

Generally the denser bodies, such as metals, &c. are the best conductors of caloric. Porous substances, such as wood, cork, &c. are the worse conductors, down to woollen cloth, flannel, and down, which is one of the lightest bodies and at the same time one of the worst conductors. The reason of this may probably be, that in the dense substances there is much less air, which scarcely conducts caloric at all. On this principle of the different conducting powers of bodies, depends the mode of clothing ourselves. Flannel and woollen dresses being very bad *conductors* of caloric, prevent, when the temperature of the atmosphere is lower than that of our bodies, the escape of the animal heat from them, and thus keep us warm in the winter season. The same dress would keep us cool when the atmosphere was warmer than our body, as it would prevent its penetrating to our frame. If you lay your hand on a piece of marble, on the wood of the table, and on the carpet of the room, they will all *appear* to you to be of *different* temperatures; the marble coldest, the wood medium, the carpet warmest, and yet the thermometer would inform you that they are *really* of the *same* temperature. The reason of this is, that the marble being the best conductor of caloric of the three, (as they are all of a temperature below that of your hand, though of the same with the atmosphere,) absorbs from you the caloric you possess more *rapidly* than the others; and though it really makes you no colder than the others would in the end, yet as it produces the same effect in a shorter time, the change is more sudden, and consequently the sensation of cold (which we must always remember is merely the abstraction of caloric) is much greater. The reverse of this would be seen, from the same cause, were we to put three