the trachea and parts around it. Even then there was no thickening—no extension of cancer to the tracheal opening. The breaking down of the tracheal cartilages could only be accounted for by the injurious pressure on them effected by the large (14 mm. in diameter) mouthed orifice of Bramann's canula. On the night of 29th-30th April a flapping noise had been audible in expiration as if there were a loose slough at the orifice of the trachea. At seven o'clock in the morning the Emperor had a severe fit of coughing and brought up a large piece of necrotic tissue. After this the noise ceased and the breathing became quiet. As the windpipe was in such an utterly unhealthy condition, it had occurred to me that a tube of lighter material than silver would be likely to do less damage. I had therefore ordered a canula to be made of aluminium, and this was worn by His Majesty, except on one or two days now and then, till the end of his life.

Temporary Improvement.—At the beginning of May a considerable improvement took place in the Emperor's condition. He felt much better and regained strength to a slight extent; he was more comfortable during the day, slept better at night, and took more interest in what was going on around him. The vegetations around the tracheal orifice, which at the suggestion of Professor Bardeleben had been treated with bismuth, had completely disappeared—a proof that they were not cancerous growths as had been positively stated by Von Bergmann. The discharge of pus was still abundant. On May 8th I collected all that escaped between 8 A. M. and 8 P. M., and found that it amounted to three ounces. As the discharge was generally more copious at night than in the day, it follows that an estimate of six ounces would be rather under than above the average secretion during the twenty-four hours. Such a quantity could not come from a cancerous larynx. Besides the matter was thick and greenish-yellow in colour—in fact, laudable pus—very different from the sanious putrescent fluid, full of miscellaneous *debris*, that comes away from a cancerous ulcer. In the present instance there could be no question that the source of the discharge was a large abcess-cavity in the situation of Bergmann's "false passage." A further proof of the abundance of the discharge is supplied by the number of times the canula had to be cleaned in order to prevent its becoming stopped up. This I find in my notes of this period such entries as "Canula cleaned eleven times," "seventeen times in the night," and so forth.

On May 12th His Majesty felt some pain in swallowing, which was found to be due to aphthous spots on the uvula and pharynx. On the 14th fresh vegetations began to form. This kind of all treatment, increased in size, till at the end of a fortnight they had coalesced into a single growth about the size of a large date, which formed a kind of collar round the whole of the tracheal orifice, except at its upper margin. On June 8th these vegetations began to get smaller again, and they gradually shrank, so that at the time of the Emperor's death they were no longer visible.

A passing Gleam of Sunshine.—On May 16th His Majesty went into the park for the first time for a month. The weather was temperate, on that day it was 89.4°, whilst in the evening it was 99°. The difficulty of swallowing had almost disappeared and the illustrious patient was making gratifying progress. On the 17th he was in the park again for several hours. He sat on a chair for some time, and afterwards drove in his pony chaise, occasionally walking a few steps. A tent had been erected on the lawn, and a rug was placed at its entrance. Late in the afternoon the pony shied at this rug, and reared so much that he almost fell back on the Emperor. Everybody except the illustrious patient himself was greatly alarmed. Vehicles only moved pointing out that violent shaking might injure his throat that His Majesty consented to have the pony taken out of the carriage, which during the rest of the evening was drawn by two of the attendants.

The Emperor's Fondness for Music.—The Emperor spent most of the day following in the park. He drove to the door of the chapel and listened for a long time to the choir which was practising the music to be sung at Prince Henry's Wedding. I had another opportunity not long afterwards of observing the Emperor's fondness for music. At Friedrichskron one day in the early part of June I heard the choir of the Church of the Twelve Apostles sang several hymns. His Majesty sat in the next room but one to the Muschel Hall in which the choir was, but the doors were open and the beautiful voices of the eighty singers constituting the choir were very distinct. His Majesty was very much affected by the singing, in fact, I noticed that during one of the hymns he could not restrain his tears. I procured him a little wine and water, and with his usual determination he walked to the entrance of the Muschel Hall and bowed his thanks to the singers.

On the 19th His Majesty drove outside the palace grounds for the first time since his recent attack. The people were more enthusiastic than ever, and when he came home he felt so well that he insisted on remaining in the park for some time. On the 21st His Majesty drove into Berlin. On the following morning day he drove out with the Empress. On the 23rd the Princess Irene was expected late in the evening, and His Majesty was anxious to sit up to receive her, but as I knew that the following day would be a fatiguing one for him I persuaded him to retire to rest.

The Wedding.—On the 24th the Emperor, who had had a good night, rose early in the morning and spent some time with Prince Henry and his bride. His Majesty went to the Blue Gallery, and was much disappointed to find that, thinking he would not be able to be present, the Civil Contract had been signed in his absence. He afterwards attended divine service in the chapel. The brisk way in which the Emperor rose to his feet was noticed by many of those present, but most people thought the illustrious invalid looked much shattered. The great effort which he made to appear as well as possible greatly fatigued him, and he could scarcely take any lunch. Late in the evening, however, he appeared much better, and enjoyed two hours in his pony carriage in the park. His temperature at 5 o'clock was 101.1. It had not been so high as this since May 3rd. In the evening, however, it fell again to 100.6°.

The Sky Again Overcast.—On the next day the Emperor showed signs of fatigue and depression, though he did not complain. From this day (May 25th) I reckoned the commencement of the final decline in His Majesty's health. He never was so well after Prince Henry's wedding. Some days before that event, however, there were signs that the original disease in the larynx was beginning to disseminate itself in adjacent parts. On May 20th a round nodule, about half a centimetre in diameter, was noticed under the skin about an inch above the upper end of the sternum bone. It was movable and moderately hard, and the skin over it was of natural colour and appearance. This nodule gradually increased in size, and in the early part of June its surface became slightly inflamed. It was judged to be a secondary point of malignant infection, and as a matter of fact it was found on examination after death to contain some cancerous elements.

On May 26th the Prince of Wales accompanied the Emperor in a drive through the Thiergarten to the Bella Vue, where he too took leave of His Majesty for the last time. On the following day the Emperor showed signs of fatigue and drowsiness, and seemed once more to be gradually losing the energy he had lately regained. On the 29th, however, he was roused by an incident quite outside the ordinary run of his life for a long time past. His Majesty inspected three regiments of Guards, which marched past under the command of the Crown Prince. The Emperor, who was wearing his helmet for the first time since his accession, sat in his victoria. He was greatly moved. Whether from the weight of his helmet or from excitement the Emperor's head was bathed in perspiration although the day was not at all hot. Immediately after the inspection I got him some wine, which seemed to revive him. I said to His Majesty, "I am afraid, Sir, it was rather tiring for you seeing the troops march past." He replied, "No, but it is the first time I have seen my soldiers." The Emperor seemed thoughtful for the rest of the day, and indeed, under the circumstances, there was sufficient matter for sad reflections. This inspection certainly seemed to try the Emperor more than anything which had occurred for some time.

Visit to the Mausoleum.—On May 31st the Emperor, who had driven into Berlin the day before, was fairly comfortable. In the evening His Majesty asked me if he might pay a visit the next day, before leaving Charlottenburg, to the mausoleum; thinking, however, that the day would be a fatiguing one, I suggested his going that evening. He silently nodded my way to the little chapel, and the Emperor slowly mounted the steps attended by one of his faithful jägers. I remained outside, and, whilst waiting, my thoughts naturally turned to the Emperor William, and it was a source of satisfaction to me to remember that he had expressed himself as entirely satisfied with my treatment of his beloved son. Of this I had received the assurance both from Prince Radolin and General Loe. The latter gentleman told me in San Remo in the previous autumn that the deceased Monarch, in the presence of several senior officers, had expressed his complete approval of what I had done; and the Hof-Marschall gave me similar testimony—in this case, I believe, by the express desire of the Emperor William.

In a short time His Majesty descended the steps of the mausoleum, looking sad and weary. Shortly afterwards he said to me, "I shall go to bed early to-night. I feel tired."

CHAPTER IX.

THE EMPEROR'S LAST STAY AT POTSDAM.

It had been arranged that on June 1st the Emperor should be removed to Potsdam, which, from long residence there, he looked upon as his natural home. Before starting, however, he was a little difficulty with the canula, and as the incident was an almost exact *repition* of the unfortunate episode of April 12th with the part of Bergmann left out, it may be worth while to relate it. I had changed the tube in the morning for a shorter one in the presence of all my colleagues. Half an hour after their departure the Emperor's breathing became slightly incident. I at once changed the inner tube, but in five minutes His Majesty sent for me again, when I found that there was a slight pulse on inspiration. As we were leaving for Potsdam in a few minutes there was no time to send for Bardeleben, and as I thought it would be unadvisable to allow the illustrious patient to travel with the new tube in his throat, I replaced the one he had formerly been wearing.

Now I might easily have magnified this little incident and represented myself as having rescued the Emperor from impending suffocation. The circumstances were almost exactly similar to those of the fatal occasion on which Bergmann had done such mischief. In neither case were there any symptoms of the least urgency; there was only a trifling degree of dyspnœa, and the breathing was accompanied by a slight sound.

The Emperor's Last Journey.—The Emperor drove through the grounds in his pony-chaise to the banks of the Spree, which on one side forms the boundary of the Charlottenburg park, and embarked on board the yacht *Alexandria*, which was to take him to Potsdam. Thousands of people had assembled on the opposite side of the river, and when His Majesty appeared their enthusiasm knew no bounds; a strong body of mounted police had been stationed to prevent the crowd approaching too near the river, but in the excitement of the moment the people pressed forward to the very brink of the stream, and it was very fortunate that some were not precipitated into it. When the little yacht steamed off a large part of the crowd ran by the side of the river. On reaching Spandau, which was gaily decorated, thousands of school children were seen to be assembled on the banks to greet their Sovereign, and on passing under the bridge, flowers came down in such a deluge that it took two of the sailors half an hour to gather them up. We arrived at Glienicke bridge at about one o'clock, and found a number of carriages which conveyed us to Friedrichskron. The Emperor was very little fatigued, eat a good luncheon, slept for a few hours, and then took a drive in his pony-chaise in the park.

Fresh Complications.—For the next three or four days there was no change in His Majesty's condition. He slept fairly well (for him), and was able to go out a good deal when the weather permitted. He was, however, more easily fatigued than he had hitherto been, and it was only too clear that his life was ebbing away *sensim sine sensu*. On June 6th the temperature, which for some time previously had averaged from 99° to 100° F., rose to 102.4° F., and there was a great deal of coughing, owing to the quantity of matter which found its way into the windpipe. That night he hardly slept at all, and the next morning he was very weak. He insisted, however, on getting up about 11:30, and giving audience to General Albedyl.

On the evening of the same day (June 7th) it was noticed by the attendant that whilst the Emperor was drinking some milk a small quantity of the liquid came out through the canula. During the night the same thing was repeatedly observed by Professor Krause, who had taken the night duty since the 4th, as Mr. Hovell had been obliged to return to England on account of the sudden death of his father. At 6:30 on the morning of the 8th Krause came to my room and said, "What you have so often feared has now happened; a fistula has formed between the larynx and the œsophagus." He then told me what he had witnessed during the night, adding that once or twice nearly the whole of the milk which the Emperor had taken into his mouth had run out through the tube. At the morning consultation, in which, besides Professor Krause, Professor Wegener and myself, Professors Leyden, Senator and Bardeleben took part, I remarked that although the symptoms seemed to point to the existence of a laryngeal fistula, I was nevertheless not at all sure that the passage of liquids into the larynx was not merely the result of the imperfect action of the epiglottis. I expressed the same view to my colleagues on several occasions subsequently. The argument in favour of this theory was the rapidity with which liquid food escaped from the pharynx into the larynx, and thus through the tracheal opening, whilst on the other hand the idea that there might be a laryngeal fistula was supported by the fact that occasionally His Majesty was able to swallow without any liquid passing into the larynx, a circumstance tending to show that the fistulous passage occasionally became closed.

The complication in any case was a most serious one, for in the weak condition of the Emperor anything which interfered with his taking a sufficient amount of nourishment would certainly bring his life very speedily to a close. At this time he was still able to take a fair quantity, as the following diet-sheet (for June 8th) will show: 10 A. M., about half a plateful of very thick porridge; 1 P. M., four eggs beaten up in wine; dinner, some *purée* of chicken, with a little mashed potato; in the afternoon a large piece of cream ice and three eggs; no supper, but at 10 P. M. a large plateful of shaped boiled rice. In the night some rice, cocoa, and eggs.

With the view of preventing the fluids which were swallowed from trickling down the windpipe, it was determined to use a tamponcanula. This accordingly I put in on the 9th in the presence of Professors Bardeleben, Leyden, Krause, and Dr. von Wegner. His Majesty slept better the next night, than he had done for some little time; he was able to take eight eggs in the course of it, and said in the morning that he felt better.

No Progress.—Seeing that the Emperor was sinking day by day, I thought it my duty on the morning of June 10th to inform him that he was not doing well. I said, "I am sorry to tell you, Sir, that you are not making progress." His Majesty replied, "I feel pretty well to-day." Nothing more was said, but some hours afterwards the Emperor handed me a slip of paper, on which he had written—

I am very sorry that I make no progress

These pathetic words* showed me that the dying monarch had fully understood the meaning of the fistula which I had to him.

On the following morning (June 11th) as the breathing had become somewhat tracheal I introduced a longer tampon-canula. As, however, air did not come quite freely through the tube, I removed it, and then passed it in again with the greatest ease. In doing so, I felt that, about two or two and a half inches below the tracheal opening, there was a slight projection forwards of the posterior wall of the trachea, and by directing the lower end of the canula forwards, and fixing the instrument in that position, I overcame the slight obstruction and the breathing became quiet. The discharge of pus had now become much less profuse, but the tube still required to be cleaned pretty frequently. During the day a good deal of fluid was seen to escape by the side of the canula after swallowing; the subglottic region was therefore tightly plugged with five small pieces of sponge, and this partly checked the leakage through the wound.

Dying in Harness.—Even at this time the Emperor battled with the prostration which was at last beginning to paralyse his hitherto indomitable energy. On this very day, (June 11th), he was writing nearly all the morning, and the amount of work which he got through was wonderful under the circumstances. I always noticed that when His Majesty felt worse than usual, he worked harder than ever; he had an almost overwhelming sense of the duties of his position, and seemed resolved almost literally to die at his post. Never discouraged the illustrious patient from working, as I knew that the disappointment he would have felt at being compelled to be idle, would have more than counterbalanced any good he might otherwise have derived from remaining quiet. Moreover the work itself seemed actually to sustain him, and it no doubt was useful in diverting his thoughts from his own condition.

Artificial Feeding.—On June 12th Mr. Hovell, who had returned from England the day before, informed me that the Emperor had been able to take very little food during the night, and that a great deal of what he did take escaped at the side of the canula. At the consultation afterwards, it was unanimously agreed that artificial feeding had become necessary, and I was requested to undertake it. I pointed out to my colleagues that, owing to the relaxed condition of the posterior wall of the trachea caused by the exfoliation of the cartilages in the upper part of the trachea, and to the probably softened state of the œsophageal walls, the passage of a feeding-tube would be attended with considerable danger, but it was decided that the operation was imperatively indicated, and that the risk might be. Accordingly at about 11 o'clock that morning, I passed an œsophageal tube, and introduced about a quart of milk through it. His Majesty was again fed in the same way at 2 P. M., half a litre of condensed milk with some cream and whisky being given on this occasion. During the day I took an opportunity of pointing out to His Majesty that he was now almost entirely dependent on the feeding-tube for his supply of nourishment, and that therefore if any difficulty should arise interfering with the passage of the tube he would be reduced to a condition of the most imminent danger. The Emperor merely bowed in assent, but gave no further statement, but asked no questions. In the evening the Emperor wished to go out for a drive, but I thought it better for him to remain on the balcony. At 11 o'clock he was again fed. In the middle of the day the breathing became tracheal, and the supply of air diminished. The difficulty gradually increased in the evening, and though Professor Bardeleben was expected, the breathing became so bad that I thought it desirable to endeavour to alter the position of the tube. After inserting the pilot, I tilted its point forwards, and in this way succeeded in disengaging the lower end from a fold of the mucous membrane covering the posterior wall of the trachea which partially blocked up the lower orifice. The breathing at once became easy. I retired to rest at 8 A. M., leaving Mr. Hovell on duty. There had been scarcely any discharge of pus for several days; but on this day (June 12th) some very offensive matter escaped. From this time there was hardly any secretion of pus, but a good deal of mucus continued to come through the canula.

On the 12th the Emperor was fed with the tube three or four times during the day. In the course of the morning I saw the servants making extra preparations on the balcony, and was told that this was because the King of Sweden was expected very soon. I had thought that the King's visit had been put off on account of the Emperor's condition; but it was now too late to intercept the carriages. Besides this, I knew that nothing could now make any difference to the august sufferer. His Majesty was rather breathless, but he was able to receive the King; the interview lasted only a few minutes. Before he left Friedrichskron I had the honour to be presented to King Oscar, who asked me what I thought of the Emperor. I replied, "It is scarcely necessary to point out to you, Sir, that the Emperor is in a most critical condition, from which I think it is almost impossible for him to rally; should he, however, get over this attack, his life might be spared for a few weeks."*

The Beginning of the End.—At 3 A. M. on this day (June 13th) I noticed a change in the Emperor's condition, which showed that the end was approaching. There were signs that inflamgation of the lungs had evidently set in, and I knew that His Majesty's sufferings would soon cease. I had promised to inform the Empress at once if any change occurred, and accordingly at 4 o'clock I knocked gently at her bedroom door. She was not asleep, and answered me immediately. As soon as possible the Empress was by the side of her dying husband, and from that hour she never left his bedside for more than a few minutes at a time. The Emperor remained surrounded by the members of his family throughout the day. As he was very restless and had not slept during the night, I gave him a mild sedative draught. Soon afterwards he fell asleep, and slumbered till 6:30, when he said he felt hungry, and asked me to feed him. I administered a quart of milk with a little whisky through the tube. He received nourishment in this manner twice again during the day. He showed very little interest in general matters, but was very particular to have his tube changed directly there was the least sound in breathing.

Thoughtful for Others to the Last.—I have said more than once that the Emperor was the most considerate of men, and I cannot forbear relating a striking instance of this quality which occurred within a few hours of his death. My sitting-room was close to His Majesty's room, but in order to reach the latter I had to pass through three rooms. In order to get to his bedside more quickly I generally used to go along an outside balcony so that I had only the ante-room to pass through. Just before daybreak on the morning of June 15th it was dull and chilly. In consequence, I suppose, of exposure to the air in going by the balcony I became a little asthmatic. Whilst I was changing his canula on two or three occasions during the night, the Emperor put his hand lightly on my chest and looked up at me with a glance of earnest sympathy, thus mutely expressing his regret that I too was suffering. Those who have much to do with the sick know well how prolonged illness often breaks down the natural transcendency of the sufferer, making even those who in health were utterly unselfish come to be regardless of anything but their own suffering. Frederick the Noble in this, as in everything else, rose above the ordinary standard of humanity; even in the agony of death he remained true to his own generous nature.

Last Scene of All.—At 4 o'clock I called Mr. Hovell, and at 5 I tried to snatch a few minutes of rest in an armchair. An hour later, however, the Emperor complained of a feeling of sinking, and signified his wish that I should give him some nourishment. After this he seemed to be somewhat better for an hour or so, and a little later he passed into a deep sleep, which was, however, broken from time to time by the irritation in his throat.

In order not to intrude on the grief of the sorrowing family, at 9 A. M. I took up my post in the room immediately adjoining the Emperor's bedroom, paying a short visit to the Emperor every few minutes. At 11 o'clock the eyes of the poor patient which had languidly followed every movement of the Empress, became fixed, the intervals in drawing breath became longer and feebler, and soon after 11 A. M. I had the sorrowful duty of announcing to the Empress that life was extinct. With his broken-hearted family, and several of his devoted servants kneeling around him, Frederick the Noble breathed his last.

Thus passed away the noblest specimen of humanity it has ever been my privilege to know. Of his military achievements and his political wisdom it would be presumption for me to speak. During his life his natural reserve and the circumstances in which he was placed led him to efface himself to a great extent, so far as the public at large was concerned. He could not, however, conceal his kindness of heart, which thus came to be *the* leading feature in the public estimate of him. Only those whose official position brought them into personal contact with him, and a chosen few who were permitted to enjoy his confidence, knew the grandeur of soul the Third was a man of commanding intellect. His courage in the field is known to all the world; his compassion for suffering and misfortune, and his chivalrous forbearance towards the weak are acknowledged most freely by those whom he conquered in war. I think that if the day I took an opportunity of pointing out to His Majesty that he was now almost entirely dependent on the feeding-tube for his supply of nourishment, and that therefore if any difficulty should arise interfering with the passage of the tube he would be reduced to a condition of the most imminent danger. The Emperor merely bowed in assent, but gave no further statement, but asked no questions. In the evening the Emperor wished to go out for a drive, but I thought it better for him to remain on the balcony. At 11 o'clock he was again fed. In the middle of the day the breathing became tracheal, and the supply of air diminished. The difficulty gradually increased in the evening, and though Professor Bardeleben was expected, the breathing became so bad that I thought it desirable to endeavour to alter the position of the tube. After inserting the pilot, I tilted its point forwards, and in this way succeeded in disengaging the lower end from a fold of the mucous membrane covering the posterior wall of the trachea which partially blocked up the lower orifice. The breathing at once became easy. I retired to rest at 8 A. M., leaving Mr. Hovell on duty. There had been scarcely any discharge of pus for several days; but on this day (June 12th) some very offensive matter escaped. From this time there was hardly any secretion of pus, but a good deal of mucus continued to come through the canula.

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* I am not sure whether the word *now* is omitted before "made," or whether His Majesty meant to write substantially the same sentiment which he wrote a few days before to his son, the present Emperor:—"I am very sorry that I can make no progress."

* Among the thousand-and-one incorrect statements which appeared in the papers, there was one to the effect that I had asked for an audience of the new Emperor immediately after the decease of his father. I think it right to state here that I never sought for an interview of any kind with Mr. Mulvey.

PART I.

I shall now proceed to prove my first proposition (*a*) *That the operation of thyrotomy (Laryngofissure) which it is stated it was proposed to perform on the Crown Prince in May, 1887, is not free from risk as it is pretended by von Bergmann, but on the contrary, is a dangerous procedure, soon leading to death.*

The Danger of the Operation.—Professor von Bergmann maintains that the operation which he was about to perform is free from danger, and he asserts that he has performed it seven times successfully. He does not, however, give any details of these operations, nor does he even say that they were done for cancer. Vague statements of this kind are of no value whatever, if they are accepted by compilers of surgical statistics.

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But to return to the subject of the ten malignant cases in which alone a fair comparison can be made, it must be remarked that they are all usually contained in my Tables! Readers will therefore be in a position to judge of the value of the assertions of von Bergmann and his successors in cases culled from the pos of the *Centralblatt!*

In Table No. 1, will be seen a collection of twenty-to cases of thyrotomy, six of which ended in *death directly from the operation*, on or before the fifth day. Of the remaining seventeen patients, two died from cancer, one report was pushed, three suffered from recurrence of cancerous disease, and must therefore be looked upon as having died (though not actually dead when their cases were reported), two cases were published too soon after the operation to be of value for statistical purposes, and two recovered. This is to say, in twenty-two cases there were two cures, or in other words the percentage of recoveries was 9.09, which is equivalent to saying that out of one hundred cases the operation proved fatal in nearly ninety-one! I have myself never done the operation for cancer, though two patients suffering from that disease (Table Cases 5 and 7), who were operated on by other surgeons, died in seven months. I perform thyrotomy some years ago in a non-malignant case. The patient had suffered from increasing difficulty in breathing for some time, owing to vocal cords having become adhesive to each other throughout the anterior three-fourth of the glottis by a tough web. I twice done an endolaryngeal operation on his patient, but though I had succeeded dividing the web on each occasion, the two edges had again become adherent. I therefore determined to obtain better access by dividing the thyroid cartilage, and I performed the operation at the Throat Hospital in the presence of my colleagues. In this case the patient would certainly have died by suffocation if nothing had been done, but I regret to say that the operation was not successful, death having occurred on the eleventh day from pyro-pneumonia.

Everyone knows that operations on the air-passages are very liable to be followed by inflammation of the lungs or their serious and mucous membranes, and in adults these complications are almost invariably fatal. Thyrotomy (division of the thyroid cartilage) than tracheotomy (opening of the trachea). It is absurd, therefore, to pretend that the operation is free from danger. The actual mortality, shown in Table I., does not give an adequate idea of the risks attending it, for there are many other results occasionally following successful cases. Thus, in case No. 1, according to Dr. Cutterbuck's words, "the return to complete sensibility was retarded by the accumulation of blood and mucus in the mouth, which ran down the trachea and out of the artificial opening. This was also accompanied by profuse sweating and some flagging of the pulse." After a patient was put to bed "vomiting ensued, a large amount of blood, mingled with mucus, was evacuated."

In one of Professor Navratil's cases, the hemorrage was alarming, and the patient nearly died under Dr. Kaiser's care, from the quantity of blood which passed down the trachea. In another of Navratil's cases the patient spered from high fever after the operation. He expectorated a quantity of blood and pus; the parts round the wound became œdematous, and the patient was in a very critical state.

In Professor von Schrotter's case the operator observed that after dividing the thyroid cartilage, holding open the edges of the wound with the hooks "gave rise to such paroxysms of coughing, and caused so much fresh hemorrage, that the examination could only be carried on with difficulty." Afterwards, "the sputa consisted of pure blood, even well to the night, and on the following day the expectoration was still coloured."

Mr. Timothy Holmes remarks with regard to his case, "that the parts over the larynx were found to be peculiarly vascular. After the hemorrage caused by the preliminary incision had been checked, the thyroid cartilage was divided." The bleeding that followed was very considerable."

Again the reporter of Mr. Davies-Colley's thyrotomy remarks, that "the boy at one time ceased to breathe, blood having apparently down the trachea into the bronchial tubes and the thyroidectomy acting powerfully on the lungs. But after artificial respiration had been tried on for several minutes the little patient recovered."

Dr. Gouvel of Paris, pointed out many years ago, that when the thyroid cartilage is divided in the median line, and the two sides of the larynx are *held back or pulled outwards*, the opening is very small, not so large in fact as the upper) natural opening of the larynx. If in order to obtain a very complete view, the sides of the larynx are too forcibly pressed back, real injury is likely to be done to the parts attached to the wings of the thyroid cartilaginous such injury would inevitably give rise to acute and dangerous inflammation. For is reason surgeons do not venture to separate the sides of the larynx (after thyrotomy) to any considerable extent, but are obliged to content themselves with a very imperfect view of the interior.

Dr. Gouvel's exact words are: "The opening gained by the separation of the two wings of the thyroid cartilage is so narrow that is with difficulty one can introduce in the nail the blades of a closed forceps. It was impossible for us, in the case of the patient who the subject of observation, No. 84, to separate the blades of a polypus forceps between the thyroid wings in spite of the gravest efforts. We should certainly have produced fractures." In the case the operator associated with Dr. Fauvel was not a "rough and ready" surgeon, but the accomplished Mons. Tarnone of the most brilliant and also the most careful of living operators.

Thyroidectomy is by no means free from risk, as the reporters, in many other surgical procedures so readily undertaken at the present day, is attended with considerable danger. The fashion of reckless operating now in vogue owes its existence to a combination of circumstances, some of which may be easily overlooked. One of these is curiously enough the introduction of antiseptic methods. Many every great discovery is attended, however, with some drawbacks, and even the blessing invention of Sir Joseph Lister, by rendering the conditions under which operations can be performed much more favourable has guided in some rash surgery. The conservative traditions of Langenbeck, Nelaton, and Langenbeck, have been forgotten, and as M. Verneuil remarks, at present, "no one surgeon cutting all his colleagues cut it, but in a different way." Dr. Gottstein, of Breslau, lose practical work on "Diseases of the Larynx" (now the best text-book dealing with the diseases which is published in Germany, remarks (page 168):—

"The extirpation of malignant neoplasms by thyrotomy, has according to present experience given very unfavourable results. In sixty cases collected by Paul Bruns, in two instances death occurred from the operation, and only in one case no local recurrence took place; but here the fatal termination was due to cancer of the suprarenal bodies and of the left kidney. In all the other eighteen cases, local recurrence took place after a longer shorter time, in most cases indeed after two or three weeks, and only once was it delayed

ascained even with approximate certainty until November 1887, if indeed it really existed before that date.*

In the second part I shall briefly consider some of the individual reports contained in the pamphlet entitled, *Die Krankheit Kaiser Friedrich's III.* ("The Illness of the Emperor Frederick III.")

PART I.

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