

1852.

An Account of some

Experiments in Therapeutics

conducted in the Royal Infirmary
under the superintendance of

Professors Christison and Bennett

by
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29th March 1852

Introduction

The questions, "is the art of medicine keeping pace with the advancements we see daily going on around us in almost every other department of human industry & ingenuity? and, "are the brilliant discoveries of modern science, being made to conduce to the furtherance of this noble object?" are to be justly regarded as of the utmost importance, not merely in a professional point of view, but the answer to them possesses a popular and universal interest, as bearing on the great cause of the amelioration of man; & the abolition of some, of those physical sufferings, which have been allotted to the entire human race, and, as bearing most powerfully, on the advancement of Christianity and civilization throughout the entire globe.

A comparative glance at the state of our knowledge

in the present day, with that amount which was profes-
 - ed by the practitioners, who lived at the commence-
 - ment even of the present century, will assuredly demon-
 - strate, that those questions may be answered, in the af-
 - firmative; and, whilst perhaps this gradually advanc-
 - ing improvement may be more apparent in the surgi-
 - cal department of our profession, it is not less true, in one
 respect at least, in regard to the medical department
 of it; for it is now universally acknowledged, that the
 diagnosis of some, perhaps all, of the most important
 and deadly maladies, to which humanity is subject,
 has, (based as it is on the foundation of a sound, and en-
 - lightened, Physiology and Pathology; assisted by the
 modern improvements in the means adapted for secu-
 - ring correct observation;) arrived at a state of astonishing
 perfection, and precision, such a state as our forefathers
 never dreamed of attaining to: and, while on the one hand
 nothing can be more delightful, or more calculated
 to excite enthusiasm for his profession, in the mind of
 the student for the first time commencing the observation
 of disease for himself, than the accuracy of these diagnoses
 verified as they are by post mortem examination; yet, on
 the other hand what is so eminently calculated to depre-
 - ss and discourage him, than the knowledge of the
 fact that in many such cases science and art are alike

powerless to aid the poor sufferers, they can do nothing they can but look on with folded arms at the progress of the struggle, unable in too many instances, even to smooth the path to the grave, or to cheer for a moment the dying wretch by even a miserable placebo; our art being in this respect in precisely the same condition in regard to the affording of relief, at the present time, as it was in the days of Hippocrates. But disheartening as this picture may be, it is not hopeless, quite the contrary, it is full of hope for the future; for many reasons - for first, if the art is to advance at all it must be by the thorough cultivation of Physiology and Pathology, and by bringing this knowledge to bear, on the actual observation of disease at the bedside: the old plan of acting from the results of experience alone, has had a very fair trial, and amongst the innumerable blows aimed by it, in the dark two only seem to have struck home; Quina has struck down Intermittent fever, and Sulphur has either routed the itch, or slain the Acarus Scabiei, but why nobody has ever yet been able satisfactorily to explain the new, and rational plan on the contrary, has this very accuracy of diagnosis, for one of its earliest triumphs, an accuracy utterly unknown, and undreamt of, fifty years ago; these advances being more particularly seen in the present modes of diagnosing diseases of the heart, lung

kidneys, liver &c, the additional precision derived from taking advantage of physical means of diagnosis as compared with the uncertain and fallacious methods formerly employed, of arriving at the seat of the lesion, from the study of mere general symptoms alone.

Again, there is hope in the fact that, we are beginning to have glimpses of the modus operandi of some substances on the animal economy; physicians now a days are not quite so content as their forefathers were, to tread the quiet, comfortable old paths; to follow the time honoured plan of pouring substances of which they knew little, into bodies of which they knew less: those who are engaged in advancing the art, and labouring most successfully to advance it, on rational principles are putting to the test of experiment the long established reputations of many an old medicament, and few of these indeed can stand such a test: but the truth is that it is much easier to discard old remedies than to invent new ones; still if these preparations, some of which are most nauseous and disgusting, are useful also, why plague patients by compelling them to swallow such? but if on the other hand, we do find them beneficial we are not to reject them tho' their mode of action be mysterious and inexplicable; we would be very glad to welcome a few more such remedies as Quina has

proved to be, though we were for ever to remain ignorant of the manner in which they should accomplish such desired results, as it has done. Perhaps the art is to make advances in both these directions, experience may determine the value of this or that substance, in certain circumstances without being able to say why, such should be the case, merely taking cognizance of the fact; and on the other hand the Chemist, and Physiologist, having determined the *modus operandi* of those substances on the animal economy, may furnish us with rational indications for our guidance in their employment. But at present we are compelled to rely almost entirely on the former mode in our employment of new remedies.

To determine the value, of empirical remedies, it is evident that series of experiments are the only methods of arriving at sound conclusions in regard to their efficacy as therapeutic agents, but it is to be expected that, as our knowledge of the processes of digestion and assimilation advances, we shall be furnished with some surer indications to guide us in the choice of remedies, than mere chance, or crude theory, or old tradition.

During the past Winter several a number of very interesting experiments have been instituted under the superintendance of Professors Bennett and Christison in the Clinical wards of the Royal Infirmary, with a view

to determine the value of several medicines recently proposed as remedies in some very intractable forms of disease. Some of these medicines were of recent introduction having been but lately brought under the notice of the profession, others were well known drugs, and it was the proposals in regard to the curative agency of these over well known diseases, which was new, and which it was the object of these experiments to decide. The fullest opportunity having been afforded to the members of the examining class for observing the progress of the cases and noting the results of the treatment, not only during the mid-day visit by the physicians, but also during the evening visit by Dr. Pinkerton the resident clerk. Having taken advantage of this permission I endeavoured to ascertain as accurately as possible by personal observation the results of these trials, and to embody them shortly in the present paper. The difficulties in the way of arriving at just and sound conclusions in regard to the virtues of any therapeutic agents are so great, as in many instances to be almost insurmountable, this arises from the variety of intercurrent circumstances, the tendencies of which are to falsify our conclusions, from the impossibility of determining the amount of their influence in each particular. We know that in a great many instances, diseases if left to run their natural course, resolve spontaneously and

often in such an abrupt manner that, had medicines been employed no doubt might have been entertained of their efficacy in that particular instance, and hence the success of quackery in its various forms, and the popular belief in specifics. Then we must take into consideration the effects of diet and regimen, exercise, change of air, of scene, and of habits, the removal of exciting and the avoidance of predisposing causes of disease &c. The only satisfactory mode left us, for arriving at the wished for conclusions, are by multiplying our experiments and varying as far as possible the outward circumstances in the presence of which they are administered, if then, we find the same results following the exhibition of any remedy under varying aspects of accompanying circumstances, in a large preponderance of cases, we are fairly justified in ascribing those ameliorating effects to its use; no matter how mysterious may be its mode of action on the living frame.

Many valuable remedies have doubtless fallen into undeserved neglect, not from their demerits, but from the careless and inattentive manner in which they have been administered, for instance Chloroform has been attempted to be administered on a handkerchief which had been thoroughly heated before a fire, previous to pouring the Chloroform on it, and under such circumstances it was no wonder the drug proved singularly inefficacious, having evaporated before it ever had an opportunity of reaching the air

passages of the patient; the same negative results followed its administration in one of the London hospitals where a very ingenious inhaler was employed, furnished with two stopcocks, one to admit atmospheric air, the other Chloroform; the patient inhaled vigorously for a quarter of an hour, without the slightest approach to anaesthesia having been induced, but the phenomenon was at last satisfactorily accounted for, by the circumstance of the wrong cock having been turned: so in the application of escharotics to sloughing or phagedenic sores how can a beneficial change of action be expected if the caustic never have an opportunity of reaching the living texture? the simple precaution of mopping up the fluid which abounds in such circumstances, and of removing as far as possible the gangrenous portions having been neglected

Another enormous drawback to the advance of knowledge in this important direction, arose from the monstrous evil (now in a great measure done away with owing mainly to the exertions of Prof: Christison) of the adulteration of drugs; an evil which at one time existed to an extent almost incredible, for instance the reputation of Iodide of Potassium was fast sinking in the estimation of the profession in England, and no wonder it was, when by analysis it was discovered that the drug commonly in use contained about two thirds of its weight of Carbonate of Potash, and the same thing might have been said of almost all the valuable remedies then employed, which were worth ^{ting}adulterations

In the experiments about to be related the greatest care and circumspection, were exercised in order that the remedies might have a fair trial, and although the cases are not so numerous as might have been desired, the season having been a remarkably healthy one; still they are pretty conclusive so far as they go. During the course of the Sepion and especially of the earlier part of it experiments were instituted on the following subjects. To determine the value of —

- 1 The Sulphate of Quina in the treatment of continued fever.
- 2 The Nitrate of Potash in the treatment of acute Rheumatism.
- 3 The Juniper tar soap & other agents in the treatment of certain cutaneous affections.
- 4 The Koupo to destroy tapeworms *Genia solium*.

Sulphate of Quina in Continued Fever.

During the Autumn of last year communications from Dr. Dundas of Liverpool appeared in many of the medical periodicals to the effect, that he had discovered a new mode of treating continued fever by means of which, that disease could be rendered as manageable as Intermittent fever; and its course be similarly cut short, the agent employed in both cases being the same, viz. sulphate of Quina: and, one of the first communications made to his class by Prof. Bennett at the commencement of his course on Clinical Medicine was, that he had received a letter from Dr. Dundas detail-

-ing that gentleman's new mode of treatment, and the reasons which led to his adoption of these new views in regard to continued fever. It appeared from this document, that Dr. Dundas who had been practising as a physician in Brazil for fourteen or fifteen years, had been greatly struck with the resemblance which the Liverpool typhus bore to the Remittent fever of the Brazil, a resemblance so close as to persuade him of their identity: he found this fever to prevail most extensively amongst the newly arrived Irish peasantry who had been driven by the extremities of famine and destitution to emigrate, and he says it is the same fever which prevails so extensively amongst the lower orders in the large manufacturing and seaport towns of England, and Scotland, and which has in those places also been successfully treated as in Liverpool, by large doses of sulphate of Quina. Dr. Dundas administered the Quina in doses of ten grains every two hours, and he says, that of those patients who took five doses, some who commenced its use on the fourth, and others on the eighth day after admision were quite well the next day, and able to sit up in bed. This proposal of Dr. Dundas' appeared feasible enough, backed as it was by numerous instances in which the remedy had apparently proved successful; and as our knowledge on this subject is altogether empirical no satisfactory explanation of the effects of the drug, as an anti-periodic having yet been given; every communication of

such a kind becomes valuable, and is deserving our best attention. Viewing the subject in this light Prof: Bennett at once commenced a trial of its powers, in some of the cases at that time in the wards, Here it must be observed however that the type of fever which then, and which throughout the winter, prevailed in Edinburgh was of a very mild form, a mere febricula; setting in often it is true with very violent symptoms undistinguishable from those of Typhus, but on the seventh day resolving spontaneously on the breaking out of a copious diaphoresis which appeared to be critical; and the patients speedily recovered their strength after that date. Proper precautions were of course accordingly taken to distinguish such cases, from those of genuine Typhus, but so rare at that time was the latter disease, that some difficulty was experienced in procuring a sufficient number of patients who could be unequivocally pronounced to be labouring under the genuine form of pure Typhus.

The idea of administering Quina in continued fever is by no means original, indeed we would expect that after witnessing the great success attendant on its exhibition in Intermittent fever, practitioners would be well disposed to give it an early trial in continued fever also. Cullen says² that Peruvian bark may be admitted in cases of continued fever either after considerable remissions have appeared, when it may be employed to prevent the return of exacerbations, or the same

footing as it is used in Intermittent fevers, or in the advanced state of fevers, when all suspicion of an inflammatory state is removed, and a general debility prevails in the system; and he adds with respect to the ^{use of} bark, good effects are to be expected from it, almost only when given in substance and in large quantity;" and Dr. Christison in his Dispensatory speaks of its employment he says, "that its utility is more circumscribed in continued than in either Intermittent or Remittent fevers. The virtues once almost universally ascribed to Cinchona bark as a tonic - antiseptic and febrifuge, in the typhoid stage and form of continued fevers are now no longer confided in, and have never been transferred to Sulphate of Quina. But it is serviceable in certain circumstances. When distinct remissions occur, particularly in the fevers of childhood, and no obstacle exists from the presence of irritation in the stomach or intestines, Sulphate of Quina often proves almost as perfect a febrifuge as in aque. It is also of service in the Typhus of adults, when attended with exhausting, noncritical sweats, which it sometimes arrests. It promotes convalescence when this is retarded by general nervous debility, and still more by defective appetite and feebleness of digestion. I have repeatedly seen it arrest relapse in inflammatory fevers, when the relapse put on the intermittent character" p 443

The number of cases in which this remedy was tried were mine in all. a number amply sufficient to elucidate the supposed virtues of the drug, if this were possible:

It is however to be lamented that the high hopes which Dr. Dundas' confident statement excited, have not been realized in this city at least, and it is presumed there can be no reasonable doubt left on the minds of those who witnessed, and carefully observed, the progress of the cases that the subject received the fullest, and most candid consideration, and investigation. It might indeed have been desirable, had it been practicable, to have tried the effects of the Quina in the outset of a case of Syphilis, but from the prevalence of febricula such an experiment could never have proved satisfactory. We are inevitably forced to the conclusion then, that Dr. Dundas and those who have adopted and upheld his views, have all along been committing the mistake of treating a febricula, which would have got well spontaneously, without their interference, and one bad result at least has followed their experiments viz) that of raising the price of the valuable drug which they employed, and unfortunately there is reason to fear that it will soon reach a price which will place it beyond the reach of the humbler classes of the community, to procure unless means be adopted to prevent the annihilation of the Cinchona family. I now proceed to give a short abstract of those cases in the treatment of which this new suggestion has been acted on.

Case 1 Miles Murray at 25 Seaboard Admitted Nov^r 4th 1857

History Has always enjoyed very good health up till the present attack. On last Sunday evening (4th) whilst in bed, was seized with rigors, shivering as if from cold, this was succeeded by a hot and flushed condition of the skin with pains in the head and back, loss of appetite, inability to sleep at night, prostration of strength, and a constipated condition of the bowels. These symptoms came on suddenly without any premonitory warning.

Examination His countenance wears in a well marked manner that peculiar aspect so characteristic of Typhus, the features have a pinched and dusky appearance; the expression of the face being dull, apathetic, or stupid with a slight shade of anxiety. His mental faculties are as yet unimpaired, but altho' he answers questions promptly and rationally yet it seems to cost him some effort to do so, owing perhaps partly to muscular debility, partly to that apathetic condition so indicative of the disease.

Nervous System. Pain in the forehead and back, there is a general aching sensation or pain in his body and limbs, slight subsultus tendinum, functions of special senses unimpaired.

Circulatory System. Cardiac sounds normal, Pulse 90 full & regular.

Respiratory System. Normal with the exception of an occasional cough, unaccompanied by any expectoration.

Digestive System. Tongue is moist, covered with a white fur with the exception of its tip and margins, which are preternaturally red.

and clear, Appetite entirely gone. great thirst, No tenderness on pressure of the abdomen. Bowels were freely opened by medicine prior to his admission

Genito urinary System Urine scanty. Specific gravity 10.24 shows no trace of ^{albumen} on the application of heat and Nitric acid

Integumentary System. Skin dry and hot, there is no eruption what ever on his body - the extremities are cold

Diagnosis. Continued fever. Treatment Ordered half a dozen leeches to the temple with a view to relieve the headache, and the following Diaphoretic mixture

℞ Vini Antimonii Tartarizati semianciaus
Solutiois Muriatis Morphie. drachmanum Cum semife
Aqua unciis sex. Misce et signetur

One ounce to be taken every third hour -

Nov 8th (6th day of fever) His condition being much the same to day as it was yesterday he was ordered, to take Quina Sulphatis grana decem. every two hours till five doses have been taken, and to omit the Diaphoretic mixture.

In the evening its effects were noted, His skin is bathed in a copious perspiration and is cooler. Pulse 82 much smaller than it was during the morning. Bowels have been opened during the afternoon

Nov 9th The Quina was not withdrawn after the fifth dose, but has been continued regularly since every two hours, until now at 12 O'Clock, Two drams of the medicine have been given with the only effect, apparently, of reducing the frequency of the pulse, and rendering it smaller and weaker, he slept well during the night, has no increase of headache and continues in other respects in much the same condition. Ordered to go on with the

Quina in five grain doses, and to have two ounces of Wine in the afternoon if required.

8 O'Clock evening. Has taken three doses of the Quina and one ounce of the wine, the pulse exhibited the same phenomenon after each dose as on the former occasions, viz being brought down about ten beats in the minute and becoming much smaller, these effects however are but transitory, as they disappear ere the interval between the doses has elapsed and his former condition becomes reestablished without any appearance of permanent amelioration having been effected in his condition, Pulse at present 40 small and regular, the urine is of a deep colour and deposits some Lithate of Ammonia, this may be accounted for by the increased secretion of sweat which still continues. Ordered to resume the ten grain doses of Quina

Nov: 10th Slept pretty well during the night, he complains for the first time of having had some tingling in his ears during the morning which soon went off however: the functions of the special senses have certainly not been heightened, but if anything, rather blunted and the course of the fever has not been checked in the slightest degree. Was ordered to omit the Quina and to have four ounces of Port wine

R^x Spiritus atheris Nitrici. drachmas tres

Solutionis Ammonia Acetatis. unciam cum semipe

Aqua unciis quatuor. Misce et sequetur

A tablespoonful every four hours.

After this date the fever continued to run its usual course until the 14th day when it abated and he appeared to be in a convalescent

state till the 21st day, when a relapse took place ushered in by nausea and uneasy sensations in the epigastric region, which were followed by a pretty severe attack of diarrhoea, which reduced his strength very considerably: these symptoms abated, and convalescence again went on till the 28th day, when a second relapse supervened accompanied by a smart attack of bronchitis, which brought him almost to the brink of the grave. however he again rallied, and the convalescence then went on uninterruptedly -

About the commencement of the season the Quina was tried also in the case of a woman named Stevenson, but I have not been able to collect the particulars; it seemed however to produce no effect whatever, and the woman died from pulmonary complications

Case 3. Isabella W. Donald at 50. Nurse in the Infirmary admitted 10th Nov^r 1857.

History states that on Tuesday week - (9 days ago) she was engaged in cleaning hair for matrones and felt very much fatigued in consequence and supposed she had caught cold; the next day she felt a general soreness over the body as if she had been beaten, and had severe pain in the head, back, and epigastrum, accompanied by nausea and vomiting; on Thursday the vomiting ceased, but she still continued ill, and on Saturday she suffered so severely from headache, that she took to bed, and swallowed a dose of

Colocynth pills, which purged her violently; increasing her debility very much.

Examination. Cyphus aspect of countenance well marked. features somewhat pinched, voice weak and infantile

Digestive System, Tongue harsh and dry, covered with a white fur, bad taste in mouth, thirst, anorexia, some nausea, but vomiting has ceased, some pain still in the epigastrium

Respiratory System, Chest resonant throughout its whole extent in a marked degree, vocal resonance less than natural; the expiration is prolonged, and is accompanied by sibilant and sonorous râles on both sides, anteriorly and posteriorly, Has cough with slight mucous expectorations

Circulatory System, Pulse 102, and strong, complains of palpitation but no increased impulse is perceptible, sounds normal.

Integumentary System Skin harsh, hot, and dry, no eruptions

Nervous System, Universal soreness continues, headache very severe, mental faculties unimpaired.

Genito Urinary System - Makes water freely but it is accompanied with a scalding sensation

R. Vini Specacuanha. drachmas

Spiritus Aetheris Sulphurici, drachmas duas

Solutionis Muriatis Morphiae, drachmas duas

Aque uncius sex Misce et signetur

℞ tablespoonful every second hour

11th Nov. The pain in the epigastrium and head is increased, Was

ordered the following emetic. *R. Pulveris Specacuanhae grana quindecim
Antimonii Tartarizati grana duo.* To be taken immediately, and as soon
as its operation shall have ceased entirely to commence ten grain doses
of *Quina* every two hours.

12th Nov. She took the first dose of the *Quina* last night between 7 and 8
o'clock, and up till noon to day has taken five doses, but the last one
has been vomited. No apparent change seems to have been effected on
the symptoms, or general progress of the case, the headache and pain
in the epigastrium remain unabated. Ordered. Eight leeches to be
applied to the epigastric region, and five more doses of the *Quina* to
be taken. Cold water to be poured on the head, should the pain continue there.

13th Nov. Has taken the *Quina* as ordered, the first dose only has been vomited
the rest were retained; the abdominal pain has not been relieved by the
leeching; and the cold affusion to the head has been succeeded by shiv-
-ering and chilliness. Pulse is 78 and full, the features are indicative of
much suffering, she is very deaf, and replies to questions rather inco-
-herently. Ordered, Warm fomentations to the abdomen. The cold affusion
to be reapplied to the head. and -

R. Pulveris Opii, granum

Bismuthi oxydi grana decem

*Confectionis aromatica quantum sufficiat ut fiant
pilulae duo. Signetur. - One at bedtime, if necessary*

14th Nov. Pain in the abdomen much relieved by the fomentation, but
still present. Pulse 88 and weaker; she complains of a sensation of swim-
-ming in the head. the nurse relates that she had an epileptic attack

last night, during which, the features were much suffused; the eyes being fixed and the limbs slightly convulsed.

15th Nov. Her mental faculties appear to be more impaired to day. she answers questions incoherently: she does not complain of pain in the abdomen, being too apathetic to do so; but prefers these evidently causes suffering. Ordered eight ounces of wine daily

17th Nov. Has evidently had an attack of paralysis, as there is ~~evidently~~ ^{distinct} puffiness and flapping of the left cheek. the features however are not as yet distorted. Ordered, To have the head shaved and blistered

18th Nov. Worse to day, she appears to be conscious, but unable to speak or protrude her tongue when asked to do so altho' she evidently comprehends the requests and endeavours to do so, the left arm is partially paralyzed, but she moves it on being pinched. the sensibility of the paralyzed parts seems little impaired

19th Nov. Died this morning -

Sectio Cadaveris. Body slightly emaciated. Left lung distended and pale anteriorly, its margins very irregular from emphysematous lobules with intervening simply atrophied portions. Two of the emphysematous parts so much detached, as to appear connected with the lung by a pedicle. Several simply collapsed lobules along anterior edge, back part crepitates feebly. A small mass of cretaceous deposit at lower part near surface. Right lung has several very large emphysematous bulla at apex, the largest the size of a hazel nut; around them are deep fissures, and in several other parts of the lung greatly emphysematous lobules, but not so much general

distension of the air vesicles as in the left lung. Both lungs give out from their bronchi considerable quantities of muco purulent fluids, the bronchial mucous membrane is congested, but not extremely so. Lungs weigh $\frac{3}{4}$ lb. Stomach presents slight softening of the coats in the greater cul de sac. Cranial contents quite normal weight 54 ounces. Other organs healthy

Case 4

George Johnson - at 21 - Bootcloser - Admitted 8th Dec^r - 1857

History. States that he was in perfect health up till the evening of Saturday (29th Nov) when after exposure to cold he had a rigor succeeded by chilliness and a sensation of extreme coldness along the spinal column, shortly after the skin became very hot, and a slight perspiration broke out - the other ordinary symptoms of Erythema are well marked

Respiratory System - Normal

Circulatory System - Pulse 108, full, impulse of heart increased in intensity

Digestive System - Tongue furred, coated in centre, cracked - anorexia intense thirst - bowels acting regularly.

Nervous System - Slight pain in head - and some confusion of intellect

Integumentary System - Skin hot and dry - no eruption

Genito Urinary System - Normal -

9th Dec. Did not sleep last night - Bowels constipated, Pulse 120, full, otherwise in same condition as on admission ordered a draught of Castor oil to be taken immediately, and after its action has ceased, to commence taking ten grain doses of Opium every two hours. Vesperi 4 o'clock Bowels have been freely acted on, there is

considerable general excitement, great heat of skin and some sweating, Pulse is 120, full and strong - Ten grains of Quina were given at 8 O'clock p.m. - Pulse 112, weaker. At 9 O'clock - Pulse 112, soft, slight ringing in the ears. At 9 1/2 O'clock a second powder was given - pulse 103 softer, feels more comfortable, and is inclined to sleep 11 O'clock p.m. pulse 110 softer; a third dose was now administered and they were continued regularly throughout the night

10th Dec. (12th day) Slept well during the night, and feels quite comfortable this morning, the skin is moist, there is some headache and ringing in the ears, pulse 84 of good strength, Urine sp: gr 1008 pale, no deposit, other febrile symptoms continue. Ordered to have three ounces of Wine to night. 9 O'clock p.m. pulse 88 very full and strong; ten grains of Quina were now given, and four powders containing five grains each were ordered to be administered every two hours; shortly after swallowing the ten grain dose the pulse sunk to 46 and became soft and compressible - Wine countermanded

11th Dec (13th day) Slept well during the night, the powders have been given regularly, pulse 84 of good strength,

12th Dec (14th day) Was restless in the forepart of last night - but slept towards morning; has some appetite this morning, thirst not so great; tongue still white and figured; no eruption on skin; pulse 90 weak; Urine pale with slight deposits

After this date he progressed rapidly to convalescence and was discharged cured on the 4th Jan^y. 1852

Case 5 Anne Dowie, et. 18, servant. Admitted 10th Dec^r 1851

History states that on Wednesday ~~last~~^{week} about 3 O'clock in the afternoon, she was suddenly seized with pain in the head, general debility, and heat of the skin; with thirst, and anorexia; she has had no distinct rigor, but a general soreness of the body and limbs, which is becoming more severe, and this forms her principal ground of complaint.

11th Dec. Respiratory System. Respiration accelerated. 42 in the minute there is pain, behind the sternum, on taking a deep inspiration. dry rales accompany both inspiration and expiration; there is cough and slight expectoration of frothy mucus

Circulatory System. Complains of pain and palpitation in cardiac region. sounds are normal. apex beats in normal position, pulse ^{feeble} 120

Digestive System Tongue, dry, brown and cracked, bad taste in mouth anorexia - thirst, nausea - bowels confined,

Nervous System - Pain in the body and limbs - none in the head -

Integumentary System. The chest and arms are covered with numerous, minute purplish, petechial spots, which appeared a few days ago, she sweats a good deal at night

Genito Urinary System. Amenorrhoea since June last.

The bowels having been acted on by Castor oil, she was ordered to have ten grains of Quina every two hours: the first dose was given about 1 O'clock p.m., when the pulse was 120 and feeble; at 2 O'clock the pulse was 106, fuller and stronger, no other physiological effect apparent, at $\frac{1}{2}$ past 3 O'clock, took another dose, and at

½ past 4 O'Clock, the pulse was 106; no physiological effects yet developed. At 8 O'Clock she began to complain of slight deafness and ringing in the ears - pulse 106 - Ordered, to take another powder, and if deafness increase after it, to cease taking them altogether -

12th Dec At ½ past 9 O'Clock A.M. pulse 80 very small and weak skin is cooler; slept a little during the night, took no Quina since 10 O'Clock last night. At 12 O'Clock, pulse 86 of better strength, skin warm and moist, her aspect is by no means improved, she is very feeble, lies on her back and inclines to slip down in the bed, there is some subcutaneous tenderness - other symptoms continue unabated Ordered to stop the Quina and to have eight ounces of wine daily After this date the fever proceeded in its usual course unchecked on the 13th day diarrhoea set in, which was however readily subdued by astringents. The urine became loaded on the 16th day with fawn coloured lithates, soon after this she became convalescent and was discharged cured on the 15th Jan^o - 1852

Case 6

Isabella Adams on at 25 - servant Admitted Dec 19th 1852

This girl had been admitted on account of an eruption of *Cerebra* on the side of the head, and she had been undergoing treatment for it, up to the 3^o of Jan^o. on which day after dinner she was seized with a rigor, which lasted for ten minutes, and was succeeded with general soreness of the body and extremities, lassitude and general undefinable uneasiness. The febrile condition did

not declare itself in full force till the 7th on which day she was entirely prostrated, exhibiting all the usual phenomena of Typhus. On the morning of the 9th there appeared a considerable petechial eruption on the chest and arms; and on the morning of the 10th at 6 O'clock she commenced using the Sulphate of Quina, in ten grain doses, at intervals of two hours at 8 O'clock, pulse was 106, full and soft, no headache nor sweating, the second dose of Quina was now administered after swallowing the powder the pulse was 104, At 10 O'clock the pulse was 92, of former character, the head aches a little and there is some deafness.

11th Jan^o Complains of ringing in the ears to day, and of nausea she vomited two of the doses of Quina, pulse was 94 in the morning, but rose to 104 in the course of the day, at the evening visit she was ordered ten ounces of Port Wine - and to omit the Quina -

12th Jan^o Pulse 104 still full and soft. Eruption dark and more distinct, still some pain in the head, has thirst, sores on the teeth - tongue furred & fissured; the progress of the fever is manifestly unchecked,

she became very ill after this date, the attack being a very severe one, but on the 24th she had fairly rallied, and convalescence then advanced rapidly -

Case 49

Jane Irvine at 17. servant. Admitted 19th Dec^r 1851.

This girl was admitted on account of an attack of Acute Rheumatism ~~on account~~, for which she had been undergoing treatment up till January 5th and was then convalescent; but on that day she was attacked with rigors, and general pains and soreness of the trunk and extremities; for this she was ordered an emetic, which gave her some relief, but still the dull pains & feelings of discomfort continued

6th Jan^r: The pains still continue, she describes them as resembling the Rheumatic pains under which she had been suffering, tho' they are not seated in the joints. She had an hysterical attack this afternoon: the pulse is 46 and natural

10th The same symptoms have continued, and become aggravated the pulse is 94 full and bounding; Ordered five, ten grain doses of Quinin at 2 O'Clock, half an hour after the administration of the first dose the pulse had risen to 100 but had become much softer and weaker. at 1/2 past 3 O'Clock the second powder was given, the pulse then being 96 full and regular; at 1/2 past 4 O'Clock it had risen to 106, but was weaker and softer; she is drowsy, and complains of headache, and ringing in the ears, and some deafness. The remaining three powders were administered during the evening, but were immediately vomited; At 8 O'Clock p m the excitement of the nervous system still continued, and the pulse was 105 and soft. Ordered a pill of Opium at bedtime

11th Jan^r: Continues in much the same condition, slept some during the night. pulse 84 soft and full; at 5 O'Clock p m had another dose of

Quina which was immediately rejected by vomiting; the headache and deafness are much increased, pulse 94 full and hard, all the other febrile symptoms exist in full force.

The fever ran its usual course till the 19th Jan^r on which day all febrile symptoms had completely disappeared, and after this, convalescence slowly progressed.

Case 8 John Craik at 23 Blacksmiths, admitted 5th Jan^r 1852.

History states, that he had always been in the enjoyment of good health previous to the present attack. He dates the commencement of his illness from Monday, the 28th of Dec^r last, and attributes its origin to a severe wetting to which he had been exposed on that day; during the same night he had several severe rigors, followed the next morning by increased heat of skin, pain in the head, back, loins, limbs, thirst, anorexia, debility and drowsiness. During the last few months he has been out of employment, and consequently, has been suffering from want of the common necessaries of life; says he has not been addicted to intemperance.

Examination - Respiratory System - Percussion reveals nothing abnormal. Auscultation anteriorly at apex of chest some sibilant râles are heard on inspiration; posteriorly mucous râles are heard towards the base of the lungs; has cough with copious expectoration of mucopurulent matter, slightly streaked with blood, has a sensation of pain over the whole anterior surface of the chest.

Circulatory System, Normal, pulse 80 of good strength.

Digestive System - Tongue red and moist, no abdominal uneasiness, complete loss of appetite, constipation

Nervous System - Considerable headache, slight deafness,

Integumentary System - Skin soft, hot, & dry; no eruptions.

Genito Urinary System - Normal.

Ordered a dose of Jalap

4th Jan^{ry}. Bowels have been acted on by the purgative dose; the cough and expectoration are very urgent.

A. Lister 3 + 3 to the chest

R. Vini Specacuanha, drachmam.

Solutionis Acetatis Morphie drachmas duas

Mistura Scillo uncias quinque cum semipe m

A tablespoonful three times a day -

8th Jan^{ry}. Was delirious last night, and very restless, is drowsy this morning, cough much better & expectoration is diminished; pulse 108, weak, Ordered, ten grains Sulphatis Quina every two hours. At 2 O'clock p.m. the first dose was administered, in half an hour vomiting ensued and part of the Quina was ejected; at 3 O'clock pulse 100, soft & regular. About 4 O'clock the second powder was administered, at which time the pulse was 110, and full, shortly after being swallowed it fell to 104 & became softer, At 6 O'clock the third powder was given, before administration the pulse was 112, after, 106, and soft. at 7 O'clock he complained of some ringing in the ears, At 8 O'clock the fourth powder was given. pulse 110, weak and soft, there is ringing of the ears deafness and some muttering delirium; At 10 O'clock, the fifth dose was given, pulse 104, full. at 11 O'clock pulse 112, other symptoms continue

9th Jan^y (12th day of fever) Was restless during the forepart of the night, but slept after getting the 6th dose of Quina at 12 O'clock, pulse is 90 weak other symptoms as before.

11th Jan^y. To day, there is a well marked petechial eruption all over the chest and abdomen, great thirst, sordes on the lips and gums, Tongue red & moist at margins and black towards the centre, Countenance flushed. Skin hot & dry, the delirium also continues. It is clear therefore that the fever is proceeding uninterruptedly.

Jan^y 16th (19th day of fever) Passed a good night and is much improved to day, Tongue is cleaner. thirst less urgent, Pulse of good strength. From this date convalescence commenced & went on steadily till his dismissal.

Case 9. Marianne Howison. et 11 Admitted 16th January 1852
History. Has been exposed to the contagion of Typhus from her mother and sister, both of whom have died of that disease. She was seized with rigors, and severe headache on Saturday 10th Jan^y but does not complain of pain elsewhere; there is no eruption perceptible, nor was any seen in the cases of her mother and sister

Examination. Pulse 130 full & strong. Intense headache. Tongue dry and brown, bowels constipated, anorexia, thirst. Urine deposits lithates in abundance.

14th Jan^y. No change perceptible to day. Ordered, five doses of the Sulphate of Quina containing 6 grains each, the first dose was given shortly after 1 O'clock p.m. previous to its administration the pulse was

100 hard and full, shortly after it had risen 5 beats, at about 2 o'clock pulse 90, regular. The second dose was given at 4 o'clock p.m. pulse was 96, not so full as before, but harder. At ½ past 4 the pulse was 100 and weaker, complains for the first time of ringing in the ears and dizziness. She is perspiring abundantly and there is much flushing of the countenance. At ½ past 5 o'clock the head symptoms had nearly disappeared. At 6 o'clock p.m. the third powder was administered, the pulse being then 100 full and soft, half an hour afterwards the ringing in the ears had returned, but the headache was quite gone. At 8 p.m. the fourth powder was given, pulse 112 moderately full and soft, and in half an hour it had fallen to 94 and was unchanged in character, ringing in ears continues. She had the fifth powder at 10 p.m. it seemed to produce a copious diaphoresis.

18th Jan^{ry} The feverish symptoms have abated remarkably, the headache is gone; pulse is 94 soft and weak.

She continued to improve till the 23rd but on that day a relapse appeared to have taken place and the febrile symptoms became greatly aggravated. On the 25th the pulse was 108, full, and hard, tongue brown and dry, and diarrhoea had set in with considerable severity. She was ordered three, five drop doses of Dr. Norwood's *Sinctura Veratrum viridis*, and one, two drop dose during the night, the two first doses were retained, but all the others were vomited immediately. The effects of this drug on the pulse were not very remarkably manifested, probably because a sufficient quantity to produce its physiological effects had not been retained. She contin-

-ued to linger on sometimes better, at other times worse for a considerable period after this date; but the abdominal symptoms became more and more manifested, and severe; indeed it turned out to be one of the best marked cases we had of the abdominal typhus "dothion enterite" this description; both as regards the progress of the disease during life, and the morbid appearances in the intestines seen after death.

It is quite evident then, from a review of these cases, that Dr. Dundas' crude theory and much vaunted practice, have not stood the test of fair trial in any one case where genuine typhus was the disease so treated: not only has Quina in large & sustained doses failed to cut short the attacks; it has not in any instance seemed even to conduct the fever in a subdued form to a favorable termination; more than this, it would seem to exert a decidedly pernicious influence in those cases where the nervous system is the seat of complication, especially where the cerebral map and its functions are seriously disordered. One important fact however in a physiological point of view has been gleaned from these experiments viz. the remarkable influence which the Quina possessed in many cases, of lowering the pulse: this was more or less manifested in all the cases, but in some was quite remarkable, as it took place a few minutes after the dose of the drug had been swallowed, and was

evinced long before its well known influence on the nervous system had been at all exhibited. The contractions of the ventricles appeared to be not only diminished in number, but their force likewise seemed greatly abated, the pulse became often quite soft from having been hard & full; this remarkable effect on the circulatory system, seems to have been generally overlooked in the study of the actions of this drug, on the animal economy; perhaps its further investigation may tend to throw some light on that mysterious antiperiodic action, on which its fame rests, and which, if cleared up might afford a clue to the unravelling of problems, of the greatest moment, in practical medicine. This effect on the pulse was transient passing off more quickly in some cases than in others: in general the frequency and hardness had returned within the two hours, which intervened between the administration of the doses

It is easy to conceive how this peculiar effect might lead the hasty observer into the mistake of concluding that, from the improved state of the pulse, the fever had been suddenly cut short; this circumstance may perhaps have materially contributed to the error in question. However this may be, we know that it is an error, and further speculation would be unbecoming in such a paper as this

Nitrate of Potash in Rheumatism.

It may be advisable before proceeding to the consideration of the various modes of treatment, proposed in this disease to give a short sketch of the opinions entertained by our best authorities, in regard to its varieties and their Pathology. This peculiar kind of inflammation manifests a decided tendency to attack the fibrous tissues of the body in preference to all others, at least in the first instance; though ultimately in its progress it may extend by continuity to ~~the~~ any adjoining texture. There are two forms of it, the acute, and chronic, the former often subsiding gradually into the latter; although the chronic form may be assumed from the very commencement in many instances; the disease never having assumed the acute form at all.

Those parts of the body where the fibrous element occurs in greatest abundance viz the tendons, and ligaments surrounding the joints, are consequently the most frequently its seat: one of the joints only may be affected, but more generally several of them are attacked simultaneously; and in such circumstances the disease very frequently manifests another of its distinguishing charac-

-teristics, viz its tendency to metastasis, or shifting from one joint to another, or to some internal organ; and herein lies its most perilous peculiarity; as the internal organ which in nine cases out of ten it chooses is the pericardium. Did this inflammation merely attack, and remain permanently confined to the fibrous structures during the attack; we have reason to believe, that neither parts nor systems would suffer anything beyond transitory impairment; for though the inflammatory symptoms may reach their highest acme, and the agony endured by the miserable patient be almost intolerable, yet suppuration never occurs till the areolar tissue becomes implicated and even this is rare; but the inflammation is seldom confined to the fibrous tissues, it spreads rapidly to the ^{adjacent} serous membranes and the products of their inflammation thus excited consists more frequently of plastic than puriform exudation, occasionally however pus may be formed in the larger joints, but never in the pericardium, its course and progress in this structure being similar in this specific inflammation to that form of inflammation which is produced in any other manner there: one of its most frequent sites is that portion of the serous membrane which is reflected over the valves of the heart, and "when it does not at once prove fatal," the permanent injury which it causes to their function lays the foundation for organic disease of that most important organ which ultimately terminates fatally. A less frequent site is the sclerotic coat of the eye and here unless the action be rapidly subdued, irreparable injury may be done to the delicate structures therein

contained, and serious impairment or destruction of its functions may
 ensue: the acute form however seldom occurs in it, the chronic more
 frequently. Most commonly it first attacks the ankles, knees, shoulders,
 elbows & wrists, sometimes every joint in the body appears to be impli-
 cated, and the patient lies utterly helpless, every attempt at motion
 causing the most exquisite agony, so that even the gentlest efforts of
 the nurse to shift his position cause so much suffering to the patient
 that these attempts cannot be persevered in; the pressure of the bed-
 clothes even can hardly be borne. The system of course sympathizes
 largely with the local affection, and this is manifested by a high
 inflammatory fever, the Synocha of Cullen; which is entirely distinct
 from, and never shows any tendency to pass into, the form of Typhus;
 the pulse is rapid, full, and hard; the digestive system is consider-
 ably disordered; manifested by a white and furrowed tongue - preter-
 naturally red at the margin and tip, thirst, and constipation;
 there is however in most cases no marked disturbance of the bowels.
 The urine is scanty, high coloured, and very acid; sometimes loaded
 with lithates, at other times clear. Skin sometimes dry, but usually
 profuse perspirations break out at irregular intervals, exhausting
 the patient without relieving his distress, and this secretion is further
 remarkable for its acidity, and its peculiar powerful odour. The
 nervous system has all its functions disordered often when the pericor-
 dia is attacked, but so long as the disease is confined to the
 joints, delirium does not come on, although from the extreme suffering
 and the protracted want of sleep we should be inclined to suppose

this would likely ensue. Acute Rheumatism has been divided by Dr. Chambers into two varieties, the distinction being founded on the implication of the synovial membrane in the diseased action, or on that action remaining confined to the fibrous tissue. The one variety he calls Synovial Rheumatism, the other Fibrous Rheumatism. The first named variety most frequently attacks the larger joints especially the knee, implicating the synovial membrane at an early period after its onset. the consequence is a rapid increase of its peculiar secretion, so that shortly after the commencement of the pain the joint becomes distended with fluid, bulging out those ~~the~~ parts of the surrounding tissues which yield the most readily to its pressure and producing thereby a very characteristic swelling fluctuation indeed can often be readily distinguished by percussion. The Fibrous variety on the other hand, attacks the fibrous tissues alone, in the vicinity of joints producing some redness of the part, but it is not till the pain has lasted for some considerable time that any swelling takes place, and the effusion is not as in the former case into the joint, but into the areolar tissue surrounding it which is consequently rendered oedematous. The constitutional distress in this latter form is far greater than in the former, although the local suffering may be less severe. It is this Fibrous Rheumatism which is so commonly seen in stout, young adults, and sometimes children, amongst the lower classes of society and the younger the patient, the more dangerous is the disease", occurring as a consequence of exposure to cold and moisture after copious perspiration has

been going on for some time, when the system has been somewhat enfeebled and less able to resist the depressing influence of the cold: thus it is very commonly seen in female servants who have been employed in washing clothes; during the process they are very thinly clad with a view to coolness, but when drying the clothes in the open air they neglect making any addition to their clothing, and consequently the exposure for any length of time to this low temperature, induces, amongst other complaints; this specific inflammation of the fibrous textures; a most torturing, tedious and often fatal disorder, fatal because of ~~the~~ its liability to leave the joints for the pericardium, there to produce changes which if not speedily rectified by active and suitable treatment, must necessarily destroy the patient in a very short time, or lay the foundation for organic lesions which shall ultimately prove mortal. The Synovial variety again, is not attended with such an intense amount of fever; and relief is commonly obtained after the serous effusion has been poured out into the interior of the joints: it seems to be somewhat allied in its nature to Gout and hence has been called Rheumatic Gout; it occurs more frequently in persons of the better class, and of middle age, and is often peculiarly amenable to the action of Colchicum, which indeed in many instances appears to cut short the attack as if by specific agency: but, most important difference of all, it is peculiarly distinguished by being greatly less liable than the other form to attack the pericardium; in all these particulars it seems to bear a much closer analogy to Gout than to Rheumatism. It is not intended in the present

sketch, by any means to take up the subject of Rheumatic Carditis, as it is both foreign to its object and as no instance of the disease having as yet occurred in the Clinical wards this season we have not had an opportunity of studying the disease from nature; but several of the cases of Acute Rheumatism which were under treatment this winter having been complicated by Cardiac affections as indicated by abnormal murmurs attending the sounds of the heart; it may be advisable to glance at those physical auscultatory signs which are supposed by the best authorities to indicate the period in the disease when this organ becomes affected. These ~~signs~~^{murmurs} are two in number, and from their distinctness are extremely valuable as indicating the seat of the affection the first of these is a friction sound, usually called a to & fro sound and is indicative of inflammation of the part of the serous membrane lining the pericardium, and reflected over the external surface of the heart; a well marked instance of this, occurred in a young man in the Male Clinical ward, during the season of 1849, 50 and this was the only opportunity I ever enjoyed of hearing the like; there was no possibility of mistaking this sound, as it approached in character to the noise produced by the action of rubbing the palms of the hands back and forward on each other, when they are very dry. The second of these sounds is the bellows murmur, accompanying the first sound of the heart, and denoting implication of the endocardium in the inflammatory process; since it is the result of an exudation poured out on the valves, and forming warty excrescences on them; it is heard loudest at the base of the organ, is single, follows the

systole, and resembles a puff or slight whizz. Both these sounds may exist, and be discernible at the same time, or the bellows murmur may be masked by the superior loudness of the friction murmur; or either may exist alone; or the bellows sound may take the place of the friction sound. But sometimes a bellows sound depending on a totally different cause may have existed previous to the attack of Rheumatism, or may even follow too active depletion practiced during the progress of the malady, with a view to subdue it; hence the necessity of distinguishing carefully the origin of the two sounds; and guarding against this very likely source of error in diagnosis. Now as regards the treatment of the Stridulous variety of this very common affection, it may be premised that such is still a *questio vexata*, amongst practitioners: waiting for its solution, like the treatment of numerous other blood diseases; on rational indications of cure, derived from the clearing up of the mystery that still hangs over the Physiology and Pathology of the blood itself; a mystery which there is good hope of seeing cleared away in a very short time through Prof: Bennett's researches in this important direction. At the present time however the disease is treated in a purely empirical manner: no two authors seeming to be agreed on any one definite line of procedure, and the most perplexing diversity of opinion being held on the subject even amongst practical men. Two circumstances of importance

appears to have been overlooked in its general treatment; and these errors have no doubt led to many mistakes and much malpractice: viz) the supposition, that a murmur accompanying the first sound of the heart, always indicates commencing endocarditis; and secondly: that, that form of the disease which attacks the fibrous tissues is amenable to that specific ~~form~~ mode of treatment, which is so successful in those forms of Rheumatism which approach more nearly to the Gouty character. The great object of dread in the course of this malady being the supervention of either endo- or pericarditis; and the fears entertained on this point being undoubtedly in many instances but too well founded; and, whilst attention to the state of the Cardiac organ, during its progress, is a matter demanding the most careful and minute watching; still there is reason to believe, that in many instances, these fears have been exaggerated: Anemic murmurs having been detected accompanying the first sound, and their import having been mistaken for an evidence of commencing valvular disease; has led to the adoption in many instances of a course of mercurial poisoning, with a view to the arrest of the supposed inflammatory attack, and the introduction of this metal into an enfeebled system not requiring, and consequently intolerant, of its action, has led to the most ruinous consequences, and is attended with results little less formidable than those supposed

lesions which it was purposed to repair. The occurrence of these murmurs need excite no surprise, if we consider the treatment to which some patients have been subjected in this country, but which has been more especially advocated in France, by M. Bouillaud viz. Venesection to the following amount, on the first day of the attack, he takes away blood to a full extent measured in palettes, from a delicate person, to the extent of 4 palettes, equal to sixteen ounces; but if the individual be plethoric he would withdraw it in a much larger quantity: on the second day of the attack he would take two more bleedings of four palettes each, and in the intervals, cupping and leeching the affected parts: on the third day he would proceed to a further general and local bleeding: on the fourth day, if the pain, swelling, &c be not materially diminished he recommends another bleeding: on the fifth day if the disease be not wholly subdued, again bleed to three palettes from the arm; or to an equal extent from the affected parts: should relapses occur, bleed again. The mean quantity of blood thus drawn from a ~~healthy~~ ^{strong} person would amount to four or five pounds, or if necessary to six or seven pounds. Immense success was stated by the author, of this plan, to follow its adoption; as the disease never continued beyond one or two weeks instead of (as under the former system) enduring for five or six weeks; and he stated, there was no mortality whatever; it is most probable however, that the latter result, followed in due time, as he says that the disease never became chronic. His plan has signally

failed in this country; death from exhaustion, induced by the
 excessive bloodletting being apt to ensue: there can be little doubt
 I think that patients, treated in this barbarous fashion, if they
 survived, would soon become anemic, and then the likelihood
 of a murmur, accompanying the first cardiac sound would
 be no matter for surprise. There can be little doubt that even mod-
 -erate bleeding, such as is usually had recourse to in these cases
 may, in delicate females, and others, give rise to an anemic con-
 -dition, in which state very probably an endocardial murmur will
 be heard; altho' it by no means is present in every case of anemia;
 or this murmur may have preexisted before the coming on of the
 Rheumatic attack as was probably the case in the girl Irwin
 Case 5 being then probably functional, and one indication
 amongst many of the hysterical temperaments; It is almost im-
 -possible in many instances to distinguish, by its mere sound alone,
 such a bruit, from one whose origin depends on organic changes,
 but a successful diagnosis may in most instances be arrived
 at by a careful study of the history of the case, ^{and} of the collateral
 symptoms. The second error which has been alluded to in refer-
 -ence to treatment; tho' by no means grave in its consequences, &
 not likely perhaps to do much, if any mischief, unless the physiolog-
 -ical effects of the Colchicum, have been pretty freely developed; yet from
 the almost universal prevalence of the belief in the virtues of this plant
 as a specific, or at all events a most powerful remedial agent in the
 treatment of acute Rheumatism; it may be worth while to enquire

into the origin of this belief, and if it can be borne out by facts. There can be no doubt that in Gout, and in that form of Rheumatism; the synovial; which approaches in its nature to Gout: the various preparations of Colchicum. (especially the Wine of the seeds) have sometimes, whether bloodletting has been previously employed or not, an almost instantaneous effect in aborting the further progress of the disease; but then it is evident that sufficient discrimination has not been employed by those who used it; to distinguish the two forms of the disease and hence careless observers, witnessing the magical effects of the drug in cases of Rheumatic gout straightway try the remedy in every case whether Fibrous or otherwise, with which they may happen to come in contact, and of course they meet with disappointments: this is evidently the origin of the belief: and the want of attention to the simple pathological fact of the characteristic distinctions between the two diseases has led to the misemployment of this drug, to the risk of its being set aside as valueless in every instance; and to the perplexing and contradictory statements as to its value made by different practitioners. But the medicine has also been carefully subjected to the test of experiment, and in those cases in the Infirmary in which it has been tried, it certainly does not appear in any degree to have mitigated the patients sufferings, and it is Prof: Bennett's decided opinion that in such cases, it is utterly useless, altho' its physiological effects may have been fully developed.

But even when the diagnosis has been clearly established little can be done in many cases even to palliate; but in other cases

amendment has followed the employment of various curative agents: some practitioners rely on powerful antiphlogistic means as venesection, Calomel in scruple, or ten grain doses, with Opium. Others trust mainly to the sedative effects of the various preparations of Opium. Many think that active diaphoresis and diuresis succeed best, and with this view employ Dover's powder, Antimony, Guaiac, Spirit of Nitrous ^{Ac} Ether; and unquestionably the disease often rapidly and decidedly subsides, and ceases, upon the exhibition of one or other of these modes of cure; but the very next trial of the same remedy, under what appears precisely the same conditions may utterly fail. Under these discouraging circumstances it becomes a very desirable object, to discover some medicine, of more certain efficacy than any of those first named; and accordingly one has been recently proposed; which certainly seems, so far as it has yet been tried, to surpass them all; and should more extended observations, and experiments, justify the high expectations held out by it, at present; it will prove a most valuable boon to the victims of this torturing malady. It is the Nitrate of Potash, during the period of Prof: Bennett's attendance in the Clinical wards, it was tried in seven cases, and, during Prof: Christison's in one case up to the present date. Of course the usual difficulties, attending such experiments, existed here in full force. yet it was evident that a marked and unmistakable influence on the progress of the disease, followed in most of the cases early after its administration. It is commenced in doses of 20 grains, three or 4 times a day; increased if need be to 30 or 40

grains; and is given largely diluted with water. As regards the action of Nitrate of Potash in this disease, little it is to be feared is definitely known; in some instances, its good effects are not perceptible until its physiological actions have been slightly manifested, as was the case in the woman Anderson Case 3 but in other instances improvement seems to be contemporaneous with increased secretion from the skin and kidneys: the irregular fits of perspiration so common in this disease afford no relief, but rather tends to increase the distress; however when perspiration is induced by the aid of this substance marked relief is obtained and the urine from being scanty, and dark colored, usually becomes abundant, and on cooling deposits a copious sediment of the lithates. Whilst these few cases seem to demonstrate the superior value of this drug to most, if not all others, in the treatment of this disease, they do not, unfortunately, prove it to be infallible; it is not therefore, by any means, to be regarded as a specific. Besides those cases in which it has been employed in the Clinical wards, there were others under the care of Dr Robertson, in which a similar success followed its employment, I have not been able however to collect the particulars of those cases; but confine my account to such as were under personal observation in the Clinical wards

Case 1 Mary M^{rs} Kenzie at 46 servant. Admitted
Sunday 4th Jan^r 1852

States that she was suddenly seized with a severe

pain in the left side on Friday last, after undergoing unusual fatigue and this was followed the same night by rigors, and other febrile symptoms which have since continued without intermission. The pulse is 84 natural, heart sounds normal. Complains of headache, and loss of sleep and especially of a severe cutting pain in the left axillary region, increased by pressure & motion. Tongue is coated, there is some thirst, but the appetite is good, bowels are costive. The skin is hot and she sweats at night. Ordered Potapo Nitricis ℥ss Aqua ℥vi ℥m A tablespoonful every four hours - Hirudines x v

6th No improvement to day. Has been using the medicine regularly. Ordered ℞ S ad ℥vi

7th Pain not so severe to day, but is still present.

11th Continues much better, pain is only felt on coughing much. Convalescence proceeded somewhat slowly after this date, and she was dismissed cured 2^d February 1852

Case 2 Anne Hannighaw at 19 servant

Admitted 4th February 1852

States that about ten days ago she began to suffer from sore throat which was so much swollen as to cause great pain on deglutition. On Thursday last she was exposed, during a great part of the day to wind and rain, and on Saturday she was

seized with rigors, thirst, and other febrile symptoms. On Sunday she felt severe pain in the left knee & foot from whence it extended gradually, over all the joints of the body, and proving especially severe in the shoulders and neck, the ankle and foot are slightly tumefied, pain is much increased on pressure and motion. The heart is of normal size, there is a loud bruit with the first sound heard loudest at the apex, the impulse is very strong. Pulse 120 rather full; the tongue is furred there is anorexia, thirst, no nausea, bowels open. the urine is rather scanty and turbid; the skin is hot but covered with clammy perspiration.

Feb 8th Pains are much increased in severity to day. Pulse 90 full, R Potassa Nitrat^s ℥ss Aqua ℥xxi Siquetus. A wineglassful every three hours. Urine deposits an abundant sediment of phosphates.

Feb 9th No improvement in the pains to day, febrile symptoms undiminished, some sweating, Pulse 104 full, Urine not increased in quantity; Bruit with hearty sound is rather less distinct; bowels open. R Potas: Nitrat^s ℥i Mittere per Ore every three hours.

Feb 10th Still no improvement in state of pains, there is now copious diaphoresis, Urine is not increased in quantity, but the deposit is more abundant - Pulse 104 full. Adde Mixture Potassae Nitrat^s ℥ij - a wineglassful every three hours -

Feb 11th Slept some last night, but there is as yet no alleviation of the suffering, the urine is increased in quantity and deposits an abundant sediment, There is also increased diaphoresis. Pulse 94 full & strong Omittetur Nits Potassa

et R. Tinctura Colchici Seminum ℥ij
 Solutionis Muriatis Morphicæ q̄ss xlv
 Syrupi Zingiberis ℥iv
 Aqua ℥ij. Misce et signetur
 A tablespoonful every 8th hour

Feb 12th Considerable diaphoresis during the night, pains somewhat diminished, pulse 76, of good strength, the bruit is less distinct, expression of countenance is improved

Feb 13th Improvement still continues, the tongue is moist, urine loaded with lithates, pulse 72, of good strength.

After this date she continued to suffer more or less for a considerable time; the course of the disease being apparently uninfluenced by any medicine: it was the first instance in which the Potassa Nitras seemed entirely to fail. The improvement manifested after the exhibition of the Colchicum occurred too speedily to be fairly attributed to it; and besides this improvement was not permanent: so that on the whole this appears to have been one of those cases for which the only remedy is "six weeks"

Case 3 Mrs. Anderson at 48. Sick nurse admitted Dec 5/57
History. States that previous to the present attack, she has always enjoyed pretty good health; with the exception of a liability to a slight cough; has been lately subjected to much fatigue in her occupation as a sick nurse, and has been exposed to cold from sitting up for several nights in succession in a large room, heated by a fire, and ventilated by keeping the windows open; having no adequate protection from the cold draught thus caused ^{she became affected with} she caught a sore throat and had pain in the chest, this occurred in the latter part of October last and from that time up to last Thursday week she has suffered from slight shivering and uneasiness, transient pain in different parts of the body, nausea and vomiting. About a fortnight before admission she had a distinct rigor, followed by heat of skin, and other febrile symptoms, with very severe pain in the joints especially, much increased by any attempt at motion, the vomiting also continued; and last week she suffered from pain and palpitation in the cardiac region, and at the same time an aggravation of her former symptoms so that now, she cannot move without suffering excruciating agony.

Examination. Nervous System. Mental functions unimpaired. constant wakefulness, no headache; but severe pain apparently in every joint of the body

Circulatory System. Heart's sounds, impulse, ^hrhythm and position normal. Pulse about 100, weak -

Respiratory System. Normal.

Integumentary System. Irregular fits of copious, clammy, perspiration low smelling, no oedema of the joints.

Genito Urinary System. Urine scanty, dark colored, deposits crystals of the triple phosphates, with some mucus.

Digestive System. Tongue loaded - anorexia, thirst, occasional vomiting - no tenderness on pressing the epigastrium bowels confined.

Ordered. R̄ Muriatis Morphia semi-granum

Pulveris Aromaticæ grana quinque. Misce

Mitte per. One to be taken every half hour.

Dec 4th She took three of the powders last night, after which she fell asleep, and this morning feels somewhat better, she has also had the bowels emptied by an enema, and is now using a diuretic mixture

Dec 5 Pains in limbs much the same, gets no sleep - perspiration still copious, urine not increased in quantity, vomiting continues; has been employing diuretics and Dover's powder

Dec 6 Had an exacerbation last night, the pain in the joints and limbs being excruciating

R̄ Potassæ Nitratis semiunciam

Aquæ uncias sex Misce et signetur

A tablespoonful every four hours

Dec 7 Has taken three doses of the medicine, she perspired a good deal during the night, urine not increased in quantity, pain

pain is left severe.

Dec 8. Still sweats a good deal. pains much the same. Adde
Mistura Nitratis Potassa ℞i

Dec 9. Pains better, copious perspirations, urine increased in quantity,
increase of the nausea and vomiting, and of the thirst.

Dec 10. Pains nearly gone - sickness continues, refuses to use her
medicines - pulse 80 weak, much general debility,

After this date the pains ceased entirely, and she was shortly
afterwards discharged cured

Case 4 Janet Wright

This woman had been admitted early in December labouring
under the usual symptoms of acute Rheumatism and had
been undergoing treatment by Dovers powder, Anestics, leech
ing &c up to the 6th without any benefit whatever when on
that day she was ordered. ℞ Potassa Nitratis ℞ij Aqua Zingib
Misce. A table spoonful every three hours.

Dec 4. Has taken four doses of the medicine, but without effect
for so far, took a dose of Dovers powder last night and slept
well, pain in the shoulders very severe, and also in the knees

Dec 8. Pains still continue. Adde Mistura Potassa Nitratis ℞i

Dec 10 Has been using the medicine regularly - she says it makes
her very weak, sleepy and stupid, she sweats a good deal
at night, and the urine is increased in quantity, is very thirsty
and complains of bad taste in her mouth - pains gone from knees

Dec 13 Still continues the medicine, no return of pain in the knee. greatly relieved in shoulders & the increased secretion from the skin and kidneys continues.

The improvement continued up to the 16th when she was dismissed for disorderly conduct.

Case 5 Jane Irvine at 14 servant admitted 19th Dec 1857
History. States that last Sunday whilst engaged at her usual occupations, she was suddenly seized with severe febrile symptoms, accompanying a ~~severe~~ constant pain in the left ankle, which was increased by pressure and motion. it was red and tumefied. On Monday the right ankle became similarly affected, and then in succession the knees, shoulders, wrists, and fingers, the pain still continuing modified in severity in the parts 1st attacked. she has been undergoing treatment by diaphoretics. without however having experienced any relief from them.

Examination. Circulatory System. Pulse 100. full and soft. a soft bellows murmur synchronous with the radial pulse, accompanies the first sound, is heard loudest at the base, and is also heard along the course of the large arteries

Nervous System. Cannot sleep from the pain, which is general, and is causing intense suffering.

Digestive System. Tongue moist - preternaturally red at the tip & margin, no appetite - thirst. nausea & vomiting. the

bowels are costive, some tenderness on pressure in the epigastrium.
 C: Urinary System Urine high colored, deposits some sediment, moderate in quantity.

Integumentary System - Skin moist from copious perspiration, knees and ankles are swollen and painful on the least pressure, the right wrist, especially near the meta-carpal bone of the thumb is at present the seat of greatest suffering, and is red, painful and swollen.

Ordered, to be bled to $\mathfrak{z}xvi$ and to have a purgative enema
Dec 20th Is much worse to day, the pains in the wrist & hands are especially aggravated, copious perspiration still continues. Ordered. R. Potass^a Nitrat^s $\mathfrak{z}j$ Aqu^a $\mathfrak{z}ij$ A tablespoonful every four hours

Dec 21 Slept during the night, the sweating is still profuse. Urine in moderate quantity, sp: gr: 1016. deposits, testates. Pulse 90 weak. bruit of heart very indistinct. The pain is considerably relieved except in the left lower extremity.

Dec 22 Still continues taking the Potass: Nit, the improvement still continues, and she can allow the limbs to be moved about to day.

Dec 23 She presents quite a cheerful appearance to day and is entirely relieved from pain to day, all the joints can be moved quite freely without exciting any pain - Pulse 68 skin cool, Tongue clean, appetite returning, bowels regular - urine natural - some sediment. The bruit is more distinct.

distinct to day.

Convalescence proceeded satisfactorily from this date till Jan^y 5th when she was attacked by typhus fever See p.

Case 6 Margaret Bell, at 23, Servant, admitted 29th Dec/51
 States that last Wednesday she was engaged in washing before an open window, some time after which she was suddenly attacked with rigors, hot skin, and perspiration, and on the same night severe pain commenced in the left hip and extended subsequently to the knee & ankle of the same limb, shortly after, the right limb became similarly affected, tho the pain did not leave the left. The suffering became so intense as to prohibit the slightest motion and it became exacerbated at night, and at the same time copious perspiration broke out, the lower extremities are affected the most severely, and the joints are slightly red, and tumefied. The heart's sounds are normal - Ordered
 R Potassa Nitrat; ꝑ Aqua ꝑi A tablespoonful every 4 hours
 Dec 30 Has taken six doses of the medicine, but without any improvement as yet in the pains, pulse 128.

Jan^y 1st /52. Pulse 120 - skin cooler, slept well during the night. Urine deposits a slight sediment - Bowels have been opened There is now no pain anywhere, except on motion & pressure of the ankle, In the evening however after rashly exposing herself to cold the pain returned to the right elbow

Jan^o 2 Pain very severe in the right arm and hand. Skin hot urine loaded with sediment - no sleep ordered Potap Nit Sp every 4 hours.

Jan^o 3 Pains have again disappeared from all the joints with the exception of the wrist, which is painful on motion, On the 5th of Jan^o there was again an exacerbation, and she was bled to $\frac{1}{2}$ x $\frac{1}{2}$, after which the pains ceased entirely for the time; she did not leave the hospital however till the 25th as she was liable to occasional slight returns of the disease; which however appeared to yield readily enough to further doses of the Potap. Nit.

Case of James Rough at 26 Blacksmith admitted Dec 29th states that he has suffered on two former occasions, from attacks of Rheumatism, during his last attack three years ago, he was treated in this hospital & it lasted five weeks the present attack came on nine days ago, with great severity, having been preceded by febrile symptoms, which appeared to have followed exposure to cold; the pain was very severe in all the joints but especially so in the wrist, and knees. He has noticed within the last year or two that considerable palpitation of the heart ensues after much exertion, or indulgence in ardent spirits, but in his ordinary condition he is not troubled with it. At present the pain in the joints is not severe unless on attempting

motion: pressure on the right shoulder and ankle causes considerable pain. The cardiac dulness measures a few lines more than two inches across, the apex strikes the thoracic parietes in the normal position; A very distinct bellows murmur accompanies the first sound, is heard loudest at the ~~base~~ apex, & is not prolonged along the course of the great vessels - the 2^d sound is more sharp & abrupt than natural; the radial pulse is not synchronous ^{with} the impulse of the heart, but follows it after a very appreciable interval - A few sibilant râles can be heard here & there over the chest. Tongue is slightly furred - appetite is impaired, thirst not excessive there is slight diarrhoea. The urine is normal. Skin is moist, but no excessive perspirations. R^x Potassæ Nitratæ ℥ss Aqua ℥j in a tablespoonful to be taken diluted with much water, three times a day

Dec 31st Pains much easier to day, the bellows murmur is much softer ~~also~~, urine deposits some lithates. is sweating a little to day, pulse 46, soft, & regular

Jan^y 2^o/52 (13th day) Has no pain to day - continues to perspire a good deal - and the urine deposits a copious precipitate of the lithate of ammonia. Pulse 68 soft, regular, complains much of weakness

After this date the amendment continued uninterruptedly, altho only one bottle of the Nit of Potash mixture had been used, & she was deemed cured on the 12th January.

had been used, & she was deemed cured on the 12th of January.

Experiments in the treatment of some Cutaneous Affections.

The members of the clinical class, and indeed the medical profession generally are deeply indebted to Prof. Bennett for the manner in which he has simplified, and rendered practically useful at the bedside, those complicated, and perplexing classifications of cutaneous diseases, which, in their original shape must have required no little industry, and expenditure of time to master in detail, and the irksomeness of the task has, in all probability led, heretofore to great neglect of this most important branch of medical education; to the serious risk of the junior practitioners reputation and usefulness; as he is perhaps more likely to meet with such diseases at his outset in practice, than any other class of maladies whatever.

At present however, such inconveniences have been entirely obviated so far at least as diagnosis, and in many instances treatment too, are concerned; not only by the new classifications, but by the opportunities afforded, in the new cutaneous ward, for comparing this classifications with the original diseases, thus obviating most entirely, and satisfactorily, the necessity for resorting to plates, however excellent and beautiful these may be. But many of these affections have acquired a notorious character for their

intractability; seeming to be entirely beyond the control of all ordinary remedies, however varied and powerful these may be; in their nature; or however careful, may be the mode in which they are exhibited, either constitutionally or locally. On the other hand, some of the affections are so mild in their nature, as to be amenable to almost any treatment; many of them indeed, after a time disappearing spontaneously, or under the use of domestic applications; but others tho' yielding readily enough to proper treatment, yet if neglected, do not recede, but may continue for an indefinite period to plague their victims: of the latter class, scabies may be taken as a familiar example, a disease depending in many instances, but it is believed not in all, on the presence of a minute animal parasite, the *Acarus Scabiei*: Sulphur has been long and justly regarded as the specific in this affection, but it is now well known that many other substances have a like control over its ravages; tho' perhaps they are less certain and more tedious in their operation, than it is, yet infinitely cleaner and more pleasant in their application; an atmosphere of Sulphur being little less abominable than one of pitch, but Sulphur ointment or sulphureous baths may often be superseded by soap and water, oil, lard or other oleaginous substances, Chloride of Lime, alkaline baths &c; if some of these means be not enforced, the disease will in most instances last during the persons lifetime. Some of the most common and ordinary of these diseases, which we are meeting daily, are however

unfortunately also the most intractable, proving a constant source of annoyance, more especially if situated on an exposed part of the person, and lasting it may be, (as related by Prof. Christison) for periods of 4 and 25 years, embittering the better portion of a mans existence, excluding him often from society, even when not under treatment; and yet, in very many instances, so carefully concealed by the patient, that even his nearest friend may not have suspected, that such an eruption existed: No discover means for removing such troublesome pests, would prove no ordinary boon to society; and unnumberable have been the remedies proposed, to effect such a desirable object, but the success hitherto attending these efforts has not been great. There have been three principal experiments, conducted in the Clinical wards during the past session having this end in view: two of them being directed towards the eradicating of those very common forms Scabies, Pimples, and Lepros: the third was of a totally different nature and object; it should not strictly speaking be considered under the same heading with them as it is intended rather to prevent a deformity, than to remedy a disease: this is the new mode of preventing the pitting which so usually follows the confluent eruption of small pox, and which is remarkable as occurring on the face only; it is called the ectrotic treatment of small pox, and consists in preventing the access of atmospheric air, to the confluent pox, either in its vesicular or pustular stage; by smearing over the face a

mixture consisting of equal parts of the Unguentum Hydrargyri and dextrine, or finely levigated starch; this compound soon concretes into a firm mask, if made of a proper consistence; and on its removal, the surface of the skin is found to be quite smooth; there have been but few opportunities of testing its value this season, as we have only had three cases of variola up till the present date; but in two of these which were under treatment at the same time; its beneficial effects were fully demonstrated: in one of the cases, the face was absolutely covered with confluent pustules, and it was consequently smeared carefully with the ointment; the progress of the case was most satisfactory, (altho' it had been feared it would turn out to be a very severe one) and on removal of the mask the surface was found to be quite free from pitting. In the other case going on at the same time and much milder, with only a few discrete pustules here and there on the face, the ointment was not applied, yet this patient suffered more severely than the former, and several depreensions remained on the face after the healing of the pustules.

Two of the experiments, as I have said, were directed towards the extirpation of *Psoriasis Lepra* and *Eczema*. To judge from the number of such cases admitted during the past season it would appear, that these very unseemly and troublesome forms are of more frequent occurrence than almost any others; and it would seem from Prof. Christison's observations, that amongst the better classes of society they exist to a far greater extent

than is commonly imagined, because, tho' the disease may have existed for a great number of years; yet being situated on those parts of the trunk and limbs, which are never exposed, the patient can manage to conceal his disease even from the knowledge of his nearest relatives. Considerable difference of opinion prevails in regard to the cause of these affections; it is maintained by one party including Dr. A. S. Thomson - Dr. Watson and other London physicians, that these outward diseases are but evidences of disorder, and derangement going on in the alimentary canal; and they have directed their attention to such internal remedies, as shall best tend to rectify this depraved condition of the stomach and intestinal tube: trusting mainly to tonics, alkalies and arsenic; from which it would seem that they are disposed to consider an excess of acid to be present in that canal. Dr. Watson considers external applications to be but of little use, and he says, that after trying a great many, he has lost confidence in them all with the exceptions of the warm baths. He considers that whatever tends to improve the general health, will hasten the departure of these eruptions: now, whilst it is undoubtedly true that in a great many instances, a cure may be effected, by internal remedial means, yet we have good reason to believe, that the diseases often do not depend on disorder of the digestive functions; no trace whatever of such disturbance can be found, in many instances, and here of course more benefit is likely to be derived, from the application of local remedies, whilst

the former condition is best ameliorated by antacids, arsenic and decoction of *Dulcamara*^{4e}; the latter condition seems to have yielded more frequently and readily to the local application of pitch than to any other substance; the local remedies indeed have been exceedingly numerous, such as weak Citrus ointment, white precipitate ointment, carbonate of Soda &c. It is no wonder that substitutes for tar have been eagerly sought for; the patient who submits to a course of treatment by this substance passes through an ordeal of no ordinary severity, it requires obviously, a total exclusion from society, which is best secured by a residence in the country; the patient lies in bed enveloped in an atmosphere of tar, every affected portion of the integument, being thoroughly visited by a dose of the ointment, and its permanent application secured by a sheet wrapped round the patient's body; then comes the difficulty of cleansing the skin from this most adhesive filth, the best way to effect this, is to apply the tar in the form of ointments, and previous to washing it off, to smear the body with oil, or some concrete oleaginous material as butter, lard, palm oil, &c. and then wash thoroughly with soap: frequent ablution must be practised ere the pitchy odour is entirely got rid of: After undergoing all this accumulation of discomforts during the prescribed time, it too frequently happens, that the disease tho' banished for a time, again returns with all its former inveteracy in the course of about

six weeks, as was very remarkably seen in one most inveterate case in the cutaneous ward. From the frequent want of success attending the use of pitch; and from the success attending the application of lard merely, in cases of scabies, Prof: Bennett was led to suspect that the credit of cure when cure occurred, in the former instances might as justly have been ascribed to the lard, as to the pitch, in the ointment; and accordingly this substitute was tried in a good many cases, but it may suffice to say that it totally failed in every instance and the superior value of the pitch was fully established.

Within the last two years Dr. Webster a physician in Aix la Chapelle announced that he had discovered a new variety of tar, the product of a species of the Juniper family, and which he found to be more serviceable in this disease, than the ordinary kinds of tar, Prof: Christison procured a quantity of this, some time ago, and used it in some cases, in private practice with great success. he related the particulars of some of these cases to the class. In one case the patient had been afflicted during 25 years with Leprosy and Psoriasis, on one occasion he had been all but well from the use of the ^{ordinary} tar ointment, keeping down the disease by fresh applications of it, whenever the eruption reappeared but still, never rooting it out entirely; On another occasion he got nearly well from the use of internal remedies

under the advice of Dr. A. J. Thomson. The Professor justly considering this a good opportunity for testing the virtues of the new remedy, ordered a quantity of it to be carefully applied and the gratifying result was, that a manifest improvement took place in four days, and at the end of one week the patient was better than he formerly had been under the use of the ordinary tar in one month. At the end of one month, a mere trace of the disease remained; and he continued well for four months, when a slight return appeared on the neck easily enough subdued by a fresh application; so that altho the disease may not be entirely eradicated, yet on its re-appearance, it can be easily limited by a fresh application of this remedy. Another case was that of an officer who had been ill for seven years, he went to Aix la Chapelle, and there under the use of the Juniper tar he was soon all but well.

This tar is procured from two species of Juniper the *J. communis* and the *J. oxycedrus*. Prof. Christison considers that the kind employed at Aix la Chapelle is the produce of the *Juniperus excedras*, and care must of course be employed in selecting this variety; it belongs to the *Siincau* Clap and Order *Diacia Polyandria* and to the Natural Order *Conifera* or *Pinaceae*. This substance has been employed occasionally in medicine; it may with greater propriety be regarded as a volatile oil, or a distilled spirit than as a tar: it is best employed in the form of a soap, although an ointment has

also been prepared, but the soap has many advantages over the oleaginous preparation, it is more powerful, apparently on account of getting into closer contact with the skin in this form than when in combination with lard; it is more convenient, as it is as easily removed on the application of hot water, as ordinary soap is: the soap is made by combining Castor oil with Carbonate of Soda and then adding the Juniper tar; it is made up in round balls in size somewhat larger than a wall nut; the odour is peculiar, being a combination of tar with that of the Juniper. A small quantity of it should be rubbed on the affected part every night, which should be washed off in the morning. Its application is not usually attended with any pain, but sometimes patients complain of slight smarting which however is more likely caused, by the rough manner in which they rub it on the parts, in one case of Eczema it was applied so zealously, as to remove the tender cuticle, and of course in that case did more harm than good: As at present obtained the article is rather expensive, the price of each ball at Duncan & Blockhats is 3/6. It has been tried now in numerous cases in the wards ~~of which we have appended~~, but the success hitherto has certainly not been great and by no means fulfils the expectations which its earlier trials had inspired, whether this may arise from any fault in the drug or in its mode of preparation yet remains to be proved.

Since the above remarks were written, the new method of

treatment of these inveterate diseases, has been tried in a great many cases, and the utmost care has been taken to secure the proper application of this remedy; sufficient time having since elapsed (two months) to test its powers, I am sorry to say that in no one instance did it seem to have proved serviceable; by no means even to the extent of the ordinary *Mn quantum Picis*.

It is just possible that some error may have been committed in the preparation of the article which was employed at the Royal Infirmary; this suspicion being excited by the circumstance, of Prof. Christison's first attempts in private practice having proved so successful. I had written out an account of several of those cases in which it was employed; but, seeing the uniform want of success in every instance, I deemed it unnecessary and useless to transcribe them. The conclusion therefore to which we are forced, in regard to this German invention is, that so far as our opportunities of observation extend, it is an unmitigated failure

Koufso as a Vermifuge

An opportunity has been recently afforded, of trying the effects of this newly introduced plant in a very obstinate case of Tape worm, admitted into the Royal Infirmary. The disease is somewhat rare in this country, but the variety of worm which does occur is the *Genia Solium*; the characteristic distinctions of this variety, were well observed by inspecting some joints of the animal, which had been voided by this patient. The characteristic marks are drawn more from the appearances on the joints of the animal, than from its head since the latter being of small size and easily decomposed is rarely seen; and the marks on the former are quite sufficient. The body of the creature is composed of quadrilateral pieces or joints, articulated loosely, by one piece being dovetailed as it were into that immediately in front of it; in the centre of the body these pieces are square; but at the extremities they are oblong as ~~they~~^{it} tapers in these directions. But the most characteristic mark is to be found in the site of the oviduct and ovary, which in the *Genia Solium* is placed on the edge of each joint: there is a very conspicuous prominence with a depression in its centre, and these in most instances are placed alternately, one on one side of the animal and the other; on the right edge of one joint and on the left, of that next to it. The patient who came under our observation had been affected, for seven years with

this parasite; during three months only, out of this time
 had he been quite free from discomfort, from the use of re-
 -medies; he had tried a great variety of these such as Sur-
 -pentine, Pomegranate bark. Dierw. without success, so
 that here was a capital opportunity for testing the alleged
 superiority of the Koups. The flower is the part of this
 plant, which is employed; it is imported from Abyssinia
 where it is ordinarily employed as a vermifuge by the
 natives, who are afflicted with this disease to an almost incred-
 -ible extent; the supposed reason for the frequency of its occur-
 -rence, being the savage custom in which they indulge of eating
 flesh raw, and warm from the animal. It is said they are ac-
 -customed to take a dose of the Koups once a month as a pro-
 -phylactic. The plant was first discovered by the traveller Bruce
 but it is only recently that it has been brought into much no-
 -tice, having been introduced ten or twelve years ago by M.
 Brayer, after whom it has received its botanical name of
Brayera Anthelmintica, it belongs to the Natural order
 Rosaceae, and bears a considerable resemblance in its gen-
 -eral appearance to our Queen of the Meadows. The dose
 of the dried flowers is half an ounce, and if this does not
 act with sufficient energy it may be repeated, an infusion
 is the form in which it is prepared, the patient being di-
 -rected to swallow flowers and all, then to follow this
 with a dose of lemon juice, and if in two hours after

the worm is not discharged, he must take a purgative dose to dislodge it.

Our patient in the hospital was treated strictly in accordance with the above directions, but the result was not satisfactory, a few joints only of the worm having been expelled; some allowance however must be made on account of the obstinacy of this case, which has hitherto resisted the action of all the standard vermifuges, perhaps too the activity of the plant may have been in some measure impaired from keeping ^{it} over long

Two other experiments were commenced under Professor Bennett's supervision, at a more advanced period of his attendance in the Clinical Wards, but they were abandoned before any definite conclusion could be arrived at in regard to their actions, and on the effects likely to be produced by these ^{medicines} in the diseases on account of which they were prescribed. One of these experiments was, to try the effects of Colchicum in those diseases where the tendency was to death by coma, induced, by the supposed non elimination of Urea from the blood, and consequently the poisoning of that fluid thereby. Colchicum is said to possess the property of increasing the secretion of Urea, and this points

might easily be demonstrated by the chemical analysis of ^{the} urine of persons in this condition when the full physiological effects of the drug, have been established. In one case of Bright's disease of the kidney where the comatose tendency was strongly marked, it was tried, and apparent improvement in the patient's condition followed; but then there was no proof that in this case the drowsiness had been caused by Urea circulating in the blood, since the man was passing a very large quantity of urine daily containing more than the average proportion of solid matters including Urea; indeed this case went far to prove that the drowsy and comatose condition, depended more on impoverishment of the blood, from the withdrawal of its red corpuscles, than from the non elimination of Urea from the system. In another case of Scarlatina Maligna in which it was tried, it proved of no avail whatever.

The other experiment, was to determine the alleged sedative effect on the heart's action, of a certain tincture which had been transmitted to Professor Bennett from Dr. Horace Greene of New York, who had received it from its discoverer Dr. Norwood of South Carolina, this preparation proved to be the saturated tincture of a plant of the Hellebore family the *Veratrum Viride*. It was alleged to possess very extraordinary powers over

many diseases, but especially over those of the heart, diminishing its action even in organic affections; (which would certainly be of very doubtful benefit to the patient). This communication favoured rather strongly of empiricism and the authors very confident statements, did not tend to excite any very great expectations in the minds of those who heard them; that this was likely to prove a valuable addition to our Materia Medica. Nevertheless it was tried in a few cases, and it certainly had the effect of bringing down the pulse remarkably in some of them, at the same time producing great sickness and sometimes vomiting, altho' given in very small doses. It did not appear however to possess any advantage over Aconite, another plant of the same order, nor indeed do its actions appear to differ very materially from those of the Aconite; however its use was discontinued in the ward, before any satisfactory conclusions as to its nature or powers could be arrived at.

Conclusion.

In reviewing the foregoing experiments, it must be confessed that their results have not been so satisfactory, as might have been desired; but still it is a matter of no small consequence to decide whether the virtues which have been ascribed, perhaps from improper motives, to

new remedies, are able to stand the test of candid experiments, conducted in a public hospital; beyond the reach of every kind of delusion and trichery. It is evident that, whilst such a mode of procedure would, if generally adopted, establish on a firm basis, the just reputation of valuable remedies, and send them forth to the notice of the profession with a guarantee which would be above suspicion: it would on the other hand expose the worthlessness of much trash which is attempted to be foisted by interested or self deceived persons, on the profession and the public; and if such supervision had been earlier enforced, it might have saved our Materia Medica from the influx of much worthless rubbish, which however, having become time honoured can now hardly be cleared away, and expunged from it.

It is satisfactory to be able to state, that the only question, in respect of which there could have been any doubt as regards the effects of Sulphate of Quina in typhus fever, viz its administration at an early period of the attack; has been set at rest, within the last few days by Prof: Christison, who made trial of the remedy, in the case of a young girl, who had caught typhus within the hospital, from contagion acquired, ^{apparently} by associating too closely with another patient recently convalescent from that disease. A well marked measles eruption appeared a very few

days after the febrile symptoms became first declared, and under this fortunate conjunction of circumstances which left no doubt of it being a case of genuine typhus, a fair trial at a sufficiently early stage of its progress became practicable. Five .8 grain doses were administered, but without producing any amendment whatever: the usual effects of the drug on the circulation were not manifested in this case. the pulse was 100 at the commencement of the experiment and precisely the same number at its close: the day after the typhous aspect was decidedly more pronounced and extreme deafness appeared to have been induced.

The results of the trial of Nitrate of Potash in Acute Rheumatism are very satisfactory and induce the expectation, that on a more extended investigation its superiority to other remedies shall be fully apparent.

The Juniper tar, it is to be feared is not likely to add much to our success in the treatment of Psoriasis and Eczema - and as regards the other experiments it is manifest that a more extended series of observations must be made ere we can pronounce decidedly on their respective merits.