

simple, also exists in the milk of women making use of alcoholic beverage of any kind; and by its presence there, being imbibed with the lactiferous secretion, it injures the delicate membrane of the child's stomach, lays the foundation of a future appetite for strong drink, and is productive of the most serious disorders which belong to infancy and childhood.

Upon the analysis of the milk of a nursing woman, after allowing for the effect of the various circumstances which may affect the relative proportions of the several constituents of the healthy human milk, such as age, temperament, period of lactation, position and circumstances in life, food, drink, &c., it will be found that the healthy quality of the secretion has been much deteriorated.

In milk of healthy women the water may range from 879 to 905; the solid constituents from 120 to 94; butter from 25 to 42; caseine from 15 to 39; sugar of milk from 31 to 45; salts from 1 to 4 parts in 1000. These proportions are materially altered by the use of Alcoholic beverages.

On the analysis of the milk of the same woman, a few hours before and after the use of a pint of beer, it has been found that the alcohol increases the proportion of water, and diminishes that of the *caseine* or curd, which is the muscle-making or nourishing element, and the presence of alcohol is very perceptible. As to the diseases produced by the influence of lactation vitiated by alcohol, Dr. Inman, of Liverpool, in his "New Theory of Disease," (1861, p. 44,) admits that, from this cause, "children have suffered severely from diarrhoea, vomiting and convulsions. I have known a glass of whiskey, to-day, taken by the mother, produce sickness and indigestion in the child twenty-four hours thereafter." Dr. Edward Smith, F.R.S., London, in his "Practical Dietary," (1865, p. 162,) says: "Alcoholics are largely used by many persons in the belief that they support the system and maintain the supply of milk for the infant; but this is a serious error, and is not an unfrequent cause of fits and emaciation in the child."

I have seen a case reported in the *Newcastle Express*, (England,) of the proceedings at an inquest at Monkwearmouth, where a surgeon stated that the child "had suffered from chronic inflammation of the bowels." And the coroner added that, "there was no doubt the child had died from convulsions arising from inflammation produced by taking the alcohol in the mother's milk."

So long ago as 1814, Sir A. Carlisle, the celebrated surgeon, said of fermented liquors: "The

next in order of mischief is their employment by nursing women, a common occasion of dropsy in the brain in infants. I doubt much whether the future moral habits, the temper and intellectual propensities, are not greatly influenced by the early effects of fermented liquors on the brain and sensorial organs."

That the vitiated milk secreted after using malt liquors may be productive of wasting chronic diarrhoea in infants, I am convinced, by repeated observations. I will relate a case in point, which occurred in my own practice. A mason's wife, in all respects a healthy-looking woman, consulted me in the autumn of 1867, in behalf of her child; seventeen months old, which had been suffering from chronic diarrhoea of an irritable character for the whole summer. It was the most haggard-looking and emaciated creature I had ever seen, and wore a remarkable senile expression of countenance. Its abdomen was very large, distended and tympanitic from flatulence. The skin hung in loose folds upon its emaciated frame, and its front teeth were already much decayed, giving a more ancient and haggard expression to the face. The child, I was told, was still nursing, and would not take nourishment. She added, however, that she had *kept it up* for some time by giving it, at first, a wineglass, then half a tumbler of porter, three or four times a day, and she drank freely of porter and ale herself, by her former doctor's orders, to enable her to keep up a liberal supply of good healthy milk, as she said. She took three pint bottles each day. She had consulted the best medical talent in the city, and was informed that, as the child was tuberculous and of unhealthy constitution it was a case incurable, but advised a continuation of the stimulants and the use of ale herself, to keep up the supply of milk. I regarded the case, at first, as one of starvation or inanition, from mal-assimilation; but, upon examination of the milk of the mother, upon which the child had been entirely dependent for nourishment, I found there was next to nothing in it to assimilate. It was almost entirely destitute of caseine or curd; the fatty matters were plentiful enough, but the quantity of sugar of milk present, I did not determine, as I have since wished I had done. In one specimen there was a sensible odour of alcohol; but in another, its presence could not be detected. Regarding the case now as one of *non-prehension*, instead of *non-assimilations*, before, I recommended an immediate change of nurses, and, although comparatively poor, the anxious mother at once fell in with my recommendation, and obtained a healthy