The following are his remarks respecting its rupture:—

"Rupture of the tendon usually takes place in persons beyond the meridian of life, in whom the powers of nutrition begin somewhat to fail, and in whom that senile change, so well described by Sir H. Halford as a climacteric disease, is about to set in; the usual situation of the separation is about midway between the glenoid cavity and the anatomical neck of the humerus. Should it turn within the groove, the effusion is greater, and the retraction of the separated portion to the belly of the muscle is more marked, because it, in this instance, escapes from the groove. When the injury has taken place more within the joint, sufficient connexion remains between the tendon, the synovial membrane, and the cellular membrane around it in the groove, to prevent this great retraction."

The symptoms of these injuries are a slight flattening of the outer and posterior part of the joint, and a prominence in front, with crepitus, and pain on moving the shoulder. One sign which occurred in one of the cases narrated, is, in the author's opinion, most important.

"The slightest movement of the elbow backwards was followed by acute pain precisely in the situation when the tendon of the biceps turns over the head of the humerus; there was, also, effusion of blood into the subcutaneous cellular tissue, but confined to the tract of the biceps tendon."

The author does not think it probable that one could distinguish rupture from dislocation of the biceps. He says,—

"In the latter injury I should expect much more pain and a greater loss of power than in the rupture of the tendon, the patient being nearly in the same condition as if he had a loose cartilage in the joint."

With respect to the treatment of these injuries, we have it said—

"In either of them, I do not think that much can be done in the way of treatment. If I suspected from the symptoms a dislocation of the tendon, I fear that no plan I could devise would be at all efficacious in bringing it back to its true anatomical position. On the other hand, I think much mischief, as synovial inflammation, might be produced by any ill-directed efforts to accomplish the desired end. I should elevate the shoulder, and direct the patient to flex and extend the fore-arm, at the same time rotating the humerus, and then apply warm fomentations, (a plan to be adopted in all sprains and injuries to tendinous structures,) and advise perfect rest, taking great care to throw the head of the bone backwards, by bringing the elbow forwards, until all chance of inflammation had ceased. At the end of a fortnight or three weeks, I should recommend passive motion, so as to enable parts to adapt themselves to their new position. Should it appear that the tendon was ruptured, I should adopt the same plan; fomentations, rest, and afterwards passive motion, would be all that the surgeon could advise. The vis medicatrix naturæ would do the rest. As the object would be to accustom the bone to its slight change of position, I should not employ either pads or bandages; a sling for the arm, in the manner above stated, would be all that is necessary. It is of course possible that acute synovitis might set in immediately after the occurrence of either injury; it would be combated in the usual way."—p. 149.

There can be no doubt that a rupture or dislocation of the biceps tendon is of more frequent occurrence than it is thought to be; but, at the same time, the diagnosis of these injuries is very difficult; perhaps there is no certainty of distinguishing such until a post-mortem examination reveals them. The following case, which we quote entire, is given by the author as an instance of rupture of the long head of the biceps:—

"John Gadsby, aged forty, applied for relief as an outpatient at Guy's Hospital, June 20, 1846; was a sailor, and said, that the night before last he had fallen down and hurt his shoulder; he could give no precise account as to the way in which the accident happened, or as to the way in which he fell, being at the time, to use his own expression, 'a sheet or two in the wind.' He was a man of fair aspect, said he was at sea most of his time, very healthy, and had never had any rheumatic affection of his body or joints. He entered the surgery supporting his left arm with his right hand. On examination there was found some swelling about the shoulder-joint, but not sufficient to make any important points; the rotundity of the shoulder was not materially impaired; there was no depression to be felt under the acromion, no difference in the length of the two arms, but a decided prominence in the fore part of the joint; the elbow could be brought with ease to the side; he complained of great pain on attempting to raise his arm to his head, ('something appeared to catch,' he said) and upon throwing the elbow backwards, there was a great tenderness over the occipital groove; but he was able to flex the fore-arm without pain. Some attempts at reduction had been made by extension; it was put up, at my suggestion, upon M. Velpeau's plan, and the arm confined in that position for three weeks. Upon removing the bandages, there was still found a slight projection anteriorly of the head of the bone, and upon abducting the humerus from the side, it appeared to come against the acromion. I enjoined passive motion, cold ablutions, and occasional friction. The patient did not return."—p. 155.

The subject of Fractures of the Neck of the Humerus concludes the work, and the author invests this accident with the importance it deserves. He devotes too little space to the consideration of an accident, which equals in interest compound dislocation — we allude to fracture of the neck of the humerus with dislocation. This is a complication to which surgical writers have paid little attention, but yet it is one of importance; for it is somewhat difficult to diagnose it, and the treatment can hardly be by any means satisfactory. The following the author gives as symptoms:—

"It is usually accompanied by great effusion and bruising of the soft parts with rupture of the capsule and its tendons. In it all the common signs of dislocation are present; some of them are, however, modified and altered. The flattening over is said to be slight, owing to the shaft of the bone quitting the head, and returning to the glenoid cavity. The elbow can be brought to the side, and in place of lengthening, there is invariably shortening of the limb. If one hand be placed upon the head of the bone, and the humerus rotated, the former is found not to move. The arm is powerless, and all attempts at active or passive motion are productive of great pain."—p. 163.

It is extremely important to make a correct diagnosis of this accident, inasmuch as, if a dislocation alone is considered to be present, attempts may be made to reduce the bone, which will be useless, or even do harm. An instance has lately occurred under our observation, where, after a very severe injury, there were evident signs of dislocation into the axilla; a crepitus also existed; but it was not ascertained what the precise nature of the injury was. Ineffectual attempts were made at reduction. Some weeks afterwards, a powerful attempt was being made by the pulleys, when it was ascertained, by the surgeon who was rotating the arm, that the neck of the humerus was broken. The head being in the axilla at the same time, of course all trial to reduce it was very properly given up. This instance strikingly indicates the necessity of making a true diagnosis; and it also shows, that if the surgeon is not able to reduce an apparently simple dislocation in the axilla, he should carefully examine, to see whether or not a fracture may exist as well, and produce the difficulty.

This essay by Mr. Callaway is altogether creditable to him; it shows him to be an industrious and intelligent surgeon, and we cannot do otherwise than recommend it. Much valuable matter, statistical and otherwise, will be found, specting the particular injuries which are here treated of.

Medical Societies.

WESTMINSTER MEDICAL SOCIETY.

SATURDAY, OCTOBER 6, 1849.—MR. HIRD, PRESIDENT.

THE rooms of the Society were crowded this evening—the first of the session—with fellows and visitors. The increasing prosperity of this useful institution may be judged from the fact, that three new members were admitted, and seventeen proposals for new members were read from the chair. The Chairman, on taking the chair, said that the fellows had been

called together a week or two earlier this session, in consequence of the prevalence of cholera, to give them an opportunity of discussing that important subject.

Dr. WEBSTER read a paper, entitled,

OBSERVATIONS ON THE HEALTH OF THE METROPOLIS DURING THE LAST SIX MONTHS, MORE ESPECIALLY IN REFERENCE TO THE RECENT EPIDEMIC CHOLERA.

Referring to his previous communication respecting the health of London during last winter, read to the Society towards the close of the session, the author, after several prefatory remarks, said—Notwithstanding the very recent great mortality in the metropolis during the months of April, May, and June last, so far from being insalubrious, fewer deaths occurred in London than during the same period of 1848, although cholera had already carried off 268 victims, and diarrhœa, 240 individuals. The decrease was chiefly in scarlatina and typhus; in the former disease, the deaths were 322 less; and in the latter malady, 370, than during the same months of 1848. The author, however, made a very different statement indeed respecting the three months from Midsummer to last Michaelmas, when the mortality in London was greater than had ever been known, even since the great plague, 184 years ago. Instead of 13,503 deaths recorded in the same period of 1848, the numbers, this year, were a fraction more than double, or 27,159, by all diseases; and this increase chiefly arose from cholera and diarrhœa, by which two diseases 15,811 had died during the last quarter. Commenting upon this enormous amount of deaths, Dr. Webster observed: History tells us of the black death of the middle ages. In this country we often hear reference made to the black assizes; and, in popular language, black Monday is often mentioned. Now that the period of our greatest danger is happily passed, and the health of the community is rapidly improving, the first seven days of last September may well be called the "black week of 1849," seeing that 3183 human beings were then called to their final account, instead of 1008, as in ordinary weeks, being at the rate of 454 per diem, in place of 144, as in previous seasons. On the other hand, scarlatina only proved fatal to 404 individuals, instead of 1560, as in the former autumn, being a difference of 1156 in favour of the same quarter of 1849, just terminated. Again: small-pox had proved fatal in only 191 cases, since the 1st of last April to the 29th September of the current year, instead of 816 deaths, by the same malignant malady, registered during the parallel six months of 1848. In reference to the subject chiefly embraced by the author's paper, he would first notice the localities where the recent epidemic had prevailed most fatally; then the causes apparently influencing its appearance; and lastly, the measures to be employed to prevent a recurrence. Respecting the districts in which the disease had exhibited the greatest severity, speaking generally, it was most decidedly so on the low grounds adjoining the south banks of the Thames, where, in a population of only one-third of the entire metropolis, or 580,000 persons, nevertheless more than half the deaths by cholera, or 6708 out of the 13,114 registered during the last six months, took place in this part of London, being treble the amount met with on the northern side of the river, in proportion to the inhabitants. Dr. Webster then entered into several elaborate statements in regard to the comparative mortality of different localities,—whether in the southern, north-eastern, or north-western parts of London,—of which the following is only a very brief report. In Lambeth parish, the ratio of deaths by cholera was one person in every 91 inhabitants during the last six months. In St. George's parish, Southwark, one died in 64 of the population; whilst in Bermondsey the astounding mortality of one death in every 56 inhabitants is recorded. Contrasted with such sad mortuary details, the author then alluded to the north-eastern districts, in which the mortality was considerably less than in the parishes previously mentioned. Thus, in Whitechapel, the ratio was one death by cholera in every 156 inhabitants; in Shoreditch, one in every 134 persons; and in Bethnal-green, one fatal case occurred in every 120 persons resident in the parish. On the other hand, in London city, the proportion was one death by the recent epidemic in every 270 inhabitants. Again, in Marylebone, the proportion was one death in every 609 residents of the parish. In St. James's, Westminster, one in every 678; whilst in St. George's, Hanover-square, although 121 persons had died in a population now estimated at about 74,500, 100 of these deaths by cholera took place in that division of the parish towards Chelsea and the river, usually called Belgravia, having nearly half the entire population; besides, it should be noticed, that the number of deaths now stated does not include the thirteen fatal cases reported from St. George's Hospital, situated in the district. Several of the other deaths recorded occurred in the May-fair district, chiefly in the neighbourhood of Shepherd's-market, whilst only thirteen fatal cases are reported from the Hanover-square division, the most open, elevated, and salubrious portion of the parish, and as it has an estimated population of about 24,000, the rate of mortality was therefore only one death by cholera in every 1846 inhabitants. Of the thirteen cholera deaths in this part of London, seven were adults and six infants and children. The particulars of these cases were next succinctly related by the author, to show that the impaired constitutions, habits of life, residences, and previous disease, of most of the victims, very materially contributed to the supervention of the malady under which they had sunk, and the facts stated seemed most instructive in regard to the effect which insalubrity of locality &c. had elsewhere upon the epidemic. The sex and ages of the persons who died next occupied the author's attention. As to the former point, more women—about five and a half per cent.—than men were carried off by the cholera, whilst at least one-half of the victims were in the prime of life, the greatest number being from thirty to thirty-five years of age. One-fourth were infants or young persons, the remainder being old people. Speaking accurately, 3534 died under fifteen years of age, 7565 from that to sixty, and 2015 were upwards of that period of life. Subsequently, Dr. Webster proceeded to consider the causes apparently influencing the prevention of cholera, which he divided into four categories—namely, atmospheric, local, individual, and exciting, upon each of which topics he entered at some length. Respecting the ozonic theory, although ingenious, and well deserving of further notice, still so few facts had yet been brought forward in its support, that further investigation and experiments were necessary, to establish the deductions enunciated. Allusion was then made to the malaria of unhealthy districts, and various as also interesting reports were made by the author respecting the difference of atmospheric phenomena observed in London during the month of August and first week of September, at which period the recent epidemic proved so fatal, contrasted with those noticed during the second and latter weeks of September, when the malady declined so remarkably. Dr. Webster particularly adverted to the dryness of August, the great variation of the temperature between the night and day, with the small amount of electricity, and the low barometric pressure then observed; whilst in September the phenomena were often very different. The most influential local causes, in the author's estimation, were, low, damp situations; the vicinity of common sewers; open ditches filled with refuse; crowded neighbourhoods; recently used, and especially overstocked, grave-yards; cesspools; the absence of means for carrying away putrid animal or vegetable exuviæ; the want of free ventilation, as also of an ample supply of good water; the accumulation of filth, and similar abominations. The individual causes, again, were, dissipated habits; broken-down and debilitated constitutions; previous disease; personal uncleanness; deficient nourishment; neglect of premonitory symptoms; defective or deranged general health; bad clothing; misery; destitution; in short, whatever impairs the physical strength or moral energies of an individual. Amongst the chief exciting causes, Dr. Webster ranked bad water, especially if contaminated by noxious ingredients; decaying or putrid food, whether animal or vegetable; intoxication; exposure to the night air, particularly when asleep in insalubrious localities; great bodily fatigue; strong purgative medicines; fear, all mental emotions of a depressing character; besides any influence which suddenly debilitates the nervous system, or corporeal frame. Speaking generally, the author considered the recent epidemic ought not to be ascribed to the action of one influential or particular agent, but to a combination of the various circumstances to which he had alluded; and he thought we were too apt to reason erroneously, in concluding that atmospheric, local, or individual causes are exclusive or paramount. The measures necessary to prevent or modify a recurrence of similar epidemic maladies, in future seasons, next occupied the author's attention. On this head, he said that intra-mural interments must be put down throughout the country; the physical well-being of the population, especially the labouring portion, must be improved; low and damp situations ought to be rendered more salubrious; the light of the sun and the admission of pure air must not be taxed; a plentiful supply of good water ought to be obtained, particularly in densely crowded neighbourhoods; and all nuisances, either public or private, should be abated; whilst vested rights and individual interests should give way to the health of communities; for here "salus reipublicæ" is "su-

prema lex." On such questions as these there can be no mistake, there ought therefore to be no compromise. The symptoms, pathology, microscopic or chemical examination of the fluids, as well as the treatment of cholera, were not entered upon by the author, but left for future occasions. And as the disease is now almost universally admitted to be non-contagious, and his (Dr. Webster's) own opinions being also decided thereon, this part of the subject was not mooted in the paper. Dr. Webster then proceeded to give some very satisfactory examples respecting the immunity of particular public institutions, and of various classes of individuals, from the recent epidemic, although living in the worst localities, and exposed to even some of the most noxious influences. Of these exemptions, Bethlem Hospital was first adverted to, where no case of cholera had occurred amongst a constant population of about 700 persons, of whom upwards of 400 were insane; and as frequent changes occurred amongst the inmates, near 1000 persons had been thus exposed. This remarkable exemption of Bethlem Hospital was doubtless owing to its excellent ventilation and cleanliness; the plentiful, wholesome, and regularly-served food; the abundant supply of good water from a deep Artesian well, and other hygienic measures regularly maintained. Bridewell Hospital had also been free from cholera, although situated near Fleet-ditch, Puddle-dock, and Bride-lane, where, as also in houses in the immediate neighbourhood of the prisoners' cells, the epidemic had proved very fatal. In Cold-bath Fields' House of Correction, having a population usually about 1200, no case of cholera had occurred, whilst the inmates had been recently particularly healthy, and only two cases of illness were last week in the infirmary. Amongst the household troops of London, although fatal cases of cholera had occurred, the military of the metropolis, generally speaking, had seldom been in a better condition of health than they enjoyed during the recent epidemic. One fact was also instructive, from being analogous to the experience met with amongst the general population—namely, out of six deaths by cholera, five came from the Tower, and only one from a West-end barrack. The metropolitan police, consisting of 5600 men, furnished similar results; since, out of twenty-seven persons belonging to the force, carried off by cholera, not less than twenty did duty on the south side of the Thames, whilst of these, eleven died in the Borough or its vicinity, and three in Lambeth. Five policemen fell victims to the epidemic in the north-eastern portion of the metropolis, two died in Westminster, one being on the river; but not a single fatal case by cholera was met with amongst the police throughout the whole north-western districts. The deductions which may be justly drawn from the above important and authentic facts are most conclusive. At the dispensary to which Dr. Webster was attached, and where the sick applicants mostly belonged to the parish of St. James's, and the upper divisions of St. George's, Hanover-square, amongst 3252 patients treated by his colleagues during the last six months, not one fatal case of cholera had been met with; and it is besides remarkable, that the aggregate number of patients under treatment at this institution were fewer during the last three months, particularly in September, than throughout the previous quarter, comprising April, May, and June of the current year. Further, as an additional gratifying illustration that cholera had not been so virulent amongst all classes as many persons otherwise supposed, at insurance offices, although deaths by the recent epidemic have been reported at particular offices, the general mortality from all diseases, amongst the persons assured, had ranged, generally speaking, less than ordinary. At the insurance company in London to which Dr. Webster was the medical adviser, not only had no death by cholera been reported, but the casualties from ordinary diseases were under the average; and as similar statements had been made to the author by other parties, especially by Mr. Neison,— a great authority on such subjects,—the opinions now expressed must be correct. In concluding his communication, Dr. Webster made a short reference to Sydenham, especially when speaking of cholera morbus being so very epidemic during 1669, in which year not less than 4385 persons died, according to the old bills of mortality, by "plague, or gripings in the guts," which indubitably was the cholera alluded to by the above-named celebrated physician, although that appellation is neither before nor afterwards employed in any of these ancient documents. During the year 1670, the epidemic proved fatal to 3690 persons in London; but it declined considerably for the remainder of the seventeenth and beginning of the eighteenth century; so that exactly one hundred years ago—viz., in 1749—the amount of deaths recorded was not more than 148; whilst in 1793, the number of fatal cases from the same cause fell to only 14, in a total mortality, by all diseases, of 21,749, throughout one million of inhabitants, at that period resident in the metropolis.

Mr. Harding said that no case of cholera had occurred at St. Pancras Workhouse, although that establishment contained fourteen hundred persons. The supply of water was from an Artesian well.

Dr. Cormack said, that considering the limited time which remained before the hour arrived at which the meeting must break up, and believing that other fellows might desire to comment on Dr. Webster's essay, he should confine his observations to a very few of the topics which he had noted as subjects suggestive of discussion. He must, however, in the first place, remark, that the Society and the profession at large were deeply indebted to Dr. Webster for the highly practical analysis which he had given of the vital statistics of London during the last six months. Notwithstanding the appalling mortuary details which had been laid before the Society, the general inference from all the facts adduced was this—that cholera was a disease pre-eminently under the control of a well-directed system of preventive medicine and sanitary police. Be it granted that the pestilence has travelled to us from the far East, and that in addition to Dr. Webster's four causes—viz., 1, atmospheric; 2, local; 3, constitutional; and 4, exciting, there must be added, as an essential, the existence of a specific poison, or, as some would have it, a specific atmospheric constitution; yet we find, that when it does reach our shores, it can find no victims except amid the vapours of grave-yards, cesspools, and open sewers, or in the neighbourhood of rivers. It appears, then, that though a pervading epidemic influence may be necessary, yet the atmospheric causes, which are of real practical importance as regards the prevention of the disease, are of a very limited and local nature, and partake of the character of those miasmata which give rise to pernicious fevers. These, when only endemic, may assume the intermittent type, but every few years they assume the graver form of remittent or continued fever. Miasmata, then, seems to be all-potent in the generation of cholera, as well as of the diseases already adverted to. Many years ago, Moscati found that air collected during the night from the insalubrious rice-fields in the north of Italy was heavier than other air; and that, when it was condensed, it showed albuminous flocculi, of cadaverous smell. Analogous observations have been made by many others in different parts of the fever districts of Italy; and is it not possible that the living organisms observed at Bristol by Drs. Brittan and Swayne (or others of a similar nature) might have been found by the Italian physicians, had they used sufficiently powerful microscopes, and had they been acquainted with the characters of microscopic fungi? It is not necessary, however, to make out the existence of microscopic fungi, or confervæ, in districts where cholera and intermittent fever prevails, to establish the pathological relation of the two. The history of past epidemics, as well as the facts at the present moment under observation, alike testify to this great truth. Comparetti, of Padua, in 1765, described cholera, such as has prevailed during the last month in London, under the name of *febbre perniciosa collerica sincopale*. Torti, of Modena, and Raimond-Restaurant, describe the same disease, and in 1680 the latter physician treated choleraic intermittent fever by cinchona. Laudanum and cinchona were the medicines in which Comparetti trusted. These physicians speak of the severity of the disease being so great, that the patients sank in the cold stage of the first paroxysm. Dr. William Currie, of Philadelphia, speaks of cholera with regular periods like a tertian. This brings us to observe, that their views were identical with those more recently, and so clearly and philosophically developed by Dr. James Bird, Dr. Charles Bell, and others. The remittent and intermittent type of cholera, Dr. Cormack remarked, can be best seen when the disease is studied in families, and in a district, from house to house, cases slight and serious being equally valuable in supplying the full natural history of the malady. From observations of this kind, Dr. Cormack was firmly impressed with the conviction, that cholera was a remittent or intermittent fever —that the recoveries from the cold or collapse stage were to be attributed, not to the therapeutic action of medicines administered, so much as to the inherent or essential character of the disease—or, in other words, that the collapse of cholera and the cold stage of a simple ague had alike a tendency to end in reaction. In both cases, provided the functions of life were not at a complete stand-still, some good might arise from the application of heat to the surface, the administration of internal stimuli,—such as camphor,—the restraint of the

serous exudation from the intestines by means of astringent enemata, and, above all, the modification of the character of the fever by means of quinine. In addition to the clinical and other facts already mentioned, certain experiments of Magendie might be cited. That physiologist injected a small quantity of putrid water into the veins of dogs; and he states, that among the intestines there was found an exhalation of a matter in colour resembling the water in which meat has been washed, and which adhered to the mucous coat of the intestine. This he regarded, not as an intestinal secretion, but as a part of the blood itself. As such, Dr. Cormack regarded the serous stools in cholera; they were really and truly hæmorrhagic phenomena, and required, as such, to be treated by astringents. To allow them to proceed unchecked, under the idea that morbid matter was being eliminated, was an error which it only required a little practical contact with the disease to dissipate. Dr. Cormack concluded by stating, that while in each case the special symptoms might require special modifications of treatment, the key-stone to the successful management of the disease was this—to bear in mind that cholera was a fever, and that the serous purging was an exhausting hæmorrhage.

Mr. STREETER would state a fact connected with the cryptogamic theory. In the urine, first secreted after recovery from a very severe form of collapse, and withdrawn by catheter from the bladder of a lady by himself, Mr. Queckett, on microscopical examination, detected, and had made a drawing of, what he then termed "curious organic bodies." This occurred before Dr. F. Brittan had exhibited to Mr. Queckett his specimens derived from vomit, dejection, and atmosphere, for verification of their cryptogamic nature. Mr. Streeter considered this fact important, because it clearly showed that these entophytes (for so they should be called if they are of a vegetable nature, and not entozoa) really existed, and if introduced into the system by the alimentary canal, had actually traversed the circulating blood. He understood from the medical journals that they had also been observed in the perspiration. It was only by this power of traversing the blood, and being eliminated from the system by the skin and kidneys, that he could understand the removal of incipient collapse by copious perspiration and renal secretion, which experience had shown to be so efficacious, if that condition really depended upon the presence of these organic cells, an opinion which he thought highly probable.

Dr. LANKESTER regarded the fact just stated as an interesting one, and he would test the theory advanced regarding fungi by this and the circumstance of the same bodies being found in the air and the excretions of cholera patients by Dr. Brittan. He considered that the conclusion arrived at, that these fungi were the cause of cholera, as a very hasty one. It was proving too much, in showing that bodies of the same character were found in the urine. How did they get into the bladder? Surely not by being passed into the stomach, absorbed into the circulation, and passing into the kidney; yet this must be the case if the theory advanced by Dr. Brittan were correct, for it was impossible to conceive that they passed up the urethra. Then, if these supposed fungi were really the cause of cholera, how did you explain the suddenness of the attack in some cases of this disease? It was true that confervoid bodies were occasionally found in the body, as proved by Drs. Williams and Cowdell; but how was it that the bodies described by Dr. Brittan were only occasionally found. His own (Dr. Lankester's) opinion was, that these bodies really consisted of changed epithelial cells. Mr. Busk had examined the evacuations of cholera patients carefully, and had never been able to find any definite body in them. Taking this, though merely negative evidence, he thought it sufficient to show that the bodies in question were not what some supposed them to be.

The discussion was adjourned until Saturday, October 13th.

SURGICAL JURISPRUDENCE IN THE GREAT DESERT.

AN enterprising traveller, M. Eugene Daumas, ex-colonel of Spahis, who lately made a journey to the kingdom of Houssa, in the interior of Africa, found that surgery was there held in considerable estimation, and he furnishes some amusing instances of its importance in the decision of legal questions and family disputes.

In the city of Timimoun, it seems they give the following pithy injunction to the young bride on presenting her to her husband:—"Be silent as to his secrets. When he is joyous, do not let him see you sorrowful; and when he is sad, do not show yourself merry before him." But whether or not the young Arab ladies are in the habit of attending strictly to this precept we are not told. We learn in the sequel, however, that if they are not particularly careful of their husband's secrets, they are well able, on occasion, to take care of their own.

Timimoun appears to be a city of some pretension in the Desert, as it contains five or six hundred houses, which being each built in its own garden, occupy a large space of ground. It is surrounded by a dry ditch, about a dozen feet deep, by seven or eight feet wide, and is inclosed by an embattled wall, on which are several small forts of two stories high, capable of containing thirty or forty combatants apiece. Civilization here is about equal, the traveller considers, to what it was in Europe during the middle ages, or about a thousand years ago.

In this city, we are told that surgery supplies the place of a penal code. If one individual wounds another, the surgeon is called in to estimate the damages, and these are assessed in proportion to the length and depth of the injury, which is ascertained by an instrument called the measure of blood. Questions of jurisprudence are also sometimes decided by an appeal to the faculty, of which the following anecdote is an instance.

A woman of the caste called Berbère (a wandering tribe), had married two husbands, without letting either of them know that she had any other besides himself; for in the marriage contracts she had stipulated with one that he should never visit her, excepting between sunrise and sunset; and with the other, that he should never come till after nightfall, and should depart before daylight in the morning, by which arrangement they never met. Two different cadis had attested the agreements, and, thanks to the precautions taken, nothing disturbed for some time the harmony of this family compact.

"*Deux coqs vivaient en paix,*" said La Fontaine. It was not a hen, however, in this case, which came to destroy their peace, but an infant—*eh voilà la guerre allumée!* The wife of two husbands was in some perplexity, but she took heart, and revealed her expectations to both, when an explanation followed, and they were not a little confounded to find themselves officially in such a position towards each other.

"You are mad," said one; "this woman is my wife."

"She is mine, I tell you," said the other; "and it is you who should be pronounced mad!"

"You are neither of you mad," interposed the wife; "each of you is my husband—you have only to observe the conditions of your agreements. Pray do not agitate me by your disputes, but await the event tranquilly."

However, a new altercation arose about the expected infant, and in order to have it decided to which of them it should belong, they at last agreed to refer the matter to the cadi.

After long deliberation,—for the question was really perplexing,—the worthy magistrate hit upon a solution of the difficulty: he decided that if the child were born during the day, it should belong to the husband of the day; if it were born after dark, it should belong to him of the night. This decision was very satisfactory, but it so happened that the disputed infant was born after sunset, and before dark—that is, during the twilight hour, which belonged to neither husband, so that the decree of the cadi could not be put in execution. They then agreed to submit this new difficulty to the judgment of the marabout. The holy man listened to the pleadings, and ordered that the two husbands, the wife, and the child, should all be brought before him; and at the same time he sent for the best surgeon in the city to attend with them.

When all were assembled, the marabout addressed the surgeon, and said, "Here are three egg-shells of exactly equal size and weight; take two of them, and fill them with the blood of the husbands (one for each), then fill the third with blood from the infant." The doctor obeyed, and, after the operation was completed, the marabout ordered a pair of nicely balanced scales to be brought, in which were weighed separately the first two shells against the last. From this experiment it resulted that the blood of one of the husband's was found to be a trifle lighter than that of the child, and the other's was of exactly the same weight with it. On this being ascertained, the judge, turning to the latter, said, "In the name of God, I declare thee to be the father of this child. Take it away; it belongs to thee!"

However ridiculous such a mode of arriving at a judgment may appear, it was at least decisive, and, under such circumstances, it may be fairly doubted if a whole host of London magistrates could have settled the controversy in a more satisfactory manner.