

of its normal tone. *Pain* from any cause may suppress a cough, and for this reason, the use of narcotics may be indicated. Narcotics subserve a useful purpose in diagnosis. Assuming we have a pleuritis complicating a pneumonia in which cough is a prominent symptom. If the cough is suppressed by doses of some narcotic, let us say opium, just enough to control pain, then we are in a position to say that the cough is probably caused by the pleuritis. When the mind is obtunded, as in brain lesions and the pyrexias, no cough is produced despite bronchial irritation, hence the tracheal mucous rattling, which has been popularly referred to as "*the death rattle*," is always an inauspicious sign. There are *different kinds of cough* from which a diagnostic inference may be drawn. The *dry cough*, unaccompanied by expectoration, is present as an initial symptom of phthisis, pleuritis, and what has been called a nervous cough. A *moist cough* is characteristic of free expectoration. We are all familiar with the *paroxysmal cough* of pertussis.

According to genesis, we may divide coughs into endo- and extra-pulmonary coughs. An endo-pulmonary cough is a reflex discharged from the respiratory tract in consequence of irritation of the vagus branches which supply this tract with sensory fibres. All parts of the bronchial mucosa are not equally sensitive to irritation, as has been repeatedly demonstrated by animal experiments. Accumulations of the mucus in the lung alveoli are incapable of exciting cough, and fail to do so until the accumulated material attains the mucosa of the communicating bronchiole. No reliance can be placed on the statement of the patient regarding the source of the expectoration. I have instituted inquiries in this direction among my phthisical patients, and the majority of them refer the source of the sputum to the upper part of the chest. This is no doubt due to the fact that the tracheal mucosa is extremely sensitive, and it is along the course of the trachea that the patient first feels the dislodged sputum. The relegation of a cough to its correct etiology is a perplexing problem. The intensity of a cough and the quantity of expectoration are usually proportionate. When this relation is disturbed we must look for an extra-pulmonary cause for the cough. Cough is an art that must be learned. Patients may be disciplined to inhibit a cough, and they may be educated to dislodge mucus by a single expulsive effort.

Dettweiler, a well-known phthisiologist, informs his patients, that to cough in public is as much a breach of