entertain either a very humane or scientific opinion on the subject of insanity. Doubtless it is much to be regretted that any one member of the bar or bench should have the opportunity of diffusing erroneous and unjust views on so important a medical question; but so it is. Does it not become us, as physiologists and pathologists, to look to this matter? Is the British Medical Association to become practical, or not? Is it to have a voice in the state, or not? Are we, as members of an Association claiming some share of self-respect, and professing no little anxiety for the progress of medical knowledge, and earnest withal in the cause of truth and humanity,—are we, let me ask, to be content with the present state of the plea of insanity, as recognised both by the state and the lawyers? Shall we long continue so apathetic and indifferent to the cause and well-being of the insane, as to see them treated as criminals—imprisoned, transported, and even hanged like dogs?

The newspaper press has much to answer for; but what can be hoped for from its contributors? They can know nothing of medical science; they have not had opportunities of mastering the difficulties in the way of a correct and faithful diagnosis of a painful and overwhelming disease. Of the mind and its derangements, what are they likely to care? That which appears in the columns of a daily or weekly newspaper, in relation to physiology and pathology, is not likely to be from the hand of an "expert". In the present instance, the opposition of the press to Dove's insanity has been very much on a par with the speech of Mr. Overend; *i. e.*, it has been characterised by no small share of prejudice and discourteous feeling. Truly, as the leading article in the *Times* for July 21st has it, "*no one had ever heard that William Dove was mad*": but what is proved thereby? Just this; that those about Dove were indifferent towards him, and ignorant of what constitutes insanity. That Dove "*lived like the rest of the world*" (*Times*), is simply an untruth, nothing more or less. However, the ignorance and inaccuracies of the *Times* may be forgiven in this instance, in consideration of the large and abundant proportion of good for which society is its debtor.

I wish it were in my power to speak in similar terms of certain of the weekly medical journals. I deny, *in toto*, and unconditionally, the truth or justice of the assertion made by the writer of "The Trial of William Dove", in our own publication of last week, to the effect that "*the great question to be decided by the Home Secretary, before he listens to the recommendation of the jury, is, Did William Dove* KNOW *the consequence of the dreadful act he was committing?*" The principle involved in the above assertion is altogether unsound, unphilosophical, and mischievous in the extreme; its general recognition it is which prevents the detection, in many instances, of mental unsoundness; which excuses the presence at large and in society of a great number of chronic and dangerous lunatics; and which leads, therefore, to the commission of crime by madmen, and to their summary and revengeful correction. To lessen so serious an evil is the principal object I have in view on the present occasion.

ILLUSTRATIONS OF THE PATHOLOGY OF CANCER.

By J. Zachariah Laurence, Esq., F.R.C.S.

Part I *(continued)*.

General characters and classification of cancerous tumours.

(7) Enchondromatous Cancer. This species is founded on two well recorded cases of the most conclusive characters.

Case. *Enchondroma of the Testis: Operation: Death: Autopsy: Secondary Enchondromatous Deposits in the Lymphatic and Vascular Systems, and in the Lungs.* Henry Wynd, aged 37 years, received an injury to his back and his right thigh, two years before his admission into St. Bartholomew's Hospital, under Mr. Skey. Some swelling of the right testicle ensued; but this did not begin notably to enlarge till, a year afterwards, the organ got bruised by an iron bar falling on it. Before the patient was operated on, the testicle had attained a transverse circumference of ten and a half inches; was hard, heavy, and tender. The spermatic cord was similarly affected. After the operation, the tumour turned out to be an excellent example of enchondroma of the testicle, and to be composed of "tortuous, cylindriform, and knotted pieces of cartilage." The epididymis was healthy. The patient recovered well from the operation, but soon returned to the hospital, feeble and emaciated, exhibiting a breathlessness which, increasing, cut him off suddenly in less than three months after the operation.

At the *post mortem* examination, the spermatic lymphatic vessels were seen to contain deposits similar to those in the testicle,* and "became connected at their upper part with a swelling of the size and shape of a hen's egg .... probably a diseased lymphatic gland .... which adhered to the vena cava inferior .... and projected into the cavity of this vein." "Beyond this point, no affection of the lymphatic system could be traced .... the growth in the vein was branched like a stunted leafless shrub .... and in direct contact with the venous blood." "Both lungs were enlarged by the formation in them of masses of cartilage in such abundance that the two lungs weighed eleven pounds and a half. "In many of the larger branches of the pulmonary artery, small shrub-like growths, like that in the vena cava inferior, were attached to the lining membrane." No other organ of the body was found diseased. "The cartilage, in every seat of its growth, was of the true or hyaline kind." Professor Paget very kindly showed me the various preparations above referred to, and also gave me a section of one of the lungs, of which I subjoin the following description from my note-books:—"The section was crammed with cartilaginous tumours, of the average size of a hazel-nut. They were connected but laxly with the surrounding pulmonary tissue, and could be easily and cleanly enucleated with one's fingers. Each was enveloped in a thin pseudo-cyst of cellular tissue, which, branching inwards, subdivided each tumour into a number of small lobes. The cartilage was blueish and translucent, cut like other cartilage, and agreed essentially in its minute characters with that of the ordinary cartilage of joints. The matrix of the cartilage-cells was finely nebulous; the cells themselves exhibited great variety of forms—round, triangular, elongated, etc., and filled limited lacunæ in the matrix. In some instances, the cell occupied but a small portion of the lacuna, in others it filled it, and in most cases each lacuna contained more than one cartilage-cell. This was well defined, and possessed generally a round dark nucleus, and a good deal of coarsely granular matter."

The second case is that of M. Richet, reported in the *Gazette des Hôpitaux*, Nos. 71 and 95 for 1855.

Case. *Enchondroma of the Scapula: Operation: Death: Autopsy: Secondary Enchondroma of the Lungs.* A man, aged 34 years, had had a tumour growing on the right scapula for four years: by that time it had attained the size of a child's head. M. Richet removed it, together with a considerable portion of the scapula. "The tumour originates from the bone, which it completely surrounds; it does not rise beyond the level of the spine of the scapula. It is enclosed by the periosteum.... It is composed of a tissue of a gelatinous appearance, but of the consistence of somewhat softened cartilage. This substance is homogeneous, transparent, traversed by filaments of fibro-cellular tissue, which appears to subdivide it into so many lobules or loculi.

* It is not often that we have an opportunity of anatomically demonstrating the presence of morbid material in the lymphatic *vessels*. Sir A. Cooper relates an instance of cancer of the testicle, in which "the *absorbents* of the spermatic cord were very considerably enlarged, their coats thickened, and small tumours appeared at irregular distances, arising from a diseased and enlarged state of their valves. These vessels were entirely impervious, and contained matter similar to that found in the testicle." The thoracic duct, receptaculum chyli, and lumbar glands, were similarly diseased. (Sir A. Cooper, in *Medical Records and Researches.*)

"The microscopic examination, made by Messrs. Giraldès, Broca, and Verneuil, proved that the tumour was exclusively formed of large cartilage-cells and nuclei."

The man died a fortnight after the operation.

At the *post mortem* examination, at least thirty tumours were found in the substance and on the surface of the two lungs, some the size of a millet seed, the largest that of a nut. "This latter one offered all the external characters of an enchondroma; it was, in fact, cartilaginous tissue; and the microscopic examination, made with the greatest care by Messrs. Broca, Giraldès, and Robin, proved that these tumours contained nothing but cartilage-cells."

Rokitansky, without offering any further explanation, states that he "has seen it *(enchondroma)*, on several occasions, in the lungs;" and that "enchondroma is benign, provided it does not enter into any specific infectious metamorphosis."*

(8) COLLOID CANCER. My personal experience of the surgical forms of this disease is too limited to warrant me in offering any definite opinion as to its precise nature.

(9) FIBROUS CANCER (Paget). Of this form of malignant tumour, Paget gives three cases.† The first of these is especially conclusive, both from its intrinsic characters and the high degree of authenticity it derives from the distinguished pathologist who has recorded it.

CASE. Mr. Paget removed the breast of a woman, aged 47 years, for a large tumour of ten years growth, but which, having been struck seven weeks before Mr. Paget saw her, had increased so rapidly, and become so painful, as to induce her to submit to an operation. "The cut surface could not be distinguished from that of an ordinary fibrous tumour of the uterus .... and microscopic examination could find nothing but a tough, compact, well formed fibrous tissue, with imbedded elongated nuclei." Suffice it to add, the tumour recurred three months after the operation, sloughed out, and in about another two months she died, with a huge cavity in her breast. The point of the case, however, is, that, at the *post mortem examination, both lungs contained between twenty and thirty small tumours, similar to the first and second tumours of the breast—"complete fibrous tissue"*.

(10) FIBRO-PLASTIC CANCER (Velpeau). Of this species, I will, in the first instance, narrate the following interesting case, which, having had under observation for two years, I have been able to investigate with an unusual degree of care.

CASE. *Fibro-Plastic Tumour of the Orbit: Three Operations: Three Recurrences: Death: Autopsy: Secondary Fibro-Plastic Growths in the opposite Parotid Region, the Dura Mater, and the Pleura.* Susannah Foster was 6 years old when she first came under my observation. This was on the 12th of October, 1853. Her parents brought her to University College Hospital, to consult Mr. Quain regarding a protrusion of her left eyeball. They said the child had been delicate from her birth, and had been much subject to coughs and colds, and to bleeding from the nose; and, for the last three or four years, she was in the habit of sweating at night, and, three years back, had a bad cough, with bloody expectoration. Her intellectual faculties had always been remarkably keen. For nearly two years, a difference had been observed in the two eyes; "the left one appeared slightly less than the right, rather drawn back, and a little turned." Six weeks before we saw her, she fell on the front of her head, and from that time onwards the right eyeball was noticed protruding. The left eyeball now protruded considerably, was at the same time turned downwards, and felt rather harder than the right one. The pupil acted well, and vision was perfect. The upper eyelid was suffused, and its veins were enlarged. The child pointed to the outer canthus, and said "it pricked her". She was a fair-haired little girl, with a thin delicate skin, long eyelashes, and prominent upper lip, and was remarkably acute and intelligent. Strange to say, the child outlived both her parents; for the father and mother died of phthisis during the progress of her case. In the father, Dr. Peacock writes me, "there were decided evidences of tuberculous deposits at the upper part of both lungs". A letter from the mother's medical attendant, Mr. Luke, informs me that "she died of phthisis". I, on one occasion, saw one of her brothers and three of her sisters; they appeared to me healthy children, had delicate fine skins, and blue eyes. Between this report and the following one, the protrusion of the eye increased—remarkably so in the week preceding her entrance into the hospital. This was on the 29th of November, 1853. Three days before, the child had been playing about as usual, and up to that time her eyesight had remained good (her father told me "he had often tried her sight", and thought, if there *was* any difference, she saw the better out of the protruded eye); but, on the evening of that day, after the child had been put into bed, she became restless, and complained of pain in the head (apparently the left side only) and eye, and in the lower part of the abdomen. Since that, her mother said, she would start up suddenly in bed, lay herself down again, and then begin rambling. The eye had been discharging offensive matter.

The following are the chief facts in her diary whilst in the hospital.

Nov. 29th, 1853. She was admitted. The left eyeball protrudes about one inch beyond the level of the right one; the eyelids are lividly red. The ocular conjunctiva is, in its upper half, slightly injected; in its lower half, dusky red, and chemosed. Exposure to the light gives her most intense pain. As far as then can be ascertained, the cornea, anterior chamber, and iris, appear sound. Towards the outer half of the upper eyelid is felt a tolerably moveable plate, of the consistence of cartilage. On questioning her as to where she feels pain, she points to a spot on the temple, just at the outer canthus.

Dec. 3rd. Since the last report, the child has been quite freed from pain by small doses of laudanum. She was to be operated on to-day. Half an hour before the operation, her pulse was 120; respirations, 30; tongue moist, coated with a white fur; skin dry and hot.

Operation by Mr. Quain. Chloroform was administered. The outer commissure of the eyelids was divided, and an exploratory puncture made into the orbit; the grooved needle was felt to enter some solid resisting substance. The eyelids were now separated from the contents of the orbit by dividing the palpebral sinuses. The eyeball was then removed. A vertical section through it showed it to be unimplicated in any disease. The mass of the tumour behind it in the orbit was now removed, then some other small portions of the growth, and a small part of the optic nerve. The hæmorrhage was not great. The orbit was plugged with lint, and a compress applied.

Examination of the Growth. It was about the size of a walnut, in form rounded, with one or two lobes on its surface. It cut very firm, its sharply defined section was of a dirty yellowish grey colour, much like that of the grey substance of the brain, only of a deeper hue; there was not the slightest translucency in the tint, which was opaque and dead, and the whole surface had a remarkably uniform homogeneous appearance, excepting a slightly elevated and lobulated nucleus of a rather lighter colour than the adjacent portion of the growth; there was but a single red point, about the size of a pin-head, on the section, otherwise not the slightest trace of vascularity was to be seen.

In tearing out fine shreds with needles for the microscope, the tissue of the growth was found to be very tough,

* Since writing this, I have received a letter from Professor Rokitansky, from which the following extracts are made:—"In those cases of enchondroma in the lungs, which I have seen, it was quite solitary." In the second paragraph, quoted above, from his work on Pathological Anatomy, he is especially alluding to those deposits of cartilage, met with in medullary cancers (*e.g.*, in the testicle). In regard to the two cases of "enchondromatous cancer", on which I have founded this species, he says: "It is perhaps not well made out, that the enchondromata in the lungs were developed after the extirpation of the enchondromata of the scapula and testicle; they may perhaps have existed already simultaneously with those enchondromata of the scapula and testicle." It will be remarked that the Professor suggests a different interpretation of the facts of these two cases, to that adopted by Professor Paget and myself. Which of these interpretations is more in accordance with the principles of inductive reasoning, I leave to my readers to determine.

† Paget's "Surgical Pathology", vol. ii, p. 150.

and not to exhibit any tendency to tear in any one particular direction.

Minute Anatomy. Three chief elements constituted the mass of the growth:—

1. Fibres intersecting one another in all directions.
2. Nucleated laminæ of various forms and sizes.
3. Large quantities of well defined circular nuclei, lying amongst intermediate granular matter, and presenting a fine outline and a homogeneous "stumped" aspect.

Besides these, was a very fair number of *cells*, in some cases circular, in others elongated in various degrees. Of true fusiform cells, only two were observed, and those imperfect in their development. And, lastly, there were a few oat-shaped nuclei, which, however, presented no definite arrangement to one another.

Not a single cell had any of the characters of the so-called "cancer-cell".

The case went on quite favourably, till about the fifth day after the operation, when a smooth, oblong (half an inch long) moderately vascular fungoid growth was noticed projecting from the outer half of the lower border of the upper eyelid.

December 13th. The fungus of the eyelid has been rapidly increasing in size from day to day.

Dec. 17th. The patient continues in excellent health and spirits. The palpebral fungus has not sensibly altered, but a *second* tumour can be felt above it under the skin of the eyelid, just below the eyebrow. This latter growth is a hard, resisting (non-elastic) swelling, perfectly distinct from the fungus of the lower edge of the eyelid.

Dec. 28th. The upper palpebral tumour is much larger.

Feb. 10th. The upper tumour of the eyelid has now reached dimensions of two inches by one inch. The lower fungus remains stationary. Mr. Quain to-day removed the tumour of the eyelid, leaving, however, and dissecting off the skin of the part. The growth was found in the operation to be intimately connected with the periosteum of the orbit.

Examination of the Second Growth. It was somewhat larger than the previous orbital growth, and stated by the operator to be very intimately connected with the periosteum of the orbit; no section was made of it, but the characters of its substance, where it had been cut in its removal (with the exception of the "nucleus" there referred to), is so completely identical with those of the original growth, that the description given of the obvious physical qualities of this latter may be taken as accurately portraying those of the one now under consideration.

Minute Anatomy. On submitting a very fine section, made with a razor, to the microscope, it was found to be composed of irregularly intersecting fibres, which at the outskirts, projecting beyond the general outline of the section, were seen to possess all the optical properties of ordinary cellular tissue. On the addition of acetic acid, many parts of the section exhibited large quantities of the so-called "oat-shaped nuclei" quite similar to those observed in the original growth; but, besides being very much more numerous, they were seen to be arranged parallel to one another in the most regular possible manner.

A very fair number of rounded, mononucleated cells, too, and here and there some genuine well characterised fusiform (fibroplastic) cells, were observed.

The child left the hospital with the wound of the operation healing, and in excellent health; but for two or three days before her departure, a small nodule made its appearance just below the outer canthus; and by the 25th of March, this had extended below the under margin of the orbit inwards, and had reached the size of a horse-bean.

This third tumour grew rapidly, and was removed by a third operation. It nowise differed anatomically from the preceding two.

I saw nothing more of the child till January 30th, 1854, when her mother brought her back to the hospital. She had continued quite well after the third operation, till within the last two months. Then the tumour recurred in the eyelid, and an entirely new growth sprang up in front of the right ear. The following is a report of her condition at the above mentioned date. At present, the left upper eyelid is the seat of three tumefactions, one above and two below, separated from each other by the T-shaped scar of the operations. The inner of the lower two tumours is of a very dark, dusky, venous hue, and feels rather soft; the two other ones are harder and not so dark. They have given her no pain. In front of the right ear is a diffuse tumour firmly attached to the subjacent parts, and apparently connected with the zygoma; it reaches to and involves the antihelix, and in this way narrows the meatus auditorius externus so much, as to give rise to considerable deafness. It was the size of a pea when the mother first noticed it: it now measures two inches by two inches; it feels very hard and resisting; the skin over it retains its natural colour. There is some discharge from the ear, and she has been much troubled with the earache, not with any headache. The left nostril is much stuffed, and blowing it gives her pain; it has bled several times. An examination reveals only some redness of the mucous membrane. The child is otherwise well and very cheerful; she has an excellent appetite, and has kept up her flesh.

Feb. 8th. A hard tumour has formed behind the pinna of the ear continuous with that in front of that organ: this posterior swelling measures two inches vertically, and seven-eighths of an inch across.

Feb. 13th. The progress of the growth is truly surprising. A fresh tumour has formed over the bridge of the nose and above the left eyebrow—extensions of the palpebral tumour. Her health is beginning to fail her. She appears to me and to her parents to have lost flesh since I last saw her; she sleeps badly; her appetite is gone; the tongue is coated. She suffers a good deal of pain in the anterior part of the aural tumour. The right eye waters a little, and its vision is somewhat impaired.

March 10th. The following measurements will speak for themselves as to the astonishingly rapid progress of the tumour. *Parotid Tumour.*—Vertical measurement, $3\frac{1}{2}$ inches; horizontal measurement, $3\frac{3}{4}$ inches. The *Fronto-Palpebral Tumour* occupies now the entire left half of the forehead and root of the nose; it measures, from side to side, $2\frac{1}{2}$ inches; and reaches, from the level of the eyebrow upward, $1\frac{1}{2}$ inch.

May 19th, 1855. Up to shortly prior to the present date, I had had the child as a patient at the Farringdon Dispensary, but about this time her father died, and her mother moved to another dwelling; and I therefore got her again into University College Hospital, where she died on the 30th of October, 1855. On May 19th, I have the following notes. *Parotid Tumour.*—Vertical measurement, $5\frac{3}{4}$ inches; horizontal measurement, $6\frac{1}{4}$ inches. *Frontal Tumour.*—Vertical measurement, $4\frac{3}{4}$ inches; from middle line above eyebrow to within an inch of ear, 6 inches. There wa great uniform glossy lividity of parotid tumour, and over the orbit: where no such lividity exists, there the subcutaneous veins are greatly enlarged. In front and behind the right ear, some desquamation of the cuticle has taken place.

Up to the period of her death, she gradually sank into such an exhausted condition as to preclude the possibility of taking any further exact notes of the case. Pectoral symptoms, too, intervened, indicatory of consolidation and partial softening of the lung tissue. On the evening of the 30th of October, 1855, she breathed her last.

POST-MORTEM EXAMINATION, Oct. 31st, 1855, 3 P.M. *Head. Parotid Tumour.*—After the skull had been cleared of all the soft parts excepting the morbid growths, the parotid tumour was found attached to the parotid, mastoid, malar, auricular (and slightly the occipital) regions, and to the side of the superior maxilla, approaching within half an inch off the outer margin of the orbit. The pinna of the ear was greatly enlarged and thickened by infiltration with the morbid material. The shape of the tumour was circular—that of a bun—with the convex face turned outwards, and unattached. Its diameter in any direction

was 6 inches. It felt hard and resisting, excepting behind the ear, where a small portion felt softer, and had a mammilated appearance. *Palpebral Tumour.*—It was formed by a great thickening and deformity of the left eyelids by the morbid deposit. The eyelashes still remained, though inverted and concealed by the diseased state of their supports. The tumour thus formed was divided into three or four divisions, which closed the anterior aperture of the orbit; but, on removing the roof of this cavity, only a trace of the morbid deposit was found on its floor. The frontal tumour was an extension of the palpebral, and, occupying principally the left frontal region, encroached on the upper half of the nose. The frontal and palpebral tumours, taken together, measured 6 inches across, by 7 inches from above downwards. The frontal tumour reached also beyond the middle line, slightly into the right frontal region.

The tumours above described, parotid and palpebral (frontal), had no connexion with one another.

On the skin being reflected from both these tumours, they presented the following characters. Of a dirty greenish grey colour, firm, consistent, and homogeneous; destitute of vascularity or hæmorrhages. Excepting the green tint (which may perhaps have been, to a certain degree, *post mortem*), the physical attributes of these growths agreed remarkably with those removed during life. The skin covering the tumours was considerably involved in the deposit, but the cranial bones appeared free from disease. *Brain.*—Healthy, excepting at one point of its surface, where it corresponded to a tumour of the dura mater; here the cerebral substance was depressed, and in part wasted. *Dura Mater.*—Attached to the cerebral aspect of the dura mater, investing the base of the skull (in the right middle fossa, corresponding with the posterior extremity of the petrous portion of the temporal bone), was a tumour, of the size of a walnut, and having all the external characters of the growths previously described. On raising up the dura mater, small points of the tumour were seen penetrating to this aspect of the membrane, and the subjacent bone was found rough and worm-eaten (not carious). *Thorax. Right Lung.*—Weighed 11 oz., somewhat shrunken. The upper, middle, and upper half of the lower lobe, felt to be infiltrated by some hard tuberous deposit of some kind. On cutting into the lung substance, this was found consolidated and grey—in fact, presenting all the appearances that would be expected in old chronic pneumonia. On examining a portion of the lung tissue more closely, I found it studded here and there with what appeared to me to be small deposits of yellow tubercle. With the microscope, after the addition of acetic acid, narrow bundles of intersecting fibres (original lung tissue), exudation corpuscles, indefinite cells, and quantities of fine granules, were the elements noted. *Left Lung.*—Weighed 6½ oz.; exceedingly small, and shrunken to an extreme degree; firmly bound by old pleuritic adhesions; both lobes consolidated, as in the right lung; about an ounce of straw-coloured serum in the pleural cavity. *Bronchial Glands.*—Enlarged. On cutting into one of these enlarged glands, it was found grey and softened, but yielded no juice on pressure. With the microscope, myriads of round, slightly granular corpuscles, less than those of the blood, were seen (lymph corpuscles?). Beneath the right costal pleura of the vertebral extremities of the eighth, ninth, and tenth ribs, and along the sides of the bodies of the corresponding vertebræ, was found a flat deposit (3 inches long, by 2½ inches broad, and about ¾ thick), of material identical in its physical characters with those of the cranial growths. *Abdomen. Liver.*—Very pale and yellow. *Kidneys.*—Very diseased; extremely hard and tough; apparently consolidated by interstitial fibrinous exudation. *Intestines.*—Very transparent, and distended by flatus.

Minute Anatomy of the Parotid Growth. (1) Large masses of parallel waved fibres, well seen after steeping portions of the growth in chromic acid solution. (2) Elongated narrow nuclei, parallelly arranged, and best seen after the addition of acetic acid. (3) Fibro-plastic cells in fair quantity. (4) Cells about the size of blood corpuscles, round, with a granular nucleus. The basis of the growth was evidently fibrous. No cancer-cells were observed.

The preceding account of the microscopic characters agrees essentially with what was observed independently by Professor Quekett in some portions I brought him to examine.

[*To be continued.*]

Association Medical Journal.

SATURDAY, SEPTEMBER 13TH, 1856.

THE DIET OF CONVICTS IN AUSTRALIA.

In the *Journal of Public Health* for July of the present year, an article appeared commenting on a statement made by Dr. Rennie, one of the medical officers to the convict establishment in Western Australia, to the effect that numbers of the prisoners were suffering from diseases caused by an excessive supply of food. The same fact has been also noticed by Dr. Routh, in his papers now in course of publication in this JOURNAL.

Having perused the Official Report in which the statement above referred to is contained, we find it to give so curious a picture of the manner in which our convicts are—or at least very lately were—treated, that an outline of the most salient points is worthy of publicity.

The statements made by Dr. Rennie are contained in two Reports presented by him on February 3rd and August 1st, 1855. In these he draws attention to the fact, that ophthalmia, cutaneous diseases, and bowel complaints, had been remarkably prevalent among the prisoners; and he traces these diseases, not to atmospheric causes, contagion, bad water, moral depression, or to the peculiar training which the men have undergone in prison in England, but to an inordinate supply of food. The daily diet, indeed, of prisoners and ticket-of-leave men, in the beginning of 1855, consisted of two pounds of food for breakfast, three pounds and ten ounces (including sixteen ounces of meat and the same quantity of potatoes) for dinner, and one pound and twelve ounces of food for supper; the total weight being seven pounds and six ounces, including *fifty-nine ounces* of solid aliment.

So enormous a supply of food not only produced blood-disease from over-repletion, but caused the deposition in the alimentary canal of an amount of matter requiring almost incredible quantities of medicine for its removal. Thus, in a tabular statement of twenty-two cases of ophthalmia, dysentery, skin-diseases, œsophagitis, and neuralgia, it is shown that the ordinary treatment requisite before any movement of the bowels could be effected, was the administration of two injections, ten (sometimes fifteen) grains of calomel, from 120 to 360 (generally 240) grains of compound jalap powder, an ounce and a half (sometimes three ounces) of castor oil, from three to five drops of croton oil, and from two to four colocynth and blue pills; with, not unfrequently, eight grains of scammony, and from two to four ounces of Epsom salts.

Such were the statements made by Dr. Rennie; and a