

ments to respect. His microscopical observations are confirmed by the celebrated Professor Queckett, curator of the Royal College of Surgeons.

After describing the living appearance of certain prize animals at the Show, such as cattle, sheep, and pigs, some of them owned by the Prince Consort and the Duke of Richmond, all monstrously fat, and exhibiting great difficulty in breathing, Mr. Gant observes:—"Throughout the exhibition one circumstance particularly arrested my attention. It was the size of the animals compared with their respective ages. The bullocks averaged from two to three years; the pigs and sheep were about one year old. When I contrasted the enormous bulk of each animal with the short period in which so much fat or flesh had been produced, I certainly indulged in a physiological reflection on the high pressure work against time which certain internal organs, as the stomach, liver, heart, and lungs must have undergone at such a very early age. I therefore resolved to follow up those animals to their several destinations, and to inspect their condition after death." Mr. Gant was admitted to the slaughter houses when the gold and silver prize bullocks, heifers, pigs and sheep, that remained in London, were killed, and after carefully removing the heart, lungs, liver, &c., he made dissections of these organs, and provided faithful drawings of both their visible and microscopical appearances. Our space will only admit of a slight reference to their symptoms.

In the sheep, the hearts of several specimens were found in an unnatural, that is, unsound condition; the external surfaces very soft, greasy, and of a dirty brownish yellow colour, mottled with yellow spots of fat imbedded in the substance of the heart. Under the microscope the process was readily detected of the muscles being changed into, or overlaid by fat. The lungs were flabby, with numerous tubercles, and their function, or power of action, greatly diminished. Similar observations apply to the pigs, whose circulating system suffered serious interruption, indicated by the dark, livid liver. In horned cattle, the left ventricle of the heart had, in the several instances examined, been more or less converted into fat, having a yellow, soft, and greasy appearance. The intestines also exhibited a fat, putty-like mass, from an inch to an inch and a-half thick, in various parts of their surfaces. The worst feature of high breeding, early maturity, and consequent aptitude to fatten, appears to be under our modern stimulating system to convert the most important organ of life and health into a mass of fat. The stomach may indeed prepare food for the production of blood, and the lungs and kidneys may purify it of excrementitious matter, but these departments of the blood-factory are only subsidiary to the heart, whose special duty it is to propel the vital fluid to the most distant recesses of the body, that every part may be nourished and renovated. Yet I found the great central organ more than any other damaged. \* \* \* This material (fat) may itself be regarded as the superfluous food with which the animal had been gorged. It was first deposited in all loose parts of the body, these being most adapted for its accumulation, beneath the skin, and around the kidneys, stomach, intestines and