Original Communications.

REMINISCENCES OF A FOUR MONTHS' STAY WITH PROFESSOR A. VON GRAEFÉ IN BERLIN.

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THE Russian Government, about to establish universities in several of the largest cities of the empire, Odessa among the number, where there is first to be a medical faculty only, intends at this latter place to erect a general hospital on a truly Russian scale, as there are no fewer than three hundred of its beds to be assigned to patients affected with eye-disease only. The Italian Government, again, proposes, it is said, to place Dr. Sperino at the head of an ophthalmic hospital to be established at Milan, which is to afford accommodation to three hundred patients. As yet, however, there does not, to our knowledge, exist any ophthalmiatric institution equal in extent to that of Professor von Graefe in Berlin. If mere dimensions were of any essential importance, we might add that the latter has recently possessed himself of very extensive property directly adjoining his present establishment, which is thus expected, at no distant day, to assume greatly enlarged proportions. Besides, whatever quantitative attempts in this direction the next future may realise, will all have to be traced to the example set and the impulse given by Von Graefe, whose advent in conjunction with Helmholtz, Donders, and Bowman, will ever mark an epoch in the ophthalmic province of medicine.

The uniqueness of Von Graefe's establishment does not, however, consist in the extent of it, but in these facts; that it is an entirely private undertaking, even at present all but unaided from without; that he, the master, reigns absolute in its precincts, to which, moreover, whilst at Berlin, he almost entirely restricts his out-of-door practice; that he never delegates any of his duties, excepting the merest routine—not disdaining to do himself thousands of times over that which lesser minds would scorn as derogatory; and, especially, that the distinction between private and public practice is here in a great measure sunk, so that patients of both sexes are seen from every quarter of the globe and of all classes of society. To other features, in our opinion no less distinctive, we shall further on find opportunities of calling attention.

As regards numbers, when we state that, from an average of the last five or six years, about six thousand patients annually are entered as seen, during the nine months of his stay at Berlin, by Professor von Graefe, both in private and public practice (for all are entered day by day promiscuously in his journal), the figure will, perhaps, at first surprise by its smallness; but, in explanation, we will restrict ourselves to mentioning the fact that there are at present almost all over Germany medical men to be found fairly conversant with eye-disease, not merely in the large centres and in the university towns, but in many smaller places, who have attended the school of Von Graefe; the disciples of which, as is well known, are now dispersed all over the world.

Professor von Graefe's "Eye-Clinique" is situated

in the Karlstrasse, at the north-western extremity of the city of Berlin, close to the river Spree, just where this leaves, after having traversed the town, in close proximity to the vast park, called the "Thiergarten", as it were the lungs of Berlin, and at a very small distance from the "Charité", the largest hospital and clinical school of the kingdom, amongst the teachers of which Virchow, Frerichs, and Traube are at present the foremost. Although the clinical teaching of ophthalmology at the Charité is entrusted to Professor Jüngken, who, well stricken in years, combines this post with that of clinical professor of surgery, a small division, comprising some forty beds, has for some years been placed under the direction of Professor von Graefe. His patients here, all of the poorer class, and left to the immediate care of a military medical officer with his subordinate assistants, are mostly such as are affected with chronic inflammatory eye-disease, and whose cases but seldom call for the performance of a capital operation.

The edifice of Von Graefe's Eye-Clinique is a corner house, in the main three-storied; but a small portion of the back façade, going by the name of the "small house", consists of two stories only. The block, as it appears at present, is a combination of three houses, none of which was originally planned for the purposes of a hospital; and, as there has never been a thorough reconstruction, the interior is of almost bewildering intricacy. In most parts of the building, the sick-rooms are opposite each other, divided by a narrow passage, and looking into the street or into the yard respectively. The rooms are heated, each separately, by means of the customary German stove, constructed of glazed tiles, and standing in a corner of the room. The stairs, passages, and some of the dwelling-rooms, are lighted with gas; in the sick-rooms, candles are used. There is no artificial system of ventilation; but the building is provided with pipe-water and with water-closets in all its stories. These latter are far from being *cabinets in odors*, owing chiefly to an overwhelming stench of tobacco—a nuisance the toleration of which is the more surprising, as persons of both sexes are compelled to resort to these abominable places. There is only one bath in the whole building. None of the rooms are without double windows and weather-blinds—the latter made of strong linen twill, and moving between the two windows. Every door is edged throughout with list of woollen cloth. The curtains, the inner blinds, and the bed-screens are all of dark blue merino; the folding candle-screens, of green silk. On the ground-floor there are no more than four or five sick-rooms for private patients; there is, besides, the diphtheritic ward, consisting of a few small rooms. The remainder is occupied by the clinical department on the one side; the porter's room, the inspector's dwelling-rooms, and the patients' assembly-rooms, on the other. The kitchen, presided over by a male cook, is underground, where also some of the male servants are accommodated.

The Clinique affords accommodation for upwards of one hundred patients. Pretty nearly half of the beds are assigned to what are called hospital patients; the other half to private patients. The rate of payment, together with the character of the accommodation, forms the distinction between these two classes of patients. The patients of the hospital proper are charged at the rate of £1:17:6 per month, for all in all. There are, however, about fifteen beds for such patients as are unable to pay, entirely entertained at Professor von Graefe's own expense; and a considerable number of hospital patients, again, are admitted at half the usual

charge. Many also are assisted with a free pass by the communal authorities of Berlin and of other towns, who undertake the liability for them. The occasional overflow of hospital patients are accommodated at the hospital charge by the two male attendants, one of whom lives within the building, the other close to it. The rooms forming the hospital are for the most part situated in the top story (where there are but a comparatively small number of private sick-rooms), but partly and stragglingly also on the first floor. The hospital rooms, modestly furnished, though none without a sofa, contain from three to six beds, all mattedress, which, during the day, are raised against the walls. Each of these rooms has its cubic space marked on a board, and, like every sick-room in the house, is provided with a thermometer. The hospital wards, visited by the professor with the same scrupulous exactness as the private portion of the establishment, are by him entrusted to the superintending care of Dr. Waldau, and more especially attended to by his junior clinical assistant—whose office is an entirely unpaid one—at present Dr. Tachau of Hamburg, who invariably accompanies Von Graefe in his hospital visits, and has to watch the cases with such care as will enable him to meet, in his reports, the exacting interrogatory of the master.

The private sick-rooms, about fifty in all (there being some in the first story, rented for the purpose, of a house opposite the Clinique), are of various proportions, a small number of them being narrow and one-windowed only; by far the majority are on the first floor. Each contains, for the most part, one bed only; and the office of this has, in the smaller rooms, to be performed by the sofa, inside which the bedding is placed during the day. The furniture—mahogany, and fully sufficient—is pretty uniform in all the rooms. The charge per bed (there staying, in many instances, a relative, friend, or attendant, with the patient at the Clinique) varies from four to five shillings a day, according to the size of the room, but independently of the aspect and of the story in which it is situated. For this payment, lodging, meals, and service are afforded; while fuel, lights, medicines, night-watches if required, errands, etc., are separately, and for the most part moderately, charged for. There is, of course, to be paid, besides, the fee for medical attendance, as given, first by the professor himself, and secondly by one of his three assistants, Drs. Waldau, Arendt, and Ewers, to the care of one or the other of whom each of these private patients is entrusted. The sick-rooms all over the establishment are regularly visited by Von Graefe once a day; but every operation-day—i. e., three times a week—and frequently also on other days, he sees the operative cases and others requiring it again late at night. On many days, he pays three or even four visits at the establishment. In his visits to the private patients, he is not usually attended by any of his assistants, who have to report what is necessary at other times; but a male attendant follows him with a case containing the most usual applications; and the nurse to whose department the patient belongs has to be regularly and promptly at hand with her own medicine-case and dressings, or else with those set apart for the individual patient. The private patients are often, whilst at the Clinique, attended to for their general bodily ailments or some special affection by their habitual advisers, or by some practitioner called in at their own desire or at Von Graefe's suggestion.

The whole of the patients are tended by female nurses, who have each a housemaid attached, with whom they appear to work in pleasing harmony, one having often momentarily to act as the substitute of

the other. There are as many small kitchens as there are couples of nurses' housemaids in the private portion of the establishment; five or six rooms being apparently the complement for each couple. The nurses, varying in age from about 16 to 60 (and of whom only a small number have for a long series of years been attached to the institution), have to serve an apprenticeship of several months, during which they receive no wages, under one or another of the older nurses, and are each and all free to leave or liable to be dismissed at less than a day's notice. Not unfrequently, individuals who have been patients of the Clinique before, stay or return to become nurses. There are now two young and very efficient ones, wearing each an artificial eye, in place of the one enucleated at the Clinique.

The nurses, their training over, are expected to be, and generally are, most prompt, clean, and handy, in the management of dressings, applications, thermometrical measurements (to which great attention is here paid), and the like. They have to provide, and seem to know well how to procure from the patients or the friends of the latter, the whole of the old linen and charpie required in their respective departments. They do not appear to be overpaid; but in compensation are certainly receivers of substantial bounties on the part of their patients. The discipline throughout the institution, with its staff of from thirty to forty officials and servants, leaves, on the whole, nothing to be wished for. With little or no noise, the word of command finds its way in every direction, and everywhere meets with ready obedience. Although the utmost stretch of severity of which the gentle disposition of the master admits, is a momentary semblance of harshness, yet the faintest intimation of his approach, a mere whisper of his voice, never fail to secure the swiftest attention.

There also resides in the establishment a young lady, versed in languages, who had before been a patient herself, and whose office consists, apart from presiding at table, in attending to the casual wants in the way of correspondence, conversation, reading, etc., of the more or less helpless among the private patients.

The meal hours of the establishment are as follows: breakfast at eight, dinner at two, coffee at four, and supper at seven o'clock. The house door is locked at 10.20 p.m. The meals generally—we are now speaking of the private portion of the establishment—are very carefully prepared and from good material, except the coffee, which is distinguished by its weakness. The dinner is as substantial as persons enjoying perfect health are accustomed to partake of abroad. The ordinary beverage is water, and this of tolerable quality. A glass of beer or a bottle of light wine may be ordered and had, but they are, on the whole, but little in request. An exception in diet from the rule is apparently but seldom thought necessary, and perhaps almost exclusively for persons who have had some trying operation recently performed upon them.

The dinner for those who are permitted or choose to have it out of their rooms, is served in the dining-saloon, which accommodates about forty persons. The attendance here is most efficient. The company of ladies and gentlemen, of course greatly varying in age, comprising natives of every clime, often the many healthy companions of patients, and hardly ever persons very gravely affected, is frequently most interesting; and parties of a moderately genial disposition are sure to carry away with them many a cherished contribution to the pleasures of memory. The dining-room possessing the luxury of a piano, music and singing often afford a grateful entertainment to the company after dinner. Those who are

compelled or prefer to take their dinner in their own room receive it there punctually; but, to their disadvantage, the whole of it at one time, and, what is more grievous to some and mysterious to all, curtailed of the tart. At four o'clock P.M., coffee is served to those who prefer in the so-called garden-saloon, adjoining the dining-room; from which a few steps lead down to what is by courtesy named the garden, though it is little more than a small and unpaved portion of the not very extensive yard.

The long university vacations, from the beginning of August to the end of October, Professor von Graefe has of late years regularly spent at Heyden, in the canton of Appenzell, and during the month of October in Paris, interposing a short stay at Heidelberg on account of the Ophthalmological Congress which meets there every year in the beginning of September; at all of which places patients in great number and from every quarter crowd upon him. During the whole of this time, the In-patients' Department, as we hear, and as may be imagined, is well nigh deserted. But the daily attendance on out-patients, which we shall now endeavour to sketch, as we have found it in the Professor's own keeping, is continued without interruption by his assistants. We may perhaps state by anticipation that, in a distant part of the town, out-patients, other than those of the Clinique, are twice a week attended to by one of the assistants.

At the Clinique, attendance is given by Von Graefe, whilst he is at Berlin, every day, Sundays and holidays included. The patients begin to appear at twelve o'clock, and distribute themselves over the three anterooms, which in an irregular curve skirt the reception-room. The latter, which occupies the corner of the ground floor, is about twenty-six feet by fourteen, with three windows on its long and two on the small side, and has three doors, one by which visitors and students enter and the patients leave, another for the patients to enter from the ante-rooms, and a third (a sliding door) giving access to the ophthalmoscopic room, which is fitted with all the requisites for two persons to be examined at the same time. There is besides a spacious chamber for microscopical and pathologico-anatomical examinations; where, also, private conferences and consultations are held, and the pathological, together with a pharmacological, collection, optical instruments, and the long series of patients' entry-books, are kept. The reception-room is operation-room and lecture-room as well. When the time for operating has come, tables and chairs are moved out of the way, and the couch so long raised against the wall, a very convenient and little complicated structure, is lowered and properly placed.

The applicants for relief are admitted indiscriminately, without any inquiry into their pecuniary circumstances. There being no outside contributors to this entirely private charity, anything like a recommendation is unknown. The bounty thus lavishly proffered is, of course, largely abused; but this is little heeded, and an occasional inquiry about the fee incurred is for the most part ignored. However, a considerable number of the Professor's private patients, apart from the occupiers of the sick rooms, make here their appearance pursuant to his desire, and promiscuously with the real or pretended objects of charity. Many a lady or gentleman, of noble birth or high rank, superior military officers, deputies, etc., arrive here to occupy for a space the seat before Von Graefe, just vacated by some person of the labouring class.

From twelve to half-past one o'clock, a large number of patients are attended to by Dr. Arendt; viz., those who are judged by Von Graefe no longer or

yet not for some time to require his own immediate care, and are therefore committed by him to what he calls "the second chair." He appears himself at the Clinique by about two o'clock. Mostly before commencing his attendance, he sees a knot of private patients who have been waiting his arrival, and are content to have his advice on such higher terms as are here charged in comparison with the fee at his private residence. At the latter, he sees patients only on three or four days of the week, invariably in the evening, by lamp-light, from seven o'clock often until midnight. Every patient has to sit down before him; and he occupies a higher chair with its back to the window. The out-patients are admitted in batches of from four to six by an attendant, who provides the new comers with a slip of paper containing their names, ages, occupations, and residences, for entry in the journal, which is kept by the junior clinical assistant. The patients looked at, Von Graefe dictates the diagnosis to be entered and makes such applications as he deems proper, or despatches the patient for more thorough previous examination either to the assistant on whom the ophthalmoscopic exploration of cases exclusively, and for the most part also the inquiry into the state of refraction and accommodation, devolves — at present Dr. Schelske; or to the second chair, represented by Drs. Arendt and Ewers, who also supply patients with their prescriptions, as directed by Von Graefe. There is, however, comparatively little prescribing, as inward medicines, except in specific disease, are held generally to have but small effect upon the local disorder, and as the various local applications are in most instances not only made there and then, but the fullest scope is afforded for their speedy and frequent repetition, the attendance being daily. The preliminary examination by the assistants over (who are all qualified practitioners with a practice of their own), the patients again appear before Von Graefe, furnished with a slip of paper on which is written the result of the examination—i.e., in many instances, the diagnosis thus made out—which is in ophthalmoscopic cases mostly verified by Von Graefe either immediately or at a later moment. Frequently, the patients have to carry away with them, and re-present on their return, a paper with the diagnosis, the state of vision, the remedy applied, etc., marked upon it. Regular prescription-sheets left in the hands of, and regularly to be produced by, the patients, are not in use, and are in a great measure rendered superfluous by Von Graefe's extraordinary memory. Besides, the prompt attention to the indexing of the paged case-books secures expedition in reference. Whilst he attends, hardly any application is made but by his own hands; cauterisations, incisions and probings of the lacrymal passages, the applications of powder, ointment, and drops, opening of abscesses on the lids, even frequently the performance of dressings, are all sufficiently weighty with him not to be lightly entrusted to others. Homogeneous cases are by the attendant caused to appear *seriatim* in close succession, such as patients requiring their lacrymal passages to be probed; often a dozen of them will come forward presenting their probes, one or two, as the case may be, previously handed to them by the attendant. It is a curious spectacle to see a number of persons seated in a row, each with two long, shining, tapering objects, stiffly projecting at his forehead like a couple of horns or antennæ. We were struck by Von Graefe's dexterous despatch in the performance of Weber's operation and the introduction of his probes. Readiness is with him the chief postulate, and it is efficiently secured. The patients, with rare exceptions, have their senses about them when questioned. Verbosity on their

part is sure to be shortlived; nervousness becomes pluck itself where the minutes are so precious; the infant to be operated upon appears at the desired moment with its body firmly secured to the pillow by many windings of a roller; every requisite of dressing is unfailingly presented when the hand but moves to seize it; the patient under chloroform, independent of rank, somehow contrives speedily to shake off the trammels of the soporific so have his muscular capacities tested after tenotomy. The blennorrhic and diphtheritic cases appear towards the close of the attendance. A number of them are always in-patients, brought down by their respective nurses. The junior assistant, so long engaged in writing, now steps forward to assist in the tedious manipulations which the cases of these little sufferers necessitate, who, with their heads fixed between Von Graefe's knees, are the objects of his most scrupulous and laborious care. His vigilance in the warding off all danger of infection either to his own or others' eyes by the utmost punctiliousness in ablation cannot be surpassed. No case of purulent or trachomatous disease is ever touched by him without resorting to the basin thoroughly to wash his hands with soap and water, whilst in particularly suspicious cases chlorine solution is superadded for the purpose. It is no exaggeration to say, that we have seen him clean his hands in this manner upwards of twenty times in less than two hours of attendance. Apparently, most sorrowful experience has made him thus keenly alive to the necessity of caution. One of his assistants has had one of his eyes all but mutilated by diphtheritic infection. In certain cases where the risk may be apprehended of the discharge squirting into the surgeon's face, Von Graefe even protects his eyes with a pair of plane glasses.

Patients whose cases are likely to be of interest to one or another of the celebrities of the profession, or to be benefited by their attention and treatment, are frequently directed to their respective addresses—thus, *e.g.*, grave cases of malignant disease to Von Langenbeck; neuro-pathological cases to Romberg or Griesinger; cases by their inherent difficulties of physical exploration courting the touch of a master to Traube; again, cases of nervous disease, *e.g.*, exophthalmic goitre, for electric treatment to Remak, etc.

The remedial agencies in which trust is here placed are few in number. Internal remedies, as we have said before, are little in request; for specific purposes mercury and the iodide of potassium—the latter often in combination with iodide of mercury*—are appreciated. The preferred method for mercurialisation is inunction. Of late, the Turkish bath has become a favourite resource, apparently for alternative purposes generally. Aperients do not seem often to be thought necessary. For the ordination of quinine there is much less occasion than we find in this country. (Altogether, the out-patients, as regards appearance and intelligence, are of a different cast; as the national wealth of Prussia is yet far from the standard of England, so her national misery, if it ever should come to rival, has not yet attained to British dimensions.) A combination of camphor and carbonate of ammonia is occasionally, at the Clinique, ordered for the same purposes for which here the more expensive quinine is prescribed. Blisters are but sparingly made use of, and issues all but ignored. General depletion appears to be entirely abandoned. Local bleeding is, in the inflammatory condition following operations, utterly repudiated; and, in acute disease generally, very little resorted to. Contrariwise, in congestive conditions, espe-

cially those so frequently attending amblyopic disease, extensive use is made of Heurteloup's artificial leech, with the application of which a special surgical assistant is entrusted at the Clinique. The eye-douche continues to be held in deserved esteem. There are, further, the multitudinous orders for the various refracting-glasses, either spherical or cylindrical; a kindred resource is the prismatic glass in muscular asthenopia, etc.

Nothing strikes the visitor more, though not at the Clinique only, but in Berlin generally, than the extraordinary number of persons wearing blue glasses. These, mostly plane, and ordered for the purpose of protection from the yellow rays of light, are now frequently preferred of the globular shape. The neutral tint or smoke-glass is seldom seen. The sunlight, throughout the year, is more glaring abroad than we have it here. Moreover, there is at Berlin, besides Von Graefe, an authority perhaps greater than he in this particular, favouring the resort to blue glasses, Professor Böhm, who has made the merits and effect of the blue light his special study, and to whom practical ophthalmology is certainly indebted for valuable information on this head. Whoever has cared to inquire into, and in suitable cases try, the effect of blue glasses, will not, on account of a possible excess due to fashion, too unfavourably judge the ascendancy obtained by this therapeutical agent. A reliable firm of opticians at Berlin (Pätz and Flohr) is specially, and we think wisely, patronised by the Clinique in the ordering of glasses.

Atropia, as it were the staff of ophthalmology, is extensively resorted to; but we were gratified to find much discretion observed in its use. Correspondingly, those tedious and obstructive conjunctival and erysipelatous affections consequent on its administration appear to be comparatively rare. The application is made with the brush.

Of the remedies directly applied to the palpebral conjunctiva, the solution of the absolutely neutral, and thence so inoffensive, acetate of lead (generally one drachm to the ounce) and the nitrate of silver stick, mitigated by the admixture of double the quantity of nitrate of potash, are in the order in which they are here named by far the most frequently employed. The light-handed touch, the circumspect restriction of the remedy to the really affected locality, and the singularly painstaking ablation (with water in the case of lead, with a solution of chloride of sodium first and then with water in the case of the caustic) must, in our opinion, be ranked among the characteristic features of the treatment here bestowed. The mitigated lapis seems to have almost superseded the sulphate of copper so much in request some twelve years since, when we attended this clinique. However, when used, the sulphate of copper crystal is here employed in a very elegant form; viz., carefully ground into pointed cones which are fixed in a crayon-holder—to be obtained, like the other articles mentioned above, from the wholesale house of Mr. Simon, Spandauer Strasse. The use of the unalloyed lunar caustic is almost limited to the purpose of obliterating the lacrymal passages; for a similar end the nitrate of silver is, in suitable cases, also employed in the form of small silver probes or of bougies coated with the salt. Other favourite topical administrations, partly of recent introduction, are the inspersion of calomel, the application of liquor chlori, and especially that of Pagenstecher's amorphous oxide of mercury ointment—all these in fascicular or phlyctenular kerato-conjunctival affections; the latter excellent remedy (which is regularly removed from the eye again after a few minutes), also in subconjunctival (circumcorneal) inflammation. The tincture of

* Iodide of potassium 3j; iodide of mercury gr. vj; water 3iij. A teaspoonful to be taken in the morning.

opium is considered by Von Graefe as a specific in the dry form of conjunctivitis. Amongst the derivatives might still have been mentioned the frequent application, but lightly made, of the mitigated lapis or the concentrated lead vinegar (solution of basic acetate of lead) to the cutaneous surface of the upper lid; but, above all, the almost stereotyped use, in acute inflammation attended with more or less intolerance of light, for inunction to the forehead, of Arlt's salve, containing the extract of belladonna and the white precipitate of mercury in varying doses (in most cases respectively one and two parts to twelve of fat. In the administration of this ointment, it is not the specific action of the ingredients which is sought; the remedy appears, in the main, to be intended as a sedative and counterirritant, and is usually directed to be applied in tolerably large quantity from six to eight times a day. The practice of ordering bulky lotions does not prevail at the Clinique; the most frequent prescription is that of two drachms of the acetum plumbi, of which a few drops mixed with a few ounces of water furnish a lead lotion to the patient which he may thus frequently renew for himself. Of very general extemporaneous employment are the elegantly prepared glycerine and starch ointments (Simon's), with their admixtures of sulphate of atropia or acetate of lead or nitrate of silver. Tar is another local application ever at hand for cases of exanthematous lid-affection.

We conclude this survey of the pharmacological armoury with a reference to some of the principal instruments of treatment relied upon by Von Graefe. Sustained pain after operation is invariably met by the subcutaneous injection of morphia; iced compresses are the chief remedy opposed to the diphtheritic process during its yet unbroken severity, and are likewise resorted to when cutaneous inflammation rises to an excessive height. But the great adjuvant in the subjugation of danger, or in the conquest of a partial effect at least, is the systematic use of compression, in many instances alternating with warm camomile fomentations, of a temperature regulated in accordance with the requirements of the cases. It is this latter method of proceeding matured to its present perfection by the thoughtful and assiduous study of many years, and ever and anon, in the individual cases, practised with unswerving vigilance, which, in our opinion, again constitutes one of those patent secrets of success attending the practice of a master of the healing art.

If, by way of transition to the chapter of operations proper, I shortly refer to those multifiform manipulations which in a sense belong to the province of what is called minor surgery, as they are mostly performed in a more off-hand way—such as the opening of abscesses, or of the lacrymal ducts after Weber's method, or the abscission of prolapsed iris—it is because Von Graefe's systematic dealing with the last-named morbid occurrence has appeared to me so pre-eminently instructive. In those frequent instances of ulcerative perforation of the cornea, whether of diphtheritic or blennorrhic origin, the luxuriating protuberance is never winked at, but again and again removed with scissors, until, in progress of time and by dint of cauterisation of the mucous membrane, the exuberant tendency of the morbid process, if not an invariably destructive one, is effectually subdued. It is once more our impression that diligence and devotion thus succeed in rescuing much that else would be unfailingly lost; and the least gain is a more speedy termination of the process.

[To be continued.]

DESCRIPTION OF A KIDNEY, WITH CYST, CONTAINING CALCULI.

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THE kidney was taken from a sailor, a patient in the Newcastle Infirmary, under the care of Dr. Humble, who kindly permitted me to make the *post mortem* examination, and the further privilege of giving the following description.

The organ, when removed, was of ordinary size and natural in appearance, the capsule being removed with ease. When divided by a longitudinal incision, the lower third was found hollowed into a cavity, filled with serous fluid, and containing four calculi; the remaining portion being healthy, the cortical substance well distinguished from the medullary. The cavity was equal in size to a large walnut, internally ridged, lined with a glistening white membrane, and for two-thirds of its circumference bordered and separated from the capsule by the cortical structure, fully one-fifth of an inch in thickness. No communication existed between the cavity and infundibula, which, with the pelvis and ureter, were of ordinary capacity and free from calculi. The fluid was clear, colourless, and devoid of any urinous odour. The calculi together weighed nine grains. Two were like small peas; the others larger, nodous, with two or three prolongations. The section of one of the small ones disclosed a distinct nucleus, surrounded by visible layers. Chemically, it was composed of oxalate of lime.

The right kidney was healthy. The pleura were firmly adherent; the lungs highly emphysematous; the bronchial tubes filled with tenacious mucus; and the mucous membrane extensively inflamed—the immediate cause of death.

Cavities or cysts in the kidney, perfectly distinct from the pelvis, and filled with serous fluid, are not unfrequently observed; but, containing calculi, very rarely so—the renal calculus being commonly located within the pelvis or the cyst-like expansion formed by the dilatation of an infundibulum.

The obstruction of a tube, and the extension of the pervious portion, from the collection of fluid, is applicable as an explanation of the origin of the cyst; the calculi, in all probability, being subsequently formed by deposition upon some urinary or organic matter within the tube.

A WONDERFUL BULLET. I had just been ordering our men not to waste their ammunition, and to fire only when they saw the person of a Yankee completely exposed, when close at hand I heard the dull thud of a bullet striking home, and turning round I saw one of our soldiers, a gallant young fellow whom I knew well, throw up his arms and fall heavily to the ground. Dismounting at once, I hastened to his side; but finding that the ball had struck him right in the middle of the forehead I regarded him as a corpse, and deemed all further assistance wholly unnecessary. Not many minutes had elapsed, however, before the apparently dead man began to move, and when the surgeon, who had already arrived, poured some brandy down his throat, to our infinite amazement he opened his eyes. A few hours later, miraculous to relate, when the bleeding from the wound had ceased, he had recovered sufficiently from the severe shock to return to his post of duty. According to the surgeon's statement, the ball, striking obliquely, had glanced, passing between cuticle and skull, all around the head, emerging at last from the very place it had first entered. (*Blackwood's Magazine.*)