

creased temperature than adults and that it is in febrile diseases of the former we can accomplish most by the use of cold externally.

The febrile diseases in which I have found this treatment to be most useful are diarrhoea, dysentery, scarlet fever, acute bronchitis and convulsions, complicating febrile action. I have also treated acute pleurisy, pneumonia, and cerebro-spinal meningitis in this way, but not a sufficient number of cases on which to base any conclusions. I may say, however, that the cases of pleurisy seemed to be benefited, but the cases of pneumonia and cerebro-spinal meningitis terminated fatally, although not, I believe, on account of the cold water treatment.

A large number of children die every summer from acute diarrhoea. The attack usually comes on suddenly, the stools are frequent, the stomach sick, and the temperature high; If seen a few hours from the beginning of the disease the child will be found restless and pained, the stools offensive and unnatural in color, the features pinched and pale, the eyes sunken and often the feet and hands cold. The patient moans and moves the tongue about the mouth in a peculiar manner, and often makes efforts to vomit when no food or drink has been taken. If the case be allowed to go on, the pupils become contracted, the breathing labored, the extremities colder and bluish in color, the pulse frequent and feeble, the fontanelles depressed and the child rolls its head from side to side on the pillow. If the axillary temperature of that child be tested, it will almost certainly be found to be between 103° and 106° F., notwithstanding the coldness of the extremities. Such cases must have relief promptly or they will all die. The indications are to rid the bowels of offensive accumulations, to arrest the vomiting, to preserve the strength and to reduce the temperature. Purgatives will seldom remain on the stomach, nourishment and stimulants are rejected in the same manner; it is generally useless to administer anti-emetics, and even if we could wait for the action of drugs that reduce the temperature, they would, as a rule, be inadmissible on account of their depressing influence on the circulation. If a child in this condition be placed in a cold bath for from five to twenty minutes, according to the heat of its body, and the coldness of the water, the temperature will fall to the normal standard, the heart will

beat with more force, the thirst will be less intense, the circulation will become equalized, sleep will generally be procured, and the stomach will retain nourishment and medicine. If, after a few hours the temperature rise again, the bath can be repeated, but by allowing the child to lie naked and be sponged and fanned its repetition may not be necessary, for if, in the meantime a purgative dose of rhubarb or castor oil be given the tendency to a rise of temperature will not be so great. I have frequently seen children that had tossed and moaned for hours fall into a quiet sound sleep in the water in a few minutes, and continue to sleep well after being taken out. As an illustration I have transcribed from my case book the following typical cases.

CASE I.—July 27th, 1878.—J. Ellson, æt. 5 months, strong and well nourished, has had diarrhoea for forty-eight hours, and the mother thinks fever also. Looks distressed, temperature 105° F. pulse 130, evacuations greenish and offensive and about twelve a day. Ordered rhubarb and soda bicarb. aa. grs. iv. every two hours.

28th, 10 o'clock, a. m. The child has not rested but cries and tosses about incessantly, the extremities cold and temperature 105° F.; no pulse at wrist, breathing labored, fontanelles depressed, eyes sunken, features pinched and bluish and it refuses to nurse. Put it into water from the well until axillary temperature fell to $99\frac{1}{2}^{\circ}$ when the child fell asleep. Soon after its removal from the water the pulse returned at the wrist, and the body and extremities became of about uniform warmth. At 1.30 p.m. the temperature had risen to 104° and the child was again restless. Repeated bath with same result as at first.

29th—Rested well all night and has nursed several times, temperature $99\frac{1}{2}^{\circ}$. Parents had used sponge bath and fan frequently through the night. Stools greenish. Ordered a dose of castor oil and chloral enough to make it rest.

30th—Passed a comfortable night and nurses well; has been sponged several times during last twelve hours; temperature $99\frac{1}{2}^{\circ}$. After this an occasional dose of rhubarb and soda was the only medicine given, and the child soon recovered entirely.

CASE II.—July 12th, 1876, 10 o'clock, a.m.—Casper Schwemler a robust child five months old has had diarrhoea for three days, but not very ill