the good of others; and their design is excellent, though limited.

There are before me ten laws and reports of eight institutions of this kind in the metropolis and different sections of the provinces. It had been my design to have given an enlarged statistical view of the operations of these societies in their several localities, and to have gone fully into their respective merits and agencies, but I have not been able to obtain such precise information as to their *boundaries*, their management, and the relative proportion of subscribers to the mass of practitioners within the district embraced, or of those who might probably become claimants upon the fund, to enable me to do so with precision, and I must, therefore, content myself with some general observations.

It may be remarked of all these, and affiliated societies, that their *permanent efficiency* must depend upon the maintenance of a due proportion between the available income and the claims made upon the funds; and it would appear that these institutions had been managed with such an amount of prudence, and such an apportionment of the annuities granted, that up to this time their resources have been found ample, and their capital has accumulated.

And since it is not often that we find institutions of this nature becoming rich, where the chances have not been nicely calculated, it becomes us to inquire into the causes of this wealth, and especially to ascertain if the reference be legitimate, that it is because they are not *actually and practically required*. For a reply to this question, I would refer to the published opinions of the secretary of the largest of them, for London and its vicinity, who feelingly laments the frequency with which he is assailed by claimants, to whom he is obliged to reply that they cannot be relieved, because they are not *members*, or the representatives of such. The reason, therefore, of the accumulation of capital, is, not that there is not widowhood and orphanhood in abundance to be relieved, but that the widows and orphans have no title to relief under the present constitution of these societies, *except by membership*; indeed, on looking over the list of contributors there are certain things which cannot fail to strike the observant eye; as, first, the *immense preponderance* among the members, of those who cannot, by any positive calculation, be supposed to have subscribed for themselves, but only as an act of charity towards others, who, less fortunate than themselves, may become claimants.

Secondly, separating those who cannot, by any ordinary contingency, become claimants upon the fund, we are next surprised at the *small number remaining*, of whom it may be supposed that *their widows and orphans* may become dependent for aid, and who may be said to have become members with the provident intention, of laying up in store for those who may be left behind, in the event of their early death; and when it is recollected that *comparatively few* of these will die before their wives, or leaving children unprovided for under *fourteen* years of age, or not leaving behind them an income of £50 a-year, we cannot be astonished that the income of these societies should exceed their expenditure.

Thirdly, we are surprised, by the very small number of subscribers of both classes, as compared with the number of medical men living in their respective localities. Here the disproportion is so enormous, as to lead to the conclusions that the proportion of medical men with superabundant incomes is very small; that the number of those who will save from scanty incomes for charitable purposes, by acts of self-denial, is still smaller; that the number of those who avail themselves of these institutions as a provident resource is very limited; that amongst the mass of medical men, there are some *who could, but who will not*, provide for their families, because they prefer the enjoyment of their own little luxuries, (*Carpe diem—minime credula postero*;) but there is also a very considerable number who cannot, by the most rigid economy, carry this self-denial privations further; and who cannot, let the consequences be what they may, spare the cost of membership to any of these valuable institutions.*

There is then a class of sufferers who have no refuge in these amicable societies, and there is a class of distress to which they are utterly inapplicable; and for these sufferers, and for their families, and for their distress, so shut out from all other aid, THE BENEVOLENT FUND is provided.

(To be continued.)

NOTES ON AMERICA: ITS MEDICAL SCHOOLS AND ESTABLISHMENTS.†

By EDWARD HUMPAGE, Esq., M.R.C.S., Bristol.

The other Medical School to which I referred is connected with the College of Physicians and Surgeons, although not so large as the University Medical School. It is well conducted, and numbers among its professors some very able men. The lectures commence in November, and continue four months. The Museum of Anatomical Preparations and Morbid Specimens is well arranged and extensive; it contains also some fine models of skin diseases, executed by the late Doctor Thenard, of Paris. I was particularly struck with those representing that horrid disease—glanders, in the human subject.

The number of students this session was above 200: they appeared very well conducted persons, differing in no essential particulars from our own medical classes but in that most disgusting and filthy practice of chewing tobacco, the effects of which were everywhere apparent, and brought to my mind the philippic of James I., in which the royal author, speaking of tobacco, says—"It is loathsome to the eye, as well as harmful to the brain." I must not, however, be understood as stating, that all the medical students I saw in the schools practised this abomination; there were, happily, many gentlemanly exceptions, but, alas!

* On the subject of provision for families, see a valuable paper by Dr. Holbrook, of Cheltenham, which will be inserted in a subsequent number of this Journal.

† Continued from page 136.

the floors, the staircases, the lobbies of lecture rooms, told a tale of tobacco, and spoke of *salivary stimulation*, too plainly to be misunderstood.

But I turn from this digression, to speak with pleasure of the politeness with which the lecturers in this school received me. The chemical professor, Doctor Torrey, the professor of anatomy, Doctor Watts, and the professor of surgery, Dr. W. Parker, were exceedingly kind; and I had much satisfaction in attending the last gentleman's surgical clinique, delivered to the class every Monday, from eleven o'clock until one, p.m.

Dr. Parker has been in Europe, is an accomplished surgeon, in middle life, and enjoys a deservedly high reputation among his medical brethren and the citizens of New York. He is a good medical surgeon, if I may so speak, and prefers ankylosis, with all the trouble of obtaining it, to the more brilliant and *far easier* plan of getting rid of the disease by amputation. I attended this gentleman's clinique on two or three occasions, and some of the cases I will now relate.

The first person who presented himself was a man aged 35, suffering from diabetes; this patient passed more than two gallons of saccharine urine daily; he was very thin, of a cadaverous aspect, had lost his virility, and suffered from great thirst. The supposed cause of his disease was indigestion, from drinking bad water at New Orleans, from which city he had recently come. Dr. Parker gave the class a very concise history of the various theories and plans of treatment which medical men had proposed, but he still regarded its pathology as *sub judice*, and its treatment as empirical. In this case he recommended animal food, and simple drinks,—as cocoa, milk-and-water, and occasionally small doses of potash, tincture of iodine, warm baths, and Emplastrum Belladonnæ constantly over the loins.

Hemiplegia Dr. Parker treats with considerable success by strychnine.

Dr. Parker's comments on a case of phthisis were highly practical. The patient was subjected to a good examination, both as to the physical signs and also the constitutional; much stress was laid on a due observation of each class. Among the former symptoms he appeared to attach much importance to the effect of tubercle, producing *increased resonance* from the superior conducting medium through which the sound passes. He places much reliance on the use of the spirometer, and stated his experience as to the curability of the disease to be, that out of seventy-three cases twenty recovered, the patients getting well being for the most part thirty years of age.

"I know," said the Professor, "it is a *squally* position to be placed in, to have tubercle in the lungs, but it is curable by good food, fresh air, and an *equable* temperature, not hot, but even as low as 40° Fahrenheit if you please. Hence the climate of Canada is far better than that of New Orleans. I go for out-doors in these cases, rather than apartments regulated at an artificial temperature. Make your patients take much passive exercise, as on horseback, or at sea. This was old Sydenham's plan."

A case of tumour of the lower lip presented itself in a great smoker. Dr. Parker remarked that it was

encephaloid, and not *scirrhus*. "We must fix it,"* said he, and forthwith the operation was very neatly performed.

The other cases on that occasion were ovarian dropsy, ascites, and diabetes, concerning all of which Dr. Parker spoke in a manner well calculated to impress his auditory with the soundness of his judgment, and the practical quality of his observations.

In a case of paralysis (from lead,) of the extensors of the wrist and fingers, he directed the attention of the class to the characteristic *blue line* round the gums, and suggested, as the best treatment, good diet, constant support, with an India-rubber splint, and the occasional application of electricity.

(To be continued.)

General Retrospect.

PHYSIOLOGY.

EXHALATION OF CARBONIC ACID IN HEALTH AND DISEASE.

The following conclusions are arrived at by M. Hervier. :—

In a Healthy state of System.—1. The exhalation of carbonic acid varies from hour to hour, with the variations of the barometer, the maximum being at nine in the morning and eleven at night; the minimum, at three in the afternoon and five in the morning.

2. The variations in temperature and barometric pressure are in inverse ratio as regards the exhalation of carbonic acid.

3. During digestion the oxygenation of carbon is diminished. The ingestion of animal food diminishes the quantity of expired carbonic acid; the reverse is the case with vegetable food.

4. In running the expired air does not contain carbonic acid.

5. It is the same after the inhalation of æther and chloroform, and after the use of alcoholic beverages.

6. During sleep less carbonic acid is expired than in the waking state.

7. The air expired by infants contains a larger proportion of carbonic acid than that breathed by adults.

In a Pathological state.—1. In meningitis and other well-defined inflammations, the quantity of expired carbonic acid is increased.

2. Pneumonia, pleurisy, pericarditis, &c., are an exception to the rule.

3. Persons labouring under rheumatism expire an increased quantity of carbonic acid.

4. More is evolved also in intermittent fever, and especially in the hot stage.

5. Less carbon is consumed in the eruptive fevers, in scorbutus during suppuration, and in the syphilitic cachexiæ.—*Gazette Méd.*, Feb. 24th.

* A curious Americanism, meaning, in plain English, we must remove it.