frequently found to be desirable to employ counter-irritation for a while after the more urgent symptoms have been overcome. Hence, you will recollect, that in the case of Sarah Ann Hooper, after she had been greatly relieved by leeches and blisters, as some uneasiness remained about the side, and slight pain was occasioned by pressure over the upper part of the dorsal portion of the spinal column, she was ordered to have the back rubbed with the croton-oil liniment, which had the effect of producing a plentiful eruption, and ultimately removing the disease.

With respect to medicines in this affection, I shall only observe, that beyond regulating the state of the bowels they are of no use.

Before leaving the subject I may remark, that in some cases of spinal irritation, the patients are suddenly plunged into very considerable danger, by the occurrence of symptoms of disturbed cerebral irritation. In illustration of this I may briefly mention the particulars of a case which I saw some months ago. The patient was a female, about 40 years of age, who had been suffering from a long time from pain in the side, which her medical attendant regarded as pleuritic. The remedies which had been employed had failed to afford her relief. When I saw her she was lying in bed and complaining of constant and severe pain in the side, which, however, was not increased by inspiration. She had no cough; the skin was cool; pulse rather quick but feeble. On examining the side with the stethoscope, no friction could be detected. When pressure was made on the upper portion of the dorsal vertebræ she immediately complained of great pain and tenderness, and said that it greatly aggravated the pain in her side. In this case then, the affection of the side obviously depended upon the morbid state of the spinal nerves. Remedies were accordingly applied to the tender portion of the spine, and the side was relieved. She continued to go on very well, till one day, about a fortnight after my first visit, I found her partially paralytic; she soon fell into a state of coma, and died, with all the symptoms of profound apoplexy.

I have alluded to the foregoing case for two reasons: first, to shew you the jealousy with which you ought to regard the earliest and slightest indications of cerebral disturbance in these cases; and, secondly, because the occurrence of these symptoms is strikingly analogous with what we know takes place in cases of undoubted inflammation of the spinal cord or its membranes; and this is a further confirmation of the views which I have been advocating respecting the nature of spinal irritation.

ON THE EFFECTS OF THE SUB-SULPHATE OF MERCURY, (TURPETH MINERAL,) AS AN EMETIC.

By DR. HUBBARD, of Hallowell, Maine, United States

(Read before the Philadelphia College of Physicians, October 7th, 1845.)*

My attention was first directed to the use of this substance, from feeling the want of some article, reliable, as an emetic of certain, prompt, efficient, and safe action, with the least tendency to run off by the bowels. For, whatever may be thought of the value

of emetico-cathartics in many other cases, it must be admitted by all that simple emesis is, in many pathological conditions, alone desirable; and that its complication with catharsis will, in such conditions, not only defeat the beneficial effects of the emesis, but will prove positively injurious, and often extremely hazardous. It is under precisely such conditions of the system, that the emetics in common use, such as tartarized antimony, ipecacuanha, sulphate of zinc, &c., will most frequently fail of producing efficient emesis, and are most liable to run off by the bowels. There are certain diseases—for instance, croup, and scarlatina maligna—during all the stages of which, there is great insensibility of the stomach to the impression of emetics, and, when procured by inordinate doses, emesis is likely to be very imperfect, and to be followed by catharsis. The same insensibility also exists in all diseases, under circumstances of great prostration of the system, whether that prostration be owing to the violence of the disease or to its duration.

Every practitioner of experience must have felt the importance of availing himself, under some of the above-named pathological conditions, of the revellent and equalizing effect of simple emesis; and he must also have experienced the difficulty and uncertainty of obtaining it by any of the emetic substances in common use. Take, for instance, a case of spasmodic and intermittent croup:—The patient is suddenly seized, for the most part in the night, with croupy cough and spasmodic breathing, which symptoms continue, attended with great distress and anxiety, for several hours, and then pass off to return on the succeeding night with redoubled violence. In many instances, the intermissions of all morbid phenomena have been so perfect, as to lull the friends of the little sufferer into a fatal security, until, by the accumulated power of repeated paroxysms, the patient is overwhelmed with disease, almost beyond the hope of recovery; when, for the first time, medical aid is called for. A single case will better illustrate the difficulties the physician has to encounter than any general description.

I was called in the night of February 5, 1845, to see Miss C., aged about twelve years. In the three preceding nights, at about the same hour, she had been seized with paroxysms, similar to the one in which I found her,—each one continuing several hours, each of progressively increased severity, and each leaving her able to be about, during the day, with respiration so easy as to excite no alarm, and only a slight croupy cough. I found her with breathing extremely quick, laborious, and stridulous, the chest heaving with convulsive throes, the countenance livid, the eyes wild and distracted, extreme jactitation, the pulse thread-like, vacillating, and too rapid to be counted, the extremities, up to the body, of an icy coldness, in short, the patient appeared like one in the last agonies. Strong rubefacients were immediately applied to the whole surface, sinapisms to the spine and extremities, and heated blankets to the lower limbs. As soon as she could swallow,—for deglutition was at first extremely difficult,—five grains of the *turpeth mineral* were given at once, and followed with the free use of mustard whey; this not vomiting her, after fifteen minutes I gave her five grains more, immediately upon swallowing which, vomiting commenced, and continued smartly for more than an hour. During

* From the *American Journal of the Medical Sciences*.

this operation, and for some hours after, a free use was made of a decoction of seneka, as a stimulant diaphoretic. Her respiration began to improve immediately on vomiting, and at the end of about four hours, it was comparatively good; the skin open, natural warmth restored, and the circulation equalized. The patient was then put upon the use of the following powder: R. Pulv. Ipecac. Comp., scr. j; Hydrarg. Chlorid. scr. j; Camphor. Pulv., grs. xij. M. Ft. chart. No. vj. One to be taken every four hours; a free use to be made of the decoction of seneka in the intervals, and the bowels to be moved after twenty-four hours.

The emetic did not produce purgation. No paroxysm of difficult breathing returned. In forty-eight hours my attendance ceased. I know of no other emetic substance that would have effectually met such a case. Ipecacuanha, sulphate of zinc, &c., would have proved too feeble at best; tartarized antimony would, I conceive, have been hazardous, from its nauseating and sedative effect, setting aside the uncertainty of its procuring emesis in any reasonable dose, and the almost certainty of its producing exhausting catharsis. I repeat, then, that in this form and condition of croup, my experience furnishes me with no substitute for the *turpeth mineral* as an emetic.

In the more inflammatory and less paroxysmal forms of this disease, with decided arterial excitement and hot skin from the commencement, tartarized antimony, as a nauseant and emetic, may be, and undoubtedly is, with certain limitations, preferable. Still I must say, that in all stages and conditions of this disease, where the equalizing and revellent effect of emesis is alone desired, I have never regretted having used the *turpeth mineral*, in preference to all other emetics.

These remarks might easily be extended to the use of this remedy in some other forms of disease, and especially in some of the anginose affections. The hints above given will, however, enable the experienced physician to determine its applicability to such conditions.

It remains only to say a few words upon the peculiarity of this substance as an emetic, and upon some of the objections urged against it. In the first place, the promptness and certainty of its operation belong to no other substance within my knowledge. It has seldom, if ever, failed to vomit efficiently, when administered in a proper dose, in any of the various conditions of the stomach, and of the system, in which I have given it. It usually acts in ten or fifteen minutes, and the dose should be repeated at those intervals, if the first fail, which rarely happens. In efficiency and revellent power, it is not, perhaps, quite equal to the tartarized antimony; it is, however, vastly superior, in these respects, to ipecacuanha, or any other substance known to me. In safety, it is greatly superior to antimony. Its emetic operation usually continues from an hour to an hour and a half, accompanied and followed by none of the distressing nausea, prostration and depletion of antimony; but, on the contrary, leaving the patient with the invigorated feeling arising from equalized warmth and circulation. In its emetic operation it has seldom, never, in my recollection, been accompanied or followed by catharsis.

I have never known it to be violent, nor otherwise than entirely safe in its operation, although I have given it in much larger doses than are usually directed; nor I have I ever seen salivation follow its use as an emetic. So safe do I consider it, that in urgent cases I have not hesitated to put my patient under its full emetic operation, two or three times within twenty-four hours; nor have I seen ill consequences result from such practice. I am inclined to think that the dose should be somewhat larger than is usually recommended. From two to three grains may be given to a child two years old, and repeated in ten or fifteen minutes, until emesis is produced. If the first dose fails, the second usually acts as soon as it touches the stomach.

CASES IN THE HOSPITAL PRACTICE OF T. M. GREENHOW, ESQ., SENIOR SURGEON TO THE NEWCASTLE-ON-TYNE INFIRMARY.

(Reported by Mr. C. J. GIBB, House Pupil.)

SCIRRHUS OF THE EYE-BALL.

Dixon Hutchinson, aged 50, cabinet-maker, of Sunderland, a stout, well-proportioned and healthy-looking man, of the sanguineo-nervous temperament. Admitted January 1st, 1846, with great enlargement of the left eye-ball, apparently from the deposition of a malignant tumour. The natural appearance of the eye is altogether destroyed. A ball of hard scirrhous-feeling matter enveloped in a capsule, which has much the look of the sclerotica, (only of a more dusky and injected hue,) with engorged and tortuous veins ramifying over it, and covered by the conjunctiva, fills up completely the orbit, and projects from under the protection of the eyelids, which cannot be made to cover it. Its visible surface is slightly irregular from little lobular elevations, and when the upper eyelid is raised, a circular circumscribed portion of it, resembling in every respect an opaque cornea, is seen to have a whiter and more pearly colour, as if the remains of the front of the eye were there situated, compressed, from being forced forwards by the tumour.

History.—Was engaged fourteen years ago in fitting up a house, where, for nearly a whole day the left side of his face was exposed to a current of cold air coming through an open door, from a little after which time he has had successive attacks of inflammation of that eye at varying intervals. A year after this the eye became by degrees totally blind, but did not in the slightest change from its naturally lucid appearance until three years after, when a more than usually severe inflammation rendered it opaque. A few months after this had a portion of the iris and cornea removed without any benefit, and the eye remained a little collapsed from the operation, until two years ago, when it began to project, and has by continued increase, attained its present size. Has occasional pain of the orbit and left side of the head when much excited, or on exposure to cold; no affection of the other eye; no glandular swellings, and is in perfect health. To have milk diet, a warm bath, two compound rhubarb pills every night, and warm water fomentations frequently to the eye.

13th. Continues well; troubled only now and then by slight pains of the side of the head. Eyeball extracted. Operation performed in the usual manner;