The whistle was made of tin, and measured 1¾ inch in diameter.

Case II. *Coin in Œsophagus for Three Months.*—R. E., a girl, aged 13, was admitted into hospital on February 11th, complaining of pain and tenderness between the scapulæ, with a history of having swallowed a penny three months previously. Three months previously she swallowed a penny accidentally; it seemed to "stick" in her throat. She had been under medical treatment since for pain in the back. There was no difficulty whatever in swallowing either liquids or solids, the only symptoms complained of being pain and tenderness over the eighth dorsal spine. A skiagraph taken on February 10th revealed the penny situated just behind the

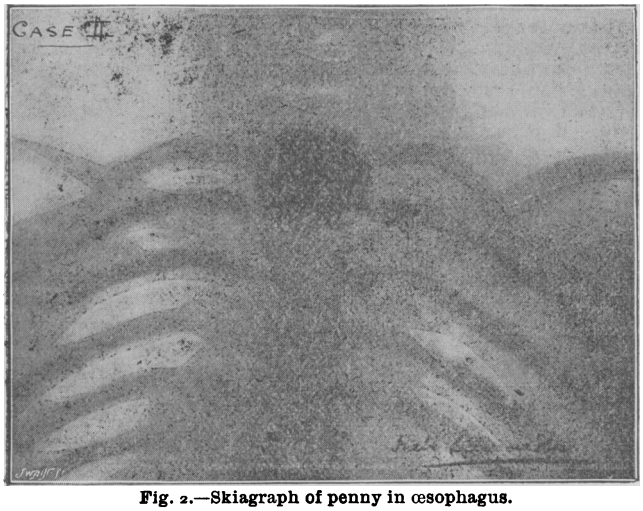

Fig. 2.—Skiagraph of penny in œsophagus.

sterno-clavicular articulation a little to the left of the median line (Fig. 2). The coin was lying transversely. On February 12th the patient was anæsthetised. A No. 14 œsophageal bougie passed into the stomach without any trouble and without grating against any foreign body. On passing a coin catcher down it was felt to grate against the coin, and after several unsuccessful attempts the coin was brought up. She left the hospital the next day.

Case III. *Shilling and Sixpence in the Œsophagus for Six Weeks.*—M. E., an infant, aged 18 months, was admitted into the Children's Hospital, Birmingham, on March 1st, with a history of having swallowed a shilling and a sixpence forty days previously. The child was extremely fretful and peevish.

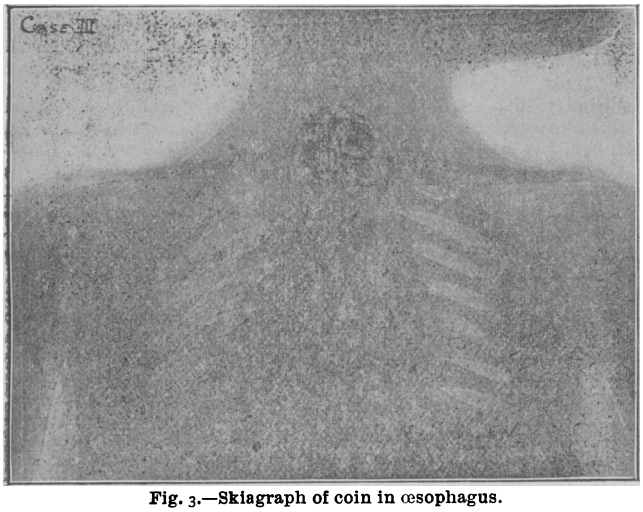

Fig. 3.—Skiagraph of coin in œsophagus.

She had no difficulty in swallowing fluids, but refused to swallow anything solid. There was nothing to be discovered in the neck by palpation. A skiagraph was taken, and showed a coin lying transversely in the upper part of the thorax just behind the manubrium sterni (Fig. 3). The day following the taking of the skiagraph several ecchymotic patches appeared in the lower part of the neck.

On March 4th the child was anæsthetised. On passing the coin catcher down the œsophagus a sixpenny piece was removed. No other coin could be detected with the coin catcher; but on passing a large œsophageal bougie there was some difficulty experienced in making it enter the œsophagus, and a grating sensation as it passed onward into the stomach. A long curved pair of forceps was passed into the œsophagus, and after several unsuccessful attempts a shilling was grasped and removed. Both coins were covered with a black film of sulphide of silver; they apparently lay together in the œsophagus, just behind the manubrium.

DIAGNOSIS AND TREATMENT OF SPASMODIC STRICTURE OF THE ŒSOPHAGUS.

By J. C. RUSSEL, M.D.,
Southport.

There is a form of stricture of the œsophagus which, I have reason to think, cannot be extremely rare, and yet few surgeons seem to recognise its existence, and cases are seldom heard of. This is that stricture which is situated at or near the cardiac orifice of the stomach, and is caused by muscular spasm, superimposed upon a greater or less degree of more permanent contraction.

Eleven years ago I met with such a case in my practice, and, directly or indirectly in consequence, I have since seen six similar cases, all, with one exception, living within a radius of less than 40 miles. Its apparent rarity I believe to be due, in the first place, to the misleading character of the symptoms, suggesting, as they do, disease of the stomach; and, secondly, to the inefficacy of treatment by bougies in this condition, causing a diagnosis of stricture, once made, to be abandoned or modified since the symptoms persist after supposed dilatation. As to treatment, that which in my hands has given good results consists in stretching the stricture, by an expanding dilator, to a calibre approaching that of the normal œsophagus at that point. This is not done suddenly or at one operation, but with bags of increasing size and at several sittings. Four cases were by this means completely cured, one was much improved, and of the remaining two one was not improved and the other has not been treated. The following is a brief history of my cases:

Case I.—Mrs. S., about 40. Seen eleven years ago. For several years gradual aggravation of two symptoms, feeling that food did not reach the stomach, and regurgitation of what was swallowed. Had not previously been treated. Now no solid food will pass, and most of the liquid is rejected. A tight stricture at the cardiac orifice. Dilatation by bougies till No. 23 Jaques passed. No improvement in symptoms. I was then persuaded that further stretching beyond what a bougie could accomplish, or even overstretching as is practised on the anal sphincter, would be necessary to overcome the contraction. I accordingly made an instrument consisting of a sausage-shaped silk bag, rendered air tight by a very thin rubber bag within, and mounted on the end of a tube or hollow bougie. This was passed through the stricture in a collapsed state, and blown up by an air syringe when in position. This method proved successful; after a time swallowing became normal and continues so, the lady being now alive and in good health.

Case II.—A man about 40 (J. H.), seen six years ago. His trouble came on suddenly about two years ago; while drinking a draught of liquid, it was suddenly rejected and nearly choked him. Since then liquid only has passed, and that is often rejected. This man had been seen by several physicians, one of whom advised washing out the stomach, and himself passed the tube and performed the operation. The washing was continued, first by the patient's ordinary adviser, and afterwards by the patient himself. This tube probably never entered the stomach. When I saw him a much smaller tube would not pass, and he was afterwards satisfied that the other had never passed. Treatment by dilator was not successful in this case. He had to be taught to feed himself with the stomach pump, which he has done since, and keeps up his health and strength. A case of mistaken primary diagnosis. It does not appear that stricture was suspected until the patient himself thought of it.

Case III.—Dr. S., seen November, 1896, a surgeon in the Colonial service, aged 28. Symptoms coming on for about three years, regurgitation in particular. For about a year not more than one-third of the fluid he takes has passed into the stomach, the rest being rejected. Saliva collects and is brought up every two hours, night and day. His sustenance consists of milk and eggs taken through a small tube. He had been seen by several medical men. An eminent London surgeon had passed bougies up to 2 cm. in diameter without improvement in the symptoms. A hospital surgeon in Edinburgh also treated him, and came to the conclusion that not stricture but dilatation and atony of the œsophagus was at the root of the evil, and advised gastrostomy as the only remedy. Others propounded other theories. I used the expanding dilator, and

the swallowing power was soon completely restored. He rapidly gained flesh and strength, and returned to his duties on the West Coast, where, I regret to say, he died of fever about Christmas last. When last heard of, not long before his fatal illness, he had not had any return of his trouble. In his case the stricture was not exactly at the cardiac orifice, but about 2 inches above it. This is a case of failure of bougie treatment and consequent erroneous secondary diagnosis.

CASE IV.—D. W., a man aged 42; seen March, 1897. Two and a half years ago he felt uneasiness at pit of stomach while eating, and could feel his food "bolt" suddenly through. About six months after, food began to come back, first solids and then liquids also. He went to a hospital physician, who sent him to a surgeon. The latter passed bulbs eighteen inches down his throat and sent him back to the physician, who thereupon prescribed as for disease of the stomach. A month after, he saw a well-known physician, who suspected the bougies had not reached the stomach, but prescribed liquid food of specified kinds. There being still no improvement, he went to yet another prominent provincial surgeon, who passed a bougie 18 inches, and recommended washing out the stomach, which the patient was supposed to do himself. Although the tube did not enter the stomach some improvement ensued, and he became able to swallow rusks boiled in milk. When seen by me he had a stricture at the cardiac orifice, which would not pass a No. 23 Jaques but passed No. 18. It was easily dilated to No. 23 and then stretched, and in a few weeks he regained the normal power of swallowing. He continues well.

CASE V.—A retired naval officer, 65 years of age, seen April, 1897. For three or four years had intermittent difficulty of swallowing. Three years ago a physician diagnosed stricture, but no local exploration was made and no treatment used. When I saw him his diet was reduced to jellies, eggs, and milk, which sometimes returned. There was a tight stricture at the cardia. Bougies were used and then the dilator, with the result of restoring the function completely. At Christmas last he continued well.

CASE VI.—J. A., a youth of 20, seen April, 1897. A little over three years ago he began to vomit after some of his meals, and became gradually worse till he vomited a great part of each meal he took. He was never easy till it came back. It sometimes caused acute pain. It made no difference what the food was or whether solid or liquid. He was treated for dyspepsia, and was washing out his stomach. I could find no trace of stricture, the tube passing easily into the stomach. He was told to feed himself through the tube and report whether the food so taken returned. He did so, and reported that no more than a mouthful of that so taken returned. I stretched the cardia several times, with the result that he was usually able to eat without any food coming back, though occasionally some did so. He had then to leave the town and return to his work. I saw him about Christmas, and he reported great improvement but not absolute freedom from vomiting. I stretched the cardia once then and have not heard from him since. There might be some doubt as to the exact pathology of this case, but, as will be seen by the following case, there may exist undoubted spasm closing the cardia absolutely, without any stricture being perceptible by an instrument.

CASE VII.—Seen February, 1898; a medical man. Illness of about three years' duration. At one time scarcely able to swallow anything. At present he can eat a considerable quantity, say an entire course of a meal. He then feels that he can eat no more, and takes a large and continuous draught of water, during which the spasm gives way, and he feels food and water pass together into the stomach, after which he can go on with his meal, and repeat the process. If, however, he is interrupted in drinking, the entire quantity he has eaten is immediately rejected. No trace of stricture could be found on passing a tube. I only saw him twice as he was about to start on a distant voyage. There is no treatment to record, and I mention the case merely as being one of the kind in question, and showing the possibility of the œsophagus being completely closed without demonstrable stricture.

For the sake of brevity, I have omitted much that might be said, and if I have seemed to dwell unduly on faulty diagnosis it is because I believe this to be the chief obstacle to the proper treatment of these cases. I may be permitted to conclude with the following suggestions: That in all cases of persistent vomiting, unless obviously due to disease of the stomach, it should be positively ascertained whether or not a stricture is present. That it should not be assumed that no stricture or spasm exists because none can be detected by a bougie, nor that stricture is not the cause of the symptoms because these persist after the largest possible bougies have been passed. In cases of doubt, the behaviour of food given through a tube may be of assistance. In using instruments for the diagnosis or treatment of stricture, it is very easy to be deceived on the question as to whether they have passed into the stomach or not; measurement of the length passed is not an infallible guide. In using the dilator, I always pass it well below the point required, and then withdraw it until I judge it to be on the spot, before expanding.

I have seen it stated that Professor Loreta, of Bologna, stretched some strictures from below, through an opening made into the stomach. This plan might be useful if the dilator failed, as in my second case. In the *American Year-book* for 1898, p. 172, a case obviously of this kind is quoted under the title of "Fusiform Dilatation of the Œsophagus." It was treated by tube feeding. The author had collected records of twenty cases, in none of which was the diagnosis made during life, which tends to support my thesis that if this condition were more carefully looked for it would be more frequently found.

MEMORANDA:

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

A PROLONGED CASE OF SARCOMA OF OVARY.

M. B., aged 35, domestic servant, unmarried, first complained of intermittent pain in the region of the left ovary in January, 1892. Mr. Page of Newcastle-on-Tyne diagnosed sarcoma of the left ovary, and in May, 1892, removed a solid sarcomatous left ovary. There were no adhesions, but a little fluid in the peritoneum. The right ovary seemed quite healthy.

The patient's condition was for some time critical, but eventually she made a good recovery and returned to service. In the autumn of 1893 the growth showed signs of recurrence, and by April, 1894, it had increased enormously.

Mr. Page again operated and he says: "The abdomen was occupied by a large soft growth springing from the stump of the left ovary and closely connected with the intestines and peritoneum from which it could not be separated; a large amount was however removed with difficulty. The hæmorrhage was very severe and the left ureter was accidentally torn across. The ends were fixed in the wound. The right ovary could not be found." After some weeks the patient returned home. Urine flowed from the wound for nine months and then ceased.

In June, 1895, and September, 1895, she had localised attacks of peritonitis from which she made good recoveries. By June, 1896, the tumour was the size of the gravid uterus at full term and occupied the left side of the abdomen principally, but from this date it seemed to grow more towards the right hypochondriac region.

In May, 1897, menstruation, hitherto normal, ceased, and from then till Christmas she had better health than she had had since the second operation; in fact, she frequently walked unaided a distance of four miles at a time. In December, however, cough, dyspnœa, insomnia, ascites, and general anasarca gradually developed, accompanied by syncope and weak, intermittent pulse.

On March 10th, 1898, aspiration was resorted to. At first only a little glairy fluid escaped, but eventually about two pints of clear serum were withdrawn, when the needle became blocked. Fluid, however, ran from the puncture for five days giving much relief.

By March 29th the ascites was so much worse that Southey's tubes were tried. They, however, became blocked at once, but on withdrawing the needles fluid ran for three days.

From this time, however, the patient got gradually worse, with increasing cachexia and syncope, till on April 20th she had a severe attack of hæmatemesis, from which she never rallied but died on April 26th, more than six years from the commencement of the symptoms. Unfortunately, a *post-mortem* examination could not be obtained.

The chief points of interest in the case are (1) the long course it ran; (2) the good health the patient had after the second operation, being practically free from pain for four years; (3) the marked improvement that followed the cessation of the catamenia for eight months when she died. Was this the menopause?

Harbottle, Northumberland. W. F. MILLER, M.B., B.S., etc.

DIPHTHERIA AFFECTING THE SKIN.

CASES of diphtheria affecting the skin surfaces are nowadays rare, hence the following cases may be worthy of record. Even in the essays of Bretonneau and his pupils I find few cases of cutaneous diphtheria, although it was no doubt more common than it is to-day. Diphtheria of the skin appears to be not so dangerous as the same malady affecting the mucous surfaces. Trousseau says, "It is not very dangerous when it affects the skin."

CASE I.—In November, 1895, I saw a boy, aged 2, with spots on the cheeks, lips, and breast. At first I thought the condition one of herpes which had become purulent, but on touching them I found them soft and leathery, and on removal a bleeding surface was revealed. Under the microscope they had a glassy appearance and stained badly. This