ted at La Pitie by it, but the testimony of Dr. Hutchinson does not confirm the testimony in its favour, when the inflammation is of a chronic nature, and as he observes, no practitioner could place confidence in it alone in active laryngeal inflammation.

There is a valuable paper from the pen of Dr. Inglis, of Castle Douglas, in *THE LANCET*, on the external application of croton oil in cynanche trachealis, in which he details facts exhibiting the good effects of this as a remedial agent in regular croup. There is one circumstance which you must bear in mind, in the employment of this counter-irritant, as well as tartar emetic, that you will very probably have a high degree of irritation produced at some part considerably distant from the seat of friction, and that the scrotum will more particularly be affected. The skin of the genitals is very apt to become in a very irritable state, and the itching is most distressing, and continues sometimes after all action of the croton has ceased; the smarting, the tingling, and the heat at bed-time are generally much increased; decoctions of elm bark, and of dulcamara allay these sensations, as does creosote, but then they again come on, and sometimes more pertinaciously than ever.

CASE OF
STRANGULATED HERNIA
PRESENTING
AN UNUSUAL APPEARANCE OF THE
HERNIAL SAC,
IN THE FORM OF A CYST IN FRONT OF THE
HERNIA.

To the Editor of THE LANCET.

SIR:—I send you the following case, because it presents a variety in the arrangement of a hernial sac, which I apprehend must be very rare. If you think its insertion in your widely-circulated pages likely to be useful, it is at your service. I am, Sir, your obedient servant,

GEORGE MACILWAIN.

Argyle-place, July, 1838.

I was sent for in February to visit a woman, 43 years of age, who was labouring under strangulated hernia. I found her with a brown tongue, nausea, frequent vomiting, considerable pain, and tenderness, with some tension of the *abdomen*. The pulse small, frequent, and irritable. She said that the rupture had been down five days, and that her present sufferings had commenced at the same period. The hernia was a left femoral, and presented some peculiarities which had probably led the gentleman whom she had first consulted to determine that it was not hernia. It appeared much more above the crural arch, than femoral hernia of that size usually ascends, and had taken a direction outwards, and

contrary to that which has sometimes led to the femoral hernia being mistaken for the inguinal variety. It was remarkably loose and moveable, and though the general symptoms were severe, was not the least tender on pressure. As it was not a case for delay, and as I could not reduce it by the taxis, I immediately proceeded to expose the contents of the tumour, when the following appearances were developed:—The fascia propria, and the fat so commonly found between it and the sac, had become consolidated into a single covering of unusual density. On dividing this, a part supposed to be the sac, was brought into view, but presenting, when cautiously examined, the following characters:—A cyst evidently containing only a fluid, and at this you could ascertain the whole boundary, except at a small point where it was connected to the subjacent parts. The nearest resemblance to it which I have seen is a suppurating gland in front of a hernia of which I have spoken elsewhere.

After proper examination, I divided the covering and evacuated the fluid, which now appeared to have constituted the whole of the tumour. On carefully dissecting and extending my incision through the contracted base of the sac, I found, very deep and close to the femoral aperture, a very minute knuckle of intestine very tightly strangulated. The parts immediately embracing the intestine required several minute strokes of the bistoury before the bow was set free, when they were found to have become somewhat thickened. The symptoms immediately subsided, and the woman got well, without a bad symptom which very often happens where the practice of giving aperients (as a matter of course) is not pursued.

I have little doubt that this curious disposition of the sac had arisen from the improper bearing of a truss, which she had worn for about three months, in the careless manner which is too common in such patients. Not having been careful in reducing the hernia, she had, I doubt not, pressed a small portion of the sac against the crural arch, above which the femoral hernia is in its progress very apt to rise. The sac had become thus extended, and its sides, at that part nearest the hernia, constantly pressed together, so that the communication with that part immediately investing the intestine was in course of obliteration. The hernia itself, being very small, lay close to the femoral aperture, and being thus not included in the pressure exerted on the sac against Poupart's ligament, had not, of course, by pain or other symptom, drawn attention to the improper bearing of the truss. I forbear remarking on the practical cautions suggested by this case, as they will be probably sufficiently obvious.

Statistical Report of the Sickness, Mortality, and Invaliding among the Troops in the West Indies, prepared from the Records of the Army Medical Department and War Office Returns. 1838.

As this is the first of a very important series of Medical and Statistical Returns, we shall extract a passage from the Introduction, explanatory of the circumstances under which they were commenced; and then proceed at once to lay some of the more striking facts before our readers, reserving to the end any remarks that we may have to offer upon the work, or upon the questions under examination. At the same time it may be safely affirmed that if carried out on the plan announced in this volume, these Reports will constitute a most important acquisition to medical science; will furnish data for the solution of innumerable questions in the etiology of disease; and will inevitably lead to the salvation of thousands of lives.

Captain Tulloch says, in the Introduction:—

"In October 1835, the Secretary at War deemed it requisite that an inquiry should be instituted into the extent and causes of the sickness and mortality among the troops in the West Indies, with the view of founding thereon such measures as might appear likely to diminish the great loss of life annually experienced in these colonies. At this period there existed no public document which could at once supply that information for a series of years; and though the number of deaths might have been ascertained by a compilation from the War Office Returns, that fact, unaccompanied by a detail of the diseases, as well as the extent of sickness which prevailed, would have afforded a very inadequate idea of the magnitude of the evil, or the causes by which it was induced.

"Under these circumstances, it became necessary to refer to a very voluminous series of returns and reports, containing an Historical Record of the Medical Transactions in the British Army since 1816, when first established by Sir James McGrigor, the Director General; but as these documents extended over upwards of 160 folio volumes, and had been accumulating at the Army Medical Board for a period of twenty years, it became necessary that the investigation should be committed to persons who were conversant with statistical details, and had been in the habit of condensing the results

derivable from masses of figures into a succinct and comprehensive form.

"For this duty Mr. Henry Marshall, Deputy Inspector General of Hospitals, and myself, were nominated by the Secretary at War, on the recommendation of the Director General. For the honour of this selection we were, I believe, principally indebted to the circumstance of our having been previously engaged in publications showing the extent of mortality among the troops in the colonies, collected from such limited sources of information as were within our reach.

"The documents submitted for our investigation, and which we were desired to take as the basis of our Report, consisted principally of a series of returns furnished annually by every medical officer in charge of troops on foreign stations, to the principal medical officer of the colony in which he serves, detailing the number of troops under his charge, with the admissions into hospital and deaths among them, in the course of the year, and a specification of the diseases by which they were occasioned. The contents of these are then condensed by the principal medical officer into one general return, embracing the sanitary details of the whole troops in the colony, which is transmitted to the Medical Department, where it forms a record of the state of their health for that year.

"So far as regards the number of admissions into hospitals, or attacks of sickness, these documents are a very accurate record, because every soldier taken into hospital being forthwith subject to a stoppage of tenpence per day, the entries made by the surgeon to regulate the financial details of his department, afford a ready means of checking his returns. The same cause, however, which tends to ensure accuracy in the admissions, proves a considerable source of error in the deaths, for if a soldier dies so suddenly as not to have been dieted in hospital, his death, in many instances, is omitted altogether by the medical officer. The mode in which this defect has been remedied by reference to the documents in the War Office, will be hereafter detailed."

The medical returns contain many details respecting the climate, locality, and other circumstances supposed to influence the health of the troops. From these meteorological tables, and topographical descriptions of the stations have been derived, and appended to the tabular views of the diseases and mortality.

The troops employed in garrisoning the British possessions in the West Indies are distributed into four commands. The Windward and Leeward command extends from 6° to 17° N. latitude, and 56° to 63° W.

longitude, embracing British Guiana on the continent of America, and 12 islands. The climate and topography differs to a great extent, but some of the more general features have been brought together in the following observations :—

“ 1st. The first peculiarity which distinguishes the climate of this command is a high temperature, a necessary consequence of proximity to the equator. The mean height of the thermometer throughout the year is, however, rather under than above the average of similar latitudes, being only about $80\frac{1}{2}^{\circ}$. In none of the islands is it above 82° or under 79° , and any slight difference in this respect results more from their geological features, or extent of cultivation, than the mere difference of latitude; as the mean temperature of British Guiana in latitude 6° is but $80\frac{1}{2}^{\circ}$ while that of St. Kitt's, more than 12 degrees further to the north, is 81° .

“ 2d. The next peculiarity which extends to this, as well as most tropical regions, particularly of insular situation, is great uniformity of temperature. The difference between the highest and lowest mean range of the thermometer, is, even in the most variable of the islands, only 13° , and in some it is not more than 4° throughout the year; whereas in Britain it is, in most years, upwards of 30° .

“ 3d. In this, as well as other tropical climates, there is but little change in the elasticity or pressure of the atmosphere. The extreme range of the barometer is not more than from a quarter to half an inch throughout the year, and it is not materially affected even by hurricanes; whereas in this country its range is from two to three inches, and it varies with every slight change of weather.

“ 4th. One of the most marked of the atmospherical peculiarities of these regions, is the large quantity of rain which falls annually, being, on the average, at least three times as much as in Britain—a necessary consequence of rapid evaporation under a tropical sun. The quantity, however, varies materially in the different colonies, according as their surface is mountainous or level, clothed in wood, or cleared and under cultivation. We have, in a subsequent portion of this Report, stated the fall of rain in each colony, so far as it has been ascertained by measurement; the average quantity throughout the whole command has been estimated at from 60 to 70 inches annually.

“ The rain of these regions is, however, of a very different character from that of Britain, being confined principally to two seasons of the year, termed the spring and autumnal rains, and then falling, not in gentle

showers, but in torrents, which, unless in very dry soil, or where there is free drainage, speedily inundate the surrounding country.

“ 5th. The four seasons of temperate climates are therefore represented by two wet, and two dry seasons; but as the rains follow the course of the sun, it is obvious that the period of their commencement and duration must vary according to the proximity of the settlements to the equator. In Guiana, the most southerly, the spring rains generally extend from December to January, the autumnal from May to August, while in the most northerly of these settlements, the former does not commence till April or May, and the latter extends from October to December.

“ In many of the islands, particularly the less hilly ones, there is scarcely any deposition of dew, and in the others it is generally scanty, except in densely wooded districts.

“ 6th. In regions exposed to such a high temperature it is fortunate that the heat of the day is generally modified by a sea breeze, not of that variable character which prevails in temperate climates, but which blows with nearly uniform force, and from one direction, during nine months in the year. It is termed the trade wind, as it generally comes from the east and its effects lateral points, except from August to December, when it veers round, and blows slightly from the south and west, with frequent calms at intervals.

“ While this trade wind prevails during the day, a land wind, in all the large and mountainous islands, blows with almost equal regularity at night.

“ In these and some other tropical regions in similar latitudes, hurricanes are occasionally experienced between the middle of August and latter end of October, hence denominated the hurricane season. Trinidad, Tobago, and the settlements to the south have hitherto been exempt from them, but they sometimes fall with dreadful violence on the other islands. Barbadoes, in particular, has suffered very severely from the ravages.

“ During the rains, particularly at the commencement and termination, thunder and lightning are very common, but seldom occur at any other period of the year.”

The state of the barracks and the dietaries we shall have to refer to in investigating some of the means of reducing the mortality in these colonies.

The following table exhibits the strength of the admissions into hospital, and the death during 20 years, 1817—36 :—

TABLE showing the Admissions into Hospital, and the Deaths among the White Troops
in the Windward and Leeward Command.

Years.	Strength.	Admissions.	Deaths.	Ratio per Thousand of Mean Strength.	
				Admitted.	Died.
1817	5120	12,111	830	2365	162
1818	4203	8490	532	2020	126
1819	3790	6949	314	1833	83
1820	3672	7463	387	2032	105
1821	3636	7660	397	2104	109
1822	3299	6036	254	1830	77
1823	3264	6072	158	1860	49
1824	4144	8534	293	2060	70
1825	4466	7906	343	1770	76
1826	4549	7855	308	1727	68
1827	4310	8251	365	1914	85
1828	5202	8071	341	1921	81
1829	4164	7459	241	1791	58
1830	4601	9290	300	2020	65
1831	4232	9927	293	2346	69
1832	4331	7823	277	1806	64
1833	4823	9018	241	1869	50
1834	5407	8249	233	1526	43
1835	5462	8259	313	1512	57
1836	4983	9512	383	1909	77
Total	86,661	164,935	6803	—	—
Average..	4,333	8247	340	1903	78.5

"From this it appears that among every 1000 white troops there have been 1903 admissions into hospital in the course of the year, so that on the average every man must have been under medical treatment, for some cause or other, about once every six months and a half.

"If reference be made to the proportion of admissions among troops in the United Kingdom, it will be found that there every man is under treatment about once every thirteen months; consequently the cases of sickness or admission into hospital among white troops in this command are about twice as numerous as when serving in their native country. There is, however, this marked distinction, that they are of so severe a character, that 1 in 24 proves fatal, whereas in this country only 1 death occurs out of every 67 cases treated.

"Before bringing the mortality among the white troops in this command, however, into comparison with that of the same class

in the United Kingdom, it may be necessary to remark, that the deaths stated in the preceding table are only those which have occurred under medical treatment, or after being admitted into hospital, leaving still to be accounted for a considerable proportion who die suddenly, or from accidental causes.* The only means we have of ascertaining the number of these, is by a comparison of the deaths in the preceding table with those reported annually to the War Office by the general officers in this command, and which include the deaths from all causes.

* In a few of the years, particularly of late, the deaths from accidents, violence, &c., are enumerated by the medical officers; but in others, no mention is made of them, consequently from the want of a uniform system, this portion of the information cannot be made available.

TABLE showing the Deaths from all causes in

	1817	1818	1819	1820	1821	1822	1823	1824	1825
Deaths per War Office Returns }	909	487	316	358	427	223	163	309	365
Deaths per Medical Returns.... }	830	532	314	387	397	254	158	293	343

“ This omission, added to the ratio of deaths in the preceding table, increases it to $81\frac{1}{2}$ per thousand, to which must be added invalids who died at sea, or on their passage homeward; these have averaged about 14 annually, or $3\frac{1}{2}$ per thousand, thus making the mortality from all causes 85 per thousand of the mean strength.

“ This would be a fair estimate of the ratio of mortality among this class of troop during the last 20 years, provided the strength in the Medical Returns had been accurately stated. But as this has, in most instances, been taken at the highest rate to which it attained in the course of the year, and not on the mean of each month, as it ought to have been, we find, by a comparison with the War Office Returns, that the strength has in this way been rated, by the medical authorities, about a tenth higher than it ought to have been; consequently the above ratio of mortality must be increased in a correspond

Years.	1803	1804	1805	1806	1807	1808	1809	1810
Strength	8501	6849	6467	7044	6604	7814	7000	6046
Deaths	993	1706	1790	800	848	1138	695	1015
Ratio of Deaths per 1000 of Strength..... }	117	249	277	114	128	146	99	168

“ Thus, during this period 138 per thousand of white troops in this command died annually, which is about one-half more than on the average of the last 20 years; so that as fatal as the climate still is to European troops, it appears of late years to have materially improved, particularly in Barbadoes, Trinidad, and Antigua. In this estimate we have carefully excluded the strength and deaths of the troops serving in the settlements of

The authors of this Report have acted in the most candid manner by their readers, and have, in all instances, published the separate facts on which the deductions in the Report are founded, except in the instance above cited, where they have omitted to give the mean strength accurately determined from the War-Office Returns. To this oversight we direct their attention, that it may yet be supplied, and not be committed in the Reports of other Colonies. It is much to be regretted that the elements of medical statistics are not taught in the schools, and that the medical officers should have been left uninitiated in the simple means of deducing the real mean strength from the monthly musters. The defect here pointed out in the Medical Returns have long been known to exist. Our readers will observe, that Mr. Edmonds obtained the facts in his papers published in this Journal from the War Office, where the Returns were more accurately made. Sir James Mac Grigor should have set this right

the Windward and Leeward Command.

1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	Total.
315	380	344	261	314	332	304	278	249	332	403	7069
308	365	341	241	300	293	277	241	233	313	383	6803
Difference understated in Medical Returns....											266

ing proportion, which will make it $93\frac{1}{2}$ per thousand of the strength, or, in other words about an eleventh part of the force have died annually.

"From this statement, however, no definite idea can be conveyed of the insalubrity of the climate, till we compare it with the mortality which has taken place among the same class of troops in the United Kingdom. This has amounted, during a long series of years to about 15 per thousand annually; but, during the last seven years, it has, owing to the prevalence of influenza and cholera, been about 2 per thousand higher. Thus the mortality among troops in the Windward and Leeward command has been six times as high as in the United Kingdom, though the extent of sickness, as shown by the number of admissions into hospital, has only been twice as great. Even this rate of mortality, high as it appears, is considerably less than during the previous 14 years, from 1803 to 1816, when it was as follows:—

1811	1812	1813	1814	1815	1816	Total.	Average.
5502	6152	7292	6673	6641	6153	94,738	6,767
804	609	529	493	639	969	13,028	931
146	99	73	74	96	157		138

Surinam, Martinique, Guadaloupe, St. Eustatia, St. Martin's, Santa Cruz, and St. Thomas, which were given up by the British in 1814 and 1815, as a greater mortality occurred in these settlements than in the others which now constitute the Windward and Leeward command."

many years ago, and would deserve censure for the culpable omission, if it were not more than overbalanced by the share he had in obtaining the Returns of diseases which form the basis of the Reports. No profound knowledge of numbers was requir-

ed to enable the Director-General to discover in what way the average strength should be determined, and no great sagacity to see that the *total deaths*, whether occurring in hospital or out, should have been entered in the Returns of Deaths.

(To be continued in our next.)