hours, and since the establishment of a low temperature room, the bodies are in a much less septic condition.

In conclusion, I would say that our desire should be to teach the student by a good object lesson the simplest way of safely carrying out an aseptic operation, and that this is best done in a small theatre with the students close by.

If the number of spectators is large, then they must be separated into different theatres; in fact in America, large classes of any kind are being done away with altogether.

THE PROMOTION OF UNIFORMITY IN THE REGISTRATION OF DISEASES IN HOSPITALS.*

By R. F. TOBIN,

SURGEON, ST. VINCENT'S HOSPITAL, DUBLIN.

SOME months ago the Board of Superintendence of Dublin Hospitals receiving Government grants, of which I am secretary, decided that it would be well to amend the form on which the hospitals send in a classified annual return of patients admitted, and I was directed to look into the matter.

There was certainly necessity for the change, for the old form was quite obsolete—the classification being alphabetical, with the inclusive term "abscess" holding first place on the list.

I shall not delay you by mentioning those with whom I have corresponded—Science does not recognize nationalities, and the list is therefore a long one—but I shall take this opportunity to thank all on that list for their letters and suggestions.

Any one carrying out such an inquiry will be struck first with the excellence of the *Nomenclature of Diseases* of the

* A paper read before the Section of State Medicine, Royal Academy of Medicine, Ireland, May 1st, 1908.

Royal College of Physicians—how far it is in advance of all other classifications, and most with the fact that the profession generally knows very little about it. My own ignorance of it was the first thing that was brought home to me, and then came the consolation of finding how widespread was my shortcoming. My feelings towards the book are now those of a converted collier towards temperance. The care bestowed on its compilation, the eminence of the men who have worked at it, the difficulties as regards classification that have been overcome, the education that lies in an intimate acquaintance with it, are ever before me.

The means I suggest for promoting uniformity in the registration of diseases in hospital is very simple. It consists in putting in every admission and discharge book, alongside the column for the names of diseases, a column for the numbers given to these diseases in the *Nomenclature*, and in using, when the annual returns are being prepared, these numbers as a means of classification and of bringing together the various diseases in their proper order.

This simple means of classification is in use in preparing the returns of the Army Medical Service, and it is found to work well. The numbers identify the words, and the necessity for looking out the number leads one to using the proper word. It means the banishment of such terms as "struma," "scrofula," etc. And here let me remark that since my conversion it has been a wonder to me why the Registrar-General has not given us a space for these numbers in the certificates of deaths and asked us to fill them in.

The addition of the number in each entry of a disease in the Admission and Discharge Book in place of giving increased trouble has, as is always the case with what tends to order, a quite different result. In a very short time one comes to know the numbers of all the principal diseases, and so the initial trouble disappears while this advantage is permanent—that from

A CLASSIFIED ANNUAL RETURN OF THE DISEASES OF PATIENTS Treated in Hospital during the year ended 31st March, 19

The following entries are made with a view to illustration.

No. in <i>Nomen- clature.</i>	Disease.	No. Treated.	No. Died.	Class.	Totals of Each Class		Remarks.
					Treated.	Died.	
13	Enteric fever	6	1	Infective	33	5	
38	Scarlet fever	4	2				
44	Tuberculosis, lung	20	2				
44	Tuberculosis, knee-joint	3	—				
44	Tuberculosis, abscess tibia	1	—				
44	Tuberculosis, lupus	2	—	Intoxicants	6	1	
50	Alcoholism	4	1				
59	Plumbism	2	—				
79	Lipoma, circumscribed; back	4	—	New growths non-malignant	5		
79	Papilloma, villous, vesical	1	—				
80	Sarcoma, spindle-celled, femur	2	1	New growths malignant	10	2	
80	Sarcoma, spindle-celled, testicle	1	—				
80	Carcinoma, scirrhus, breast	4	1				
80	Carcinoma, epithelioma, lip	3	—				
171	Keratitis	5	—	The eye	18	—	
193	Congestion, optic disc	7	—				
204	Lenticular cataract, complete, senile	6	—				
1,025	Burn, forearm and hand, skin	1	—	Injuries	12	2	
1,041	Wound, common carotid, partial division ..	1	1				
1,089	Wound of scalp, with injury periosteum ..	1	1				
1,096	Concussion of brain	1	—				
1,145	Fracture, ribs	2	—				
1,205	Fracture, radius, Colles's	4	—				
1,233	Dislocation, femur	2	—				

an admission and discharge book so filled up any clerk can make out a classified return of diseases: Infective diseases, malignant diseases, diseases of the various systems that are not either infective or malignant, are compelled to fall into proper order, and a bracket to define the sections is all that is necessary to complete the return. The first page of the form furnished to the hospitals under the superintendence of the Dublin Hospital Board is reproduced, as it furnishes an illustration of how the system works. On it the number of infective cases, of malignant cases, of injuries, etc., are seen at once.

I would ask representatives of hospitals to give this system their consideration, and if they approve of it to try and introduce it into the institutions with which they are connected. I have said it is in use in the Army Medical Service, and it may be in more general employment than I am aware of; it is for its universal adoption that I plead. Why should not each disease carry a like number in every land?

THE DENTAL NEEDS OF THE POOR OF LONDON,

WITH SPECIAL REFERENCE TO SCHOOL CHILDREN AND THE EDUCATION (ADMINISTRATIVE PROVISIONS) ACT, 1907.

By J. G. TURNER, F.R.C.S., L.R.C.P., L.D.S.,

DENTAL SURGEON, ST. THOMAS'S HOSPITAL; SURGEON AND LECTURER ON DENTAL SURGERY, ROYAL DENTAL HOSPITAL OF LONDON.

For this inquiry the poor of London may be taken to mean all who are unable to pay £2 for an upper or lower denture (or £4 for both upper and lower), 2s. 6d. for a filling or scaling, and 1s. for extraction without anaesthesia. To arrive at an idea of their number and needs we may proceed somewhat on the lines of the quantity surveyor, who estimates the cost, say, of a new county council palace, and finds his original figures doubled before the building is complete, only with far less certainty of data and greater liability of underestimation.

In accord with the scope of this inquiry, the poor may be divided into those of 14 years of age and under, of whom about 900,000 are school children, and adults, or those over 14. The number of these latter is not easy to estimate; from a study of the housing figures for 1900 in Mr. Charles Booth's *Life and Labour of the People of London*, and of the very poor in "General" Booth's *In Darkest England*, it may be taken that 1,000,000 adult "poor" is well within the limit, especially having regard to the fact that many whose occupation entails a show of "respectability" must be included in our "poor." We may, then, try to take out the needs of 1,000,000 adult poor. Any dentist conversant with hospital or dispensary practice knows that the "perfect set" is remarkable only for its rarity; the imperfect, and badly so, is the rule; imperfect referring not only to carious teeth, but to pyorrhoea alveolaris, tartar, discharging sinuses, and all that is included under "oral sepsis," leaving a mouth offensively foul, and often practically uncleanable. Allowing that each of these 1,000,000 has five teeth fit for and needing filling (this is probably an underestimate), and that each filling takes half an hour to do, we have 2,500,000 hours' work. Allowing that each requires two sittings of half an hour each for scaling and treatment of pyorrhoea (many will require more), we have 1,000,000 hours' work. Allowing that each has five teeth needing extraction (again an underestimate), and allowing three minutes for each extraction, we have 250,000 hours' work. Allowing that a quarter of these 1,000,000 requires a denture in the upper or lower (including a double set as an upper or a lower to each of two people), and allowing two hours' personal attention to the patient for each denture, we have 500,000 hours' work. Thus we have:

Fillings	...	...	2,500,000
Pyorrhoea and scalings, etc.	...	...	1,000,000
Dentures	...	...	500,000
Extractions	...	...	250,000

4,250,000 hours' work.

Allowing that a dentist can work five eight-hour days per week for fifty weeks=2,000 hours a year, we need

5

2,125 dentists working whole time, leaving out of account the mechanical assistants. Allow 10s. 6d. per hour for the dentist's time=£2,125,000; deduct £500,000 for dentures and £62,500 for gas, at 6d. per anaesthesia, on which items no profit except time is allowed to the dentist=£1,562,500, and one-third of this for working expenses=£1,041,667 for 2,125 dentists=£490 per year per whole-time dentist. £2,125,000 would be capital expenditure, that is, the cost of the first year's work, but entirely apart from equipment of surgery; current expenditure, that is, for "repairs" to these 1,000,000, and attention to the 90,000 school children annually becoming adult, might be estimated at a quarter of this sum=£506,000: 531 dentists. Indeed, the carpenter would shed many a bitter tear at the labour! and there are not enough dentists for the work; nor would any governing body entertain half such a proposition.

We may also take out the quantities from a physiological aspect, measuring the needs by the disease potential. To estimate the actual number of days lost through dental trouble is impossible, nor can we get any clear idea of the amount of sickness from this cause till a more general recognition of the clinical signs of oral sepsis leads to its due and more frequent incrimination. We can only schedule the possibilities. Want of masticatory power, the most popularly recognized, is the least of all the evils of bad teeth. The whole range of gastric complaints, from simple indigestion to incurable dilatation; catarrhs of the biliary and pancreatic ducts and their sequelae; blood diseases, from chlorosis to malignant endocarditis; new growths, from a granuloma to a cancer; and the whole category of septic diseases, may be traced to a foul mouth as the source of evil; every general disease must be unfavourably influenced, and tubercle may be specially mentioned; a mother may poison or starve her babe, suckling or unborn; the mouth may act as a carrier of the germs of epidemic diseases. Measured either quantitatively or qualitatively, the dental needs of the adult poor of London are overwhelming.

To meet these needs there are in London County, beyond the three special dental hospitals (the Royal Dental Hospital, the National Dental Hospital, and the dental department of Guy's Hospital), some ninety hospitals and dispensaries to which dentists are attached. A circular letter was sent to each inquiring as to the number of dental surgeons and clinical assistants working in connexion with the institution, and their days and hours of attendance; the existence of a separate dental department always available for dental use; the number of new cases per working day; the use of anaesthetics; kind of work done—whether extractions only or also fillings; whether, in view of the new Act, it were possible to expand the dental department. Replies were received from 69 of these (some I have been unable to thank, and take this opportunity of doing so), and from them a fair conclusion as to the provision there exists in London to deal with the dental needs of the poor, and as to the use it is put to, may be drawn.

Answers received from 69 institutions may be summarized thus (since there are 90 institutions employing dentists, about one third must be added to these figures to get true numbers):

Eighty-one dentists are employed at 69 institutions; 7 clinical assistants at 4 institutions, one having 3 and one 2 clinical assistants; 13 attend patients at home; 12 attend as required; 56 attend at the institution, averaging 73 attendances per week, with an average of 13 new patients a day (hours of attendance 9 a.m. or 2 p.m., except one case of 5 p.m.); 5 have special dental departments used for no other purpose, and 15 can expand in view of the Act; all use anaesthetics; 25 do filling work, 10 at home, but the total number of fillings is only a few hundreds; 22 of the institutions are dispensaries.

The total number of new patients attended at 40 institutions giving returns under this head is 42,523 per annum. These patients include adults and children. To get at the total we may practically double this number=85,000, and to arrive at adults deduct a quarter=64,000 new adult patients seen per annum.

Returns from the special dental hospitals show that probably another 48,000 patients are seen per annum at these institutions, of whom about one-sixth are children=40,000 adults. Total 104,000 adults per annum—one-third at the special dental hospitals and two-thirds at the general—or about one-tenth of those needing attention.