redients of "Sicherheit" explosive on Friday, June 28th, but Saturday and Sunday being holidays did not work a full day until Monday, July 1st, and since then worked regularly until the time of attending at the surgery. On Monday evening, July 1st, he began not to feel well, and his wife noticed that he was very blue.

Symptoms.—(1) Subjective: Has much headache of a dull and heavy character, chiefly frontal. Feels very short of breath on exertion. Is "muddled in his mind." (2) Objective: Is cyanosed all over. His appearance can only be compared to that of an infant with patent foramen ovale. The cheeks, naturally ruddy, are of deep purple-blue; hands blue except nails, which are of a yellow-white. The pulse is quick and jerky, 99 per minute. Sphygmographic tracing as below. The blood from prick of finger is of a

Pulse-tracing; pressure, 3 ozs.

dirty purplish-black colour; presents no remarkable features under the microscope, except that the red corpuscles are crenated. The heart-sounds are normal, except that the first sound is indistinct. Ophthalmoscopic appearance: Blood-vessels unusually dark in colour and dilated. Temperature at 9 P.M., 99.9° F. Urine dark orange-brown in colour, clear; specific gravity 1030, acid, no sugar.

Treatment.—Beyond a heart tonic by way of placebo the treatment was confined to free exposure to fresh air and sunlight, and absence from the mixing-room. The patient slowly amended, and had regained his normal health and colour in about two days.

OBSERVATIONS.—The "Sicherheit" explosive is a German patent, intended for blasting in coal mines and other places where a flameless explosive is indicated. A manufactory has been recently established at Denaby, by Mexborough, where P. D. works. His duty is to mix the ingredients in a steam bath, during which process noisome fumes are given off. The composition of the explosive is kept a profound secret, and the patient either is, or pretends to be, ignorant of its nature. Other cases with similar symptoms have arisen at the works, as we gather, but we have not been able to get particulars of them. The points of greatest note and interest appear to be the cyanosis (produced most probably by the rather stable combination of some gas with the red corpuscles of the blood) and the raised temperature. The subjective symptoms appear to bear proportion to the objective ones. The patient was able to walk to the surgery each day. His appetite was not interfered with; his only complaints were, as before stated, severe headache and "muddiness," with shortness of breath. It was his wife's alarm at his blue appearance, and not his own symptoms, which induced him to seek medical relief. So far as we are aware the case is a unique one.

TWO CASES OF MALIGNANT DISEASE OF THE THYROID GLAND.

By PROCTER S. HUTCHINSON, M.R.C.S.

A CASE of malignant disease of the thyroid, which came to Mr. Hovell's clinic at the Throat Hospital, and which, owing to his absence in Germany, he did not see, is, I think, worth recording, on account of such cases being rare.

The patient, R. P., a schoolmaster, aged 53, came complaining of a swelling occupying the right lobe of the thyroid, which he had noticed three months; it was very hard, tender on pressure, and immovable. It had come on rapidly, and was causing severe pain, shooting to the arm, dysphagia, and a husky voice. Laryngoscopic examination showed absolute fixation of the right cord in the cadaveric position. There was great pain at night, preventing sleep. He was a thin man, and had lost flesh. I saw the patient during two or three weeks, the enlargement always remaining as hard as a wood board. The patient died from exhaustion about six weeks from the first time I saw him, that is, about four months and a half from the time of first noticing the tumour.

I obtained a necropsy at his house. I found that since my last

seeing the patient, a fortnight before, the tumour had swollen to double its size. The whole gland was infiltrated with pus, and cut on section like liver. It had pressed closely on surrounding structures, but had not grown into them. Microscopic examination showed such a marked alveolar arrangement that the idea that the changes were merely inflammatory was negatived. The cells also in the alveoli had a more definite arrangement and outline than pus cells, though they were somewhat smaller than the usual size of soft cancer ones.

It is probable that the tumour, which had entirely replaced in the part examined the normal thyroid structure, was a small-celled cancer, though it had many of the characteristics of an alveolar sarcoma.

This case illustrates the difficulty, so often found in thyroid tumours, of determining whether the growth is sarcomatous or cancerous. Owing to the necropsy being done under disadvantageous circumstances, I was unable to examine the other organs, but he had no symptoms of disease elsewhere.

I am indebted to Mr. Hovell's kindness for permission to publish the case, and to my brother, Mr. J. Hutchinson, jun., for the microscopical examination. The dysphagia and aphonia were caused by pressure and not by the growth having involved either trachea or oesophagus. No enlarged glands were found.

The second case occurred in a woman, J. H., aged 56. She came to the hospital complaining of swelling on the right side of the neck, which had been present about five months. It caused some dyspnoea and dysphagia. The swelling occupied the position of the right lobe of the thyroid, was about the size of an orange, and was apparently only a simple goitrous enlargement. She was a florid, otherwise healthy-looking woman, and not in any way emaciated. She attended as an out-patient for some few months, during which time the goitre got gradually harder, and dyspnoea began to be more troublesome. On June 6th, 1887, she was admitted into the hospital, and an endeavour was made to remove the gland in order to relieve the dyspnoea. It was found, on cutting into the tumour, that it was too firmly attached to surrounding structures for removal to be possible. It cut like an unripe potato, and was very hard. A piece was removed for microscopical examination; it was not vascular. In the sections examined there seemed to be but little tendency to an alveolar arrangement; nevertheless, the occasional small groups of large nucleated cells suggested that the growth was of the nature of a scirrhus, or, at any rate, a cancer. The difference in size between the cells was very marked, the small round ones largely predominating in number. There was very little fibrous tissue present. The patient went home again, and died about five months afterwards; no necropsy was obtained. As in this case it was probable that malignant disease had developed in an old goitre, it is difficult to date its duration. I am indebted to Dr. Wolfenden's kindness for permission to publish this case. I have seen one other case, in a clergyman, aged 49, which came on in an old goitre, and proved fatal in rather over a year from the time of appearance of malignant symptoms. The glands were extensively involved later; no necropsy was obtained. The following is a summary of cases recorded in the *Pathological Transactions*, to compare the course of the disease.

Case recorded by	Nature of Disease.	Duration.	Sex.	Age.
Dr. Moxon	Encephaloid cancer	4 months	Woman	46
Dr. Payne	Medullary cancer	?	"	66
Dr. Church	"	7 months	Man	48
Mr. Bowby	Infiltrating fibroma	3 years	Woman	42
Dr. Carrington	Epithelioid cancer	?	Man	47
Dr. Gulliver	Malignant, complicated by myxodema	?	Woman	46
Dr. Norman Moore...	? epithelioma or sarcoma	5 months	"	46

I find in Mr. James Berry's Jacksonian prize essay of 1886 that he records altogether thirty-seven museum specimens. Of these, thirty were cancer (three being scirrhus) and seven were sarcoma. Thirteen occurred in one museum, that of Berne, in Switzerland; the other twenty-four in Great Britain. He thinks that malignant disease occurs more frequently in patients who are already the subjects of existing goitre than in others.

THE Minister of the Interior has given a thousand francs to the Paris Ambulance Organisation.