

THE MILROY LECTURES ON TYPHOID FEVER.

PROF. CORFIELD gave the first of his course of Milroy Lectures on typhoid fever at the Royal College of Physicians on Thursday last.

After an introduction, in which he defended the name typhoid fever as that used by Louis and Jenner, and as being the least objectionable name to give to the disease, and pointing out that the name of enteric fever is a bad one, not only because it gives the name to a general disease from a particular lesion, but because it suggests the false idea that the disease is due to that lesion, he proceeded to give a short history of the subject from the beginning of the last century, first introducing a hitherto unknown author, Dr. Christopher Mayr, of Vienna, an unopened copy of whose Latin work on fevers, published in Vienna in 1806, he had found in the library of the Royal Medical and Chirurgical Society of London. He stated that there is no other copy of this book known in London, whether in the British Museum or anywhere else, and that the leaves had not been separated when he found it. This author gives an admirable classification of fevers into genera and species, the different varieties of typhus forming his second genus, and including typhus fever and the oriental plague, which were confused together until long after that time, the occidental plague or American yellow fever, all of which he regarded as contagious, and three varieties which he regarded as non-contagious and which were evidently, from his excellent description, varieties of typhoid fever.

This author also gave a most interesting disquisition on the contagion and on the causes of these diseases. It is remarkable also to note that he includes phthisis pulmonalis among the fevers, though he does not say whether he regards it as contagious or not.

Dr. Corfield then gave an account of the work and views of MM. Louis, Chomel, Gaultier de Claubry, Montault, Rochoux, and other French physicians, some of whom considered typhus and typhoid as the same disease and others as different diseases.

After alluding to the work of a number of other investigators, especially Dr. Lombard, of Geneva, and Dr. Shuttuck, of Boston, he gave an account of an important paper, read by Dr H. C. Barlow before the Parisian Medical Society on February 6, 1840, on the distinction between typhus and typhoid fevers. In this paper Dr. Barlow described the differences between the two diseases, and decided positively that they were quite distinct from one another.

Two months after this, Dr. Alexander P. Stewart also read a paper on the same subject before the Parisian Medical Society, but, contrary to the opinion generally held, he did not advance the knowledge of the subject in any way by his paper, and, in fact, did not lead us as far as Dr. Barlow had already done.

The work of Prof. Forget, of Paris, on follicular enteritis (even a worse name for the disease than enteric fever) was next alluded to, it being quite clear that Prof. Forget thoroughly understood what typhoid fever was and that it was a different disease from typhus.

Such was the position when Dr. William Jenner (afterwards Sir William Jenner, Bart., G.C.B., president of the Royal College of Physicians) undertook the investigation of the question. As he had been resident medical officer of the London Fever Hospital, he had had an excellent opportunity, of which he made the best use, of observing cases, both of typhus and typhoid fevers, and in 1849 he published his admirable paper on the identity or non-identity of those diseases. He proved to a demonstration that they were different diseases, and in a subsequent paper also proved that without a doubt their causes were different.

It was reserved, however, for Dr. Charles Murchison, in his able paper read before the Royal Medical and Chirurgical Society of London in 1858, to demonstrate that typhoid fever is caused in some way or other by water, air and soil contaminated with foul organic matters. In his great treatise on the continued fevers of Great Britain, he maintained that the poisons of those diseases were generated *de novo*; that of typhoid fever from decomposing excrement.

In 1873, Dr. William Budd produced his masterly work on the disease, proving that "typhoid fever is in its essence a contagious or self-propagating fever."

Dr. Corfield finally quoted from his own paper, "On the alleged Spontaneous Production of the Poison of Enteric Fever,"

read before the Epidemiological Society in March, 1874, when he combated the views of Dr. Murchison and maintained that the disease was infectious and had a special poison, which was not generated *de novo*, but was always derived from a previous case of typhoid fever. The correctness of this view has now been established by the discovery of the organism peculiar to the disease.

VESSELS WITH TURBINE MACHINERY.

THE introduction of the Parsons marine steam turbine into practice has extended ever since the time the *Turbinia* showed her marvellous qualities for speed, and was followed by the two torpedo boat destroyers, H.M.S. *Viper* and H.M.S. *Cobra*, which broke all previous records with a speed above 35 knots. The next steamer thus equipped was the *King Edward*, an excursion steamer plying on the Fairlie-Campbeltown route, and being the pioneer vessel belonging to the mercantile marine fitted with turbines, created a considerable interest at the time. The *King Edward* has now undergone a season's running, and (says *Engineering*, January 24) in order thoroughly to test her turbine machinery and coal consumption, data have been tabulated from her and also from the Clyde passenger paddle steamer of the same size named *The Duchess of Hamilton*, thus giving a comparative statement of the two vessels for the "running" throughout the season. The table is as follows:—

Comparative Statement of Speed, Mileage and Coal Consumption of the Paddle Steamer "Duchess of Hamilton" and the S.S. "King Edward"

	Duchess of Hamilton.	King Edward.
Total coal ... ..	1758 tons 13 cwt.	1429 tons 16 cwt.
Miles run ... ..	15,604	12,116
" per ton ... ..	8'87	8'47
Number of days running ...	111	79
Daily average consumption..	15 tons 17 cwt.	18 tons 2 cwt.
Average speed ... ..	about 16½ knots	about 18½ knots

On referring to the above table, it will be seen that the figures of coal consumption per mile are satisfactory, and also the data prove a decided victory for the steam turbine over the reciprocating engines, inasmuch as although the *King Edward* is by far the faster boat, her consumption of coal per mile is almost as low as that of the *Duchess of Hamilton*. In a previous issue we pointed out that one of the chief advantages gained by the adoption of the turbine was the possible modification in the "model" of the boat, as finer lines could be introduced for speed purposes. The *King Edward* in this respect also, we understand, has given entire satisfaction to her owners, and not unnaturally another boat of the same type, but 21 feet longer and with a speed of 21 knots, is being built, the Parsons Marine Steam Turbine Co. being at present engaged on the machinery.

It is also worthy of notice that the class of craft being built with turbine machinery at the present time comprise three high-speed yachts of large size, one being of the torpedo-boat type with water-tube boilers, so, as is pointed out, the turbines will have every opportunity of appearing at their best. The Parsons Company have also a torpedo-boat destroyer with a similar speed to the *Viper* (not being built to the order of the Admiralty) which we are informed will have a less consumption both in cruising and full speed than any other 30-knot boat in the Navy.

This vessel, which is named the *Velox*, was launched by her builders (hull and boilers), Messrs. R. W. Hawthorn, Leslie and Co., on the Tyne on February 11, and measures 210 ft. long, 21 ft. beam, with a moulded depth of 12 ft. 6 in., and to guard against "buckling" she has been specially "stayed" longitudinally. The *Velox*, to ensure economy at cruising speeds, has fitted in her a novel arrangement of power wherein engines of the ordinary reciprocating type are designed to work in conjunction with, and are coupled direct on to, the steam turbines, the turbines being kept in reserve for the higher speeds only. In considering coal consumption, it will be seen at once that the engine arrangement introduced by Mr. Parsons forms a very important item, because, as in the case of torpedo-boat destroyers, but a small percentage of their steaming is spent on full speed work: and also, as is well known, as all steam engines (steam