THE DUBLIN JOURNAL

OF

MEDICAL SCIENCE.

SEPTEMBER 1, 1887.

PART I.

ORIGINAL COMMUNICATIONS.

ART. VII.—*Our First Campaign in Egypt.* By BRIGADE-SURGEON
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Occupation.

AT the commencement of the year 1800 a fine army of some 15,000 men, under the command of Sir Ralph Abercrombie, had been collected at Gibraltar with the view of retaking Egypt from the French. On the 23rd October orders were issued for the expedition to start. On 3rd November, Admiral Lord Keith sailed with part of the expedition for Minorca, while the remainder, under Sir Ralph Abercrombie, followed, proceeding direct to Malta, where they arrived on 30th November. A fortnight later, Lord Keith's arrival reunited the expeditionary force. The troops were disembarked for the purpose of being inspected, and the ships ordered to be cleaned. 500 Maltese were enlisted at Malta, and on the 20th December the expedition set out in two divisions for Asia Minor, of the harbours of which very little was known. The harbour of Rhodes was found unsuitable to large ships of war. Lord Keith coasted along until he came to the Bay of Marmorice, which was a fine open basin, approachable only by a narrow channel, and which, lying among high hills, was completely sheltered from storms, already making themselves unpleasant on the coast. Here the sick were at once landed, and shortly afterwards the troops were disembarked, and the infantry practised in manœuvring, while the cavalry were awaiting their horses. Many difficulties now

began. Fresh provisions could not be obtained, though goats' flesh and poultry were procured by the officers at exorbitant prices, and the horses furnished by the Turks were so bad, that out of several hundred only two hundred were found fit for cavalry; and, to complete their misfortunes, on the 8th and 9th February, a storm of terrible fury raged over the camp—the hailstones, as big as walnuts, lying two feet deep—the torrents from the mountains sweeping everything before them—while, to add to the foregoing, the horses broke loose, and much exposure of the troops to the vicissitudes of climate resulted. On the 20th February, the day previous to re-embarkation, there was present and fit for duty 14,895, including 803 sick, sick absent 911, making a total of 16,599. Included in those present and fit for duty were the N. C. officers and men sent to the service of the different departments, regarding which Lieutenant-Colonel Wilson (author of the History of the Campaign) remarks:—"The British service was then the only one in Europe where the commissariat, medical, and civil departments had not their distinct followers;" and this with a sick-rate of 10·3 per cent. absent and present.

On the 23rd the fleet sailed, and it was creditable to the discipline of the troops that they left Marmorice Bay without a single complaint being preferred against them.

The voyage was prosperous, and on the 26th they fell in with a convoy from England. On the 1st March they sighted the coast near Arabs' Tower, in small transports of about 250 tons each, and on the morning of the 2nd anchored in Aboukir Bay, without so much as a decent map of the country, and a much under-estimate of the force of the enemy, who, under Menou, were able to put in the field 18,000 men, and leave 10,000 to garrison Cairo and Alexandria, with the enormous advantage of acting on interior lines.

The Turks had not yet recovered from their defeat at Helio-
polis, where 50,000 of them, under the Grand Vizier, had been defeated by barely a fourth of their number, while the forces at Sir Ralph Abercrombie's disposal consisted of 15,463 infantry, 472 cavalry, and 578 artillery, incumbered by 999 sick present; a total of 17,512 of all ranks. The French, about 2,000 strong, occupied a position of great strength close to the shore of Aboukir Bay, disposed along the summit of a ridge of sand a mile long, concave, and rising in the centre about 200 feet. At three o'clock on the morning of the 8th March the signal for attack was hoisted,

and by 9 a.m. the long line of 150 boats sprang forward through the hail of bullets and grape which tore through them until the shore was reached, and the heights carried with a loss of 500 of all ranks. Before evening the whole force was landed.

The troops disembarked with sixty rounds of ammunition and two spare flints per man, packs on, and carrying three days' bread and three days' pork ready cooked. Each individual had his canteen full of water; the same quantity of bread and meat was landed in charge of the respective quarter-masters. The officers were only allowed such articles as they could carry themselves. The general hospital stores were landed after the troops, and a proportion of the general hospital staff was attached in the first instance to each brigade, and only such orderlies were taken from the brigade as were absolutely necessary. Regimental surgeons were allowed one orderly each to carry the regimental field-case of instruments. As soon as the troops were landed, the sick of each regiment embarked in transports, and were collected into one of these vessels under the care of the assistant-surgeon, who had to report himself and the state of the men in his charge to the Inspector-General of Hospitals (Mr. Young) on board H. M. ship "Niger." Where there was only one medical officer present with a regiment this duty was assigned to a careful non-commissioned officer. Regiments embarked in men-of-war left their sick under the care of the surgeon of the ship, who received the allowance established in such cases. When necessary, a small proportion of orderly men, selected from convalescents, were left with the sick. Regiments that had women with them were directed to employ them as nurses in lieu of orderly men. Officers were enjoined to employ every means and use every precaution in their power for the preservation of the health of the troops under their command. The most exact discipline was to be enforced and the most rigid economy in the consumption of provisions, fuel, and water, so as to diminish as much as possible the labour of the soldier. These orders were issued from on board H. M. ship "Kent," Marmorice Bay, February 16th, 1801.

It was further ordered that men going on all detached duties, or duties of fatigue, were to carry with them provisions ready cooked. Only one day's allowance of spirits was issued to the troops, and the canteens were to be filled with water previous to marching. After landing the army was employed in digging for water, which was always found where date trees grew. Before the troops

marched from the heights of Aboukir an hospital was established on the beach.

In a skirmish, on 10th March, 20 Corsican Rangers and the surgeon of the corps (Mr. Smith) were captured by a sudden rush of the French cavalry. Large numbers had already died of a "bad type of fever;" later on, dysentery and blindness made great ravages amongst them, having had nothing to drink but bad water; worn-out boots and clothing, tents unsuitable to the climate, and large arrears of pay—yet not a man was guilty of the smallest excess.

On 8th March, in action with the French, they lost 4 officers killed and 29 wounded; 98 men killed, 489 wounded, and 53 missing. On the 13th, at Mandora, 8 officers were killed, 71 wounded; non-commissioned officers and men, 152 killed, 1,045 wounded.

At the battle of Alexandria, fought on 21st March, the British left rested on Lake Madieh, the centre was behind some low sand-hills, and the right in the Roman palace or Fort, near where Ramleh Hospital is now situated, in which were placed two guns. Here 10 officers were killed, 60 wounded, 3 missing; 233 non-commissioned officers and men were killed, 1,133 wounded, 29 missing. It is on record that "the English tents were torn to pieces by the shot, and thousands of brass balls were lying glistening in the sand; several officers' servants had been killed in the tents, and miraculous escapes of the sick lying in them were told; nevertheless our soldiers—surrounded, partly broken, and without ammunition—continued the conflict. The small mosque in the village close by was the head-quarters of a field hospital, and to it Sir Ralph Abercrombie was borne when wounded." After this the camp was moved to within four miles of Alexandria, not far in front. On 30th March, nine days after the battle of 21st, up to which date, from landing, 488 had been killed and 2,593 rank and file wounded, the actual state of the army was as below. The figures are interesting, as showing the respective sick-rates of the regiments composing the force, and how unequal must have been the duties of the regimental surgeons:—

RANK AND FILE.

—	Regiment	Fit for Duty	Sick Present	Sick Absent	Total
	INFANTRY.				
Brigade of Guards (Ludlow's)	Coldstream Guards .	647	44	159	850
	3rd Regiment of Guards	544	62	256	862
1st Brigade (Coote's)	54th, 1st Batt. .	460	151	27	658
	54th, 2nd Batt. .	362	115	90	576
	Marines .	380	79	—	459
2nd Brigade (Craddock's)	8th Regiment .	361	74	36	471
	13th „ .	375	260	74	710
	18th „ .	359	88	29	476
	90th „ .	438	270	25	743
3rd Brigade (Earl of Cavan's)	27th „ 2nd Batt. .	534	41	53	628
	50th „ .	407	86	23	516
	79th „ .	572	102	48	722
4th Brigade (Doyle's)	2nd „ Queen's .	513	36	23	572
	30th „ .	359	42	9	420
	44th „ .	220	68	7	295
	89th „ .	341	48	8	397
5th, or Foreign Brig. (Stewart's)	Stewart's .	707	187	31	925
	De Rolles' .	402	110	22	534
	Dillon's .	385	140	21	546
Reserve (Moore's)	23rd Regiment .	362	116	53	531
	28th „ .	488	128	28	594
	42nd „ .	466	300	16	872
	58th „ .	357	110	18	485
	40th „ Flank Compy. .	186	41	—	227
	Corsican Rangers .	168	44	—	213
	Staff Corps .	82	3	5	90
	92nd Regt., detached to Aboukir .	373	119	51	543
	General Total .	11,156	3,082	1,182	15,463

TABLE—*continued.*

—	Regiment	Fit for Duty	Sick Present	Sick Absent	Total
(French's)	CAVALRY.				
	11th Light Dragoons .	49	3	—	52
	12th „ .	428	74	—	502
	20th „ .	406	32	—	438
	Hornpesch's .	125	12	—	137
	General Total .	1,008	121	—	1,129
	ARTILLERY.				
	Rank and File .	475	98	5	578
	Gunners and Drivers .	58	13	—	71

On 9th April, General Menou marched towards Rhamanieh, but was attacked by Doyle's Brigade, to which 560 French surrendered. This brigade was afterwards detached to Cairo. On 1st September letters of capitulation were signed by the French, and at eleven o'clock the Grenadier company of the 30th, and other regiments, with colours flying and bands playing, marched into Alexandria in three columns; at noon the French flag was hauled down; 10,528 of the enemy surrendered, including 1,387 sick, but excluding 238 officers and attendants of the General Hospital. The population then numbered about 6,000. On the 14th, the 1st division of the French army embarked from Aboukir for France in high spirits.

During the action at Rhamanieh the French fired occasionally at a mosque near the village where the wounded were placed. It is related that as the surgeon of the 89th was dressing them, a cannon ball broke through the dome, whirled round it, and fell on to his back without doing him the smallest injury. At the final attack on Alexandria the surgeon on board one of the French gunboats was killed, his assistant losing both legs. The medicine chest, containing a good many dollars, floated ashore and became a prize to the 54th. Previous to the surrender, General Menou, in a letter, thanked General Hutchinson "for the humanity shown to his wounded officers and soldiers by the British surgeons."

Major-General Hutchinson's March to Cairo.—On 4th May this officer advanced from Rosetta to Resembal. The effective strength of his army assembled at El Hamid was :—

Infantry	-	-	-	-	-	-	300
Cavalry	-	-	-	-	-	-	4,000
Artillery	-	-	-	-	-	-	112
							<hr/> 4,412

with about 4,000 Turks. On 7th, Fouah (the ancient capital of Egypt) was reached. On 9th, the French were attacked at Rhamanieh. The plague raged in this village; sickness was already beginning to break out amongst the men, who up to this time had carried everything themselves. In the dgerms (boats), taken from the French at Rhamanieh, the knapsacks and stores were now placed, and afterwards carried by water as the column advanced towards Cairo. The inhabitants beheld with wonder the British column following the Ottoman troops in regular order, and preserving the strictest discipline, the soldiers only asking for water. On 11th May they again advanced, halting, after a march of twelve miles, on the bank of the Nile at Shihaghite. The sirocco or kamseen wind, blowing the whole day, parched the men almost to suffocation. On 12th, they marched to Kaffa Handeig, the sirocco still continuing; halted 13th, and moved to Shabour on 14th, where they captured a valuable convoy from the French, containing, among other things, wine, spirits, and £5,000. On 15th, marched and encamped between Zowaff and Zaontal Bahar; 16th, marched to Algam, overpowered by the heat and their exertions; 17th, fought the action of El Kanka; 18th, marched to Menouf; 21st, to Birchamp, a sirocco blowing and the thermometer 120° in the shade. Several horses and camels died, but towards evening the wind changed to the north-west, and it became cool again. Left camp on 27th, and on 1st June were at Mishlei—the delay in the march was owing to a want of commissariat supplies; 4th, marched to Lochmas; 5th, Verdain—ten miles. Sickness had now alarmingly increased; already 1,000 were sent back to Rosetta, and in two days a hospital camp had to be established at the point of the Delta, where the Nile divided into two branches at Exhoue. On 9th, were at Burtos; 15th, Tinash; 16th, Shubra-Cairo, forty-three days after leaving Rosetta; 19th, crossed the Nile; and on 21st, advanced to within a mile and a half of Giza. On 22nd, a flag of truce was sent out by the French

General; 26th, definite articles were agreed to; and on 27th, capitulation signed; and following day, Fort Soukowski (present abattoir on road to Abbasseyah) taken possession of by the 30th Regiment, and the Gate of Giza by the Grenadiers of the line. The army was very sickly, and the heat of the weather and advance of the season when the Nile overflows, were now all anxious considerations.

Col. Wilson, who accompanied the column, wrote:—"Certainly no troops had ever shown more resolution, patience, and spirit. The duties of the officers and men had been most severe, yet they bore every hardship without a murmur, and, although four months in arrears of pay, never were guilty of the smallest excess. Dysentery and blindness had made great ravages, and they had little shelter from the burning heat of the sun; their tents offered no resistance to the rays, but rather concentrated their force. Frequently they were obliged to drink only water, and, wanting shoes, had to travel on the fiery soil and on the prickly furzes which covered the surface. All the departments of the army showed the utmost zeal. When, on 6th July, the Grand Vizier came to review the army, it is stated that he was 'delighted at the appearance of the English troops,' who, *notwithstanding their rags*, formed a very martial parade. The Scotch regiments, from being *sans-culottes*, particularly excited his wonder."

On 14th July, General Hutchinson presented the officers of each English regiment with a puncheon of Sicilian wine (Marsala), which was stated to have proved a most agreeable donation; for many of them had not tasted a drop of any kind since leaving Alexandria.

"Never, indeed," writes Colonel Wilson, "had an army before been so abstemious, and consequently so well conducted."

On 13th, the French totally evacuated Giza, under General Belliard (13,012, including 800 sick; in addition were 760 native auxiliaries and 82 employés), and the allied army began their return march to Rosetta. The Turks preceded, the British followed the French, who had flanking parties of their own cavalry, the Mamelukes and English cavalry closing the rear. The sick were carried in the dgerms, 300 of which were alone required for the French sick and baggage.

The following return showed the disposal of the French army in Egypt up to date of leaving Aboukir for France:—

Killed in different actions and died of wounds	-	3,000
Prisoners taken in different battles, convoys, &c.		3,500
Garrison of Cairo embarked	-	13,672
Garrison of Alexandria	-	10,582
Soldiers dead of the plague and other maladies since landing of the English	-	1,500
		<hr/> 32,180

Killed, wounded, and missing of the British army during the campaign in Egypt, 8th March to 14th September, 1801:—

	Killed	Wounded	Missing
Officers	22	108	7
Quartermasters	1	1	1
Sergeants	20	149	2
Drummers	2	17	1
Rank and File	505	2,723	75

Mr. Thomas Young, Inspector-General of Military Hospitals, has left behind the following "Return of Sick":—

1. Sick with army on surrender of Cairo—

(a) With their respective regiments before Giza	346
(b) In hospital encampment at the point of Delta, under direction of a Field-Inspector	- 454
	<hr/> 800

2. Left the army at different times during its march to Cairo—

(a) At encampment at point of Delta previous to army taking up a position before Giza	838
(b) Sent to General Hospital, Rosetta	- 284
	<hr/> 1,122

N.B.—838 includes 454 in hospital encampment at point of Delta. Out of this 838, at point of Delta, 73 died, and 311 recovered and were sent back to duty.

3. (a) Sick of the French army at surrender of Cairo	1,800
(b) Taken ill on their march down to Rosetta	- 500
	<hr/> 2,300

4. Number of plague patients between 12th April and 26th August, 1801, being the periods of the first appearance and termination of the disease—

(a) Admitted	-	-	-	-	380
(b) Died	-	-	-	-	173
(c) Recovered	-	-	-	-	207

The deaths chiefly fell on the orderlies and nurses and other servants of the hospitals. One staff apothecary, the surgeon of the 1st Battalion, 27th Regiment of foot, and three hospital mates, died of the disease.

(a) Number of totally blind	-	-	-	160
(b) Lost one eye	-	-	-	200
				<hr/> 360

The whole sick of the army and those remaining at the Delta were sent down to Rosetta previous to the army returning to the encampment at El Hamid.

According to the 14th Article of the Convention for the Evacuation of Egypt—

“The French sick who could not bear removal shall be placed in hospitals, and be attended by French medical officers and attendants until they recover, when they shall be sent to France. The expense while in hospital to be borne by the French Government.”

In the march to Cairo, while the men of the English column suffered from extreme thirst the Turks had always an abundance of water, owing to the custom of having a water-carrier attached to each company with a horse and mussack, from which every man as he passed helped himself.

The following despatch, dated Horse Guards, 18th May, 1801, was received by General Hutchinson :—

“His Majesty desires it may be most solemnly and most forcibly impressed on the consideration of every part of the army that it has been a strict observance of order, discipline, and military system which has given its full energy to the native valour of the troops. . . . The illustrious example of their commander (Sir Ralph Abercrombie) cannot fail to have made an indelible impression on the gallant troops at whose head, crowned with victory and glory, he terminated his honourable career. His steady observance of discipline, his ever-watchful attention to the health and want of his troops, the persevering and unconquerable spirit which has marked his military career, the splendour of his actions in the field, and the heroism of his death, was worthy of the consideration of all who desire, like him, a life of honour and a death of glory.”

Some other incidents of the campaign are also interesting and instructive.

His Majesty's 86th Regiment, at end of 1800, embarked on

board Sir Home Popham's fleet in order to take Suez from the French. They were nearly three months beating up the Red Sea, and did not arrive at their destination until the end of April, when they landed and occupied Suez. The regiment had suffered much from fever and had many deaths; nevertheless, under the command of Colonel Lloyd, on 7th June they started to join Major-General Hutchinson's army at Cairo. Three pints of water were allowed to each man. The temperature in the tents was then 109°, at 11 p.m. 94°. The first march was 11 miles. The tents were pitched during the day. Next day as many men as possible were carried on camels. At 2 a.m. a south wind blew, and raised the temperature to 116°. Half-way a supply of Madeira wine was served out, there being very little water left, and that very bad. On 9th June they reached the springs, where 8 out of the 17 who had fallen out joined. On 10th reached Major-General Stewart's Division at Cairo, 405 strong, after a march of 75 miles. On arrival the men were in a terrible condition from the heat. They had received as rations but a small supply of biscuit since leaving Suez. The plague had compelled them to burn their uniforms, and they had lost almost everything but their arms, knapsacks, belts, and discipline. They were said to have been a fine body of men, mostly old soldiers.

The 68th Regiment, which had also come from Bombay, but chiefly composed of boys, on the passage to Suez lost half from fever, and continued so unhealthy that they had to be sent back, being unable to undergo the hardships of the campaign.

On 8th June Sir David Baird arrived at Cossir, on the Red Sea, from India, and in a short time collected 5,000 camels, and established depots of provisions, and dug wells at different points to Kenneh, on the Nile. By latter end of July his army (5,226 rank and file) had assembled—a grand total of 7,546 persons, including sick. Some companies of the 61st had landed at Cossir on 10th July, and although sixteen weeks on board transports (the regiment exceeded 900 men), so good were the arrangements they are stated to have had only "one sick man." On 30th Colonel Carruthers left with 600 of the 61st for Kenneh, 120 miles (8 marches, averaging from 9 to 19 miles each). Wells had been dug by the Sepoys. The water was brackish, but caused no ill effects except at Cossir. Camels carried water and provisions; the former was flavoured with vinegar, and the mixture found to be a good one for thirst-quenching purposes. The men marched at

night to avoid the heat (110 to 115 degrees by day). Thirst and an almost irresistible oppression from sleep were mostly suffered from, as also the slowness of the marching and its duration—8 to 10 hours. The desert was generally of a very hard, gravelly soil, with a very uneven surface; but the cannon, drawn by bullocks, passed with facility. The men were not allowed to straggle, and took as much rest as possible at the end of each march. In the morning, half a pint of wine, and a ration of rice cooked the evening previous, was issued, and the canteens filled with the water in which the rice had been boiled. Just before each march half a pint of wine, with some rice-water, was given. They were confined to their tents during the day. Two gallons of water, for each man, with an allowance for leakage, was sent in the mussachs. Fresh meat was issued at the third and sixth stations. At the next station to the Nile the Arabs sold milk, eggs, and poultry in plenty, and very cheap. On 29th the column arrived at Kenneh with the loss of only a drummer-boy, strict orders having been given to leave no men behind, but bring those who fell out on camels. Water-kegs were found to withstand the heat much better than the mussachs, which frequently gave way, leading to much distress.

General Baird's Division finally reached Rosetta on 31st August, but too late to take an active part in the campaign. It was related of them—"Never were finer men seen than those which composed this force, and no soldiers could possibly be in finer order." They had sailed down the Nile by divisions from Kenneh in dgerms (500 miles), in ten days, the heat in the boats being over 100°.

Desgenettes was chief physician to the French army. The inspection of his hospitals elicited the warmest admiration. The French at first had more than two-thirds of their army affected with ophthalmia; and during their short stay 160 of our men became totally blind, and 200 lost the sight of one eye. The arid and burning desert, reflection of the soil, heat of the air, and checked perspiration, were believed to have been the causes. Opium was found the best application. Assaleni asserted that he found by observation in the French army that on a battalion infected with the plague leaving its cantonment for another, the distemper ceased, and that no one having communication with it was exposed to the smallest danger, and that the relieving battalion if it quitted the camp shortly did not show any malignant symptoms. Several of the men who escaped from the plague hospital

at Jaffa into the desert returned in three days perfectly recovered, and all those who could be removed from the crowded hospital became convalescent.

The principal cause of dysentery amongst the English troops was believed to have been checked perspiration, the soldiers crowding into the Nile when their bodies were pouring out moisture. At night a damp air also chilled those who did not secure themselves by covering; and during the march to Cairo frequently 50 men a day were seized with this malady and obliged to leave the army. It was found that those sent back to Rosetta or on board ship very soon recovered, the sea air again bracing the system, which had been much relaxed by heat. Flannel shirts and cloth pantaloons were recommended instead of the long gaiter and breeches then worn; as the soldiers, wearied with marching, at night, for the sake of ease and rest, removed the former and exposed the legs and knees to chill. The food of the country was stated to have been indigestible, poor, and bad. Thirty soldiers were drowned bathing in the Nile on the march to Cairo. Prickly heat appears to have caused much annoyance during the rising of the Nile. Among the French at Cairo venereal was very prevalent. In the military operations before Alexandria dysentery caused the greater number of deaths; then liver disease, the plague, fever, and miscellaneous affections. There was a very small mortality from lung disease, and less from sunstroke.

Among the diseases enumerated as endemic at the time were—leprosy, elephantiasis (very common), hernia especially frequent. Syphilis of the most malignant kind, dropsy, sore heads, worms, and liver complaints, were also of very frequent occurrence. Among the minor plagues were rats, insects, and fleas—the last in such enormous quantities that in twelve hours clean linen would become covered with spots of blood—lice, mosquitoes, gnats, scorpions, centipedes, and locusts added their quota.

In 1882, eighty-one years later, in less than six weeks (27th July to 4th September), 781 officers, 63 warrant officers, 15,572 non-commissioned officers and men, and 5,487 horses were conveyed to Egypt in 46 steam-vessels, traversing the distance from England in less than a fortnight, instead of wandering for months about the Mediterranean in crowded and wretched transports—a force very nearly the same as embarked under the command of Sir Ralph Abercrombie in 1801. There were very few sick, a perfect knowledge of the country and its resources; and the men,

instead of being tightly buttoned up in coatees with stiff leather stocks, cumbrous accoutrements, a heavy chako, tight breeches and gaiters—and existing, for the most part, on salt pork and inferior biscuit, bad water, and living in tents unsuitable to the climate—were placed in the most favourable sanitary conditions as to dress, food, and housing, with an abundant hospital staff and many luxuries wholly unknown to their predecessors. During the campaign, from 17th July to October 9th, out of an average strength of 13,013 non-commissioned officers and men, 7,590 were admitted to hospital, and only 172 died—viz., 74 from disease, 5 from accident, and 93 killed in action or died of wounds. Continued fevers and diseases of the digestive system were the chief factors of mortality. Diseases of the digestive system, of the eye, and continued fever, accounted for more than one-half of the admissions; but ophthalmia, which caused such serious losses to our army in 1801, never assumed the severe and aggravated form leading to sloughing or ulceration of the cornea, escape of the aqueous humour, and disorganisation of the eyeball; nor was the affection followed by chronic and intractable forms of granular lids so common after the campaign of 1801.

ART. VIII.—*The Radical Cure of Hydrocele.* By J. S. M'ARDLE, F.R.C.S.I.; Lecturer on Surgery, St. Vincent's Hospital.

NOTWITHSTANDING the good results obtained by the ordinary methods of treatment in the vast majority of cases of hydrocele, we still meet with some which are intractable and recur, even after adopting the most vigorous of them. It is in the treatment of such cases that incision and the other methods of which I will now speak prove of service. As far as I am aware there is no new method of treating hydrocele; but since the introduction of the Listerian system of wound-dressing, some of the older methods have been revived with hopeful results. The operations for the radical cure of hydrocele described by Volkmann, Julliard, and Bergmann, are only modifications of the methods of incision and excision described by Celsus. We are all conversant with the steps of these operations, but, with a view to placing the procedures, as I read them, side by side, I have ventured to introduce a description of each method, so that in comparing their results we may not confound one with another.