Some illustrations of Graves's disease / by G. A. Gibson.

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SOME ILLUSTRATIONS OF GRAVES'S DISEASE.

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During the last few years many additions have been made to our knowledge of this interesting disease. A number of hitherto unrecognised symptoms have been discovered, while a considerable amount of light has been thrown upon its probable pathology by the results of recent investigation. The intention of the present paper is simply to exhibit some of its most distinctive clinical appearances, and on this occasion no attempt will be made to consider either the facts or the speculations regarding the etiology and pathology of the condition.

Case 1.—Ann A., aged forty-two, engaged in household

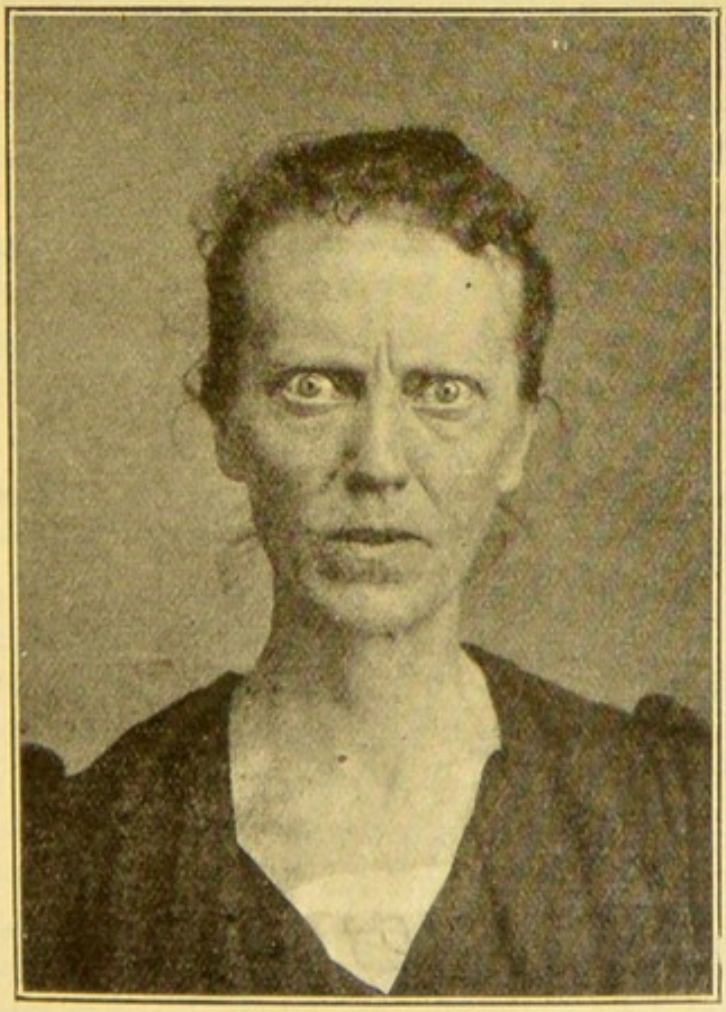

Fig. 1.—A. A., aged 42.

duties, was for some time in Ward 22 of the Royal Infirmary, under my care.

Her father died at sixty-six of chronic bronchitis, her mother at fifty-four of apoplexy. The patient was the eleventh of twelve children, of whom five—two brothers and three sisters—survive. One brother was drowned, another died of typhus fever, and the third of bronchitis. Three sisters died in youth of measles, and another during adult life of uterine cancer.

The patient was married at the age of twenty, and had a child eleven months after marriage, since when she had not been pregnant. Her health, prior to the onset of the disease, was always good.

About New Year, 1889, she had a swelling of the neck which disappeared under treatment. Soon after this she received a severe fright, and the sight became somewhat indistinct, for which she consulted Dr. Argyll Robertson, who ordered spectacles. During a subsequent visit he observed that the eyes were unduly prominent, and sent her to Ward 25, which she entered on June 6th, 1889. In the month of February of the following year she was sent for nasal symptoms to Dr. M'Bride, who cauterised the mucous membrane of the throat and nose, and removed a polypus from the nose. After a short time, during which she remained *in statu quo*, she began to improve. Her condition latterly was in many respects greatly better than it was when she was in the Royal Infirmary.

The alimentary system showed no evidence of any departure from health. The hæmopoietic viscera were not in any way abnormal. The spleen reached the mid-axillary line. The thyroid gland showed no enlargement, and no murmur could be heard on auscultation.

The patient suffered from no palpitation or dyspnœa. The pulse was 80, regular, of moderate fulness and pressure. The apex was in the fifth interspace, 3¼ inches from mid-sternum. There was a faint murmur at the apex, propagated to the axilla, and fading away before reaching the sternum. Another murmur was heard with its maximum intensity at the junction of the fifth and sixth left costal cartilages with the sternum. There was no murmur at the base. A faint continuous venous hum was heard over the jugular veins on both sides. The respiratory and urinary systems were normal. The catamenia were regular in occurrence

and normal in amount throughout her life, even during the worst phases of the illness. The integumentary system presented no morbid appearances, except a thinness of the hair of the scalp, and scantiness of that of the axilla, where it was very soft and pale. Since receiving the fright the patient had always been very nervous. She used after that occurrence to suffer from severe headaches, but these had not troubled her for a couple of years. There was a well-marked tremor. The eyeballs were unduly prominent, and showed the sclerotic all round the iris. The symptom of von Gräfe was present, and that of Möbius also. The pupil reacted normally in every way. The knee jerk was normal in extent, and the superficial reflexes had not undergone any alteration. There was some tendency to the production of a tache on drawing the nail along the skin. No other nervous symptoms could be elicited.

The case of Mrs. A. is interesting, not only in regard to the completeness of all the ordinary symptoms, except those connected with the thyroid gland, but with reference also to the integumentary system and the improvement which was noticed after the mucous membrane of the nose and throat had been treated by local measures.

Case 2.—J. M., aged fifty-seven, labourer, was an inmate of Ward 22 some years ago.

His family history presented no morbid tendencies, and his previous health was not marked by any important diseases. Some time before admission he observed that he was losing strength and energy, and his friends at the same time remarked some emaciation along with prominence of the eyeballs.

The digestive system manifested no disturbance of any of the functions, and it was of interest to observe that, as seen in Fig. 2, there was scarcely a trace of enlargement of the thyroid gland. There was a considerable but varying degree of tachycardia, unattended by any palpitation. The heart was slightly enlarged, but had no murmur. Some breathlessness occurred on exertion. The renal secretion was perfectly normal. The patient was somewhat bald, and the axillary and pubic hair was very scanty. A well-marked tremor was present with the characteristic frequency of vibration. The eyeballs were prominent, and the palpebral opening was large. There was delayed descent of the upper eyelid, with deficient convergence. No pupillary altera-

tions were present, and the nervous system was otherwise unaffected.

This case is interesting from its general completeness except as regards the thyroid gland.

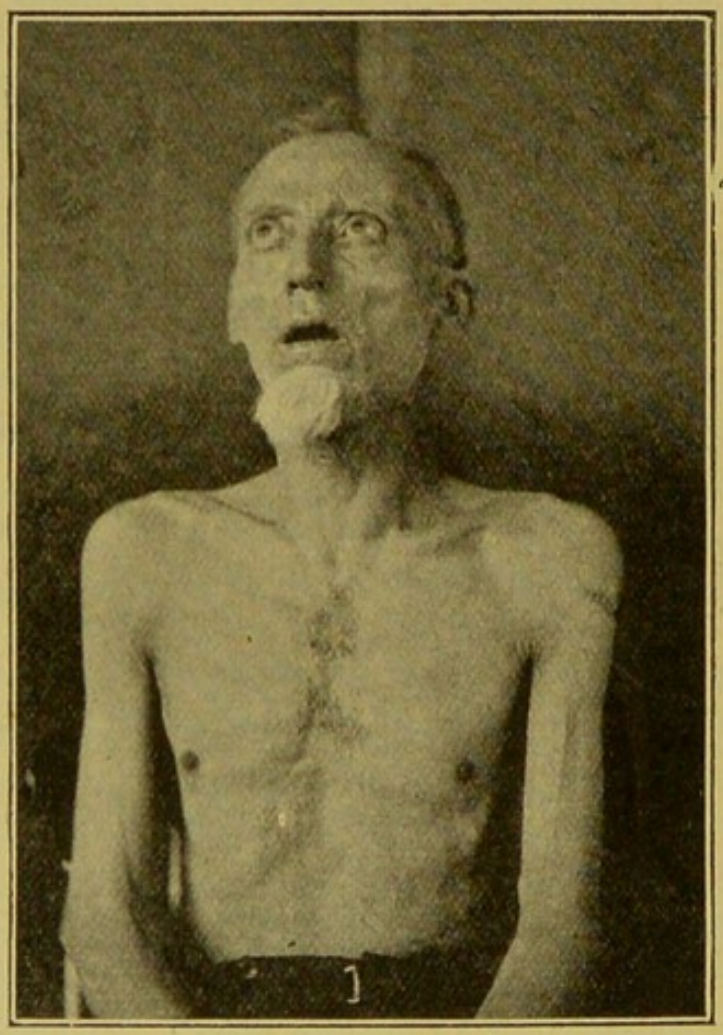

Fig. 2.—J. M., aged 57.

Case 3.—Alexander N., aged forty-six, married, and employed as a labourer, was for some time in Ward 22, complaining of palpitation, dyspnœa, and pain in the left side of the chest.

The patient's father was drowned at the age of forty. His mother died in childbed when twenty-one years old. He was an only child. He had been twice married. There were two children by his first marriage, a son and a daughter, the former of whom died of some inflammation of the mouth, and the latter of small-pox. He had also two children by the second marriage, a boy and a girl, both of whom were well.

His previous health had been good, except that during a service of fourteen years in the army he had ague when in India,

and that he was invalided in consequence of a splinter of a ball injuring the left eye. The symptoms began three years before admission, and persisted since that time. The tongue was raw. The liver was rather larger than the normal, measuring 6 inches in the mammillary line. The isthmus of the thyroid was enlarged, and the lobes also, but not to such a great extent. There was faint pulsation, and a soft systolic murmur. The pulse, about 95

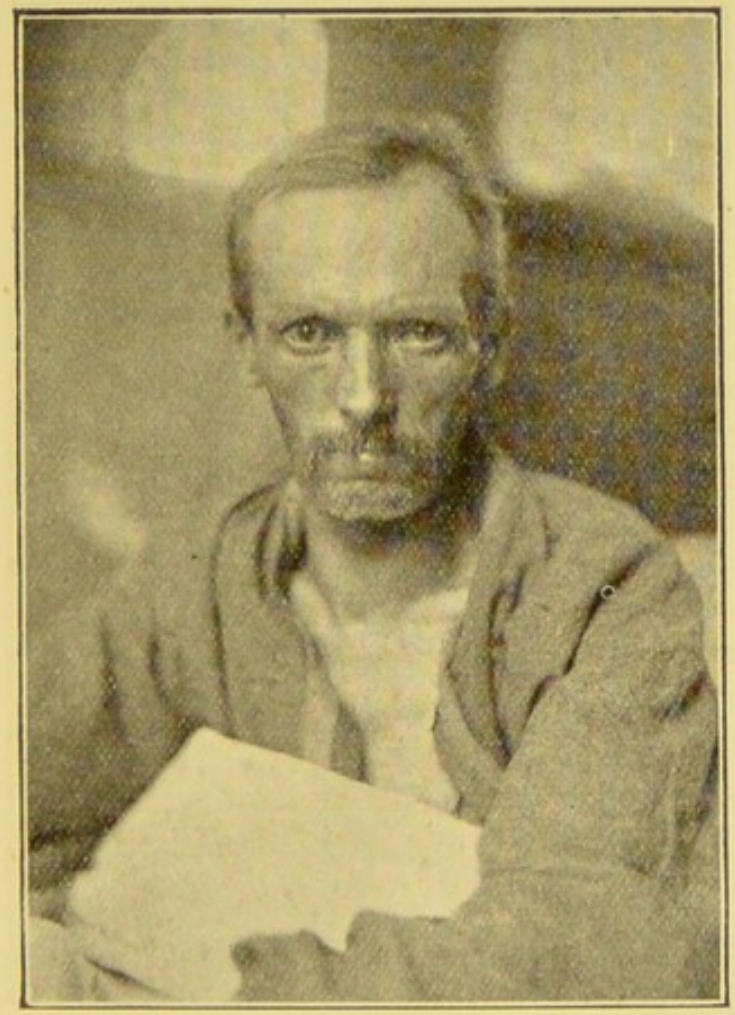

Fig. 3.—A. N., aged 46.

per minute, was very regular, small, and of low but variable pressure. The apex beat was in the fifth space, 4 inches from mid-sternum. The right border of the heart was 2¼ inches, and the left 3¾ inches from the middle line. There was a soft systolic murmur at the apex, and another soft systolic murmur in the tricuspid area. A harsh murmur, systolic in rhythm, was heard over the manubrium. There was some pleuritic friction over the lower lobe of the left lung when he was admitted. The urine varied from 70 to 80 ounces, and had a trace of albumin. The

patient perspired profusely, and had scanty hair on the scalp, in the axillæ, and in the pubic region. The eyes were slightly prominent. There was delayed movement of the eyelids. The right pupil sometimes showed the Argyll Robertson phenomenon, at other times it did not. The left was immobile from the result of the accident. There was a distinct muscular tremor over the whole body. The knee jerks were almost abolished. Th'

Fig. 4.—E. A., aged 36.

patient could not stand with his feet together and the eyes closed.

The patient greatly improved in health under the use of digitalis and iron.

The most interesting points in this case are the co-existence of Graves's disease with some ataxic symptoms, and the extreme irregularity and variable tension of the pulse.

Case 4.—Elizabeth A., aged thirty-six, married, engaged in household duties, was under my care in the Royal Infirmary on account of breathlessness and swelling of the feet and abdomen.

Her father, aged sixty, suffered much from chronic rheumatism. Her mother, also sixty years old, was healthy. She had two brothers, one of whom died at the age of twenty-five of phthisis; the other, aged thirty-four, was also phthisical. She had also two sisters, one of whom died at twenty-three of phthisis; the other was married, but very delicate, and her children were all strumous.

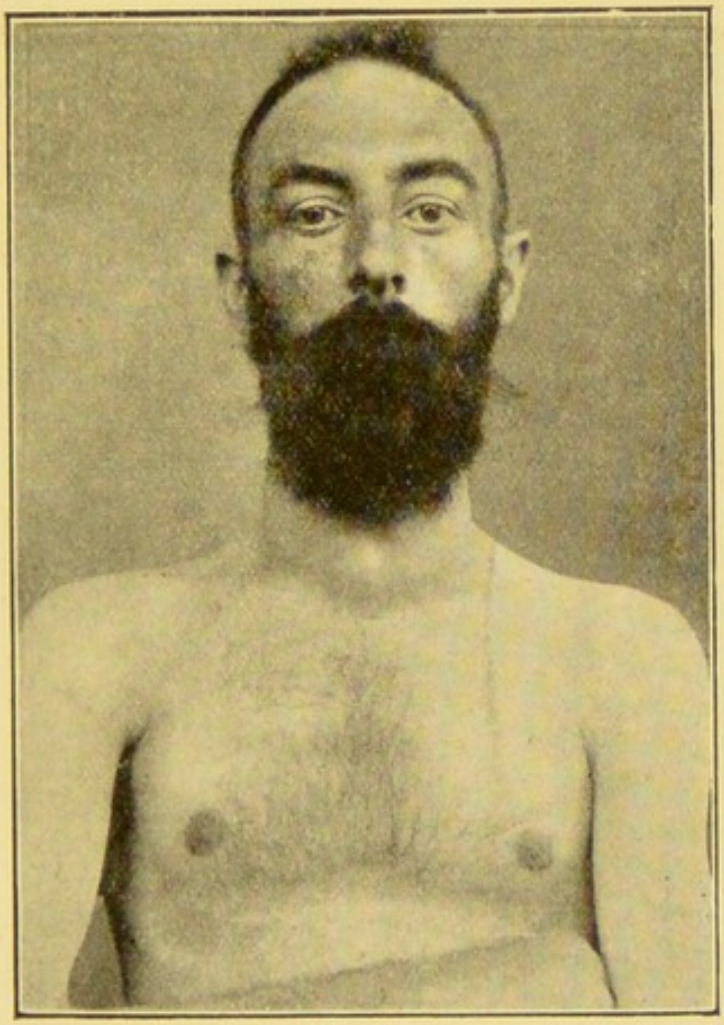

Fig. 5.—J. K., aged 36.

Her previous health was good until the beginning of 1892, except for some degree of anæmia. She had passed through five pregnancies, three of which were in every way satisfactory, the other two resulted in miscarriage at the seventh month.

Ten months before admission the patient began to feel weak and tired; she observed palpitation and breathlessness on exertion; shortly afterwards she noticed swelling in front of the neck and undue prominence of the eyeballs. At a later period the condition became much worse; the abdomen and legs began to

swell, the palpitation and dyspnœa increased, and a persistent cough commenced which had remained since. The abdomen was tapped eight times before admission. There was no suggestion of any occurrence in the past which could account for the disease.

On examination the patient was found to have a fair appetite, but great thirst. The tongue was very raw and red. The liver extended up as far as the third intercostal space. The lower

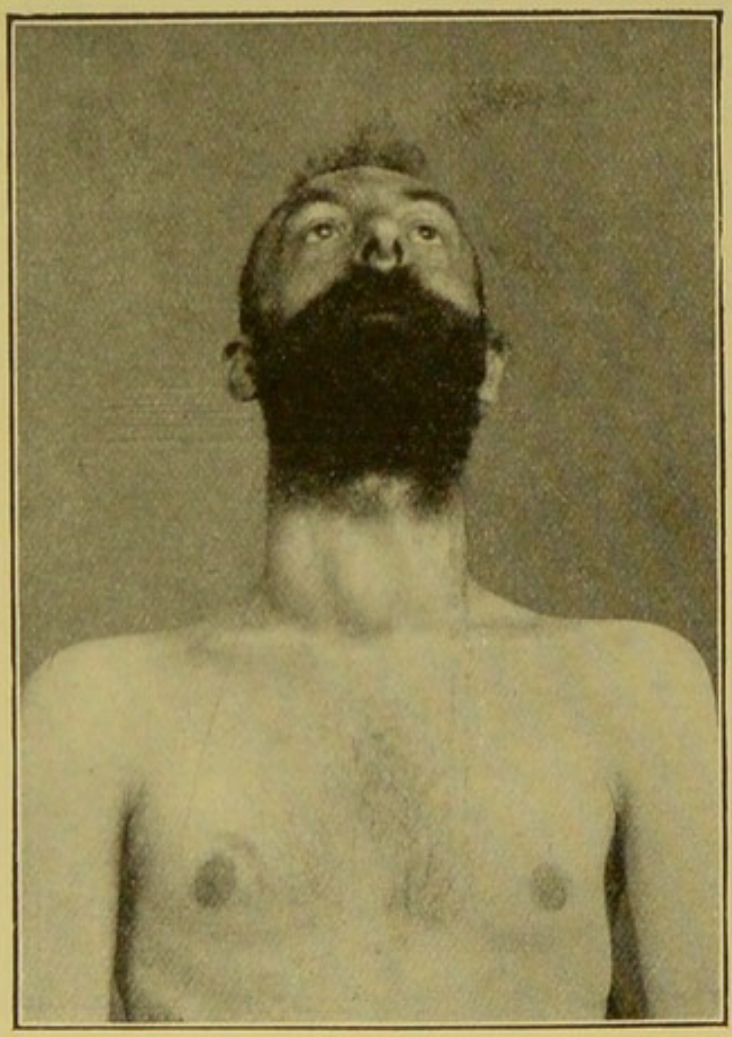

Fig. 6.—J. K., aged 36.

border could not be made out distinctly on account of the abdominal condition. Considerable ascites was present. The thyroid gland was uniformly enlarged in every direction, but the increase was not great. The size of the spleen could not be ascertained from the ascites. The pulse varied between 140 and 160; it was slightly irregular, small, and of low tension. The apex beat was in the fifth interspace, 1 ½ inches outside the mammillary line. The right border was 2 ½ inches, and the left border 4 ¼ inches from the mid-sternum. There was very great

pulsation in the arteries of the neck. Over the thyroid gland a systolic murmur was heard, and over the jugular veins a continuous hum. In the mitral, tricuspid, and pulmonary areas loud systolic murmurs were heard. There was great frequency of respiration, the breathing being 60 per minute, with severe dyspnœa, and much cough. Over the entire lungs sibilant and sonorous rhonchi were heard, and over the lower lobes behind

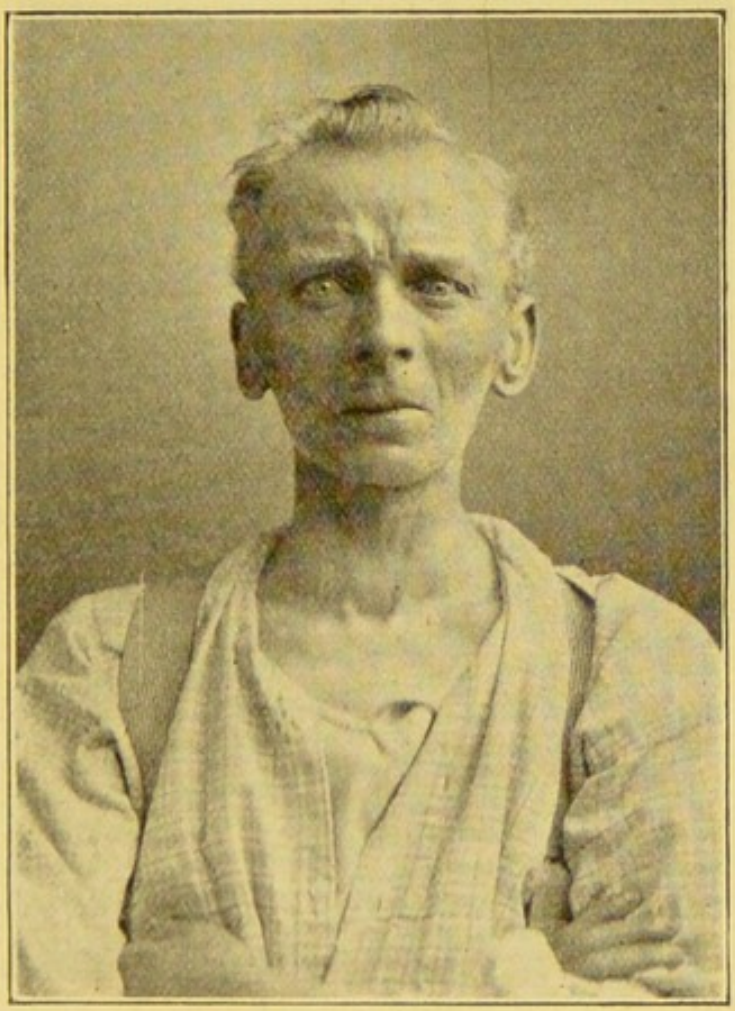

Fig. 7.—A. B., aged 51.

there were abundant fine and medium crepitations. The urine was scanty, varying from 20 to 30 ounces per day; it contained no albumin. The lower extremities were very œdematous. There was constant moisture on the surface. The hair was scanty in the usual situations. There had been amenorrhœa for nearly a year. No sensory symptoms were present. There was a constant rhythmic tremor of the muscles, continuous day and night. The reflexes showed no change. The patient had, as already noted, vasomotor and trophic changes connected with the skin. The

mental condition was unstable, characterised by emotional tendencies and general excitability. The eyeballs were very prominent, and the sclerotic was shown all round the iris. There was marked delay of descent of the upper eyelid, and deficient convergence.

The day after admission the patient's temperature rose to 102.8° F., and the following day it reached 104.2° F. The

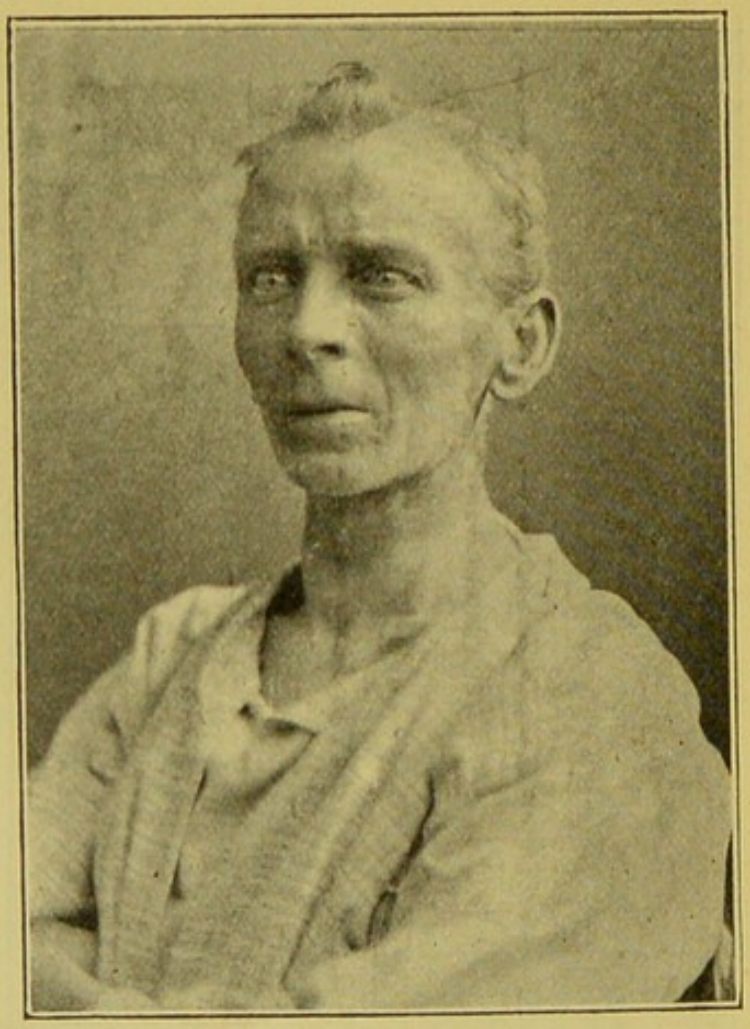

Fig. 8.—A. B., aged 51.

dyspnœa became very severe, the swelling increased in spite of frequent doses of strophanthus and the constant administration of diffusible stimulants. It was somewhat relieved by the removal, on two occasions, of 45 and 35 ounces of fluid from the abdomen. A few days later she was seized with an agonising pain in the præcordia, closely resembling an attack of angina pectoris. It was accompanied by a marked increase of the lividity of the face. The symptoms yielded to diffusible stimulants and hot applications, but the patient was much weakened by the attack, and although the temperature had fallen to the normal she gradually

sank in spite of every remedy, and died on the night of the following day.

Case 5.—James K., aged thirty-six, weaver, was admitted to Ward 22 under my care, complaining of protrusion of the eyeballs, swelling of the neck, and palpitation.

The patient's father was alive and in good health. His mother died, at the age of forty-eight, of aneurysm of the transverse portion of the arch of the aorta. He was an only son, but there had been eight sisters. Two were alive and well; two were alive but had been blind since early adult life; two died of small-pox; and two of diseases whose nature was not known to the patient. His wife had only had one child, a son, aged nine years. His social conditions had always been good.

Three months before admission he began to feel weak, and to suffer from palpitation. One night he had a severe attack of vomiting, and fell into a state of unconsciousness, during which the doctor who attended him found that his pulse was 160, and his temperature 105°. The weak state of health increased, and the palpitation became more severe after this attack. He states that the swelling of the thyroid gland showed itself first on the right side, and about a month afterwards the left side began to enlarge. The alimentary system presented no symptoms of disease. The thyroid gland was greatly enlarged. Both lobes as well as the isthmus were much increased in size, the enlargement being almost symmetrical. Very marked pulsation, a distinct systolic thrill, and a loud systolic murmur were present. The spleen reached the mid-axillary line. The pulse was 112, full, bounding, and of moderate tension. Pulsation was very visible in the arteries of the neck. The apex beat was in the fifth intercostal space outside the mammilla. A systolic thrill could be felt over the greater part of the præcordia. The cardiac dulness extended from 2½ inches to the right as far as 5½ inches to the left of the mid-sternum. There was a loud, blowing systolic murmur heard over the whole præcordia, but with three points of maximum intensity, *i.e.* in the mitral, tricuspid, and pulmonary areas, of which that in the tricuspid was the loudest. The respiratory and urinary systems had no symptoms of disease. The patient perspired profusely, and there was a marked loss of hair over every part of the body where it usually grows. The genito-urinary functions were perfect. His eyes were ex-

tremely prominent, more particularly the left. The pupils were equal, and reacted normally to light and accommodation. There was delayed movement of the upper eyelid, but the eyes could be entirely closed. The eyes did not converge well. The various reflexes were intact, and no abnormal nervous symptoms were present except insomnia and excitability.

The patient, by means of digitalis and potassium bromide

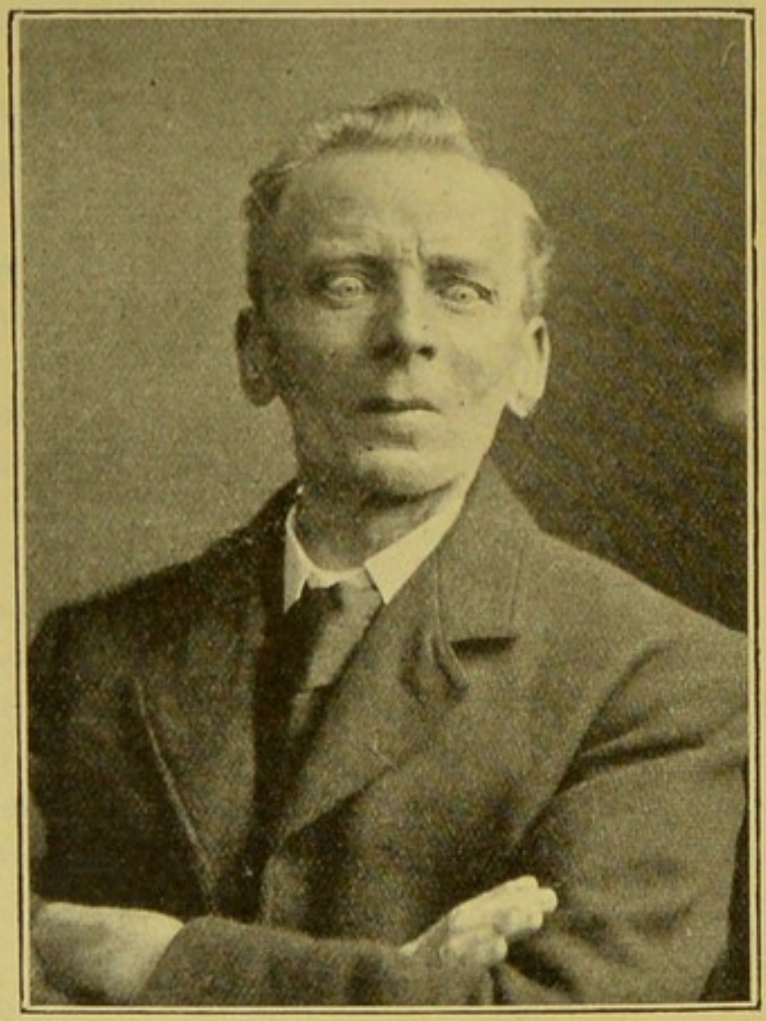

Fig. 9.—A. B., aged 51.

greatly improved in health generally, and the cardiac symptoms abated to a great extent; but when he was discharged the ocular and thyroid appearances were much as when he was admitted.

The patient presented a very complete picture of the disease in almost every respect.

Case 6.—My friend, Dr. Montgomery, of Penzance, recently sent me three beautiful photographs of a case of Graves's disease which had been under his care.

A. B., aged fifty-one, tin miner, was sent to him by Mr. C. H.

Butlin, on March 19th, 1898, complaining of loss of flesh, nervousness, palpitation, and breathlessness, with general tremulousness. In June, 1897, he lost his wife, and soon afterwards suffered for three weeks from chorea. Since that time he had never been well.

There was no affection of the digestive system. The thyroid gland was considerably and almost symmetrically enlarged, as may be well seen in Fig. 7 and Fig. 8, the latter of which has been taken in semi-profile to show the thyroid condition. The pulse was very frequent, its minimum rate being above 120. The heart was slightly enlarged, but presented no other changes. The lungs and kidneys appeared to be normal, and no note was taken with reference to the integument. There was a very distinct tremor, especially on exertion. The eyes were somewhat prominent, and manifested the symptoms of von Gräfe and Möbius. Fig 9 gives an excellent illustration of the delayed descent of the upper eyelid, photographed instantaneously. Under treatment by means of iodide of potassium and belladonna the patient improved considerably.