

but instead, we find at the outset of the disease what is spoken of as occurring at the close, fibroid consolidation ; the difference consisting in the extent to which it has gone, and in the absence in the former of secondary changes. In its essence the whole disease would appear to consist in an overgrowth—a hyperplasia—of the fibrous tissue of the lungs, induced by the chronic irritation to which they are subjected by the inspired particles of coal dust, a veritable Cirrhosis, or, as it might appropriately be called, the black Cirrhosis of miners. This certainly is the most natural view to be taken of these two cases, and accords best with their general and histological characters. From the fact that in many instances small bronchioles are seen in connection with the fibroid masses we may infer that about them the process begins, and spreads to the surrounding alveoli. In other places the *adventitia* of the blood vessels, and the interlobular connective tissue furnish starting points. We are still in the dark as to how all this takes place, how the air cells become converted into firm, hard areas—fibroid substitution as Dr. Bastian calls it, or why, again, in the same lung, some of the intensely dark spots are solid, while others are emphysematous.

Before referring to the other specimens, which do not, I believe, come in the same class, a few words must be said upon the general subject of lung pigmentation. Briefly, two sources must be admitted, an internal and an external ; in the former, the pigment is transformed hæmatin, and the affection is termed *Melanosis*; in the latter it is inhaled carbon, and the resulting disease is *Anthraxis*. It is only within the last ten or fifteen years that unanimity has been reached on this point. Up to this time many of the leading German and French pathologists refused to recognize the latter source. Even Virchow as late as 1859, basing his observations on portions of miner's lung sent him from Edinburgh, came to the conclusion, though he describes angular particles of carbon from the same cases, that a transformation of the colouring matter of the blood