cerebellum the clot was found to extend right across the centre of the organ, approaching quite close to the surface on either side and splitting up the cerebellum into an upper and a lower layer. There was no evidence of new growth. A portion of the clot was lying outside the posterior surface of the cerebellum, having lacerated its substance. The membranes of the brain and cerebellum were healthy.

Newcastle-on-Tyne.

A SERIES OF CASES OF OPERATIONS UPON THE STOMACH.¹

By HERBERT W. ALLINGHAM, F.R.C.S. ENG.,

SURGEON TO THE GREAT NORTHERN CENTRAL HOSPITAL; ASSISTANT SURGEON TO ST. GEORGE'S HOSPITAL.

IN going through my case-books I find that I have on thirteen occasions operated upon the stomach. Although I regret there is nothing new to report, yet the experience I have gained from these operations tempts me to narrate them and to point out some of the lessons that I have learnt. I have performed gastrotomy seven times, gastro-enterostomy four times, Loretta's operation once, and pyloroplasty once. I will now briefly relate the cases as they came under my charge.

CASE 1. *Gastrotomy* (1).—A man fifty-two years of age had had for a year great difficulty in swallowing, and for the last month had been unable to pass into the stomach even liquids. He had lost much flesh, and appeared to be in the last stages of starvation. On examination an œsophageal bougie stopped on a level with the central part of the sternum. There had been constant vomiting of blood and mucus. On Aug. 14th, 1886, gastrotomy was performed. An incision three inches long was made parallel to and half an inch from the margin of the ribs. The abdominal cavity was opened; the stomach was found and was secured by many interrupted stitches passing through the muscular and serous coats, and was thus fixed to the skin wound. The patient was fed per rectum and progressed favourably till Aug. 21st; as he was weak and failing in general strength the stomach was opened, and food was given every four hours until the 23rd, when he died. A post-mortem examination showed that there were no signs of peritonitis; the stomach was firmly glued to the abdominal wall. The cause of death was asthenia.

CASE 2. *Loretta's operation*.—A patient fifty-four years of age was admitted into the Great Northern Central Hospital with pyloric obstruction. There was no tumour to be felt. The patient was much emaciated and constantly vomited soon after taking food. After a consultation with my colleague, Dr. Burnet, it was decided to explore the pylorus, and if the obstruction was not malignant to perform Loretta's operation. On May 13th, 1888, the abdomen was opened by a vertical incision in the median line just above the umbilicus. The pylorus was found to be freely movable but rather thickened, and appeared to be in no way affected by malignant disease. The liver, as far as it could be examined, was normal. The thickened condition of the pylorus showed a fibrous state. The stomach was opened on its anterior surface, the incision being large enough to admit three fingers. When the finger was inserted into the stomach the pyloric opening was found to be greatly contracted. Only with great difficulty could one finger be inserted, but by gradual dilation it was possible, after a time, to pass two fingers through the contracted portion. No ulceration was to be felt. The stomach wound was sewn up with Lembert's sutures. The patient was rather collapsed after the operation and died the next day. On post-mortem examination the body was found to be much emaciated; the stomach walls were well glued together, there was no leakage into the peritoneum, and there was no evidence of peritonitis. At the back of the liver there was a small cancerous nodule. The pylorus was freely dilated and showed on section a scirrhus condition. There was no ulceration of the mucous membrane.

CASE 3. *Gastrotomy* (2).—A man forty-eight years of age was admitted into the Great Northern Central Hospital. For four months he had had difficulty in swallowing, and had experienced pain in the epigastrium and the lower sternal regions. For two months he had been unable to eat solid

food, and liquids returned at once even when slowly taken. He had lost 2 st. in weight in three months, and while in the hospital a week lost 1 st. more, so that at the time of the operation he weighed only 7 st. On July 9th, 1890, gastrotomy was performed. A vertical incision was made in the left linea semilunaris, the abdominal cavity was opened, and the parietal peritoneum was stitched to the skin. The anterior part of the stomach was sought for near the cardiac end, and was placed in position by the method of "quilled suture" advocated by Mr. Greig Smith. The patient did well and was fed for the first week with nutrient enemata. The stomach was then opened by an incision large enough to admit a No. 8 catheter; through this the patient was fed and he rapidly gained in weight. After this he went to the cancer wards of the Middlesex Hospital, where he lived for eleven months. The authorities of that hospital kindly informed me that his death was caused by the cancerous growth extending into the lungs.

CASE 4. *Gastrotomy* (3).—A woman fifty years of age was admitted into the Great Northern Central Hospital. For six months she had had difficulty in swallowing solids and for two months had been restricted to fluid nourishment. She was wasting rapidly. On the right side of the neck a swelling was noticed. No bougie could be passed beyond the level of the upper border of the sternum, and in this situation there was a cancerous mass. On Dec. 30th, 1891, gastrotomy was performed. A vertical incision was made in the left linea semilunaris, the parietal peritoneum was stitched to the skin, and the stomach was kept up to the abdomen by Greig Smith's "quilled suture" method. The patient was fed by nutrient enemata. On Jan. 3rd, 1892, the stomach was opened by a small incision, and into this was passed a No. 8 catheter, by which food was given. On Jan. 6th all the stitches were removed; on the 17th, at the request of her friends, she left the hospital. She lived four months longer.

CASE 5. *Gastro-enterostomy* (1).—A woman forty-seven years of age was admitted into the Great Northern Central Hospital on Feb. 24th, 1892. From October, 1891, she had had occasional attacks of sickness and pain in the epigastric region, which usually occurred in the evening. A burning sensation in the epigastrium preceded the sickness, the vomited matter consisting of the meals taken during the day. A few months before admission a swelling was noticed in the epigastric region. The patient had lost a good deal of flesh. The abdomen was not distended. About the epigastric region could be felt a hard nodular growth, about the size of a Tangerine orange, which was quite movable, but was painful on examination. The bowels were obstinately confined. On March 2nd the abdomen was opened above the umbilicus in the middle line by an incision four inches long. The stomach was explored and a hard growth was found involving the pyloric end. The anterior wall of the stomach was then drawn into the wound, and an incision one inch and a half long was made in the stomach; a coil of jejunum was similarly drawn out and incised to the same extent. Two Senn's bone-plates were inserted, one into the stomach and the other into the jejunum; the bone-plates were then apposed, thus bringing together the aperture in the stomach and in the bowel. The plates were next tied together, and the stomach and bowel were united by twelve superficial Lembert's sutures. The abdomen was sponged out, and the abdominal wound was united by silk-worm-gut sutures. After the operation the patient vomited some blood-stained fluid, and continued to vomit intermittently for twenty-four hours. For four days she was fed per rectum, and after that food was given by the mouth. On March 14th a purge was given, which acted well. The patient progressed favourably, with occasional vomiting after meals, especially when the food was of a very bulky nature. On May 30th she left the hospital, having gained in weight, and went to the north of England. Four months later she died from some lung trouble, probably of a malignant nature; her friends declined to allow a post-mortem examination to be made.

CASE 6. *Gastrotomy* (4).—In June, 1892, a man sixty-seven years of age came to the Great Northern Central Hospital. For twelve months he had had difficulty in swallowing; for the last five or six months his diet had been confined to fluids, and even these sometimes returned. The obstruction was on a level with the upper part of the sternum. For two months he had lost flesh rapidly, his normal weight of 11 st. being reduced to 8 st. at the time of admission. No bougie could be inserted more than twelve inches from

¹ A paper read before the Medical Society of London on May 13th, 1895.

the teeth. On June 22nd a vertical incision two inches and a half long was made along the left linea semilunaris, the abdomen was opened, and the parietal peritoneum was stitched to the skin. The anterior wall of the stomach was pulled out into the wound, and was then drawn through the hole in a Senn's bone-plate, which was placed transversely to the wound in the abdominal wall. A piece of the stomach was then drawn through the hole in the bone-plate and was held in position by two harelip pins passed through the muscular and serous coats. This operation (Bowreman Jessett's) took ten minutes to perform. The patient was fed by enemata till June 27th, when the stomach was opened by a tenotomy knife in the interval between the harelip pins. A No. 8 catheter was introduced into the aperture and the patient was fed through it. On June 30th the pins and bone-plate were removed. On July 19th the patient left the hospital, being much improved in health and having gained considerably in weight. He was heard of eight months after the operation, but no information was received as to his further length of life.

CASE 7. *Gastrostomy* (5).—A man fifty-one years of age began to experience trouble in swallowing at Christmas, 1891, and this difficulty so increased that five weeks before his admission to the Great Northern Central Hospital in August, 1892, he was unable to swallow any food. He was greatly emaciated and a bougie would not go beyond ten inches from the teeth. On Aug. 31st a vertical incision two inches and a half long was made in the left linea semilunaris, the abdomen was opened, and the parietal peritoneum was stitched to the skin. The transverse colon was discovered, and thence, by tracing up the great omentum, the stomach was easily found. Part of the anterior wall near the cardiac end was then drawn through the hole in a Senn's bone-plate (Bowreman Jessett's operation). The patient was fed by enemata till Sept. 5th, when the stomach was opened in the interval between the harelip pins by a tenotomy knife; through the opening in the stomach thus made food was given every four hours. On Sept. 7th the pins were removed. The patient, who was greatly improved, left the hospital on Sept. 20th. There was no information given as to the time he lived after the operation.

CASE 8. *Oesophagostomy followed by gastrostomy* (6).—A woman fifty-three years of age was admitted into the Great Northern Central Hospital at the end of September, 1892. For many months she had had much difficulty in swallowing solid food, and of late had had great trouble in swallowing fluids. At times she vomited blood and mucus; she had lost flesh and was much emaciated. After examination with bougie and finger, she was believed to have a malignant stricture on a level with the cricoid cartilage. This was thought to be a fit condition for the performance of oesophagostomy. Therefore, on Sept. 29th an incision was made down upon the left side of the neck; the oesophagus was found, brought to the surface, stitched to the skin wound, and then opened. The next day, as the patient was feeble, a catheter was passed into the oesophageal opening, and through this catheter food was administered. But to my amazement, as fast as the milk was poured into the oesophagus it ran out again; moreover, when the catheter was passed down towards the cardiac end, by no persuasion could it be made to find its way into the stomach. This being the case, gastrostomy was performed by Bowreman Jessett's method. Then the stitches connecting the oesophagus with the skin were cut loose, so that the oesophagus fell back into its normal position. On Oct. 1st the stomach was opened and feeding was at once commenced. The patient made an uninterrupted recovery, the oesophageal opening completely closed, food was given daily by the opening in the stomach, and the patient gained rapidly in weight, leaving the hospital at the end of October; about two months later, as she failed to pass the catheter into the stomach some friends assisted her to do so, but unfortunately they passed it instead into the peritoneal cavity, into which fluid was poured; needless to say, within twenty-four hours she died from acute peritonitis.

CASE 9. *Pyloroplasty*.—In June, 1894, a man thirty-one years of age entered the Great Northern Central Hospital. Seven years before, his illness began with an attack of what was supposed to be acute dyspepsia, and since then he had been treated for that ailment. Two years before admission he had attacks of acute pain in the pit of the stomach, which occurred at no particular time of the day, but very frequently. A year later he began to be sick, usually at

night, vomiting the meals eaten during the day, but never blood. Just before admission this vomiting took place nightly, on one occasion amounting to three quarts of partially digested food. The bowels were very constipated, acting only once a week and the motions being scanty. He had attended at another hospital, where he had had the stomach washed out frequently, and all kinds of drugs had been tried for his relief. The patient was a spare man. The stomach was much dilated, but no tumour was to be felt in the abdomen, and the other organs were quite normal. On June 20th the abdomen was opened in the middle line by an incision extending from the ensiform cartilage to the umbilicus. The pylorus was sought for and found to be thickened and contracted. There were no signs of malignant disease; thereupon it was decided to perform pyloroplasty. A longitudinal incision was made running transversely to the stricture. The pylorus, when so opened, was found to be much contracted and fibrous. The centres of the edges of the longitudinal cut were then pulled apart, so that the incision was converted into a transverse one. This incision was then sewn together by a deep suture, which united the mucous membrane on one side of the wound to that on the other side, and the muscular and serous coats were united by many of Lembert's sutures. The patient made an uninterrupted recovery. The stitches in the abdominal wound were removed on June 28th; for some days previously the patient had been fed by the mouth with milk and essence of meat, and from that date solid food was given. He continued to take by the mouth diet of various kinds without sickness or pain. He left the hospital on July 10th, having gained much in weight. He was seen again in February, 1895, when he was in perfect health and able to eat everything without experiencing sickness or discomfort. At that time he was shown before the Medical Society of London.

CASE 10. *Gastro-enterostomy* (2).—In July, 1894, a woman forty-four years of age was admitted into the Great Northern Central Hospital. For eighteen months she had complained of great pain in the stomach after meals, followed some hours later by severe vomiting. This had grown much worse of late. She had rapidly lost flesh, and for the last three months had noticed a swelling about the epigastric region, which had increased in size and was very painful when handled. The patient was much emaciated, and about the epigastric region could be felt a large, hard, irregular mass. All food taken was returned, and the vomited material was sometimes blood-stained. As it appeared from the symptoms to be a case of tumour of the pylorus, it was determined to perform gastro-enterostomy if it was possible. On July 12th the abdomen was opened in the middle line by an incision extending from the ensiform cartilage to the umbilicus. On exposing the stomach there was found what appeared to be a large, hard, sarcomatous mass which involved the pylorus and a considerable portion of the stomach. There were also secondary deposits in and about the great omentum. This condition caused me considerable doubt as to whether it was possible to perform gastro-enterostomy on account of the extent of the growth and the amount of stomach involved. However, after much consideration it was decided to be justifiable to attempt the operation, in the hope that it might afford some relief. An incision was made into the anterior surface of the stomach, and a piece of jejunum about twelve inches from the duodenum was brought to the surface and similarly incised. Mayo Robson's bobbin was inserted into the holes in the gut and stomach and fixed, and these apertures were brought together over the bobbin in the manner described by Mr. Mayo Robson. It should be noted that the jejunum was fixed up to the stomach, so that when the contents of the stomach passed along the jejunum they might proceed in the direction in which food usually goes along that gut. The abdomen was then closed in the customary manner. The patient made a rapid and uninterrupted recovery, and was soon fed by the mouth with all varieties of food. She left the hospital in about a month's time, and was shown by me before the Medical Society of London in February, 1895, together with Case 9. She was perfectly well, and had gained 3st. in weight. It was curious to note that the growth about the epigastrium was still present, but it had not increased in size, and perhaps had even diminished.

CASE 11. *Gastrostomy* (7).—A man forty-eight years of age was admitted into the Great Northern Central Hospital on Nov. 12th, 1894. For sixteen months he had had some difficulty in swallowing, which had rapidly increased of late.

He was scarcely able to take liquid food and had lost much flesh. No bougie could be passed beyond the middle level of the sternum. There was no history of syphilis. On Nov. 14th gastrostomy was performed by a vertical incision two inches and a half long; a small knuckle of stomach was fixed through Senn's bone-plate by Bowreman Jessett's method. On Nov. 20th the stomach was opened, a No. 8 catheter was tied in, and the patient was fed every four hours. In this case the opening in the stomach must have been made rather too large, for at times through the fistula there was a discharge of gastric juice (and some food) which greatly irritated the parts around the aperture. The patient left the hospital on Dec. 2nd, and was still alive in May, 1895.

CASE 12. *Gastro-enterostomy* (3).—On Nov. 28th, 1894, a woman twenty-six years of age was admitted into the Great Northern Central Hospital under the care of Dr. Beevor, my colleague. For two months she had complained of pain in the epigastrium with some distension and heaviness after meals. In November she began to vomit all food, but this relieved her great pain; the vomited material was sometimes blood-stained. On admission there was observed in the umbilical and right lumbar regions a distinct, rounded tumour, which was nodular and hard. There was no jaundice or ascites. On Dec. 10th the growth was rapidly increasing, and the patient was losing flesh and becoming worn out by the pain. Two days later (Dec. 12th) an incision was made in the middle line from the ensiform cartilage as far as the umbilicus. The tumour was found to be irregular in shape and involving the pylorus and neighbouring parts; moreover, the right lobe of the liver was adherent to the tumour. Remembering the success of a similar case (Case 10) I determined to perform gastro-enterostomy. An incision was made into the anterior surface of the stomach and a similar one into the jejunum; the openings were brought into contact over a Mayo Robson's bobbin and were fixed together in the manner advocated by that surgeon. For a few days there was considerable vomiting, evidently of fluid coming from the small intestine. This was remedied by causing the patient to sit up in bed instead of lying down. On Dec. 20th all the stitches in the abdominal wall were removed, and the abdominal wound was soundly healed. On this date the patient asked for food, and her general condition greatly improved. She continued for some time to make progress, put on flesh, and was quite relieved of abdominal pain. However, on Jan. 12th, 1895, she was suddenly seized with great pain in the abdomen, vomiting began, and she died from peritonitis on the 13th, thirty-three days after the operation. A post-mortem examination showed that the gastro-enterostomy wound was soundly healed and that the communication between the stomach and jejunum was quite perfect, admitting the middle finger. The cause of death was ulceration of the growth on the anterior wall of the stomach spreading into the general peritoneal cavity and thus setting up purulent peritonitis.²

CASE 13. *Gastro-enterostomy* (4).—On Jan. 28th, 1895, a man forty-five years of age was admitted into the Great Northern Central Hospital. Twelve months previously he had begun to have attacks of vomiting at intervals of fourteen days; these did not occur after meals, but generally took place at night. The quantity vomited varied, sometimes amounting to two or three quarts, and consisted of all the food which had been taken during the day. In November, 1894, his condition became much worse, and he rapidly lost flesh. Five years before he had weighed 15 st.; on admission his weight was only 9 st. 4 lb. The abdomen was very full, the muscles were rigid, and some peristalsis could be plainly seen through the abdominal walls. The stomach appeared to be enormously dilated, and extended as far down as the right Poupart's ligament. Considerable splashing could be elicited. On Jan. 30th the abdomen was opened above the umbilicus; the stomach was found to be enormously dilated, and about the pyloric end, which was brought up from the neighbourhood of the right Poupart's ligament, a hard carcinomatous mass was seen and felt. The anterior surface of the stomach was opened by a small incision, and the same was done to the jejunum. Into these openings a Murphy's button was inserted and the operation was completed as advised and carried out by Professor Murphy. Two anchor stitches were employed to fix the jejunum to the stomach. The patient was not at all collapsed and passed a good night. The temperature was normal and there was no vomiting

On Feb. 1st there was slight vomiting and the patient complained of thirst. There was no distension of the abdomen or tenderness. On the 3rd there was still slight vomiting. As the stomach continued to be greatly dilated it was washed out, and three pints of very offensive fluid were removed. The patient was much collapsed after this "washing out," and died early the next morning. A post-mortem examination showed that there was enormous dilatation of the stomach; the Murphy's button was in no way blocked, the gastro-enterostomy wound was quite sealed, there was no leaking into the general peritoneal cavity, and there was no trace of peritonitis and no distension of the intestines.

Remarks.—It will be seen that I lost one of the gastrostomy cases, one of the gastro-enterostomy cases, and the one in which Loreta's operation was performed. I may at once remark that if operations upon the stomach are to be of any use—that is to say, brought to a successful issue—the operation must be done fairly early—i.e., before all chance of recuperative power is gone. It may be observed that my first case of gastrostomy died nine days after the operation simply from asthenia. The gastro-enterostomy case died from what I can only describe as the result of an enormously over-distended and probably septic stomach—in other words, a stomach that had become so dilated that it had passed the point at which it was possible for it to recover its contractile power. Now, with regard to the best incision in the abdominal wall for exploring the stomach, if the operation is for gastrostomy, I conclude, after trying various incisions, that the vertical one about the left linea semilunaris is the best. On the other hand, when the pylorus is to be dealt with, or when a gastro-enterostomy is required, I am of opinion that a vertical incision in the middle line above the umbilicus is the most desirable. It is well known that in many of these cases, especially when the disease is an œsophageal stricture, the stomach is contracted and drawn up well under the ribs. There is sometimes difficulty in finding this organ, and again, even when it is found, there is occasionally trouble in making sure that it is the stomach. This may be overcome as follows. First of all, upon opening the abdomen a search should be made for the transverse colon (which is immediately recognised by the longitudinal bands); and then the great omentum (the gastro-colic portion) should be traced up to the lower edge of the stomach. By these means the stomach can always be quickly found, and, moreover, there will not be the slightest doubt that it is the stomach. The next point to consider is the choice of the operation to use in gastrostomy. I have tried several methods, and have no hesitation in saying that the method advocated by Mr. Bowreman Jessett is by far the best. This is done by drawing a piece of the stomach through the hole in a Senn's bone-plate, which is placed on the skin in a transverse direction to the abdominal wound. The stomach is held in position through the bone-plate by two harelip pins. This prominent part marks the stomach, which can be opened by a tenotomy knife passed into it between the harelip pins. By this method there is not the slightest difficulty in finding the stomach, and in opening it when feeding is commenced that way. Again, very few stitches are required; in fact, none are needed to fix the stomach to the abdominal parietes. The operation is rapidly done, a quarter of an hour being ample time. Another point is of great importance. When one is opening the stomach the orifice should be only large enough to admit a No. 8 catheter. If the orifice is made any larger there is great likelihood of the food regurgitating through the fistula and causing much irritation of the skin around the opening. Too large an opening was made in Case 11, and this, I think, was the cause of the regurgitation, which gave the patient great annoyance. While discussing the points I have noticed in gastrostomy cases, I must not forget to note the curious fact that often—i.e., in five of my cases—as soon as the stomach was opened, and the patient was fed in that way, the stricture of the œsophagus was evidently relieved of spasm, and at times the patients were able to take fluids fairly comfortably by the mouth. This happy state, however, was of course intermittent. There are only a few remarks to make about the operation of gastro-enterostomy. I do not like Senn's plates. I do not think they keep the lips of the wound in the stomach or intestines sufficiently apart, and, therefore, later, the opening between these viscera is often not large enough. I feel certain that the opening was not large enough in Case 5, for it will be remembered that after the operation

² The specimen was shown.

the patient often vomited bulky foods. Now, by the use of Mayo Robson's bobbin, or Murphy's button, the lips of the incisions in the stomach and intestines are kept well apart, certainly for some days, and thus there is little or no fear of the openings between these organs being too small. The loss of Case 13 (gastro-enterostomy) was in no way due to any fault of Murphy's button. In fact, the union between the stomach and the intestine around the button was quite good. Pyloroplasty, which I employed in Case 9, I regard as the best operation for the relief of non-malignant stricture of the pylorus. By it a healthy piece of stomach is let into the anterior surface of the pylorus; moreover, the stricture is divided and relieved, and no doubt in time becomes absorbed. I have doubt as to the lasting benefits of Loreta's operation, and I can readily understand that in dilating a rigid stricture it might easily be torn through, with a consequent leaking into the peritoneal cavity. Again, dilating a fibrous stricture does not always cure it, as may be instanced in many cases of urethral stricture. In the case in which I performed this operation, death, I think, resulted from shock and asthenia, the patient being very ill when the operation was attempted.

Grosvenor-street, W.

THE ROLE OF ALCOHOL IN THE TREATMENT OF HEART DISEASE.¹

BY CHARLES W. CHAPMAN, M.D. DURH.,
M.R.C.P. LOND.,

PHYSICIAN TO THE NATIONAL HOSPITAL FOR DISEASES OF THE HEART,
SOHO-SQUARE.

AN observer of many cases of heart disease cannot fail to be struck by the well-nigh universal recourse to alcoholic stimulants by these patients as an indispensable part of treatment. After making a fair allowance for cases in which the taking of alcohol in immoderate quantities is attributed to medical prescription, but which are really independent of it, there remains a not insignificant proportion of patients who habitually consume a large quantity of spirit, apparently under professional advice. Whatever the true reason may be the fact remains that many sufferers from various forms of heart disease take alcohol under the conviction, not only that it is a good thing for them, but that it is essential to their very existence. That alcohol is valuable in some cases and on particular occasions there can, I think, be no question, but I am thoroughly convinced that it is a grievous error to order this stimulant in all cases. If it be true, as I believe it to be, that alcohol should never be prescribed except after full consideration, with a definite object in view, in measured doses and, as a rule, in stated doses, emphatically is it so in the treatment of heart disease. A glance at the more common forms of cardiac disease will be a help in the discussion of this question. The degenerations affecting the myocardium, whether coming on in the course of an acute illness or caused by the diminution of blood-supply consequent upon atheromatous changes in the coronary arteries, lead to dilatation of the chambers of the heart. This is evidenced by a tendency in the patient to faintness or actual syncope. The physical signs are increased, cardiac dulness (unless pulmonary emphysema is also present), indefiniteness of the apex beat, and muffling or even loss of the first sound. Such a patient, liable as he is to cardiac failure, should have a stimulant of some kind always at hand. It is against the injudicious use of alcohol that I am anxious to protest. Alcohol, when not really needed, does mischief by unduly exciting the already weakened heart, and indirectly by interfering with the general nutrition through the disgust for food which generally accompanies gastric catarrh of alcoholic origin. It must be remembered that an already congested mucous membrane is easily irritated. Patients of the above class are not uncommon in the out-patient room. They generally complain of having a weak heart. They have an alcoholic appearance, the true cause of which is confirmed by their own statement that "they take whisky every now and then to keep themselves up." On further inquiry it will be found that these patients have

frequently an intolerable sinking sensation at the epigastrium. This sensation is often erroneously called fainting and is considered to be an indication for the use of alcohol; whereas the symptom frequently owes its existence to excess in spirit drinking. The histories of these patients show excess of some form of alcoholic liquor, extending, it may be, over many years—in fact, ever since they have, rightly or wrongly, got it into their heads that they have "a weak heart." The beer-drinker is generally bloated in appearance, with a liver enlarged out of proportion to his cardiac difficulty, and he has much subcutaneous fat. The spirit drinker, though sometimes fat, may be thin, and his liver may be even contracted. The symptoms in both classes when there is degeneration of the myocardium are practically the same, though the treatment may not be identical. The beer-drinker is perhaps more liable to pulmonary emphysema, which masks the percussion evidence of cardiac enlargement. It would appear that excessive beer-drinking is directly responsible for some cases of heart disease. In a quotation from the *Blätter für Klinische Hydrotherapie*² in THE LANCET the following occurs: "It is said that disease of the heart is very prevalent in Munich, where the consumption of beer amounts to 565 litres per head annually; and in the same place the duration of life in the brewing trade is shorter than that of the general population." The tremulous, flabby, or over-red tongue of the drinker is unfortunately too common to need description. When, in addition to the ordinary signs of intemperance, we have dyspnoea which the condition of the lungs will not fully explain, degenerative changes in the heart and bloodvessels should be suspected and renal changes sought for. The physician who thoughtlessly prescribes alcohol in these cases or fails to define the dose and clearly state under what circumstances it may be taken incurs great responsibility. If food is better taken with a stimulant and light wine is unsuitable, then half an ounce of brandy or whisky in three ounces of water may be taken at meal times. The frequent doses of alcohol should be stopped and a mixture containing ether and ammonia be used as an occasional stimulant, while medicinal treatment should be directed towards the relief of the congested portal system. By these means the appetite returns and assimilation is improved, judiciously selected cardiac tonics completing the cure as far as possible. Sir Thomas Watson in his classical lectures³ remarks: "For that fatty ruin much may be done even by drugs, and more by counsel and warning, for his safety; when syncope is threatened diffusible stimuli may be freely used. Above all, you must inculcate temperate habits and a life of constant quiet. These cautions are, indeed, more or less applicable to all cardiac disorders, but they are especially requisite whenever there is reason to suspect that the texture of the heart is infirm and incapable of bearing the stretching of a hurried or an impeded stream of blood."

CASE 1.—A man aged sixty years, engaged in shipping, consulted me on Jan. 26th, 1894. He complained of weakness of his heart, palpitation, and giddiness on ascending stairs. The giddiness sometimes came on in the early morning. He had been generally strong and had had no serious illness. The symptoms commenced eleven months previously. Examination of the lungs gave no evidence of disease. Cardiac dulness was generally increased; the apex could not be clearly defined. In the recumbent position the action of the heart was visible as gentle undulations; the sounds were feeble; there was no bruit. The radial arteries were thickened and tortuous. There was no albumen in the urine; the liver was a little enlarged, and the tongue was furred. The patient, who had lived freely for years, had increased his allowance lately on account of his symptoms. The amount of spirit was reduced to two ounces daily in divided doses with lunch and dinner. Strychnine and muriatic acid were given. On March 1st the giddiness had ceased and he felt better. The heart's action was stronger. Subsequent notes showed progressive improvement.

Another class of patients who complain of weakness of the heart belong to what may be called the neurotic variety. These complain of præcordial pain, or of pain under the left breast, and palpitation and irregular action of the heart. So convinced are these patients of the serious nature of their complaint, and of the consequent necessity for alcohol, that they look quite disappointed when informed that they have no heart disease, and are astonished when told that the very

¹ Read (without the cases) before the West London Medico-Chirurgical Society, Jan. 4th, 1895.

² THE LANCET, Aug. 29th, 1891.

³ Principles and Practice of Physic, vol. ii., p. 273.