tire. But this is not the caſe: for the ſmaller parts of the figure dry ſooner than the larger; and thus loſing more of their dimenſions in the ſame ſpace of time than the latter do, the ſymmetry and proportions of the figure inevitably ſuffer. This inconveniency does not take place in thoſe models that are made in wax. It is in­deed extremely difficult, in the ordinary method of working the wax, to give it that degree of ſmoothneſs that is neceſſary to repreſent the ſoftneſs of the carna­tions or fleſhy parts of the body. This inconvenience may, however, be remedied, by forming the model firſt in clay, then moulding it in plaſter, and laſtly caſting it in wax. And, indeed, clay is ſeldom uſed but as a mould in which to caſt a figure of plaſter, ſtucco, or wax, to ſerve henceforth for a model by which the meaſures and proportions of the ſtatue are to be adjuſted. In ma­king waxen models, it is common to put half a pound of colophony to a pound of wax; and ſome add turpen­tine, melting the whole with oil of olives.

So much for the firſt or preparatory ſteps in this procedure. It remains to conſider the manner of work­ing the marble after the model ſo prepared; and the me­thod here followed by the Greeks ſeems to have been extremely different from that which is generally obſerved by modern artiſts. In the ancient ſtatues we find the moſt ſtriking proofs of the freedom and boldneſs that accompanied each ſtroke of the chiſel, and which reſulted from the artiſt's being perfectly ſure of the accuracy of his idea, and the preciſion and ſteadineſs of his hand: the moſt minute parts of the figure carry theſe marks of aſſurance and freedom; no indica­tion of timorouſneſs or diffidence appear; nothing that can induce us to fancy that the artiſt had occaſion to correct any of his ſtrokes. It is difficult to find, even in the ſecond-rate productions of the Grecian artiſts, any mark of a falſe ſtroke or a random touch. This firmneſs and preciſion of the Grecian chiſel were cer­tainly derived from a more determined and perfect ſet of rules than thoſe which are obſerved in modern times.

The method generally obſerved by the modern ſculptor is as follows: Firſt, out of a great block of marble he ſaws another of the ſize required, which is perform­ed with a ſmooth ſteel ſaw, without teeth, caſting water and ſand thereon from time to time; then he faſhions it, by taking off what is ſuperfluous with a ſteel point and a heavy hammer of ſoft iron; after this, bringing it near the meaſure required, he reduces it ſtill nearer with another finer point; he then uſes a flat cutting inſtrument, having notches in its edge; and then a chiſel to take off the ſcratches which the former has left; till, at length, taking raſps of different degrees of fineneſs, by degrees he brings his work into a condition for poliſhing.

After this, having ſtudied his model with all poſſible attention, he draws upon this model horizontal and per­pendicular lines which interſect each other at right angles. He afterwards copies theſe lines upon his marble, as the painter makes uſe of ſuch tranſverſal lines to copy a picture, or to reduce it to a ſmaller ſize. Theſe traniverſal lines or ſquares, drawn in an equal number upon the marble and upon the model, in a man­ner proportioned to their reſpective dimenſions, exhibit accurate meaſures of the ſurfaces upon which the artiſt is to work; but cannot determine, with equal preciſion, the depths that arc proportioned to theſe ſurfaces.—

The ſculptor, indeed, may determine theſe depths by obſerving the relation they bear to his model; but as his eye is the only guide he has to follow in this eſtimate, he is always more or leſs expoſed to error, or at leaſt to doubt. He is never ſure that the cavities made by his chiſel are exact; a degree of uncertainty accom­panies each ſtroke; nor can he be aſſured that it has carried away neither too much nor too little of his mar­ble. It is equally difficult to determine, by ſuch lines as have already been mentioned, the external and inter­nal contours of the figure, or to transfer them from the model to the marble. By the internal contour is underſtood that which is deſcribed by the parts which ap­proach towards the centre, and which are not marked in a ſtriking manner.

It is farther to be noticed, that in a complicated and laborious work, which an artiſt cannot execute without aſſiſtance, he is often obliged to make uſe of foreign hands, that have not the talents or dexterity that are neceſſary to finiſh his plan. A ſingle ſtroke of the chiſel that goes too deep is a defect not to be repaired; and ſuch a ſtroke may eaſily happen, where the depths are ſo imperfectly determined. Defects of this kind are in­evitable, if the ſculptor, in chipping his marble, begins by forming the depths that are requiſite in the figure he deſigns to repreſent. Nothing is more liable to error than this manner of proceeding. The cautious artiſt ought, on the contrary, to form theſe depths gradually, by little and little, with the utmoſt circumſpection and care; and the determining of them with preciſion ought to be conſidered as the laſt part of his work, and as the finiſhing touches of his chiſel.

The various inconveniences attending this method determined ſeveral eminent artiſts to look out for one that would be liable to leſs uncertainty, and productive of fewer errors. The French academy of painting at Rome hit upon a method of copying the ancient ſta­tues, which ſome ſculptors have employed with ſucceſs, even in the figures which they finiſhed alter models in clay or wax. This method is as follows. The ſtatue that is to be copied is incloſed in a frame that fits it exactly. The upper part of this frame is divided into a certain number of equal parts, and to each of theſe parts a thread is fixed with a piece of lead at the end of it. Theſe threads, which hang freely, ſhow what parts of the ſtatue are moſt removed from the centre with much more perſpicuity and preciſion than the lines which are drawn upon its ſurface, and which paſs equally over the higher and hollow parts of the block: they alſo give the artiſt a tolerable rule to meaſure the more ſtriking variations of height and depth, and thus render him more bold and determined in the execution of his plan.

But even this method is not without its defects: for as it is impoſſible, by the means of a ſtraight line, to determine with preciſion the procedure of a curve, the artiſt has, in this method, no certain rule to guide him in his contours; and as often as the line which he is to deſcribe deviates from the direction of the plumb line, which is his main guide, he muſt neceſſarily find himſelf at a loſs, and be obliged to have recourſe to conjecture.

It is alſo evident, that this method affords no certain rule to determine exactly the proportion which the va­rious parts of the figure ought to bear to each other, conſidered in their mutual relation and connections. The artiſt, indeed, endeavours to ſupply this defect by