

25th.—The gums being slightly affected, the blue pill was ordered to be given only twice a day.

30th.—The system being now evidently under the influence of mercury to as great an extent as appeared desirable, the blue pill was ordered to be given at night only. The sight has continued uninterruptedly and rapidly to improve, insomuch that he is able to distinguish one object from another, as a pencil-case from a pocket-knife. Ordered to be cupped to six ounces.

Jan. 4th.—Is able to read some large printed letters on a board in the ward, when held close to the eyes.

14th.—Can now make out the ordinary type of an octavo volume, although with some difficulty. Little obvious improvement now took place until the

26th.—When he was ordered cupping to four ounces.

Feb. 3rd.—The cupping having been apparently attended with much benefit, it was repeated.

12th.—Was again cupped. He was then able to read with comparative ease.

18th.—Discharged, being able to see perfectly.

A month afterwards, this patient came to the hospital as desired; from the time he left, he has been employed in ploughing. He can read the smallest type; in short, the sight of the eye is fully restored.

#### ON THE

### ACTION OF AMMONIA IN HOOPING-COUGH.

By R. H. ALLNATT, M.D., London.

IN the review of Dr. Aberle's work on "Tussis Convulsiva," (THE LANCET, present volume, p. 551.) allusion is made to the treatment adopted by Dr. Wachtl, of Vienna, who recommends the employment of the ammoniated tincture of cochineal; and you ask, "how far might the ammonia contribute towards the good effect of the mixture?"

The immediate cause of the spasmodic action of the glottis, which occurs in this disorder, after the febrile action has, to a certain degree, subsided, appears to me to arise from morbid irritability of the stomach, which engenders an irritating secretion; which secretion, involving the bronchial tubes, trachea, and fauces, spurs their exhalent vessels to inordinate action. The excretions of the stomach, in this stage of the disease, if tested, will be found, almost invariably, to be of extreme acidity, sometimes so intense, as to excoriate in their passage the œsophagus, and roughen the teeth, as effectually as would a dose of dilute hydrochloric acid. Emetics, so greatly extolled for their virtues in subduing the paroxysms of whooping cough, act as temporary alleviants, by ridding the stomach of its acrid secretion; but the relief is transient, because the organ speedily resumes its disordered action. Many years ago, during a temporary visit at a populous town in the west of England, while the whooping-cough raged as an endemic to an alarming extent, many children falling victims to its attacks, I had an opportunity of testing the merits of practice founded upon the views I have here taken, and the result fully justified my anticipations, as the cases, however urgent, were rapidly and permanently relieved.

Dr. Wachtl, by his ammoniacal mixture, is stated to have "cured nine cases in from three to eleven days," and I fully believe the assertion to be quite consistent with truth. The liquor ammoniacæ, the active ingredient of the formula, neutralized, in some degree, the acid matter with which it came in contact, and hence arose the benefit; but we have other alkalies, less stimulating in their action, and much more effectual, than ammonia.

After preliminary purgation with calomel, (conjoined with antimony, if the febrile symptoms run high,) and an occasional emetic to clear the stomach, nothing in my experience is so efficacious as small and repeated doses of the carbonate of potassa. The following combination has been extensively distributed to the poor in seasons when whooping-cough has raged as an epidemic, and I can attest the almost invariable success which has attended its administration—what portion of the merit is due to the cochineal I do not know:—Take of carbonate of potassa, one drachm; cochineal, ten grains; boiling water, half-a-pint. For an infant, one teaspoonful to be taken thrice daily, the dose increased according to age.

In violent cases, much benefit will often accrue from the simultaneous employment of the following liniment, which is to be well rubbed, morning and night, over the whole course of the spine:—Hartshorn, and oil of amber, of each half an ounce. Mix for a liniment.

Suffolk-place, Pall Mall East, May, 1846.

### LIABILITIES OF THE MUSCLE IN DISEASE.

AMONG the most frequent and remarkable, are the effects of restless, irregular contraction, that follow in the fibre, from habitual excess in the use of fermented liquors, the delirium tremens of modern nosology. Great exception has been taken to this compound phrase, which, nevertheless, is wide and true, expressing, as it does in this disorder, the intimate relation, by symptoms, between the cerebral and the self-motive functions—the close, constant, and mutual dependence of mind and muscle. Here, in the King's ward (May 18th) is an instance of the disease in question,—severe, well marked for the most part, but incomplete, for the muscles are at rest,—delirium tremens without the tremor,—a solecism in language,—in practice, as you see, a fact. This it is to make the patient our teacher—this is bed-side physic. Clinical medicine is in this way especially corrective, by what it misses or denies. It remarks, in the contest of symptoms, on all which they want to be complete. How often have we verified this method of study in our wards! Acute rheumatism, or gout, prevailing in the system for days together, constitutional but not arthritic,—idiopathic erysipelas, not acknowledged as such, because not yet determined by swelling, redness, and vesication, to the skin; scarlet fever of approved character and severity, catching and caught, yet undistinguished by a rash.

The patient, (E. N—, of middle age, a confirmed drunkard,) when we first saw him in the surgeons' ward, the day before yesterday, (May 16th,) had been without sleep for many successive nights. His manner was much excited, and he was passing everything under him as he lay in bed; at the same time, he declared himself perfectly well, and was repeatedly asking for his clothes, that he might get up and go home to his wife. This afternoon, as you see, in manner and appearance, he is comparatively well, having been quiet, with sleep, for the last two nights; he is, however, still under the influence of the disorder, being unable, as he assures us, to command either the rectum or the bladder in the regulation of their excretory functions. I attribute the improvement in this man's condition principally to a suppository of one grain of extract of opium, with ten grains of extract of gentian, twice administered since our last visit. He had previously swallowed twenty minims of laudanum in an ammoniated saline draught, every six hours, from May 7th to May 16th, with no relief, but rather with aggravation of all his symptoms. On the latter day, he commenced taking a draught—compound spirit of sulphuric ether, a drachm; compound tincture of camphor, two drachms; sesquicarbonate of ammonia, six minims, in pimento water—at the same interval of six hours; so that he has taken considerably less opium in the last forty-eight hours than in any similar period of time during his illness.

In this, as in other inveterate cases of delirium tremens, it would seem that the nervous sympathies of the stomach were exhausted, and its absorbing faculties impaired, by the continual reaction of beer and alcohol upon its living surface. Opium, it is notorious, may, in such cases, be swallowed in very large doses, and for weeks in succession, with no effect that can be appreciated on the muscular or other symptoms of the patient. It is, indeed, as if the stomach supplied from its own secretions an antidote to the drug. Surely, then, with such open evidence of perverted function in the great organ of assimilation, it is but in common sense that we should apply our specifics—if such there be—to other surfaces, and in other ways,—to the skin, the lungs, or the rectum,—by inunction, inhalation, or suppository. If this be theory, there is no harm in it; and it is, moreover, confirmed by sufficient experience. In my practice out of this hospital, I have obtained, in many instances, the best effects from opium, used in contact with the bowel, when no good came from it as a draught or pill in the stomach. And the suggestion may be of practical use in the treatment of the more violent forms of muscular disorder, by which, as in hydrophobia, deglutition is prevented. In a case of traumatic tetanus, to which, while under the care of Mr. W. Scott, of Bromley, I was summoned late on a winter night in 1844, it was agreed between us that the opium, which up to that period had been in various ways administered, should thenceforward be entirely discontinued—that the port wine, sherry, and brandy, already prescribed, should be given, as before, in large and frequent quantities, and that suppositories of quinine, camphor, and ammonia, should be repeatedly introduced to the lower bowel. The case was of the worst kind, and did well. We kept the stomach for the wine, employing the rectum for the physic. On a careful review of all the circumstances, I attribute this patient's recovery, in great measure, to the continued use of the tonic and