

what is most truly admirable. Suppose the engineer has contrived a steam carriage. He has with the utmost possible precision calculated the power of the steam, the pressure of the atmosphere, the strength of the tubes and cylinder, the weight to be moved, and the friction of the whole machinery. The engine is designed, every thing is proportioned, and at length it is constructed; but it remains immoveable. After much thought, the impediment is discovered, the pressure is eased, or the friction is diminished, and to the admiration of the beholders the carriage actually moves, till a pipe bursts: but, this is mended, the whole is improved, and a day is appointed for a great trial; the engine now runs for half a mile, and first, a bolt is shaken loose, then a spring snaps; but, at length, with renewed ingenuity and labour and much correction, after a few months, it actually runs a stage. We have here, by comparison, a sort of proof how much there is to admire in the mere machinery of an animal frame, and before the powers of life are measured out to it: such for example as the force of the heart to propel the blood, the resistance of the tubes to the circulating fluids, the strength of the limbs proportioned to the weight of the body, the action of the muscles adapted to the length of the bones, as levers, the flexibility of the joints, the firmness of the bones to resist