France where consumption is so prevalent amongst the native population as at Montpellier and Marseilles." Dr. Journée's tables upon phthisis in Italy show that the same is the case in that country. Dr. Meryon (*Lancet*, July 1850) says: "Had I leisure, I could collect facts to prove that there are more natives (not strangers, but born and bred in the place) who die of consumption in Nice than in any town in England of the same amount of population." My colleague Dr. Pollock, who practised for many years in Rome, states that, "in no country is consumption so rapidly fatal as in Genoa, Florence, and Naples" (*Medical Gazette*, vol. xlv). Madeira itself, so long the "city of refuge" of our phthisical countrymen, forms no exception. Dr. Mason says that consumption and scrofula are frequent there (*Climate and Meteorology of Madeira*). The late Sir Ranald Martin, so long distinguished as a surgeon in India, once assured me that, in the East Indies, both native and European residents are often attacked with phthisis. The late Dr. Musgrave of Antigua has often told me that, in the West Indies, many of the native blacks fall victims to consumption.

And yet, as in the case of Australia, we send, and wisely so, many of our properly selected consumptive patients to the South of France, Italy, Algiers, etc. As with Australia, however, we must not promise them that they will meet there with anything *specific*. We can only hope that the rest and change, the milder air permitting more outdoor exercise than in England—the variety, in fact, offered to them in their every work and thought—may induce, according to their individual requirements, either some peaceful respite or some healthful reaction.

NOTES OF A VISIT TO THE MILITARY HOSPITALS OF THE CONTINENT.

By ALBERT A. GORE, M.D., Surgeon-Major, Dublin.

II.—BRUSSELS.

THE military hospital is in the Rue des Minimes, and was formerly a convent, erected in 1725. It is in an old part of the town, and not far distant from the Hôtel de Ville, in the front room of which the Emperor Charles V signed his abdication. Like most old buildings of that date, the shape is quadrangular, with a courtyard in the centre, and a garden attached. The hospital is visited at 9 A.M., and a *sœur de charité* is on duty in each of the four divisions, and appears to have much to do in the nursing as well as in the looking after the wants of the sick.

The construction of this old building (in the wards of which it is not improbable that many of our wounded soldiers were received after the battle of Waterloo) does not admit of cross-ventilation, as the wards open upon corridors, in some of which were rows of beds. The walls were scrupulously clean and neat, and the walls limewashed. The hospital contains two hundred beds, and takes the sick of the garrison of Brussels, numbering between 2,500 and 3,000 men. It is divided into wards for officers, non-commissioned officers, and privates. Venereal cases, febrile diseases, psora, eye-cases, and surgical affections are treated separately. The walls of the ophthalmic ward, which, on August 26th, only contained three patients, were not coloured. The patients seemed upon the whole anæmic; especially those suffering from secondary venereal affections, which were treated in great part by mercury.

In the garden is the pharmacy, in charge of a chief chemist, who wore a decoration in his button-hole, and two assistant-chemists, with three or four subordinates, and fourteen students in pharmacy. There was also in the enclosure a wooden hut (limewashed on the inside), and intended for the reception of small-pox cases and other infectious disorders. In the same building with the pharmacy were the quarters of the two junior medical officers ("médecins-adjoints", or assistant-surgeons), and those of the administration-director, or intendant, who distributed the rooms, and looked after the diet, clothing, hospital stores, and the ventilation of the wards. Further behind is the mortuary. Each of the resident assistant-surgeons had a large sitting-room, off which were two closets; one of them was used as a bed-chamber, the other as a dressing-room.

Antwerp has the largest military garrison in Belgium; but Brussels, the capital, is the head-quarters of the medical staff of the Belgian army. Dr. Fromont is "Inspecteur-General du Service de Santé de l'Armée", and is assisted by a *médecin-principal* of the second class as assistant inspector-general, a second assistant or battalion surgeon of the second class, and a *pharmacien*. The army (including the reserve) numbers 104,000 men, 16,000 horses, and 210 guns. Upon a black board in the consulting-room of the hospital are the names, rank,

and addresses of the officers constituting the medical staff of the garrison hospital, of which M. Lelong, *médecin-principal* of the first class, is chief. There are, in addition, two assistant-surgeons, three chemists, twenty-six students in medicine, and fourteen students in pharmacy. The regimental medical staff of the garrison numbers four first class, or regimental surgeons-major; eight battalion-surgeons, and a proportion of assistant-surgeons. Each battalion of infantry is three hundred and twenty strong. The medical officers all wear the same uniform, with the distinction of rank in the képi and sleeve, as in the French service. A very large proportion of the military surgeons are in private practice in Brussels. Dr. Lelong is Physician to the Count of Flanders, and to many of the nobility; a considerable number of the senior officers are decorated.

The case of each patient is taken at his bedhead on two forms or modèles. The first of these is a "liste des médicaments" prescribed; and the other a clinical memoir (*jour par jour*). At the expiration of every half-year, a manuscript report is made of the diseases and injuries treated in the hospital; the principal record.

To the medical officer on duty I am indebted for the following interesting particulars. During the six months ending Dec. 31st, 1875, there had been admitted to hospital 846 patients, of whom 14 died. The admissions were: venereal, 143; ophthalmia, 38; wounds and injuries, 388; fevers and medical diseases, 382. Of the medical cases, 328 were acute and 54 chronic. Of 1,007 patients (846 admitted and 161 remaining on June 30th), 761 were discharged cured, 39 were sent to the dépôts of their corps with certificates of invaliding, 56 obtained convalescent leave to go home, and 5 were sent to the special ophthalmic hospital at Louvain; 14 died, and 132 remained under treatment on December 31st.

During the first six months of 1876, there were admitted to hospital 932 patients; 132 remained under treatment, 56 of the admissions were conscripts under observation.

Admissions.—Fever and other medical diseases, 455; wounds and accidents, 261; ophthalmia, 49; venereal, 167. *Varieties of venereal disease*—balanitis, 10; posthitis, 2; phimosis, 2; paraphimosis, 2; urethritis, 93; stricture, 2; cystitis, 1; orchitis, 10; chancre, 33; constitutional syphilis, 5; warts, 6; nodes, 1.

The public women are examined twice a week in Brussels.

From the total, 1,064, occurred 22 deaths, viz: typhoid fever, 13; consumption, 4; cerebro-spinal meningitis, 1; acute tuberculosis, 1; peritonitis, 1; general abscess, 1; fracture of base of skull, 1.

The troops of the line in Belgium appear to be as a rule very young lads, clothed in blue coats with red shoulder-knots, and linen trousers. The men of the guard corps are taller.

Patients in hospital are given bread and milk at 7 A.M.; soup, bread, and fresh meat at 10 A.M.; and a mess of vegetables and some bread at 4 P.M., with any extras ordered by the physicians. The hospital contains six baths, three of which were devoted to cases of psora, which were treated by the sulphur and lime method. The hospital clothing is dark blue.

[To be concluded.]

CASE OF OESOPHAGEAL FISTULA OPENING THROUGH THORACIC PARIETES Laterally.

By J. G. SINCLAIR COGHILL, M.D.,

Physician to the Royal National Hospital for Consumption and Diseases of the Chest, Ventnor.

THIS morbid condition is, so far as I am aware, of such extremely rare occurrence, that a brief report of the case may be of interest.

J. B., aged 33, a printer, enjoyed good health until February 1875, when he had, to use his own words, congestion of the lungs and pleurisy. An abscess formed on the right side, pointed, and was opened in June; since then four other openings were made, the last two in November, when drainage-tubes were introduced. He had been under treatment in the Great Northern Hospital, and on the 27th of April, his schedule, as filled up by Dr. Frederick A. Carter, describes his condition as follows: "Empyema of fifteen months' duration, discharging slightly at the present time through two drainage-tubes, unconnected, one in each of two openings. By percussion there is noted some slight loss of resonance at both apices, and on auscultation air is found to enter both lungs fairly well and no rales to be heard. Height 5 feet 10 inches; pulse 108; respirations 15, and natural. There is no family history indicating hereditary proclivity."

He was admitted into the Royal National Hospital here on May 22nd, and the following notes are taken from the case-book, entered

on the date of each of my visits, by Dr. Williamson, the late, and Dr. Frazer, the present, resident physician.

"The right thorax is much contracted, and the apex-beat is displaced upwards and inwards under the left margin of the sternum. There are two fistulous openings on the anterior aspect of the right side, one three inches from the middle line of the sternum between the third and fourth ribs, the other three and a half inches from the mesial line between the fifth and sixth ribs. In each fistula there is a drainage-tube four inches in length, and from both openings there is discharged an ounce and a half of healthy pus in twenty-four hours. No respiration can be detected in the right lung, except from the area surrounding the fistula. There has been great loss of flesh; the weight being 8 st. 5½ lbs. The pulse is 84, respirations 25; and the temperature normal. The fingers are remarkably "clubbed", and the patient avers they had been even more so in the course of his illness. There is very little cough or expectoration. The appetite is good, the tongue clean, the bowels regular, and he sleeps well."

No communication was found to exist between the two fistulae; and ten inches of fresh drainage-tube were easily inserted into each, through which a greatly increased flow of matter was discharged. The surface was dressed with tenax, and a broad bandage firmly applied. He was ordered to have thirty minims of tincture of sesquichloride of iron in water three times a day, with full diet.

May 24th. The discharge is more abundant. He feels faint and weak, for which a cordial draught is ordered.

June 3rd. The discharge is decreasing. There is now no cough. He has a good appetite. Pulse 102, fuller.

June 7th. His weight is 8 st. 13½ lbs.; a gain of 8 lbs.

June 13th. He is ordered to inject the fistula daily with solution of boracic acid.

June 18th. He complains of debility. Ten minims of spirit of chloroform are ordered to be added to each dose of the iron mixture.

June 21st. His weight is 8 st. 12 lbs.

June 23rd. Much excoriation of the skin round the parietal orifices is noticed for first time. The part is to be dressed with a weak carbolic acid solution in linseed-meal poultice.

July 3rd. He is better; weight 8 st. 10¾ lbs. The medicine is now changed to half a drachm of syrup of iodide of iron three times a day.

July 11th. He is doing very well. The excoriation surrounding the fistulae has completely disappeared.

July 18th. The presence of an oesophageal fistula through the upper parietal orifice, although suspected, is for the first time demonstrated. Food, both fluid and solid, when "gulped", that is, swallowed in larger quantities than can readily pass through the cardiac orifice of the stomach, and so distending the oesophagus, pass through the breach in its wall. In this way, porter and milk, for instance, can be at once recognised, as also minute portions of solid food, which are often long delayed in transit, as is determined experimentally with the seeds of preserved fruit, and such like.

July 25th. The discharge is very profuse. A weak watery solution of iodine, in place of the solution of boracic acid, was injected. There is increased temperature with reduced discharge.

August 1st. The iodine injection was repeated with similar effect.

August 2nd. His weight was 8 st. 9¾ lbs.

August 5th. The iodine injection is repeated.

August 8th. He is not so well; complains of weakness. His appetite is bad. He is ordered De Jongh's cod-liver oil in a vinous solution of chiretta, and the following mixture:

R Acidi hydrochlorici dil. ʒiij; tincturae ferri muriatis ʒvj; liquor. hydrargyri perchloridi ad ʒiv. M. One drachm in a wine-glassful of water three times daily.

August 9th. He is very weak; has had an attack of vomiting.

August 19th. His general condition is now much improved. There is increased discharge from the upper fistula; both, however, are patent.

August 23rd. There has been sharp pain round the upper opening, relieved by an opiate poultice.

August 29th. The discharge is very heavy and fetid. He is ordered mixture of turpentine and senega.

September 5th. Discharge diminished. Fifteen minims of spirit of juniper were added to each dose of the turpentine mixture, on account of slight puffiness of the ankles.

September 7th. Still improving. The drainage-tube passes for the first time from the inferior to the upper opening.

September 11th. He is ordered two drachms of Parrish's syrup of phosphate of iron three times a day.

September 13th. Carbolic acid solution is ordered to be used for injection. His weight is 7 st. 11¼ lbs.

September 20th. He leaves the hospital at the urgent desire of his

friends to return home. The stomach is settled; his appetite is good; and the discharge is very much diminished in quantity and healthy in character.

We were subsequently informed that death occurred "very suddenly", probably from embolism of the pulmonary artery, on October 27th.

The remarkable variation in weight is not the least singular feature in this case, there being a gain at one period of eight pounds, and, at the date of discharge from the hospital, a total loss of sixteen and a half pounds. The general health at the same time improved, and there was only temporary elevations of the temperature after each of the injections of the pleural cavity.

PORTABLE REGULATING ETHER-INHALER.

By J. T. CLOVER, F.R.C.S.

In the BRITISH MEDICAL JOURNAL of July 15th, 1876, I described an apparatus for giving laughing gas and ether separately or combined. Experience in more than three thousand cases in which I have used it convinces me that the administration of ether may be made far less unpleasant to the patient, and equally effective and safe, by first giving enough gas to render the patient unconscious of its taste.

The arrangement of the apparatus enables one to cause the patient to breathe directly into and out of a bag, or partly, or entirely through a vessel containing liquid ether; and, even without gas, it is very efficient, inasmuch as it gives the power of varying and of sustaining the strength of the vapour. I have used it a great many times without gas, and find it as safe as any other way of giving ether, whilst the risk of coughing and sickness is much lessened.

The plan of excluding fresh air until insensibility has been induced, and admitting it very sparingly afterwards, has now been extensively tried in various ways, and, so far as I know, it is practically free from the danger of causing serious obstruction to the pulmonary circulation and overdistension of the right cavities of the heart. Of course, air cannot be indefinitely excluded, but the pulse and respiration give timely notice when air is required. A single artificial respiration of fresh air in these cases affords more relief than several such respirations when the apnoea has resulted from an overdose of ether or chloroform. The reason for this is, that in the former case the symptoms depend chiefly on the want of oxygen, and in the latter upon the presence of a substance which has not only entered the blood, but has penetrated the tissues of the body. If the apparatus be overheated, or if the ether be turned on too quickly, the ordinary coughing and struggling would, of course, be produced. The apparatus, however, requires a little more attention to temperature and other details, and is rather too complicated for general use. I have made several attempts to avoid the necessity of warming it. This can be effected by having the ether-vessel surrounded by a larger quantity of water at the ordinary temperature; but then the size and weight of the inhaler become objectionable. Better success attended modifications of the instrument having the ether-vessel placed close against the face-piece, so as to receive more warmth from the patient's breath and from the hand of the administrator.

I am greatly indebted to Messrs. Mayer and Meltzer for their patience and ingenuity in carrying out my ideas, and my present object is to call attention to a portable regulating inhaler made by them. Its advantages are these:—1. It has no valves; 2. It supplies the vapour so

gradually, that patients breathe quietly; 3. It produces sleep in two minutes; 4. It does not require fresh ether during the continuance of an operation; 5. The recovery from a short operation is more speedy than with most other inhalers; 6. It does not need to be warmed