were, moreover, no dumb-bell-shaped crystals of the oxalate of lime detected in the urinary deposit; and these I knew Dr. Beale regarded as at least pathognomonic of the gravest form of oxaluria.

Not to lose time in treating these symptoms, the patient was put upon a nitro-muriatic acid mixture, and dieted so as to favour as little as possible the presence or production of oxalic acid in the system. This last consisted in withholding all vegetables, malt liquors, and wines; keeping to moderate allowance of bread and meat, with milk, and a little brandy and seltzer water. Gentle exercise was enjoined, and the patient was advised to be in the open air as much as possible.

The next noteworthy point in the case was a certain periodicity in the symptoms. They were noticed to be most marked about five o'clock in the afternoons, and walking seemed to aggravate the urethral distress.

That there was nothing in the case to ally it with those of the intermittent or paroxysmal form of hæmaturia, I felt confident, since there were no preliminary chills, nor was there a source for these during the extremely warm weather then present. There was no history of ague. The urine remained bloody till the morning of the following day, and blood globules were always found in it, which is certainly not often the case in the paroxysmal hæmaturia. Moreover, the oxalate of lime was persistently present; and thus the opinion rose uppermost that there was cause sufficient for the hæmorrhage in the large and irritating crystals of this salt which collected and irritated the vesical and urethral surfaces. Further, I could not ignore the continuance of the congested state of the adjacent hæmorrhoidal vessels, and the presence of dull hepatic pain—symptoms clearly pointing to an improper condition of the liver.

At this time I had the advantage of seeing the case with my colleague Dr. Andrew, who carefully examined the urine, and investigated the symptoms. He quite concurred in the view taken and above expressed, and was disposed to ignore any notion of more grave renal or vesical affection. It was agreed to treat the hæmorrhoidal state more directly, and to continue the more special method to obviate oxaluria. Two drachms of the confection of black pepper were accordingly ordered to be taken each night at bedtime, and the acid mixture three times daily before meals. The result of this treatment was, that the turgid state of the vessels about the anus shortly passed off, and no more blood appeared in the urine; the oxaluria likewise disappeared. In the course of the next six or eight weeks, however, the patient suffered from a succession of painful boils, three in number, upon the right forearm. He removed to the country for some weeks, and thoroughly regained his former health. Up to the present time, eight months subsequently, there has been no recurrence of the hæmaturia, nor indeed any urinary disturbance whatever. Two months ago I detected upon all the fingernails of this person, and upon those of the great toes, transverse furrows. These, from their position, evidently corresponded to the parts grown during the period of depressed health.*

It may be well to review briefly the leading features of this case. First, as to the symptoms: there was a generally relaxed, atonic condition of system; there were signs of a somewhat congested liver, as evinced by hepatic tenderness, constipation, and loaded hæmorrhoidal vessels: under these circumstances, several attacks of hæmaturia occurred, accompanied with irritability of the neck of the bladder, and whole course of urethra.

For the reasons before mentioned; viz., the absence of renal colic, of the passage of any kind of gravel, clot, or fibrinous shred at any time, as also of lumbar pain or tenderness, the idea of calculus could not be entertained. There was no history of blow or injury to the loins, and no purpuric or hæmorrhagic tendency. No special irritant of any kind had been taken or applied to the body. The urine, between the attacks, was natural, with the exception—in this instance important—of some crystals of oxalate of lime; hence the renal textures were presumably healthy. The blood, when passed, was always intimately mixed with the urine, and so it seemed fair to suppose that there could be no important source of bleeding in either the bladder or urethra. And yet I believe these surfaces did yield the blood in this instance. The situation of the pain and uneasiness, together with the presence of great abundance of large crystals of oxalate of lime, appeared to point to the true nature of the case. We can indeed exclude the kidneys as to their secreting structures, and almost their infundibula and pelves, the ureters likewise, from contributing to the hæmorrhage; certainly there were no marked symptoms referable to any of these parts.

That urine charged with oxalate of lime crystals, independently of even small calculi, should prove a source of cystic or urethral hæmorrhage, is not usually taught or believed. It is not unworthy of note,

however, in connection with this point, that crystals of oxalate lime, generally in small quantity, it is true, not unfrequently appear in the urine in cases of hæmaturia, due to very various causes; such, for instance, as is produced by injection of turpentine (vide case reported by Dr. G. Johnson, *Diseases of Kidney*, p. 487), by the presence of "irritating material" in the blood (*ibid.*, p. 490), or, more commonly still, in the intermittent form of hæmaturia, where, as Dr. Greenhow has shewn (*Transactions of the Clinical Society*, 1868), oxalates are very often present. I may mention here that, when some time back, I repeated some interesting experiments, devised and fully carried out by Dr. Leared, upon the artificial induction of oxaluria, I did not notice hæmaturia in connection with the symptoms (*St. Bartholomew's Hospital Reports*, vol. ii, 1866); neither, I believe, did Dr. Leared. Hence, I think, we may not look for this symptom in ordinary cases of oxaluria; there must be some other morbid state or tendency in addition to the oxalic diathesis, however temporary or confirmed the latter may be.

"Hæmaturia is not a recognised consequence of oxalate of lime, unless when a calculus has formed." So writes Dr. George Johnson (*op. cit.*, p. 492). The late Dr. Todd (*Clinical Lectures on Urinary Diseases*, p. 62, edit. 1857), in commenting on a case of cystic hæmaturia, which indeed bears resemblance, in some particulars, to the one here detailed, except that the blood was passed only at the completion of micturition, asks—"could the great abundance of oxalate of lime crystals in the urine have acted as an irritant to the bladder, exciting the mucous secretion as well as the hæmorrhage?" If we ask this question with reference to the present case, I believe we may reply in the affirmative. It is fair to suppose that there was a turgid condition of the vesical mucous membrane, and the prostatic portion of the urethra, and that the presence of a considerable amount of such irritating material as large octohedra of oxalate of lime lodging about these congested surfaces, induced rupture of certain of their capillaries from time to time.

The subsequent outbreak of boils is noteworthy in connection with the oxaluria, general atonic condition, and perhaps with the presence of "irritating material" in the blood.

With respect to the therapeutics in this case, it was clear that benefit was first and most unequivocally derived from the employment of Ward's paste, or confection of black pepper. This, no doubt, relieved, as it so often satisfactorily does, the hæmorrhoidal congestion which led to the prominent symptoms, while the good effects of regulated diet and hygiene, with direct treatment by the mineral acids, led no less obviously to the removal of the oxalic diathesis.

ON ACUPRESSURE.

By JAMES F. WEST, F.R.C.S. (Exam.)

Senior Surgeon to the Queen's Hospital, Birmingham.

THE following table, showing the results of acupressure in a number of important surgical operations, performed at the Queen's Hospital within a period of twelve months, was brought forward by me at the Inaugural Clinical Address which I delivered at the opening of the present winter session, in testimony of the value of that method of arresting hæmorrhage.

It will be observed that in only two of these cases did any bleeding follow its employment; one was a case of secondary amputation of the leg just below the knee in a delicate boy, aged 17, whose foot had been crushed by a waggon, and in whom sloughing of the leg followed; and the other was an amputation of the thigh by Teale's method for acute necrosis of the femur with suppuration in the knee-joint, also in a boy, aged 13. In both cases, hæmorrhage was arrested by pressure on the femoral artery, without any reapplication of the needles being necessary. In one instance the tourniquet, and in the other digital compression was used for the purpose, and both terminated favourably.

Out of the whole number, only two cases proved fatal, but in them the result was in no way due to hæmorrhage. *Post mortem* examination in each case showed that the arteries had been firmly compressed by the needles, and that above the site of pressure coagula existed which blocked the arteries completely, and further there was no extravasation of blood between the flaps. Both patients died from shock: one was a case of double amputation of the lower extremities for a railway accident, which proved fatal in six hours; and the other was a case of amputation of the thigh through the trochanters, of a young strumous girl, who had been much reduced by profuse suppuration from a deep burn, and who never rallied from the effects of the operation, but sunk on the morning of the fourth day. Reference to this table will show that the average length of time which elapsed before withdrawal of the needles was about fifty hours. Simple needles applied after Sir J. Simpson's first and fourth methods without ligature were used in all the cases.

* This symptom was first pointed out, I believe, by the late M. Beau, of La Charité in Paris. I know that nine years ago, in his wards, he used frequently to direct attention to it. Dr. Wilks has lately brought the subject forward again.

Wounds appeared to heal more rapidly than where silken or hempen ligatures were employed; and a diminished amount of suppuration was manifest.

All these circumstances appear to me to be in favour of acupressure as a means of arresting hæmorrhage; and so strongly do I prefer it to

the ligature, that I now employ it in almost every case of amputation of the limbs, and also in excision of the breast and ablation of tumours. I do not think that it can supersede the use of the ligature altogether, but I have no doubt that it will be found a most efficient substitute for it in the majority of surgical operations.

Table of Cases of Acupressure.

Name and age.	Nature of disease or accident.	Operation.	Number of needles employed.	Time of withdrawal of needles after operation.	Remarks.	Date of operation.	Result.
J. A., 8	Scrofulous disease of knee-joint.	Amputation of thigh at junction of middle and upper thirds by Teale's method.	2	50 hours.	No hæmorrhage.	Sept. 3, 1867.	Cured, Nov. 29, 1867.
M. P., 21	Deep and chronic ulcer of thigh from burn.	Double flap-amputation through trochanters.	2	72 "	No hæmorrhage.	Dec. 20.	Died, from shock, Dec. 24.
T. B., 67	Compound fracture of arm.	Amputation by oval skin flaps, through middle third of arm.	2	72 "	No hæmorrhage.	Dec. 27.	Cured, Feb. 14, 1868.
J. H., 13	Acute necrosis of femur, and suppuration of knee-joint.	Amputation of thigh at junction of upper and middle thirds by Teale's method.	3	46 "	Hæmorrhage after needle withdrawn from femoral. Stopped by digital pressure for a few minutes. Hæmorrhage recurred next day, and arrested by digital pressure on femoral for five hours.	Jan. 28, 1868.	Cured, June 12.
P. C., 40	Compound comminuted fracture of leg.	Amputation three inches above knee-joint by oval flaps.	2	48 "	No hæmorrhage.	Jan. 30.	Cured, March 3.
F. A., 15	Scrofulous disease of ankle-joint.	Syme's amputation at ankle-joint.	2	48 "	No hæmorrhage.	Feb. 15.	Cured, March 31.
E. W., 21	Compound fracture of left thigh and right leg.	Amputation through trochanters of left thigh and immediately below knee-joint of right leg.	4		No hæmorrhage.	April 7.	Died, from shock, 6 hours after operation.
S. H., 50	Scirrhus of breast.	Excision of breast.	1	36 "	No hæmorrhage.	April 15.	Cured, May 29.
E. B., 43	Scirrhus of breast.	Excision of breast.	2	56 "	No hæmorrhage.	April 17.	Cured, May 26.
M. A. R., 42	Scirrhus of breast.	Excision of breast.	1	48 "	No hæmorrhage.	April 18.	Cured, June 9.
E. C., 11	Scrofulous disease of ankle-joint.	Syme's amputation.	1	50 "	No hæmorrhage.	April 28.	Cured, June 26.
A. C., 15	Dry gangrene of hand.	Amputation through lower third of forearm by Teale's method.	1	50 "	No hæmorrhage.	May 10.	Cured, June 15.
S. L., 47	Scirrhus of breast.	Excision of breast.	1	52 "	No hæmorrhage.	May 22.	Cured, June 13.
F. D., 53	Scirrhus of breast.	Excision of breast.	1	54 "	No hæmorrhage.	May 22.	Cured, June 16.
M. A., 52	Scirrhus of breast.	Excision of breast.	2	50 "	No hæmorrhage.	June 10.	Cured, July 17.
H. H., 17	Comminuted fracture of foot.	Amputation below knee-joint by modified skin flaps.	2	120 "	Hæmorrhage on 5th, 20th, 21st, 22nd, 23rd, 25th, & 42nd days, arrested by tourniquet.	June 22.	Cured, Sept. 6.
J. W., 14	Compound comminuted fracture of hand.	Amputation through wrist-joint.	1	48 "	No hæmorrhage.	July 20.	Cured, Aug. 21.
C. C., 25	Scirrhus of breast.	Excision of breast.	1	53 "	No hæmorrhage.	July 20.	Cured, Aug. 23.
A. N., 15	Wound into knee-joint, followed by suppuration.	Teale's amputation in middle third of thigh.	2	48 "	No hæmorrhage.	Sept. 2.	Cured.

THE WORKING OF THE "CONTAGIOUS DISEASES ACT, 1866," AT ST. BARTHOLOMEW'S HOSPITAL, CHATHAM.

By A. W. NANKIVELL, F.R.C.S.,
Chief Medical Officer.

THE Act came into force at Chatham and Sheerness in October 1866. As my appointment dates from January 1st, 1867, the figures and statistics given below will, with one exception, refer to the patients admitted into the hospital during the years 1867 and 1868.

Statistics of Admission, Ages of Patients, etc.—The total number of admissions during these two years was 678; and of these, 32 remained on the books on December 31st, 1868. The age of the oldest patient admitted was 54 years; that of the youngest 13. One patient has been admitted ten times; one nine times; three eight times; eight seven times; and eight six times. The remaining patients a less number of times. These repeated admissions, however, did not actually take place during the two years 1867 and 1868, but date back to the introduction of the Act of 1864. This is the one exception to which I alluded above. Of the patients admitted, by far the greater number were born in the United Kingdom; a few, however, were born at the Cape, Gibraltar, in India, and other British possessions. One patient born in Prussia could not speak English. Chatham furnished 565; Sheerness 113 admissions of patients. The longest duration of disease prior to admission was fifteen months; but a statement of this sort from the patients themselves is, I believe, not to be relied upon, as they usually deny knowledge of the infection until examined by the Visiting Surgeon, and, if

pressed on the point, will usually answer at random. 417 were cases of simple gonorrhœa; 261 were complicated, that is to say, had chancres, condylomata, buboes, secondary or tertiary syphilis, or some other complication. Of these patients, one escaped from the hospital but was recaptured the same afternoon; twelve were sent to gaol; sixteen were transferred to London; three were sent to the union, of whom two had contracted small-pox, while the third was far advanced in pregnancy; two died; five were discharged uncured at the end of six months; and three others totally incurable; making a total of forty-two discharged uncured. 604 were therefore discharged from the hospital cured; of these 40 were restored to their friends, and 27 sent to reformatories. The longest time any patient remained in the hospital was six months, the shortest time three days. The average duration of detention of each patient discharged cured has gradually diminished from fifty-two days during the first quarter of 1867, to thirty-four days during the last quarter of 1868, from which it is manifest that the cases have, during those two years, materially diminished in severity.

Wards.—The Lock Wards of St. Bartholomew's Hospital are built on three floors, and are six in number, containing a total of forty beds. The cubic space per patient is 1,540 feet.

Nurses.—There are three nurses, one on each floor; the head nurse occupying the central floor.

Admission of Patients.—The infected cases are sent in from Chatham and Sheerness, after having been examined by the two Visiting Surgeons appointed by Government for those places. They are brought to the hospital by policemen in plain clothes, and are handed over to the head nurse. Each has then a warm bath separately. Their own clothes are taken away, nor are they restored until the patient's discharge. In the afternoon of the same day, each patient thus admitted is examined by me, and, if the case be only one of gonorrhœa, she is not confined

* Read at the West Kent District Meeting, held at Gravesend, March 1868.