disease will depend on the better or worse sanitary conditions prevailing in various parts of a city; and the same law holds good in hospitals, proportionate to their crowded state with fever-cases, and the length of time they have been receiving them; so it is in ships, for, in the same epidemic, one ship may have received a very fatal infection, whilst others may have manifested only a mild form of fever-action, and it may be none at all, after visiting an infected harbour."

¹ Lives lost at Sea.—A parliamentary paper issued February 25th, 1884, gives the number of lives lost by drowning or other accident in British merchant-ships registered in the United Kingdom in the several years from 1871 to 1882 inclusive. In the twelve years, the total loss of life was 38,722, of which 35,660 were crew, and 3,062 passengers. The largest numbers were in 1873 and 1874, this being mainly due to the great number of passengers drowned in those years, 1,167 in the former, and 572 in the latter.

But assuming 333 per 1,000 of attacks to have been a reasonable standard of mortality in a city by epidemic yellow fever when Dr. Wood wrote, some interesting conclusions may be evolved in considering the above data; of these, the most striking is the decrease of severity of the disease since then, even in the southernmost of the cities and towns of the United States. The death-rate at Pensacola was nearly 40 per 1,000; but the difference between the highest of these and Dr. Wood's statement is 236 per 1,000. As the death-rate is the measure of the greater or less predominance of typical cases of black vomit, etc., which rarely recover, it follows that there may have been in action a less intense specific poison, or a diminution of the unsanitary local conditions that always foster the spread and severity of the disease, or both causes may have co-operated to produce the marked difference of results.

At the time when Dr. Wood wrote, this fever was considered endemic in New Orleans, Mobile, and Charleston, although it did not prevail epidemically every summer; and epidemic at distant intervals in the more northern cities of Baltimore, Philadelphia, and New York. I am not aware that any epidemic of it has appeared since then in the last three, and, in the first three, its character of endemicity has been abolished, their visitations having been rare and traceable to importations.

We all remember that, in 1865, General Butler, with paternal severity, taught the efficacy of quarantine and the influence of cleanliness, both of locality and of person.

Dr. Wood lived when the doctrine of contagiousness was not in the ascendant, and quarantine was repudiated by most medical men, while loss of blood and the use of medicines to cure were more thought of than hygienic measures to prevent and to cure yellow fever. In 1819-20 it visited most of the large cities upon the Atlantic coast from Charleston to Boston; in 1853 it was again at Philadelphia; in 1855 it was in Virginia; and during the civil war it prevailed in Louisiana, Florida, and Carolina. It was then that General Butler, as governor of New Orleans, setting aside all questions of mercantile interest, proved that, at New Orleans, prevention was easier than cure.

Now, when the disease infects towns on the Gulf Coast, the local authorities are held to blame, as in Texas and Florida in 1883. Hygiene has fully vindicated her superiority over therapeutics in meeting the many events of yellow fever epidemics; and, with that, she has proved the best way to diminish the death-rate of the once terrible and now milder disease, by reducing the chances of introduction, as well as the fostering causes of the disease.

Secondly, if it be held as proved that, in cities and towns, where improved cleanliness and ventilation of houses and of filth-receptacles, and of hospitals and other resorts of the sick, can be effected by the local authorities to the clearing out of badly infected quarters, and the destruction of all infected material, together with isolation of the attacked; and that an epidemic can be deprived of its virulence, as denoted by its general mild form, and by its minor death-rate. Then it may be comprehended how it is that when the disease does appear, whether it has arisen through introduction, or, as some assert, by spontaneous development, within the confined and overcrowded limits of a ship. The causes are obvious why so large a majority of the cases assume the very worst type, and the death-rate becomes so much inflated, that any susceptible person has but a remote chance of escape, as exemplified in the instances of ships of war, and also in the ships of mercantile marine, as well as in the crowded charity-hospital of Vera Cruz, into which none but the poverty-stricken are admitted; for under either of these circumstances, the chance of remedial measures stands at its very minimum when infection has been admitted.

From this report it is gathered that whilst the infected town of Brownsville, having received infection from Mexico, was jealous of the restraint on its commerce enforced by a rigid cordon, the finnicked towns on the Colorado River instituted their own cordons against it; and that line, being adopted, under Government authority, by the medical officers of the Marine Hospital Service, furnished with £23,000 by the United States treasury, was believed to have been the means of limiting the epidemic.

At Pensacola—a State quarantine-station for foreign arrivals—the epidemic, although a mild one by its death-rate, was less so than that at Brownsville, as judged by its death-rate; yet the extension inland from it was not less remarkable, notwithstanding the absence of any inland cordon to limit its spread. This concludes the general information contained in the report of the supervising Surgeon-General.

It is stated that no case of yellow fever was seen beyond the outer cordon. On November 10th that cordon was removed, but the river-guard was continued opposite to the infected towns in Mexico; and on the 16th all State quarantine was abolished, and further delay in forwarding mails was proclaimed illegal. The quarantine had been

enforced about three months; the maximum of daily temperature having been noted, 98.5° on August 9th, when yellow fever had begun in Brownsville; and it had fallen to 65.5° on November 14th, when it had altogether ceased at Brownsville.

At Pensacola the disease raged between September 8th. and October 26th; the greatest number of attacks in any one day having been 77, and of deaths 11. The last attack occurred on November 28th, and the last death on the 29th. The general opinion held in the United States is, that no infected place can be considered safe until a frost has set in, which was not seen in those instances.

It is important to know that at Brownsville the majority of inhabitants were of Mexican, and at Pensacola, of Negro race; which accounts in a degree for the mildness of the disease.

This concludes the general information combined in the report of the supervising surgeon-general. The history of the epidemics is very instructive in a pathological sense, but that may lie beyond the immediate scope of this notice; which has been merely to show, at this moment, when a Bill is before Parliament to devise means to diminish sacrifice of life amongst our merchant-seamen, how much it is possible to effect in the direction of curing their diseases.

SUCCESSFUL REMOVAL OF TWO SOLID CIRCUMRENAL TUMOURS.

By SIR SPENCER WELLS, BART.,

Surgeon to the Queen's Household.

ANY student of abdominal surgery in general, and especially of what is now termed the "surgery of the kidney," is certain to be interested in noticing two specimens which have lately been added to the Museum of the Royal College of Surgeons. The following description of these portions of two solid tumours which I removed last November from around the right and left kidneys of a lady, with part of the left kidney attached to one of the tumours, has been prepared by Mr. Eve. One tumour weighed 16½ lb., and the other 14½ lb.

"The portion of kidney torn away comprises more than one-third of the lower end of the organ. A calyx and papilla may be seen upon the torn surface; they afford conclusive evidence that the pelvis was opened. Within the calyx is a small mass of fat. A section of the kidney has a normal appearance. Surrounding the surface of the kidney is a tolerably firm, greasy, pale yellowish white substance, evidently consisting in great part of adipose and fibrous tissues. It is in close contact with the capsule of the kidney, but is only adherent to it over a surface about half an inch in length. The capsule can be easily separated from the kidney at this point, leaving the subjacent parenchyma perfectly smooth.

"The portion of the tumour from the opposite side was slightly more fibrous in texture, but otherwise similar in its naked-eye characters.

"In minute structure, both tumours consisted chiefly of adipose tissue. The fat-cells were large, and closely approximated. There were also many large tracts and bands of fibrillar connective tissue, consisting of a close interlacement of delicate fibrils, which gave it somewhat the appearance of mucous connective tissue, but stellate cells were absent. The blood-vessels were large and numerous, and around them were masses of small round, so-called 'indifferent' cells, which could be traced through transitions, by elongation, to the formation of fibres.

"The formation of fat was evidently secondary to the growth of fibrous tissue, the advance of the fat-cells into it being apparent; while the various stages in the transformation of the fixed connective tissue-corpules into fat-cells were distinctly seen. Sections, cut through the point where the tumour was adherent to the kidney, showed that numerous parallel fasciculi of fibrous tissue intervened between the kidney-substance (which was healthy) and the tumour.

"The anatomical relations of the tumours to the kidneys, and the microscopic examination, support the view that the tumours originated neither in the pelvis nor capsule of the kidney, but in the circumrenal connective tissue.

"Histologically, they were fibro-lipomata, and no grounds exist for believing them to be in any part sarcomatous, since the young cell-element exhibited a distinct tendency to form mature tissues, either fibrous or fatty. A complete immunity from further disease may, therefore, be anticipated, provided that the growths were completely removed."

I removed the two tumours at Tooting on November 13th, 1883, assisted by Mr. Meredith and Dr. Ridley Hilder. Bichloride of

methylene was given by Dr. Day. I had been very doubtful as to the precise character and origin of the tumours before operation, simply saying that there were two solid tumours, so movable that I did not think there could be any unusual difficulty in their removal. On making the incision usual in ovariectomy, a growth resembling an ordinary fatty tumour was seen to be covered by layers of loose serous membrane, just as in tumours covered by the broad ligaments of the uterus. This membranous capsule was divided, and the tumour easily shelled out from a large deep cavity in the left side of the pelvis and left loin. Attached to the deepest part of the tumour was a piece of dark red tissue, which I at first thought was a part of the spleen; but which afterwards proved to be about a third of the left kidney. The remaining portion of the kidney and the ureter were then seen at the bottom of the capsule. There was very little bleeding. The capsular cavity was carefully sponged, and the edges of the divided capsule were placed in apposition, but no sutures were used.

Another large tumour was then found similarly situated on the right side, and was removed in the same way; but the right kidney was neither injured nor seen. The only other difference in the proceeding on the two sides was, that the ascending colon led to no difficulty; while, on the left side, the descending colon was attached to the tumour anteriorly, and was pushed aside after dividing the serous capsule of the tumour. There was not much blood lost, only a few small vessels requiring ligature.

The patient recovered quite as well as after an ordinary ovariectomy. In quantity and appearance, the urine was quite normal. Dr. Hilder once or twice found some small clots of blood in the deposit, but, he said, "none as large as a pin's head." I saw her last month quite convalescent.

I need only add that the lady was forty-eight years of age; was married when twenty-one; had never been pregnant; had begun to suffer from abdominal trouble in 1874; and in 1878 was sufficiently large for pregnancy to be suspected. The enlargement had gradually increased. Ever since 1881, owing to prolapsus of the uterus, a ring pessary had been worn until the day of operation, and numbness and stiffness of the right leg had been troublesome. The catamenia had been regular, and the urine was always normal when examined.

MIRYACHIT: A NEWLY DESCRIBED DISEASE OF THE NERVOUS SYSTEM AND ITS ANALOGUES.

Read before the New York Neurological Society.

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In a very interesting account of a journey from the Pacific Ocean through Asia to the United States, by Lieutenant B. H. Buckingham and Ensigns George C. Foulk and Walter McLean,¹ United States Navy, I find an affection of the nervous system described, which, on account of its remarkable characteristics, as well as by reason of certain known analogies, I think should be brought to the special notice of the medical profession. I quote from the work referred to the following account of this disease. The party is on the Ussuri River, not far from its junction with the Amur, in Eastern Siberia.

"While we were walking on the bank here, we observed our messmate, the captain of the general staff (of the Russian army) approach the steward of the boat suddenly, and, without any apparent reason or remark, clap his hands before his face; instantly the steward clapped his hands in the same manner, put on an angry look, and passed on. The incident was somewhat curious, as it involved a degree of familiarity with the steward hardly to have been expected. After this we observed a number of queer performances of the steward, and finally comprehended the situation. It seemed that he was afflicted with a peculiar mental or nervous disease, which forced him to imitate everything suddenly presented to his senses. Thus, when the captain slapped the paddle-box suddenly in the presence of the steward, the latter instantly gave it a similar thump; or if any noise were made suddenly, he seemed compelled against his will to imitate it instantly, and with remarkable accuracy. To annoy him, some of the passengers imitated pigs grunting, or called out absurd names; others clapped their hands and shouted, jumped, or threw their hats on the deck suddenly, and

¹ "Observations upon the Korean Coast Japanese, Japanese Korean Ports and Siberia, made during a journey from the Asiatic station to the United States through Siberia to Europe, June 3rd to September 8th, 1882." Published by the United States Navy Department, Washington, 1883, pp. 51.