

wheel shall charge them all equally, and every one as much as one alone would have been. What is driven out at the tail of the first, serving to charge the second ; what is driven out of the second charging the third ; and so on. By this means a great number of bottles might be charged with the same labour, and equally high, with one alone, were it not that every bottle receives new fire, and loses its old with some reluctance, or rather gives some small resistance to the charging, which in a number of bottles becomes more equal to the charging power, and so repels the fire back again on the globe, sooner than a single bottle would do.

11. When a bottle is charged in the common way, its *inside* and *outside* surfaces stand ready, the one to give fire by the hook, the other to receive it by the coating ; the one is full, and ready to throw out, the other empty and extremely hungry ; yet as the first will not *give out*, unless the other can at the same instant *receive in* ; so neither will the latter receive in, unless the first can at the same instant give out. When both can be done at once, it is done with inconceivable quickness and violence.

12. So a strait spring (though the comparison does not agree in every particular) when forcibly bent, must, to restore itself, contract that side which in the bending was extended, and extend that which was contracted ; if either of these two operations be hindered, the other cannot be done. But the spring is not said to be *charg'd* with elasticity