

which they are subjected. To develop the thorax we must avoid as far as possible those conditions of our habits, mode of life, and surroundings that tend to reduce the breathing capacity—the phthisisogenic conditions—and where they are unavoidable we must ascertain their amount and counteract their effects by the adequate introduction of conditions that tend to develop the breathing capacity—the non-phthisisogenic conditions—so that the tendency of *the whole* is markedly to develop the thorax.

In 1888 the Polytechnic Physical Development Society was formed to give a practical demonstration of the prevention of phthisis by adequate development of the lungs. Over 50 different trades and occupations were represented in the society. There were clerks, composers, printers, watch-makers, carpenters, engineers, drapers, tailors, warehousemen, &c., who were engaged therein from eight to 12 and 14 hours daily. The average increase of the chest girth of 100 members was 2 inches, that of the first class was 3½ inches. Increases of 4½, 5, and 6½ inches have been recorded. The average range of mobility was about 4½ inches and a mobility of from 5 to 6 inches and upwards was frequently observed. Hutchinson's standard of vital capacity was considerably exceeded—an excess of 100 cubic inches and upwards has been noted—and in respiratory power the majority belonged to or exceeded his “remarkable” and “very extraordinary” classes. Brent's medium standard had been exceeded by 3·32, 3·42, and 3·67 inches, and many members had attained it. Now, that standard is 5·40 inches above the average of the artisan class and 3·17 inches above that of the most favoured class. The society has therefore shown that the conditions to which its members were subjected were so arranged that their tendency as a whole was to develop markedly the lungs, and it has proved the prevention of phthisis in the case of many members who were threatened with an early attack of the disease.

The objects to be attained in the treatment of phthisis are to eliminate the toxin and prevent its further accumulation and to develop the lungs to an adequate extent. A great step in the right direction has been taken by the open-air system of treatment, for it does cause an elimination of the toxin, but only passively and to a too limited amount. We must actively eliminate the toxin and prevent its further accumulation by increasing the functional activity of the skin, kidneys, and alimentary canal, by baths or by sponging the whole body, and by the use of diaphoretics, diuretics, and saline aperients. The amount of this vicarious action and the organs to be selected depend upon the extent of the disease and the state of the patient. In the early stage I have found the prescription of two baths daily and three doses of an alkaline mixture containing diaphoretics and diuretics, with a saline aperient in the morning and later tonics, amply sufficient.

I need not say that great care must be taken to secure good personal and general hygienic conditions for the patient. His food must be good and the appetite must be cultivated—not forced. He must spend as much time as possible in passive and, as soon as he is able, active exercise in the open air. No attempt must be made actively to develop the lungs until the disease has been some time arrested, then active measures may be gradually adopted and progressively increased, care being taken to avoid either strain or over-exertion until the full development of the lungs has been obtained.

By this system of treatment in the early stage the chest symptoms are immediately relieved, cough and expectoration disappear, the area of breathing, vital capacity, chest girth, and mobility increase, the temperature tends to normal, weight increases, the general state improves, and there is the appearance of a certain amount of health and strength. This is followed by complete arrest of the disease, the absence of all symptoms, an increasing area of breathing capacity, normal temperature, fair weight, good general health, and ultimately by complete recovery. There has so far been no failure in that stage and, except for error in diagnosis or treatment, all such cases ought to recover. By complete recovery I mean the possession of an adequate respiratory surface and sound health.

I have applied the treatment in over 50 cases and in all stages of the disease. Of these 10 patients have died, nine are reported well, and 16 have completely recovered—their average chest girth being (males) 37½ inches, expansion four and a half inches—an increase of two and three-quarter inches and two and a half inches respectively. The recoveries have been verified by post-mortem evidence, by acceptance for first-class life assurance in two cases, by the

number of years that have since passed in others (from two to 15 years), and I recovered in 1876.

York-street, W.

A Mirror

OF

HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv., Proœmium.

MAUD HOSPITAL, EXMOUTH.

A CASE OF PAROTITIS FOLLOWING AN OPERATION FOR APPENDICITIS.

(Under the care of Dr. R. STANLEY THOMAS.)

THE connexion between inflammation of the parotid gland and abdominal disease or operation has been recognised for many years and the abscess which generally formed was looked upon as pyæmic. It was shown by Mr. Stephen Paget that this explanation would not suffice, as in the majority of the cases in which it occurred abdominal disease was present. The chief argument against this parotitis being pyæmic in origin is the fact that it is extremely rare for any other manifestation of pyæmia to be present. Mr. A. Quarry Silcock has offered a very probable explanation of the occurrence of a parotid bubo, as this parotitis is unwisely called.¹ He suggests that in most of these cases very little food is taken and the mouth becomes dry and septic and that micro-organisms spread along the duct of Stenson. In favour of this theory is the fact that parotitis is by no means rare after typhoid fever.

A young woman, aged 22 years, whose occupation was that of a general servant, was taken ill suddenly with severe pain in the abdomen at 11.30 A.M. on Oct. 20th, 1901. When seen at 3 P.M. she had great pain which was referred to the region of the umbilicus, with very marked tenderness in the right iliac region. The percussion note was resonant over the whole of the abdomen, but there was distinct resistance in the right iliac region. The temperature was 102° F. and the pulse was 120. The girl had had two similar attacks—one in October, 1900, and one in June last. Both attacks came on suddenly and were accompanied by pain and sickness, and in both instances she was laid up for five weeks.

The patient was removed to the Maud Hospital, Exmouth. Hot fomentations were applied to the abdomen and she was given a pill of a quarter of a grain of extract of opium with a quarter of a grain of extract of belladonna every four hours and a liquid diet. On Oct. 21st she was in much the same condition, being in considerable pain and frequently sick. On the 22nd she was apparently much worse and could keep nothing down. The temperature was 100·4° and the pulse was 120. At 3.30 P.M. she was operated on, the A.C.E. mixture being given by Mr. O. Eaton and Mr. R. Martyn kindly assisting Dr. Thomas. The appendix was found with its apex firmly adherent to the brim of the pelvis; owing to the great distension of the bowels with gas it was difficult to reach, but it was, by means of an aneurysm needle, ligatured in two places and then divided. As nothing else was found the abdomen was closed. At 7 P.M. the temperature was 97·8° and the pulse was 100. The patient was free from pain and quite comfortable. The bowels acted after an enema on the second day. Parotitis developed on the sixth day on the right side and was extremely painful, persisting for 10 days. On the nineteenth day there was slight suppuration of the superficial stitch holes. Except for this the patient made an uninterrupted recovery and left the hospital at the end of six weeks.

Remarks by Dr. THOMAS.—In this case the inflammation of the parotid gland occurred on the sixth day after operation for an adherent appendix. There was no sepsis to account for it, although there was some suppuration of the stitch holes 19 days after the operation which could not be accounted for. The parotitis lasted 10 days, during which time the temperature kept between 100° and 101°; it subsided without suppuration.

¹ THE LANCET, 1899, March 25th, p. 832.