Fig. 5.—Intrathoracic tracing from a case of aneurysm of the descending thoracic aorta, 14 inches from the teeth.

the fact. In our final case, however, where every possible precaution had been adopted, and where the signs of aneurysm were at that time somewhat obscure, the straining and retching caused by the tube brought on an immediate attack of hæmorrhage, which frightened the patient and occasioned us the gravest misgivings. After this incident we carefully reconsidered the question, and finally decided to abandon the method. Although it is rational in device, easy of performance, and undoubtedly serviceable in diagnosis, the extra risk to life, in our opinion, cannot compensate for its probable advantages. We think, therefore, that the introduction of a tube, however fine or flexible it may be, in cases of suspected aneurysm is dangerous; and we give this brief account of our experiments as a warning to investigators who may subsequently wish to follow up this line of research.

NOTE ON A GROUP OF SYMPTOMS COMMONLY ATTRIBUTED TO DISLOCATION OF THE NECK.

By WILLIAM THORBURN, F.R.C.S.,
Assistant Surgeon to the Manchester Royal Infirmary.

For some years I have been familiar, from verbal description, with a series of symptoms, not uncommonly met with among the Lancashire colliers as a result of injury to the head or neck, which symptoms are, I believe erroneously, generally assigned to some form of luxation of the cervical vertebrae. No case of the nature referred to has come under my personal observation, at least in its typical stage, and I have tried in vain to obtain information upon this condition other than is contained in the following remarks. The present note is thus intended mainly to call the attention of others to the subject, in the hope that thereby some satisfactory explanation may be brought to light.

The condition referred to is generally spoken of in Lancashire as "having the neck knocked out." The head is said to be twisted by a blow or fall; the patient "goes black in the face" and appears to be choking; some bystander forcibly straightens the head or "puts the neck in;" and recovery apparently always ensues.

The only patient who has personally described such symptoms to myself was a woman, aged 38, who stated that, about nine weeks before I saw her, she had fallen down a narrow staircase of some thirteen steps, striking her head at the bottom in such a way as to bend the neck forwards and to force the head between the knees. Her sister ran to her, and says she found her black in the face; she seized the head and threw it back. The patient was then put to bed, and could not walk for five weeks. A medical man who saw her told her

that the head had been "put out" and then "put in again." While confined to bed she had a succession of "fits," and her head became drawn to one side; for some days she seems to have been comatose, and to have had unconscious evacuations, and for more than a week she could not move her right arm. When I saw this patient she had most typical symptoms of hysterical hemianæsthesia, with spasmodic torticollis, very marked contraction of both fields of vision, and other symptoms, all of which were unquestionably functional only. The existence of these hysterical conditions naturally renders the description of little value, were it not so precisely similar to that given by others in whom there has been no suggestion of functional neurosis.

My friend, Dr. J. P. Williams, who has had a large experience of practice among the Lancashire colliers, has kindly given me the following description of the usual account of symptoms as detailed to himself:

From the accounts I have heard, I gather that, immediately after the accident, the subject's head is turned towards one shoulder, and cannot be brought back to a natural position by his unaided efforts; that he struggles for breath, goes black in the face, and appears to the onlooker likely to die from suffocation. I have not, however, heard of any case which has actually ended fatally. The condition is relieved by someone holding the patient's head between his knees and forcing the shoulders downwards, when the head returns to its natural position with an audible click, and the symptoms of suffocation pass rapidly away. I have not heard of any secondary symptoms following the injury.

Like myself, Dr. Williams has never actually seen a case, nor do I know any medical man who has, but, through the kindness of Dr. Buckley, recently house-physician to the Manchester Royal Infirmary, I have obtained the following account from an intelligent eye-witness of one of these accidents:

D. Q., a farm labourer in the employ of Mr. U., was loading hay on a lorry when he overbalanced and fell, striking the ground with his forehead. The fall was about 2½ yards. Mr. U. was standing near, and at once went up to him, and found him lying with his head on the ground and his legs up, leaning against the wheel of the lorry, which was standing still at the time. He pulled him away from the lorry, and found him unconscious, not breathing, and face very blue. He thought the neck was dislocated, and at once got behind his head and pulled at the jaw, trying to reduce it, and almost immediately he says the man began to breathe, and he gradually came round. Altogether Mr. U. thinks the man was unconscious about four minutes. Then his nose bled profusely, and he noticed both eyes were bloodshot, most marked on the nasal side of each eye; right eye more than left. Q. complained very much of a sore stiff neck and arms, and walked about with neck and arms very rigid. This has gradually improved, and now, six days later, he seems to be quite well except for slightly stiff neck and slightly bloodshot eyes.

So many similar descriptions have reached me from various sources that I cannot but accept the existence of a train of symptoms such as those above mentioned, although I have no satisfactory explanation to offer. The essential features of these cases appear to be twisting of the neck and suffocation, with intense venous congestion of the face, which may, as in the case last quoted, lead to ecchymoses; and it seems to me most probable that we are really concerned with either a dislocation of the hyoid bone occluding the glottis or a lateral

displacement of the entire larynx. As already stated, the cases are, among the laity of Lancashire and also, I believe, among many medical men, regarded as dislocations of the neck, but the ready reducibility and the usual absence of any symptoms which can be attributed to injury of the spinal cord render such a conclusion highly improbable. On the other hand, it seems not unlikely that violent and irregular contraction of one or both of the sterno-mastoid muscles, produced probably in an attempt to save the face when falling upon the head, might jerk the larynx aside from the vertebral column, and that this organ might then become caught under the sterno-mastoid of the opposite side, and be unable to return to its normal position. Such a condition would cause dyspnoea or suffocation, and would lead to cyanosis, not only as a result of the asphyxia, but also by direct pressure upon the internal jugular vein. It is further obvious that forcible extension of the neck would draw the larynx back to its proper place. The absence of fatal cases may be assigned to the convulsive efforts of asphyxia being in themselves sufficient ultimately to replace the larynx where assistance is not available, or to the muscular relaxation by which death would be preceded and at the same time averted.

I have tried to produce such a displacement in the dead body, but the absence of all muscular tone and the consequent difficulty of simulating the natural conditions have rendered the experiments fruitless. There is little difficulty in forcing the larynx of a corpse into almost any position, and equally little difficulty in restoring it to the middle line of the neck.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

CASE OF POISONING BY COAL GAS IN GROUND AIR. THE case of poisoning by carbonic acid recorded by Dr. Biggam in the *BRITISH MEDICAL JOURNAL* of January 28th, in which the fatal result had been produced by ground air having been drawn into the house, recalls to my mind a fatal case of poisoning by coal gas brought about in a similar manner, which came under my notice a few years ago.

Mrs. M., aged 65, with her son and daughter, aged respectively 46 and 36, occupied a one-roomed house on the ground floor of a brick building in Dundee.

About 8 P.M. on December 27th, 1886, a man who lived next door to them looked into their house, and found Mrs. M. and her daughter and another woman, Mrs. C., aged 41, lying on the floor, apparently under the influence of liquor. He noticed a smell of gas in the room, but could not account for it, as the building was not supplied with gas.

About 2 o'clock on the following morning this man awoke, and becoming conscious of a strong smell of gas in his own room, he opened his door and window for ventilation. A few hours afterwards he knocked at Mrs. M.'s door, but got no response. About 4 P.M. the neighbours became alarmed, and called the police, who entered by the window. The smell of coal gas was almost overpowering.

I was immediately sent for, and, on arrival, found Mrs. M. and her daughter in bed dead. Her son William was lying on another bed unconscious and moaning. Mrs. C. was lying on the floor in a similar condition. Both were quite comatose; extremities cold, and pulses imperceptible. In both cases the pupils were extremely contracted. They were immediately removed to the infirmary, but, in spite of treatment, William died about ten hours, and Mrs. C. twenty-seven hours, after admission.

A *post-mortem* examination on the body of Mrs. C. was made thirty-six hours after death. There was a large quantity of fluid found under the arachnoid membrane, and also in the lateral ventricles. The substance of the brain was deeply congested. The lungs were engorged with dark thick blood, and contained very little air. There was a decolorised blood clot in the right side of the heart; the left side was empty. In the case of Mrs. M. and her daughter, who were found dead, the faces were quite placid and calm, the pupils were

equal and of medium size, and the nostrils were filled with frothy mucus. *Post-mortem* lividity of a bright rosy colour was very well marked in both cases.

In this case the gas escaped from a broken 2-inch cast iron pipe which supplied a lamp at the side of the house. This pipe was 30 inches below the surface and 3 feet from the wall of the house. There had been a prolonged and severe frost, so that the ground was very hard, and this prevented the gas escaping into the air. As no provision had been made to prevent the entrance of ground air into the building, the warmth of the room had drawn the mixture of coal gas and ground air into the apartment and produced the fatal result. Although when the room was entered the smell of gas was almost overpowering, the quantity present had not been sufficient to form an explosive mixture (about 10 per cent.), as a paraffin lamp had been left burning on the table during the whole time without any explosion taking place.

CHARLES TEMPLEMAN, M.D., B.Sc.
Surgeon of Police; Surgeon to the Royal Infirmary, Dundee.

DISPLACEMENT OF THE ULNAR NERVE.

IN the *BRITISH MEDICAL JOURNAL* of January 21st, a case of the above is recorded by Dr. Cunningham. The following record may be of interest. In the summer of 1888, C. S. slipped whilst running round a corner, and fell violently on his elbow. The arm was painful and stiff for some days, and when I first saw the patient on July 6th, the ulnar nerve could be plainly felt as a movable cord in front of the internal condyle. It could be easily reduced by extension and manipulation, and I attempted to keep it in position first by strapping, and then by a leather pad. These methods failed, so on August 30th I made a cut about two inches long on the inner side of the joint, secured the nerve, and fastened it in its place by catgut sutures, which stretched across it from the neighbouring fascia over the triceps muscle a little above the internal condyle. An angular splint was worn for a couple of weeks after the operation. The nerve has kept in position since then.

G. MUNRO SMITH,
Clifton. Assistant-Surgeon Bristol Royal Infirmary.

My brother, who has just returned from America, had a fall upon his elbow several years ago. I found that the ulnar nerve, instead of being outside the inner condyle, runs over the prominence, and the slightest touch on it causes tingling of the fingers supplied by the nerve.

Morchard Bishop, Devon. W. F. TRONSON, M.R.C.S.

THE mate of a coasting steamer while at the wheel during a storm had to use all his strength to keep the vessel in her course. During a squall he suddenly "felt something go" in both his elbows, and, since that time (two years) has been conscious of pain and tingling along the course of distribution of the ulnar nerves whenever "the inner side of the elbow" struck or was pressed against any hard body. I found both ulnar nerves lying in front of the internal condyles of the humeri. It was evident the displacement was due to freeing of the nerve by rupture, or separation from the bony attachment, of the inner head of the flexor carpi ulnaris, this rupture or separation being due to excessive muscular action. As the discomfort complained of was not very great, I merely recommended him to wear soft pads over the inner aspect of the elbows.

Reading. G. H. R. HOLDEN, M.A., M.D. Cantab.

VENESECTION IN PHTHISIS.

IN the *BRITISH MEDICAL JOURNAL* of January 28th Dr. Hugard of Davos-Platz relates two cases of phthisis in which he performed venesection with evident beneficial results. I have seen a good many cases of fatal hæmoptysis in phthisis, and have been frequently struck with the observation that these patients do not, as a rule, die from syncope but from asphyxia. What happens is as follows: a vessel, probably already aneurysmal, ruptures in the diseased part of the lung, the surrounding tissues become infiltrated with blood, often a large quantity escapes from the mouth, some is swallowed, and a very varying quantity is inspired into the bronchial tubes. As the patient becomes more exhausted by the hæmorrhage, the expulsive powers diminish, and the amount of blood in-