

ANATOMY

EXPRESSION IN PAINTING,

BY

CHARLES BELL.

Call number

pp. 27 to 232
George Washington
four copies total



Digitized by the Internet Archive
in 2010 with funding from
Research Library, The Getty Research Institute

ESSAYS.

C. WHITTINGHAM, PRINTER, DEAN STREET, FETTER LANE.

ESSAYS

ON THE

ANATOMY OF EXPRESSION

IN

PAINTING.

BY CHARLES BELL.

————— TAMEN ASPICE, SI QUID
ET NOS, QUOD CURES PROPRIUM FECISSE, LOQUAMUR.

HOR. EPIST. XVII.

LONDON:

PRINTED FOR LONGMAN, HURST, REES, AND ORME, PATERNOSTER-ROW.

—
1806.

ADVERTISEMENT.

WHEN the Author of these Essays has formerly appeared before the Public, he felt a sort of confidence in the tendency and usefulness of his labours; the motives at least which induced him to publish might plead that apology which an author so naturally wishes to establish with his readers. And to this perhaps he has hitherto owed his exemption from the severity of criticism. He has here ventured on a subject in which to succeed implies a thousand delicacies of taste and of composition, the want of which is little observed in works of less splendid pretensions. But he may be allowed

to say, that even in this attempt he has still his first great object in view, and in some measure the same motives and hopes to support him. His wish is to demonstrate the importance and the uses of anatomy; to multiply the motives for the cultivation of the science; to show how various and how interesting are the deductions which may be drawn from the contemplation of the animal frame.

Engaged by his professional duties in the study of the anatomical structure, as it directs the enquiries and the practice of the physician and surgeon, the Author has been accustomed also to look on the human body in another relation, less useful it may be admitted, but not less pleasing or interesting.

Anatomy stands related to the arts of design, as the grammar of that language in which they address us. The expressions, attitudes, and movements of the human figure, are the characters of this language; which is adapted to convey the effect of historical narration, as well as to show the working

of human passion, and give the most striking and lively indications of intellectual power and energy. The art of the painter, considered with a view to these interesting representations, assumes a high and dignified character. All the lesser embellishments and minuteness of representation are, by an artist who has those more enlarged views of his profession, regarded as foreign to the main subject, as distracting and hurtful to the grand effect, as admired only because they have the merit of accurate imitation, and almost appear to be what they are not. This distinction must be felt, or we shall never see the grand style in painting revived. The painter must not be satisfied merely to copy and represent what he sees; he must cultivate this talent of imitation, merely as bestowing those facilities which are to give scope to the exertions of his genius, as the instruments and means only which he is to employ for communicating his thoughts, and presenting to others the creations of his fancy. It is by his creative powers alone that he can become truly a painter; and for these he is to trust to original genius, cultivated and enriched

by a scrutinizing observation of nature. Till he has acquired a poet's eye for nature, and can seize with intuitive quickness the appearances of passion, and all the effects produced upon the body by the operations of the mind, he has not raised himself above the mechanism of his art, nor does he rank with the poet or the historian.

To assist the painter in one department of this inspiring study, is the Author's design in these Essays. He has been desirous, in principles deduced from the structure of man, and the comparative anatomy of animals, to lay a foundation for studying the influence of the mind upon the body; and he ventures to expect great indulgence to an attempt at once so delicate and so difficult.

Perhaps it may be proper to make some apology for the sketches which accompany the text. He often found it necessary to take the aid of the pencil, in slight marginal illustrations, in order to express what he despaired of making intelligible by the use

of language merely ; as in speaking, for example, of the forms of the head, or the operation of the muscles. The slightness of these sketches, as they appeared in the manuscript, explained sufficiently the humble intention of the Author. But, under the graver, they have assumed an appearance more soft and finished, than was perhaps to be desired; and certainly stand more in need of an apology for their incorrectness*.

* In the sketch of Astonishment and Fear the Author thought that he was successful in the expression, but they have lost much of their original character. It would be ungrateful not to acknowledge that he is indebted for some of the happier imitations of his drawing to Mr. Freeman's unremitting attention and solicitude.

CONTENTS.

INTRODUCTORY ESSAY.

	Page
USES OF ANATOMY TO THE PAINTER—FAULTS INTO WHICH ARTISTS MAY BE BETRAYED IN STUDYING FROM THE ANTIQUE EXCLUSIVELY	3
In drawing from the academy figure	9
The proper use of the living figure to the artist	11
Of the anatomy as assisting the artist in drawing from the model	12
Its uses in drawing from the living figure, or in composing	14, 15
Of the expression of the anatomy in the sketch and in the finished picture	17
The ambitious display of anatomical knowledge leads to inaccuracy and caricature ...	18

ESSAY II.

OF THE SKULL AND FORM OF THE HEAD.....	23
Of the distinction of character in the different ages—Of the head of an infant	25
Of the changes produced by the growth and falling away of the teeth	27
Character of an old woman's face	29
Peculiarities of Flamingo's heads of children	31
Of the peculiarities of the antique or ideal head	32
Of the character of the heads of brutes—The peculiarity in the antique form of the head consists in increasing the proportions which distinguish human physiognomy..	39, 40
Explanation of the plate of the skulls	49

ESSAY III.

OF THE MUSCLES OF THE FACE IN MAN AND IN ANIMALS	55
Explanation of the plate of the muscles of the face	58
Explanation of the additional plate of the muscles of the face	67
Explanation of the plate of muscles in the carnivorous animals	72
Some painters have given human expression to animals	74
Explanation of the plate of the muscles of the horse's head	77

ESSAY IV*.

	Page
OF THE EXPRESSION OF PASSION AS ILLUSTRATED BY A COMPARISON OF THE MUSCLES IN MAN AND IN ANIMALS—AND OF THE MUSCLES PECULIAR TO MAN—AND THEIR EFFECTS IN BESTOWING HUMAN EXPRESSION	84
Arrangement of the muscles of the face in brutes	89
Of the muscles of the face of man as contrasted with those of brutes	93
Effects of the muscles of expression in man and animals	96
Much of beauty of countenance is in capacity of expression	102

ESSAY V.

IDEA OF A LIVING PRINCIPLE IN THE EXPRESSION OF EMOTION—OF THE ACTION OF THE MUSCLES OF THE FACE AS EXPRESSIVE OF PASSION	108
Of the relaxation of the muscles of the face in languor, faintness, and sorrow—Of bodily pain	113
Of anguish and of death	116
Of laughter and of weeping.....	125
Of joy and discontent	133
Of wonder, astonishment, fear, terror, horror, despair	142
Of madness	153

ESSAY VI.

OF THE ECONOMY OF THE LIVING BODY AS IT RELATES TO EXPRESSION AND CHARACTER IN PAINTING.	161
Of the veins	163
The bones and muscles.....	168
Power of exercise in giving form and elegance to the figure	171
Contrast of power and velocity as indicated in the human figure	174
An elevation sometimes to be sustained in the proportions and attitude of the figure, as in the language of the poet	176
The movements of the human body divisible into those, 1. Of motion and exertion; 2. Of sentiment and passion	177
An elegant position is a natural and easy one	180
Beauty of animals has a relation to motion, but in the human body it has also a relation to the qualities of mind and the power of expression.....	181
Of the character of sleep and death	183

* This by an error of the press is Essay V. Essay V. is written Essay VI. and so on.

INTRODUCTORY ESSAY.

USES OF ANATOMY TO THE PAINTER—FAULTS INTO WHICH ARTISTS MAY BE BETRAYED IN STUDYING THE ANTIQUE; IN DRAWING FROM THE ACADEMY FIGURE—ANATOMY AS LEADING TO THE CRITERION OF TRUTH OF EXPRESSION AND OF CHARACTER.

IN the expression of emotion and passion, whether by the gesture or in the countenance, there is sufficient uniformity to be the object of art and reasoning; and though we cannot hope to obtain a perfect rationale of this curious and interesting science, something certainly may be done in settling a criterion of just and true expression.

In what I now lay before the public, I do not aim at any thing like a complete theory of expression. It is interesting in a very high degree to mark the traits of emotion, and compare them with the anatomical structure; and amidst the severer studies of anatomy, as connected with health and disease, I have been able, without departing too far from my professional pursuits and duties, to pass many pleasant hours in observing and investigating the anatomy of expression.

But we are still far from possessing sufficient materials for a theory of the science : and all that I can venture to hope, is that some of my suggestions may prove useful to those who indulge in these pleasing speculations; or be serviceable to artists, who, while they are solicitous to attain the perfection of mechanical practice, derive satisfaction from studying the principles of their art.

By anatomy, considered with a view to the arts of design, I understand not merely the study of the individual and dissected muscles of the face, or body, or limbs ; I consider it as including a knowledge of all the peculiarities and characteristic differences which mark and distinguish the countenance, and the general appearance of the body, in situations interesting to the painter or statuary. The characters of infancy, youth, or age; the peculiarities of sickness or of robust health; the contrast of manly and muscular strength, with feminine delicacy; the appearances of diseases, of pain, or of death; the general condition of the body; in short, as marking to the eye of the beholder interesting situations;—all these form as necessary a part of the anatomy of painting as the tracing of the muscles of expression in their unexerted state, and of the changes induced upon them as emotions arise in the mind.

The anatomy of painting, taken according to this comprehensive description, forms not only a science of great interest, but that from which alone the artist can derive the true spirit of observation; learn

to distinguish what is essential to just expression; and be enabled to direct his attention to appearances which might otherwise escape his notice, but on which much of the effect and force, and much even of the delicacy of his delineations, will be found to depend.

Among the errors into which a young artist is most likely to be seduced, there are two against which the study of anatomy seems well calculated to guard him.—The one of these is, the blind and indiscriminate imitation of the antique; the other, an opinion that in the academy figure he will find a sure guide in delineating the natural and true anatomy of the living body. These are subjects on which it may be excusable to insist somewhat at large.

If, as I fear it too often happens, an artist should make the imitation of the antique the beginning and the end of his studies, instead of adopting it as a corrective of his taste, after having laid a sure ground-work in the study of anatomy and a close observation of nature, and after having attained a correct and powerful execution, he will be apt to degenerate into a tame and lifeless style; he will be in danger of renouncing, in pursuit of ideal beauty, the truth of expression and of character.—Nay, I cannot help suspecting that many painters have copied after casts of the antique for years, without perfectly understanding what they should imitate, without even perceiving the necessity of previously studying the nature of the subject; entering fully into the idea of the artist; and being aware of the peculiarities of his mode of composition. Into this fault, one who is

learned in the science and anatomy of painting can never fall. But he who has not compared the natural with the antique head, or learned the characteristic differences, or studied the principle on which the ancient artists composed, may be betrayed into the grossest misconceptions by too implicitly following their models. In painting a hero, for example, on whom an ancient would have bestowed strong character, with bold anatomy and powerful expression, he may follow the ideal form of a deity, in which the Grecian artist had studiously divested his model of all that could indicate natural character, or might seem to pertain to humanity. The ancient artist, in following the mythology of his country, and the description of her poets, studied to bestow the character of divinity, by giving repose to the limbs without any indication of muscles or veins, and by exhibiting a face full of the mild serenity of a being superior to the passions of mankind, as shadowing out a state of existence in which the will possesses the most perfect freedom and activity without the exertion of the bodily frame. But those ideal forms are scarcely ever to be transferred to the representation of the human body; and a modern artist who indiscriminately follows such a model, misapplies the noblest lessons of his art.

There are also, independently of the ideal form of divinity, some peculiarities in the nature of the ancient sculpture which ought to be well considered by the student in modern painting.

In the infancy of their art, sculptors did not venture to give to their figures either animation or character; they did not even open the eye-

lids, or raise the arm from the side. A stillness and simplicity of composition is thus the characteristic of ancient sculpture; and we are told that Pericles, even in the best age of Grecian art, was anxious that his artists should in all their works preserve this grave simplicity of the early ages, as necessary to grandeur. It is observed accordingly, that among the most striking marks of excellency which distinguish the Grecian artists, the first and most admirable is this noble simplicity; this sedate grandeur of expression; and the prevailing tranquillity of soul which still appears under the most terrible agitations, and the most violent passion. Upon this chaste model was the taste in sculpture formed, in the better ages of Greece and Rome; and its influence has extended to modern times. Unfortunately this style of composing has been perverted into an additional authority for rejecting powerful expression and character even from the canvass. But we must never forget the distinction between statuary and painting. The statuary indeed must often, as well as the painter, represent what is not consistent with perfect beauty; while both must sometimes preserve an indefiniteness, and soften all the harsher, though strictly natural lines of expression. Still however there is an essential and important difference between the principle of composition in painting and in sculpture.

In the statuaries of antiquity, we see a perpetual effort to exalt their productions above the commonness of nature. In the expression of passion, they studied a grand and general effect, avoiding the representation of that minuteness or sharpness of feature, and of those

convulsions and distortions which are strictly natural : and indeed it is scarcely consistent with the character of a statue to represent the transitory emotions of violent passion. The statuary must exercise his genius on the more sublime and permanent emotions, as charactered in the countenance and figure ; and much of the difficulty of his art consists in preventing the calmness and repose which ought to be preserved in the attitude and expression, from extinguishing all character, and degenerating into indifference and insensibility.

But this rigid principle does not apply to the painter ; and to transfer to painting those rules of composition which flow from the study of ancient sculpture, threatens the loss of all that is peculiarly excellent in the art. As the painter's materials do not admit of a representation too nearly approaching to nature, a character and expression more natural and stronger than is proper to a statue is allowable. It is very true, that the painter may often be allowed to preserve much of the same gravity of style with the statuary ; that such compositions will possess a certain augustness ; and that some subjects even require this, while many admit of it, provided the tone and principle of composition will be well preserved, and the painting characterised by a low and sombre colouring. In general, however, this is neither necessary nor perhaps natural to the style of composition in painting. A stronger expression, a closer imitation of natural character may be adopted ; and at least it may be laid down, that where there is bold light, and vivid colouring, there should be strong

and natural character, bold and characteristic drawing. A painting, with high finishing and bright colouring, demands minute expression, because the same circumstances which display the natural colouring, are necessarily accompanied by a minute disclosure of the parts, and a sharpness of natural expression in the features.

Thus the painter must study, as a necessary part of his profession, the traits of human expression. The noblest aim of painting unquestionably is to reach the mind, which can be accomplished only by the representation of sentiment and passion; of the emotions of the mind, as indicated by the figure, and in the countenance. If it be still contended that an imposing stillness and tranquillity must pervade the representation of the higher subjects of painting, I will venture to affirm, that it is a tranquillity which he can never reach who is not capable of producing all the violence and agitation of passion. It is not such repose as the artist who has despised or neglected natural character may be able to represent, but such as he alone can conceive and execute, who, having commenced with natural forms and expression, has not contented himself with the first lesson of delineating the effects of passion with boldness, but has studied all the variety of expression, and learned the anatomy of the face and limbs in their most violent action. Nay, tranquillity or repose, in the strict sense of the words, cannot be characteristically expressed by one who could not with equal facility give energy to the features and figure, and action to the muscles; for in rest there must be character, and in what this consists, can best be observed and understood by him

who has studied the effect of action. It ought also to be recollected that repose and agitation must ever greatly depend on contrast and opposition. There are few great subjects in history or mythology, in which the tranquillity and higher beauty of expression in the main figure, whether a hero in the midst of conquest, a heathen deity, or the Saviour, does not borrow some aid from the harsher features, more marked character, and more passionate gesture of the surrounding groupes.

Perhaps, I may be thought to have sufficiently pointed out how dangerous it is, for one solicitous to excel as a painter, too closely and indiscriminately to imitate the antique, and especially the productions of ancient sculpture. But it is not unnatural for the student to believe that the study of the academy figure may serve as a guard against all such danger; and afford him a sure criterion for judging of the anatomy of his figures.

The study of the academy figure is, undoubtedly, most essential, but unless conducted with some regard to science, it necessarily leads to error.

In the first place, it may be remarked, that the academy figure can give no aid in the study of the countenance. Here the lessons of anatomy, taken along with the descriptions of the great poets, and the study of the works of eminent painters, afford the only resource.

But even for the anatomy of the body and limbs, the academy figure is very far from being an infallible guide. The display of muscular action in the human figure is but momentary, and cannot be retained and fixed for the imitation of the artist. The effect produced upon the surface of the body and limbs by the action of the muscles, the swelling and receding of the fleshy parts, and that drawing of the sinews or tendons, which accompanies exertion, or change of posture, cannot be observed with sufficient accuracy, unless the artist is able to class the muscles engaged in the operation; and unless he have some other guide than the mere surface presents, which may enable him to recollect the varying form.

When the academy figure first strips himself, there is a symmetry and accordance in all the limbs; but when he is screwed up into a posture, there appears a constraint and want of balance. It cannot be supposed, that, when a man has the support of ropes to preserve him in a posture of exertion, the same action of muscles can be displayed as if the limbs were supported by their own energy; and, in all academy drawings, we may perceive something wrong where the ropes are not represented along with the figure. In natural action there always is a consent and symmetry in every part. When a man clenches his fist in passion, the other arm does not lie in elegant relaxation: When the face is stern and vindictive, there is energy in the whole frame: When a man rises from his seat in impassioned gesture, there pervades every limb and feature a certain tension and straining. This uni-

versal state of the body it is difficult to excite in those who are accustomed to sit to painters; I see them watch my eye, and where they see me intent, they exert the muscles. The painter, therefore, cannot trust to the man throwing himself into a natural posture; he must direct him, and be himself able to catch, as it were intuitively, what is natural, and reject what is constrained. Besides, those soldiers and mechanics who are employed as academy figures are often stiff and unwieldy; and hard labour has impaired in them the natural and easy motion of the joints.

Until the artist has gained a perfect knowledge of the muscles, and is able to represent them in action without losing the general tone of the figure, he is apt to produce an appearance like spasm or cramp in the limbs from one part being in action, while the other is loose or relaxed. For it is always to be remembered, that whether the body be alive or dead, whether the limbs be in action or relaxed in sleep, a uniform character must pervade the composition. Whether the gently undulating line of relaxed muscle be the prevailing outline; or the parts be large and strong, and the muscles prominent, bold, and angular; there must be perfect accordance, otherwise there will be no beauty of expression.

I think, that in the sketches, and even in the finished paintings of some artists, I have observed the effect of continuing to draw from the model, or from the naked figure, without due attention to the action of the muscles. I have seen paintings, where the grouping

was excellent, and the proportions exact, yet the figures stood in attitudes when they were meant to be in action; they were fixed as statues, and communicated to the spectator no idea of exertion or of motion. This sometimes proceeds, I have no doubt, from a long continued contemplation of the antique, but more frequently from drawing after the still and spiritless academy figure. The knowledge of anatomy is necessary to correct this; but, chiefly, a familiar acquaintance with the classification of the muscles, and the peculiarities and effect of their action.

The true use of the living figure is this;—after the artist has learnt the structure of the bones and the classification of the muscles, he should attentively observe the play of the muscles when thrown into action and attitudes of violent exertion; but, chiefly, he should mark the action of the muscles during the striking out of the limbs. He will soon, in such a course of observation, learn to distinguish between posture and action, and to avoid that tameness which results from neglecting the play of the muscles. And in this view, the painter, after having learnt to draw the figure, as it is usually termed, would do well to make the academy figure go through the exercise of pitching the bar, or throwing or striking. He will then find that it is chiefly in straining and pulling in a fixed posture, that there is an universal tension and equal prominence of the muscles; and that in unrestrained actions only a few muscles rise strongly prominent, and are distinctly characteristic of that action. He will not, perhaps, be able to catch the character of muscular

expression, and commit it to paper at once; but with accurate notions of the classification of the muscles, and of the effect of each action in calling into exertion particular sets of them, knowing to what point his observation should be applied, and correcting his pre-conceived notions by the actual appearance of the limb, each succeeding exhibition of strength will accelerate his progress in the knowledge of anatomical expression, and in correctness of design.

The true corrective for the faults we have pointed out, is to be found in the study of anatomy. It may well be said, that anatomy is the true basis of the arts of design; and it will, infallibly, lead to perfection those who, blessed with true genius, can combine correctness and simplicity with the higher graces and charms of the art. It bestows on the painter a minuteness of observation, which he cannot otherwise attain; and, I am persuaded, that while it will enable him to give vigour to the whole form, it will, also, teach him to represent certain niceties of expression, which, otherwise, are altogether beyond his reach.

Even in drawing from a particular model, the artist, who is versed in anatomy, has a great superiority. When I have seen a person, unacquainted with anatomy, drawing from the naked figure or from a statue, I have marked the difficulty which he experienced in representing the course of a swelling muscle, or the little depressions and convexities about a joint; and this difficulty I have traced to

his total ignorance of the course and action of the muscle, the effect of which he was endeavouring to make out. The same difficulty is often felt in drawing the knobbed end of a bone, or the insertion of a tendon, which being under the integuments of the limb are but very faintly distinguishable on the surface. These delicate and less definite indications of the anatomy, though easily traced by one acquainted with the structure of the limb, appear to the uninformed only as unmeaning variations in the outline, of the importance of which he has no means of judging, and in the imitating of which he feels the greatest difficulty, and is exposed to continual mistakes. While the knowledge of anatomy gives to the painter a spirit of minute observation, and leads him to mark those little niceties which add to the beauty of the whole, it also enables him to preserve correctness, and infuse vigour into his drawing; to catch that diversity which nature sets before him, and to avoid the representation of what is monstrous and deformed.

Suppose, that a young artist is about to sketch a figure or a limb, feeble indeed will his execution be, if without knowledge he endeavours merely to copy what is placed before him. In thus transcribing, as it were, a language which he does not understand, how many must be his errors and inaccuracies! He sees an undulating surface; the bones and processes of the joints but faintly distinguishable; he neglects the peculiar swelling of the muscles, to which he should give force, as implying motion; he makes swellings merely; he is incapable of bestowing the elegant undulating outline of beauty

with force and accuracy, and of preserving at the same time the characters of motion or exertion. Drawing what he does not understand, he falls into imbecility or deviates into caricature.

But if with a knowledge of anatomy, he attempts the same task, his acquaintance with the skeleton enables him with truth and with facility to sketch his first outline of the figure, and to take down its various proportions; while his knowledge of the muscles enables him to represent forcibly the fleshy parts, simplifying and massing where it is necessary, and at the same time preserving a minuteness of intension.

But it is in composing much more than in copying what is exhibited, that the knowledge of anatomy is truly useful. Without such knowledge, all the original exertions of genius are repressed. Every alteration of posture is accompanied with muscular exertion and change of form, and in proportion to the painter's ignorance of these changes, are all his designs cramped and restrained. Leonardo da Vinci gives formally, as a precept, what is self-evident to an anatomist. "In naked figures, those members must shew their muscles most distinctly and boldly, upon which the greatest stress is laid; in comparison with which, the rest must appear enervate."—"Remember, further, to make the muscles most visible on that side of any member which it puts forward to action." Such rules and precepts are rather the result of anatomical knowledge, than useful as pointing out to one unacquainted with anatomy

the effect he is to produce. It is not by following such a precept, that the end is to be accomplished, but by enriching the mind with the continual contemplation of the anatomical changes, which mark each motion; and by forming, as the result of such study, rules for the representation of human action. The uses of this study will best appear from an illustration. In vigorous action, while there is generally a tension in the whole frame, there is also, in order to produce the particular motion, a certain class of muscles brought into stronger action than the rest; the delineation of which is the true indication of the action itself. If a man be merely pointing upwards, an elegant simplicity may be all that the painter can attain, or should attempt; but if, in the same posture, he is bringing down a heavy sword to make a blow, the muscles start into strong exertion; and by representing those swelling muscles which pull down the arm and give the sweep to the whole body, the idea of mighty action is conveyed. Thus it is necessary, in order to compose with truth and correctness, not only that the painter should know the place and form of the bones and muscles, but that he should also have an accurate conception of the classing of the muscles in their action.

Perhaps, I shall best impress my idea of the advantage to be derived from this study, by contrasting two young artists employed in drawing from a figure; the one trusting to his untutored genius; the other assisted by the study of anatomy. The first, after much labour, is seen copying bit by bit, and measuring from point to point; and the effect is an accurate out-

line. The other catches the attitude with facility, because a knowledge of the skeleton has enabled him to balance the trunk upon the limbs, and to give the outline with boldness ; the turn of the limbs, the masses of muscular flesh, and the general character of the joints, are touched with a slight but accurate hand. If you look upon his sketch, you will find the attitude, the character, the spirit, and life of the original. Even in the early stage of his drawing, and whilst his opponent is copying parts, he presents you with the foundation of an accurate and spirited sketch ; and if the anatomical student has the advantage in conveying the general idea in a few lines, he has a much greater superiority in drawing the minute parts.

But this superiority which anatomy bestows, is still better exemplified, if you remove the model from these two young painters, and make them draw the figure from recollection ; or if, keeping the model before them in its original posture, you make them alter the attitude of the figure. Suppose, for example, that we take the fighting gladiator. Instead of a young warrior pushing on with great energy, let their task be to represent him receiving a blow of his antagonist, which forces down his shield upon his breast, or brings him with his knee to the ground ; as it is beautifully represented on some medals. Can we doubt for a moment which will excel ? The one will copy from recollection his original drawing, or twist with great difficulty the erect limbs of the statue into a couching posture, while the other will gain by his greater freedom. Retaining the general air, like one who had understood what he copied, he is aware, that a new class of muscles come into action, while those

formerly in exertion are relaxed; he knows that the bending of the limbs increases their measurements; he knows how to represent the joints in their new postures; in short, he gives energy and effect as a compensation for slighter errors.

It is a mistake to suppose, that because in many capital pictures the anatomy is indicated very faintly, the study of it may not be necessary to a painter. Even that, which in the finished picture is to be the mere indication of muscular exertion, ought to have its foundation laid in the sketch, by a correct and strong representation of the full action. It is very true, that the sketch is too often a mere indication of the painter's design, intended to be worked up to all the truth of representation as he transfers it to the canvass; that the outlines of the figures are oftener mere shadowy forms undefined in the minute parts, than studies of anatomical expression, or guides to the painter in his subsequent labour. And perhaps it is for this reason that there have been many painters whose sketches all admire, but whose finished paintings fall short of public expectation. But I venture to say that a sketch which is without spirit, tame, monotonous, and in which the anatomy has not been studied, is a bad foundation for a fine painting. Even a little exaggeration of the anatomy is not only agreeable, but highly useful in the mere sketch. The anatomy should be strongly marked in the original design; and from the dead colouring to the finishing, its harshness and ruggedness should be gradually softened into the modesty of nature. The character of a sketch is spirit and life; the finished painting

must have smoothness and accuracy combined. What was a harsh outline in the sketch, or the strong marking of a swelling muscle, or the crossing of a vein, will in the finished composition be faintly indicated, perhaps, only by a tinge of colour. But the anatomy of the finished picture will always be the most happy, and even its delicacy perhaps the greatest, where the painter has a strong and clear conception of the course and swelling of each muscle and vein which enters into the delineation of the action.

While artists neglect the study of anatomy as connected with character and expression in painting, they never can attain the "vantage ground of their profession." Perhaps, also, it is to be feared, that while this study is confined to a few, and one or two artists only are versed in the science, they will be apt to caricature nature. They are learned above their rivals: it is their *forte*, and they are solicitous to display it. But were anatomy more generally studied, the same spirit and love of originality would make those very men seek for distinction, by combining elegance, and the other requisites of fine painting, with truth and expression; and prevent them from being any longer ambitious of drawing with an accuracy bordering on deformity.

It is not enough however to prove that the painter should accomplish himself in the knowledge of anatomy. The public attention must also be directed to its importance. For as necessity must precede invention in the origin of arts, so must general good taste pre-

cede or accompany their improvement. The mere conviction in the mind of the painter, that anatomy is necessary to the perfection of his science, will seldom be sufficient to insure his application to a very difficult and somewhat of a disgusting study. The knowledge and opinion of the public must force him to the task, and encourage his labour by the assurance of its merited reward.

I have therefore two objects in view, in submitting these sketches and hints to the public; to furnish the painter, so far as I am able, with a guide to the study I recommend; and to convince the amateur of the necessity of this union of anatomy and painting. To many, of both descriptions, I am afraid this work will not be agreeable. The painter who considers his education as completed, will not be pleased to find so arduous a branch of it still to be begun; and the amateur may be expected to shudder at the very name and phraseology of anatomy. But it is only while anatomy is studied improperly, that it can excite disgust; when connected with the criticism of art, it affords very delightful subjects of investigation. Even in the common intercourse of life, as well as in the gallery, the spirit of observation which it excites and fosters, must prove a source of very pleasing speculation. At the gaming-house, on the exchange, in the streets, this study affords amusement of the highest interest and gratification. In the theatre it is the foundation of true criticism. In heroic poetry, the finest passages are those which are descriptive of passion; and those poets who have excelled in describing human emotion, and have been able to convey a forcible and vivid idea, by attending to the

working of the impassioned countenance, have spoken with uniform effect to all ages. The description of a characteristic feature or trait of expression, often conveys a perfect idea of the whole, and, like a skilful touch of the painter, a single stroke of the poet's pen enlivens the picture, and interests the feelings.

ESSAY II.

ESSAY II.

OF THE SKULL AND FORM OF THE HEAD—OF THE DISTINCTION OF CHARACTER IN DIFFERENT AGES—AND OF THE PECULIARITIES OF THE ANTIQUE OR IDEAL HEAD—AND OF THE NATURAL CHARACTER, AS ILLUSTRATED BY THE FORM OF THE SKULL.

THE painter has much to learn in observing the form of the skull. He will often be directed in his drawing by the knowledge acquired in this study; he will learn also to mark the peculiarities in heads of different ages; and even the distinctions of national character, if he should be inclined to carry his studies so far.

Turning to PLATE I. there is a division of the bones of the head, which it may be useful for the painter to recollect. In fig. 2. is presented a sketch of the skull in profile, and a distinction may be observed between the globular part of the head or CRANIUM, which contains and protects the brain; and the FACE, which is

formed of small, light, and irregular bones, containing principally the organs of the senses, and forming at the same time the basis, as it were, of the features. On this account, the latter is particularly worthy of our attention at present.

On attentively considering fig. 2, and 3, we may observe certain distinguishing peculiarities which must be preserved in drawing the head of a child, and of an adult person.

The human head differs from that of every other animal in the size of the Cranium, compared with that of the face. The human Cranium (containing the brain) is particularly large. And as the brain is a part which nature is provident to bring at an early period to maturity, we see in the infant's skull, (fig. 3.) that the Cranium is of great magnitude, compared with the face. The whole head has a very different character from that of fig. 2. which is the skull of a grown person.

To account for some of these peculiarities, may contribute to their being more distinctly remembered.

The bones of the Cranium, in the grown person, are strong and unyielding; firmly united by a juncture, called the *SUTURE*. In the child newly born (fig. 3.) we observe that the skull consists of distinct laminae, or plates of bone, and that they are loose and unconnected. This is a provision of nature for facilitating the birth of the

child; the bones of the head during labour, yielding and accommodating themselves to the pressure.

There is in the general form of the head of an infant, and its elongation backwards, another provision for the safety of the mother, and the easy birth of the child.

We may observe then these

PECULIARITIES IN THE HEAD OF AN INFANT.

1. The oval elongated head.
2. The flatness of the forehead.
3. The smallness of the bones of the nose.
4. The smallness and shortness of the jaw bones.
5. The little depth of the jaw.
6. The smallness of the neck compared with the size of the head, which is owing to the peculiar projection of the back part of the head (or OCCIPUT.)

Comparing again the two sketches, fig. 2. and 3. Plate I. we see that in the old skull the face has increased in its proportion to the whole head. The brow has not however increased in the same proportion, though its form has so far changed, that there is now a fullness and prominence towards the ridge of the eyebrows. The cause of this is explained in the view of the section of the skull, fig. 4. where we observe, that in the forehead there is a cavity: which from

the os frontis, or frontal bone, is called the frontal sinus, and the growth of which occasions the protuberance or projection over the eyes, peculiar to manhood. This protuberance is represented in fig. 1. and 2.

Again we observe that in the progress from infancy to youth, the upper jaw bone (the superior maxillary bone) is greatly enlarged; for there is now formed in it also a great cavity, called the maxillary sinus*. By this enlargement of the upper jaw bone, which is the centre of the bones of the face, a new character is given to the whole countenance. The bones of the nose are raised; and the nose is lengthened: the cheek bone (or os malæ) is also made to project.

But further, the growth of the teeth deepen both the upper and lower jaw bones; and one necessary effect of this is, to make the angle of the jaw bone under the ear, recede more towards the back of the head. To make room for the full sett of teeth, the jaws are also elongated. By the growth of the teeth, and of those processes of the jaw bone which are necessary to support and fix them, the face is deepened, or made longer; so as to differ from the chubby face of a child: and by the lengthening of the jaw, and particularly the reced-

* The cavities in the frontal and maxillary bones are connected with the cavity of the nose, and are supposed to have a remarkable effect in giving the sonorous manly tones to the voice. They are very small in women, and in children.

ing of the angle of the lower jaw, a manly squareness is given to the chin.

In attending to the forms of the lower jaw bone, we may observe several peculiarities distinguishing the face in different ages.

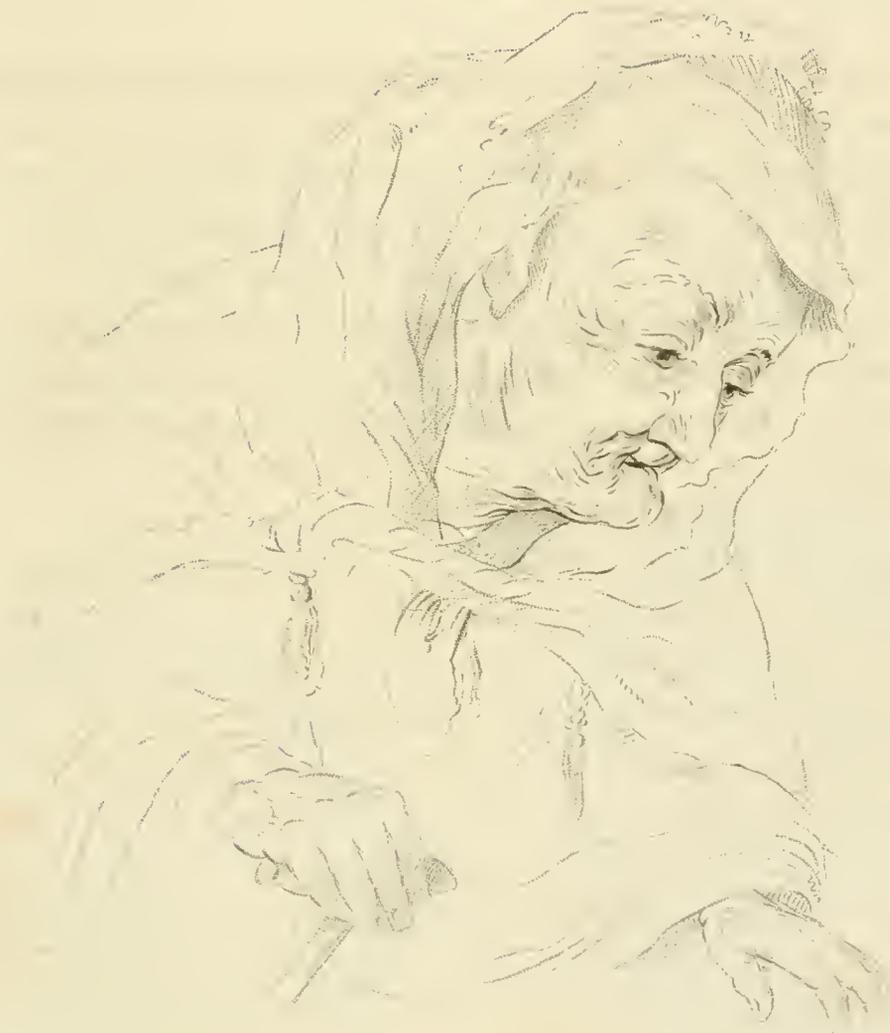


We have to notice the comparative length, the depth, and particularly the angle of these three jaws.



The cause of the smallness and roundness of a child's face is apparent from the little projection of the point of the jaw at the chin, and from the obtuseness of the angle behind. In the adult we observe a greater depth in the body of the jaw bone, and the teeth being added, the base of the jaws must necessarily be more separated, and of course the face lengthened. We see further, that as the teeth shoot up behind, the jaw must be lengthened to accommodate them; the chin therefore projects while the angle of the jaw recedes backward. Lastly, when the teeth fall out, in old age, the processes (or alveoli as they are called) which grew up with them and supported them, waste away; and there remains nothing but the narrow base of the jaw, while the length of bone from the hinge of the jaw to the angle is undiminished. The effect is perceived in the last outline. The jaws are allowed to approach nearer to each other at the fore part; the angle comes of course more forward and resembles that of the child, but the chin projects also; the teeth and adventitious part of the jaws being gone, the chin and nose approach, and the mouth is too small for the tongue; the lips fall in, and the speech is inarticulate.

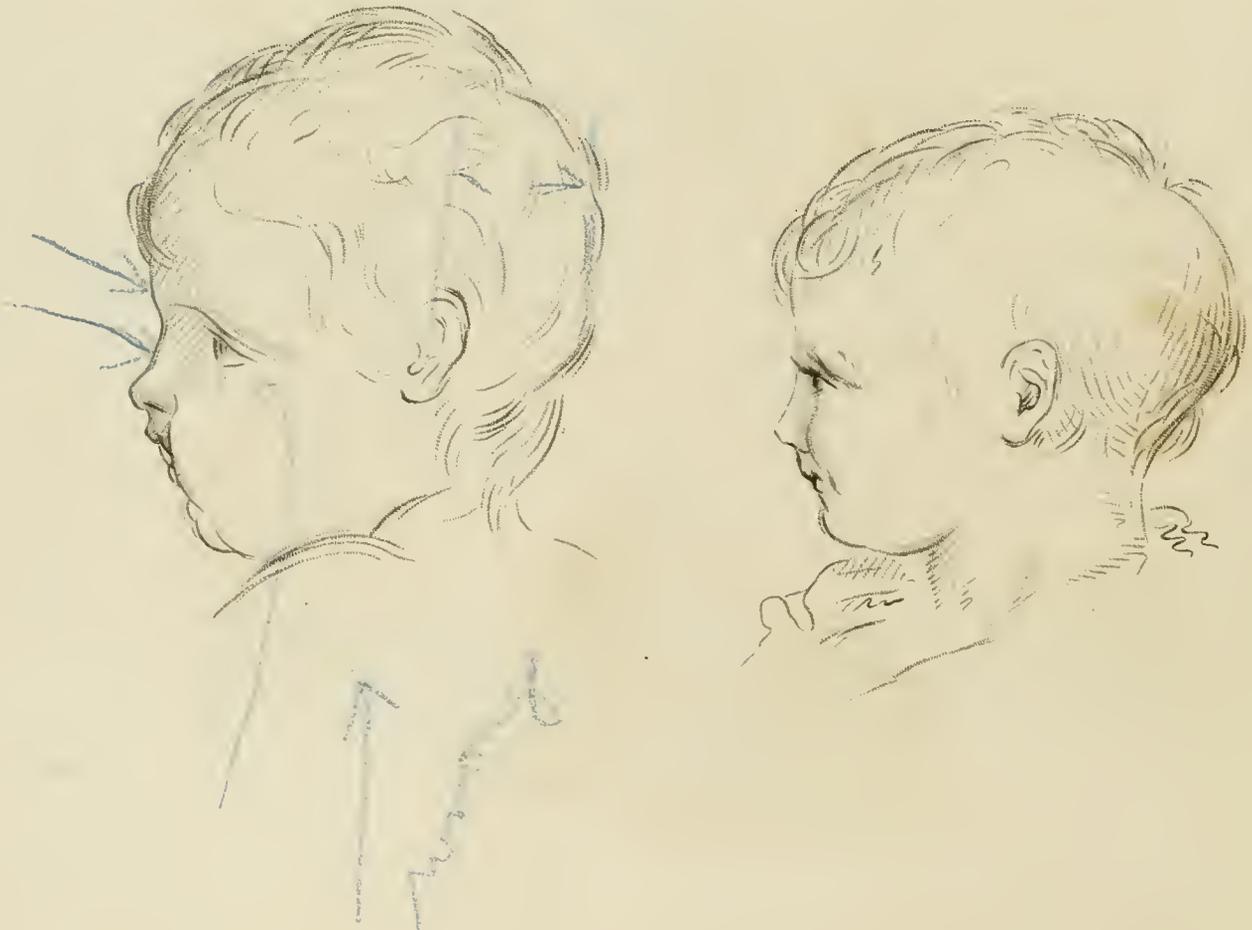




This sketch will illustrate the effect of the loss of the teeth, and of that part of the jaw bone which supports them. We shall touch

slightly on the other peculiarities of old age which this face presents, when treating of the muscles.

The next observation, which the view of these skulls naturally suggests, on the subject of character, as it relates to youth or age, is the distinguishing and necessary form of the child's head. We observe that the length of the skull in the child (fig. 3.) is from the forehead to the back of the head. This great length, compared with its depth, no doubt diminishes, as the child advances in years; but still the largeness of the head, the projection of the back of the head, and the flatness of the forehead, must be attended to.



In this marginal plate I have presented a sketch of a boy's head, and of a head by Fiammingo, who was much celebrated for his models and sculpture of boys. We see at once that Fiammingo is out of nature. Instead of having given to the back of the head its due preponderance, he has accumulated the mass to the top, and proportionally diminished the space from the ear backward. The eye is too deep set for a boy; the sinews of whose forehead, and the bones of whose nose are not yet raised: and there is a protuberance marked on the lower part of the forehead which is quite peculiar to a more advanced age. The only character of the boy which he has preserved is the largeness of the head compared with the face, and the falling in of the mouth and chin.

I believe he has in this deviation from nature proceeded on the same principle with the ancients; presenting us with an ideal form, instead of strictly copying nature. I do not mean to censure these peculiarities of Fiammingo's designs, nor shall I determine how far they are necessary or allowable. I wish merely to point them out for observation.

We may finally perceive that the peculiar character of the face in manhood results from the increase of the number of teeth; the depth of the jaws; and the formation of the cells in the upper jaw bone and frontal bones, and particularly the former of these cells; for by the enlarging of the upper jaw bone the nose is elevated and arched, and the cheek bones are thrown further out.

When we look upon an European head or common skull in profile, we may observe that if the lines have a tendency to one direction, the physiognomy approaches to that of a brute; if to the opposite direction, it presents the line of the antique head. This leads me to believe that in the ideal form of the antique head, the great principle of design was to magnify the proportions which mark the peculiarity of the human countenance, compared with that of the lower animals.

The better to explain what I mean, I have presented these sketches.



It is necessary only to attend to the changes produced by varying the line of the face, as drawn from the lower part of the forehead to the teeth, or projecting processes of the jaws.

We shall readily perceive the effect of an extraordinary projection of the alveolar processes of the jaws and teeth—the facial line of course falls back, and its inclination is followed by the projection of the eye, and flatness of the nose and forehead. The appearance of the head passes from that of the European, to that of the negro—from that of the negro, to that of the brute*.

The peculiarities in the head of the negro and Calmuc are consequences of the conformation of the skull. It is observed, 1st. That a line drawn upon the processes of the upper jaw, which support the teeth and the forehead, recedes very much. 2dly. The space from the nose to the teeth is very deep. 3dly. The inclination of the head is backward, which of consequence raises the face. Professor Camper observes, that this elevation of the face is owing to the heaviest part of the head being behind. I think it is the reverse. The head being moveable on the pivot of the vertebræ, must be always balanced; and if it were heavier backward, it would be inclined forward to relieve the muscles and balance the head. But being heavier before, and falling naturally forward in the negro, it is thrown backward to poise it and relieve the muscles which support the head behind.

* It is not merely the inclination of the facial line, however, in the full extent of Professor Camper's expression, that produces these changes; I speak of the facial line, merely, as serving to point out some further distinctions to be observed, for it is sufficiently proved, that Camper's accurate measurement of angles will not support his system.—See Blumenbach, *Decad. Col. Craniorum*, p. 9.

If we make a sketch of a head with the shoulders elevated, the head thrown back, the line of the face inclining very much backward, the jaws prominent, the lips thick, the nose flat, and the space betwixt the nose and the mouth large, we shall have the unequivocal character of the negro head*.

In the brute, as the food is gathered by the mouth, the strength is in the jaws. The brain or sensorium is smaller, the forehead is therefore flatter, and the comparative size of the upper part of the face is diminished. The face is diminished in depth, while the jaws are lengthened by the projection of the mouth. The space between the ear and the eye is greatly enlarged, to afford room for a larger temporal muscle for the stronger motion of the lower jaw. In consequence of this the socket of the eye is projected forward, and in order to give prominence to the eye, the nose is flattened. The prominence of the eye gives a larger sphere of vision.

To give to the human head the air of the antique, the reverse of

* “The sloping contracted forehead, small eyes, depressed nose, thick lips, and projecting jaw with which the African is usually delineated, are by no means constant traits.” Among those of them whom either curiosity or commerce had attracted to the settlement of Sierra Leone, “I saw a youth (says Winterbottom) whose features were exactly of the Greeian mould, and whose person might have afforded to the statuary a model of the Apollo Belvidere.” See Winterbottom’s interesting account of Sierra Leone. This variety amongst the Africans must be admitted; it is merely allowing what Buffon has expressed, that they have their Circassians and their Tartars; but it is sufficient to pass through the streets of London to be convinced of the generally prevailing character.

these proportions must be observed. The line A. B. fig. 2. being brought to the perpendicular, the eyes are thrown backward, and the space from the eye to the out line of the eyebrow and forehead deepened. Accordingly we find that the most striking peculiarity of the antique head is the deepness of the eye, and the perpendicular line of the forehead and nose. We cannot fail to observe that the deepness of the eye in the ideal head has not the same effect which it would have in natural physiognomy. The reason is, that in relation to the face in general and the cheek bone, the eye is not sunk, but only in relation to the greater elevation given to the frontal and nasal bones. From not attending to this, Winkelman, with all his enthusiasm, cannot reconcile this peculiarity of the antique to his idea of beauty. He supposes the artist to have in this studied the effect of light only. ‘ Il est vrai que des yeux enfoncés ne sont pas une propriété de la beauté, et ne donnent pas un air ouvert à la physiognomie, mais, dans les grandes figures placées à une certaine distance de la vûe, les yeux auroient peu d’ effet sans cet enfoncement, &c.’ Winkelman, 458.

Again, the peculiar roundness of the chin, and lower part of the face, is the effect of the shortening of the jaw, which is made more remarkable by adding in fleshiness to those muscles which move the lips, are the organs of speech, and serve to express the passions. The fleshiness of the chin and lips is remarkable in Grecian heads.

To brutify a human countenance we have only to diminish the forehead, bring the eye nearer, lengthen the jaws, shorten the nose, and depress the mouth. If this be done, no expression of individual features will give elevation to the character. A breadth and squareness in the lower part of the face is quite consistent in a vulgar head, with a certain representation of strength and manliness, but if the eyes be diminished, and the space between them contracted, the expanse of the human countenance is lost, and there can remain no dignity of expression.

The largeness of the orbit, with a full eye, is not only a great beauty in itself, as a feature of expression, but it necessarily takes off from the prominence of the cheek bone, and gives the oval cast to the face* ; and the prominence of the cheek bones, which we regard as a deformity, produces a disagreeable effect, not from the jutting out of the bones merely, but from its being accompanied in general by nearness and smallness of the eyes.

The peculiarities of national character, and of the antique, Pro-

* I believe the expressions, "The awful goddess ample-eyed"—or, "With eyes full-orbed, the spouse of Jove," are allowed by the commentator on Homer to be just translation. They observe, "*magni autem in muliere latique oculi ac multum licantes pulcherrimum Grecis maxime atque Hebræis habebantur.*" In the Jupiter, Juno, and Apollo, the eye is by the artists of antiquity made large, open, and round. Winkelman says, they are so also in statues of Pallas ; but the eye-lid is lower, which conveys a modest and virgin air. In Venus, on the contrary, the eyes are smaller, and less majestic, and have a certain languor, from the breadth given to the lower eye-lid.

fessor Camper has attempted to distinguish and ascertain by the measurement and inclination of the facial line. But he has not been successful in his attempt. It is possible, in contradiction to the leading principles of his theory, that a face or a skull may have the due prominence of the orbit, and the sockets of the teeth in such a relation to each other, that the facial line shall be perpendicular, and yet the head, instead of resembling the antique statue, be evidently deformed and ugly*.

Blumenbach † is the great antagonist of Camper's opinions respecting the facial line as a test of national character. This author rejects the method of lines as a fit distinction of national character, and of the peculiar physiognomy of individuals; for those very disproportions in measurement, which, according, to the supporters of Camper's theory, distinguish national character, are found in the skulls of individuals of the same nation. Rejecting therefore the

* See Professor Camper on the connection between the science of anatomy, and the arts of drawing and painting, &c. In this work are pointed out many peculiarities in the skulls of animals, and in the human skull in different nations. And although Camper be wrong in his theory of the facial line, his remarks and sketches must be very useful to the historical painter when he has to represent national character. His book was published in the Dutch language, and for an English translation of it we are indebted to Dr. Cogan.

† It is not easy for those who shudder to look upon a skeleton to conceive the very different traces of thought and association which arise in the mind of the anatomist from the contemplation of the same subject. Blumenbach (*Dec. Collect. Craniorum*) speaks with as much feeling and enthusiasm of his skull of the Georgian girl, taken by the Russians in the war with the Turks, as Winkelman does of the winged genius of the villa Borghese.

method of D'Aubenton, A. Durer, and Camper, he substitutes a more minute survey of the skull in general, and particularly of the frontal bone and maxillary bones. He cannot be wrong in this; for, in fact, the frontal bone, and the jaw bones, either produce, or are themselves affected by, every possible variety or change in the cranium or face. The frontal bone, no doubt, as it forms a great part of the cranium, indicates the globular form of the cranium; the elevation of the vertex; the narrowness betwixt the temples: and as it forms so distinguishing a part of the face, it must indicate the form of the forehead, and the arch of the orbit. Again, the upper jaw-bone infallibly gives the breadth of the nostrils, the projection of the cheek-bones, the form of the nose, and the breadth or flatness of the face. But notwithstanding all this, the foundation of Blumenbach's observation is deficient in simplicity. He wants a leading principle to make his theory extensively useful. His general result is, that there is not sufficient distinction in the skulls of different nations to lead us to refer them to different origins, and that they differ in no more remarkable degree from each other, than we see individuals of the same species of domestic animals differ.

As I have already hinted, I would refer the peculiarity of the beautiful and impressive form of the antique head to this principle, that the ancient artists sedulously avoided whatever was deemed characteristic of the brute, and magnified those dimensions of the human countenance which mark the distinguishing attributes of man.

The principle of composition among the ancients is worthy of our study. Painting was with them more of a science; with the moderns it is more of an art. The former always sought to discover among those sympathies and associations which often influence our judgment so unconsciously as to appear even like prejudices, some leading principle of composition: they soon left mere imitation, and advanced to a higher study, that of ideal form, in which they endeavoured to combine excellencies, and to avoid whatever might tend to injure the design or to impair its effect. And in this pursuit they seem to have studied with peculiar care the forms and expression of animals as contrasted with those of mankind.

We trace this method of study in many pieces of antiquity, where the artist has endeavoured to convey the character of dignity, or bodily strength, or courage, by transfusing into his composition some of the peculiar forms of animals, as in the personification of gods and heroes*.

* Pour peu qu'on examine la configuration du roi des dieux, on découvre dans les têtes toute la forme du lion, le roi des animaux; non seulement à les grands yeux ronds, à son front haut et imposant, et à son nez, mais encore à sa chevelure, qui descend du haut de la tête, puis remonte du côté du front et se partage en retombant en arc: ce qui n'est pas le caractère de la chevelure de l'homme, mais celui de la crinière du lion. Quant à Hercule, les proportions de sa tête au cou nous offrent la forme d'un taureau indomptable. Pour indiquer dans ce héros une vigueur et une puissance supérieures aux forces humaines, on lui a donné la tête et le cou de cet animal; parties tout autrement proportionnées que dans l'homme, qui a la tête plus grosse et le cou plus mince." *Ouvres de Winkelmann*, p. 367—368.

We may trace it also in ancient masks, satyrs, fawns, and centaurs; and I have placed at the end of this chapter a drawing from an antique mask, which may serve in some degree as an illustration of this. In this composition it was the artist's design to brutify the countenance, and accordingly we see all the proportions and expression, which we are accustomed to admire in the outline of the antique head, reversed. This peculiarly ludicrous effect is produced by the union of brutal physiognomy with human expression. The flatness, breadth, and depression of the nose, the direct exposure of the nostrils, and the prominence of the eyes, characterize the brute; but in the form of the mouth and the lines of the eyebrows there is wild laughter.

The frequent representation of fawns, satyrs, centaurs, and masks*, necessarily forced the artists of antiquity to study the peculiarities

* We sometimes see exhibited in paintings of fawns and sylvan boys, by modern artists, such sober, wise, and reflecting human countenances, that they give no representation whatever of those festive deities. At the bottom of the staircase of the Royal Academy, the painter may observe in the configuration of the nostrils of the two centaurs, the moveable membranous nose of the horse. In these monstrous combinations, while the parts are joined, they must be composed into a whole; and in reconciling the mind to the representation of these discordant parts lies the great merit of the composition.

—————faber imus et unguis
 Exprimet, et molles imitabitur ære capillos
 Infelix operis summâ, quia ponere totum
 Nesciet.

of brutes, and to engraft them on the human form. What then was more natural or obvious, while observing the effect of these forms and expressions transferred to the human countenance, than the persuasion that this character should be sedulously avoided, and the proportions which mark it reversed, in order to convey the dignified and characteristic form of man?

The ancient artists, in representing the sylvan deities, centaurs, fawns, or satyrs, did not merely give them hair and cloven feet, but bestowed on them a certain combination of character, very difficult in execution, but which alone can reconcile us to the palpable absurdity; a coltish wildness in gesture; a goatish expression of countenance or festive hilarity, with features in which there is more of common nature than of dignity, and which are in some conformity with the hair and the hoof; a body and limbs muscular and powerful; a skin browned, and of a high colour, such as the savage wildness of their life may be supposed to produce.

Modern artists hazard their reputation, when they are employed in bestowing the line of beauty on a face or limb, by giving any particular curve or gradation of outline; and they appear to me equally to depart from all the modes and habits of composition of the ancients, and to lose all chance of imitating the antique with success. We see the artists of antiquity combining acknowledged excellencies, but not following a vague and evanescent form of beauty. They

seem to have always endeavoured to imitate some acknowledged beautiful forms of age or sex. First, to have combined the beautiful forms of individuals of the same sex and age, and then to have combined the beauty and character of different ages: thus, in the Apollo, there is united manly dignity in the proportions and attitude with youthful beauty in the simplicity of the contour; nay, they even ventured to combine the beauties of both sexes, for example, in the young Bacchus, or more decidedly in the hermaphrodite. The highest effort of art was to represent man deified, purified from the grosser character of nature. Of these species of ideal representation are all the sculptures of the deities. Surely the artists in all this were not trusting to their own ideas of beauty, nor considering it as an abstract quality. As in the antique, therefore, each variety had its character established in nature, and resulting from an imitation of particular beauties, it must be impossible to imitate their works, or even to appreciate their high degree of merit, until we are awakened to natural beauty of sex, age, character, and expression. It really appears to me, that those who affect to be enthusiasts in the antique, either mistake the nature and foundation of their sentiments, or have no real feeling of the beauty of form, when they affect to despise natural beauty; for to be susceptible of the beautiful forms of nature is the first step to the admiration of the antique.

Sir Joshua Reynolds has given a very ingenious view of the theory of beauty; that beauty is the medium or centre of the various forms of the

individual; that every species of animal has a fixed and determinate form, towards which nature is continually inclining, like various lines terminating in a centre, or like pendulums vibrating in different directions over one central point, and as they all cross the centre, though only one passes through any other point, so it will be found that perfect beauty is oftener produced than any one kind of deformity.

But how shall we reconcile this with the form of the antique? Though this theory may account for the straight line of the ridge of the nose being more beautiful than that which is concave or convex, because it is the central form, it will not explain the peculiarity of the form of the nose, brow, and eye of the antique. The minute form of the individual features may be made beautiful upon this principle, but the peculiar form of the whole remains still to be understood; and thus there is suggested a higher object of study, than what is to be found in the mere comparison of individual beauties.

I have endeavoured to place the subject in another view, and to shew that the noble and imposing form of the antique resulted from a deep and more extensive survey of nature. I conceive the artists of antiquity to have studied the deformities, as well as the beauties, of the human countenance; and observing the prevailing lines of a low and disagreeable countenance, to have traced this effect to

an association with a lower species, and hence to have deduced their principle of ennobling the form of the head, by increasing those peculiarities of character, the indication of intellect, and the powers of expression, which distinguish the human form, and by carefully reversing those proportions which produce a resemblance to the physiognomy of brutes. While we seek to discover the superiority of the antique form in the direction of the lines, the elevation of the facial line, or even in the proportions of the several parts, without examining the cause of our ready acquiescence in that as beautiful, which yet is not natural, or without tracing the association which affects our judgment, the result of the inquiry must be vague and unsatisfactory, while the principle which influenced the ancients is not established. It is evident, that the line of the antique face can not be the medium, or central, line of the beautiful in nature. And it is scarcely probable, that the line of the nose and forehead of the antique should be the prevailing line in a natural head, or that it should even have resulted from a selection of natural beauties of individual form.

No man has bestowed more labour on the measurement of skulls, and their comparison with the antique, than Professor Camper, and in conclusion he says, "If it be now asked what is meant by a fine countenance, we may answer, that in which the facial line makes an angle of 100 degrees with the horizon. The ancient Greeks have consequently chosen this angle." There is no satisfac-

tory conclusion in saying, that a head is beautiful, because it is four noses in length; or a face, because the eyes are in the middle of the head*; or that the figure is elegant, because it is seven or eight heads in height! for the question still remains, why do these proportions produce a beautiful head?

Professor Camper betrays a still more remarkable degree of negligence, in tracing the origin of our ideas of beauty, when he says, we are pleased with a child without acknowledging it to be beautiful; and that the form of a child, abstracted from its playful vivacity, its perfect simplicity, or affectionate attachment, has nothing pleasing in it. For these very reasons I hold a child to be the most pleasing, and being the most pleasing, the most beautiful object in the world. The natural form of a child is the only species of beauty so perfect in character and expression, that it cannot be excelled by art, nor receive addition by the adoption of an ideal form.

In concluding my remarks on the form of the head, I may venture to affirm, that there cannot, in this part of his study, be a more im-

* “The head of the Apollo, or Venus, or Laocoon, is universally allowed to be finer or more beautiful than the heads of our best proportioned men and women. Whence does this proceed? Perhaps it is because in antiques the eyes are placed exactly in the centre of the head, which is never the case with us.” Again, “The proportions given by the ancients to their figure are not beautiful in our eyes merely from a weak prepossession in favour of all that is handed down to us, but because they have corrected the defects which arise from the laws of vision.”

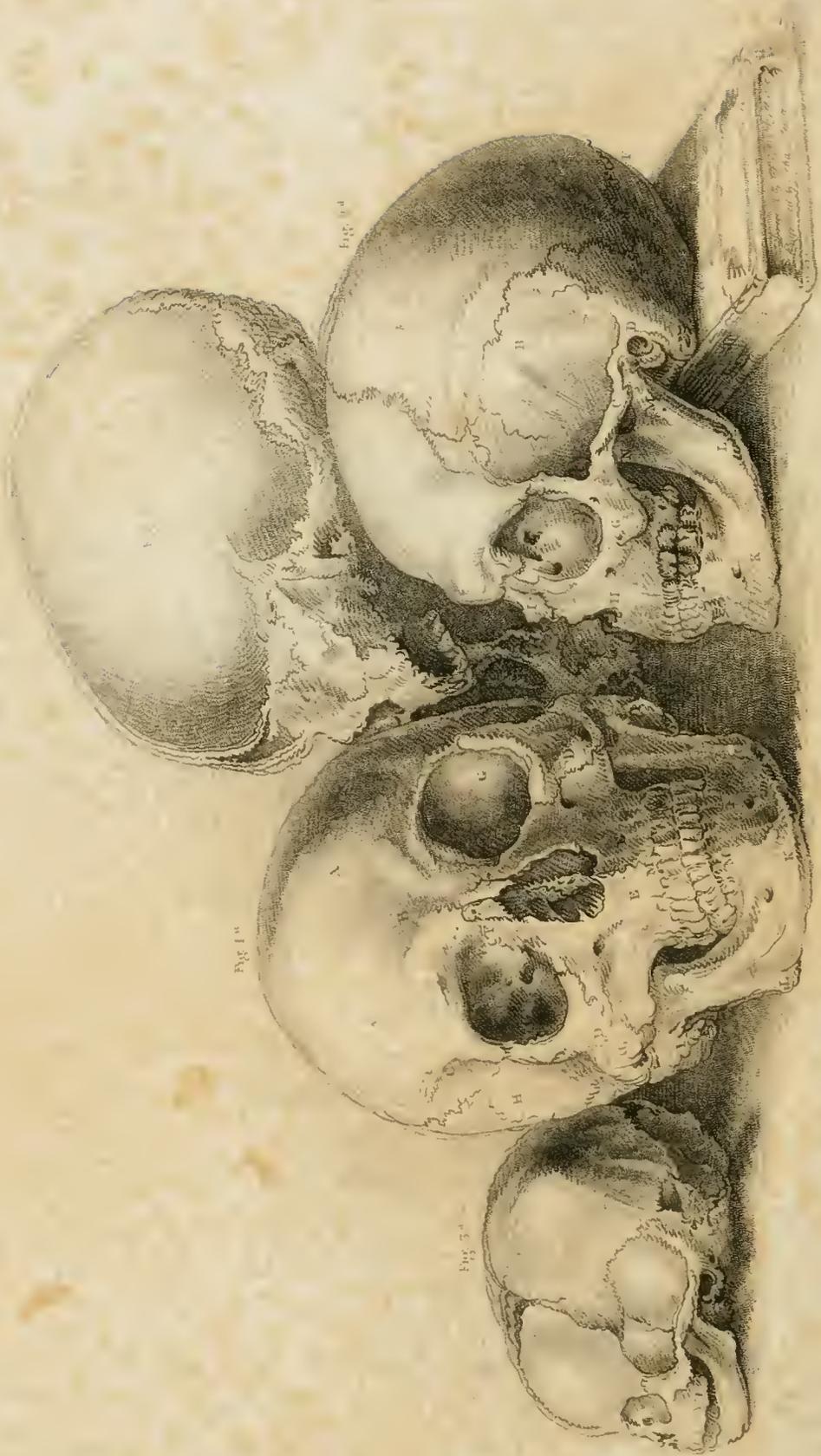
portant subject for the observation of the artist, than the form of the frontal bone. Much of the character of the whole head will be found to depend on the contour of the forehead, the ridges of the temples, the prominences formed by the cavities in this bone, and, lastly, the arch of the orbit.

For example, we often see a painting in which the whole figure and the general design of the picture is subservient to the display of the light playing on the temple of an old man. Some painters, in these profiles of old heads, are satisfied with the effect of light merely on the furrowed brow and on the rough hair; but how much more beautiful is the picture, when the anatomy is displayed, the thinness of a care-worn face, the ridge of the frontal bone highly illuminated, the veins in their course over the temple, the delicate transparent colours of the skin, the shade of floating grey hairs!—So much character will often be produced by the simplest touch presenting the true anatomy.

Instead of mechanical rules for drawing the face, I would recommend to the young painter to have the skull much in his hands, to observe the bearing of certain points, the ridge of the orbit, the prominence of the cheek bone, the angle of the jaw, as he turns it, and to draw from it in every possible variety of position; by these means he will lay a foundation for most

accurate drawing and foreshortening, while he will acquire a turn for observation on the human countenance which he cannot otherwise attain.





EXPLANATION

OF

PLATE I.

OF THE ETCHINGS OF THE SKULLS.

AFTER these observations on the form of the Skulls here presented, I shall shortly point out the most remarkable bones and processes as they regard our present enquiry.

Fig. 1. The Skull of a Man fully grown, presented in a front view.

- A. The **FRONTAL BONE** (*os frontis*).
- B. The **PROTUBERANCES FORMED BY THE FRONTAL SINUSES**,
(see the section of these cavities in fig. 4).
- C. The **TEMPORAL RIDGE OF THE FRONTAL BONE**; on which
the form of the temple depends.

- D. The CHEEK BONE (OR OS MALÆ).
- E. E. The UPPER MAXILLARY BONES.
- F. The NASAL BONES.
- G. G. The ORBITS OR SOCKETS FOR THE EYE BALLS. The circle of their margin is seen to be formed of the frontal bones, the cheek bones, and the superior maxillary bones.
- H. H. The TEMPORAL BONES. These hollows are filled with a strong fleshy muscle, which arising upon the side of the skull, passes down through the arch to be inserted into the lower jaw bone.
- I. I. The MASTOID OR MAMILLARY PROCESSES OF THE TEMPORAL BONE. These are the points into which the strong mastoid muscles which give form to the neck are inserted.
- K. The LOWER JAW.
- L. The ANGLE OF THE LOWER JAW.
- M. The PROCESSES OF THE JAWS which form the sockets for receiving the roots of the teeth.

Fig. 2. Is the Skull of an Adult seen in Profile, in which we have to remark these parts :

- A. The FRONTAL BONE.
- B. The TEMPORAL BONE.
- C. The ZYGOMATIC PROCESS OF THE TEMPORAL BONE, which, with the process of the cheek bone, forms an arch, under which the tendon of the temporal muscle passes to be inserted into the lower jaw.

- D. The HOLE, OR FORAMEN OF THE EAR; a little below this is the mastoid process of the temporal bone.
- E. The PARIETAL BONE, so called because it forms the greater part, as it were the wall of the skull.
- F. The OCCIPITAL BONE.

These bones are united by sutures, in which the processes of the bone as they grow, seem to run out, and indent into the opposite bone without there being an absolute union of the whole cranium. That which unites the frontal bone, and parietal bones, is called the coronal suture; that which we see here uniting the parietal bone, and temporal bone, is called the squamous or temporal suture. That line which is betwixt the occipital and parietal bones is the lambdoidal suture; lastly, the union of the parietal bones is called the sagittal suture, because it is laid betwixt the lambdoid and coronal sutures, like the arrow betwixt the bow and the string.

There are many lesser sutures which unite the smaller bones of the face, but they need not be mentioned here.

- G. The CHEEK BONE (*os malæ*).
- H. The UPPER JAW BONE (or *os maxillare*).
- I. The BONES OF THE NOSE (*ossa nasi*).
- K. The LOWER JAW (*inferior maxilla*).
- L. The ANGLE OF THE JAW.

- M. The PROCESS OF THE JAW which moves in the socket in the Temporal Bone.
- N. The CORONOID PROCESS OF THE JAW into which the temporal muscle is fixed to move the jaw in conjunction with other muscles.

Fig. 3. Represents the Skull of a Child at Birth, in which the sutures are not yet formed, the bones of the cranium being loose, and attached by their membranes only. While spaces may be observed, left unprotected from the imperfect ossification of the bones.

The individual parts require no references; they will be sufficiently understood from their correspondence with fig. 2.

Fig. 4. Is a Section of the Cranium, in which the only thing meant to be particularly remarked, is the cavity which is to be observed in the frontal bone, viz. The frontal sinuses.

ESSAY III.



ESSAY III.

OF THE MUSCLES OF THE FACE IN MAN AND IN ANIMALS.

IF we except the two muscles which move the lower jaw, all the others which are seen in the 2d and 3d plate are cutaneous muscles; that is to say, their fixed extremity from which they operate, or what is called their origin, is in general attached to some point of bone; their insertion, or the point upon which they operate is in the elastic and moveable integuments of the face. These muscles moving the features, it is difficult to demonstrate perfectly in every respect, because there are many of them which, unlike the fleshy muscles of the limbs, are very delicate fibres interwoven with the fat and cellular membrane. As the form of the bones of the head shows that nature has been provident of a superiority in that organ, on which the intellect and superior intelligence of man

depend, so in the muscles of the face there is a superiority of expression in the human countenance. This superiority we shall presently see in part to depend on the action of muscles peculiar to man, and the sole destination of which seems to be limited to this greater aptitude for expression. It partly is attributable also to that perfection of muscular structure and action, which is necessary to the motion of the lips and cheeks in the modulation of the voice.

EXPLANATION

OF

PLATE II.

THIS plate represents the muscles of the face as they appear in a front view, after a careful dissection, in which the skin and fat are taken off.

I.

A. A. THE FRONTAL MUSCLE. This is an expanded web of muscular fibres, which covers all the forehead.

It is, in truth, only a part of a muscle which has two bellies or muscular portions, one on the occiput or back of the head, the other on the forehead, with an intermediate tendon, and is therefore called the OCCIPITO-FRONTALIS MUSCLE.

The OCCIPITO-FRONTALIS MUSCLE arises with a fleshy web of fibres (similar to those which cover the forehead) from the back

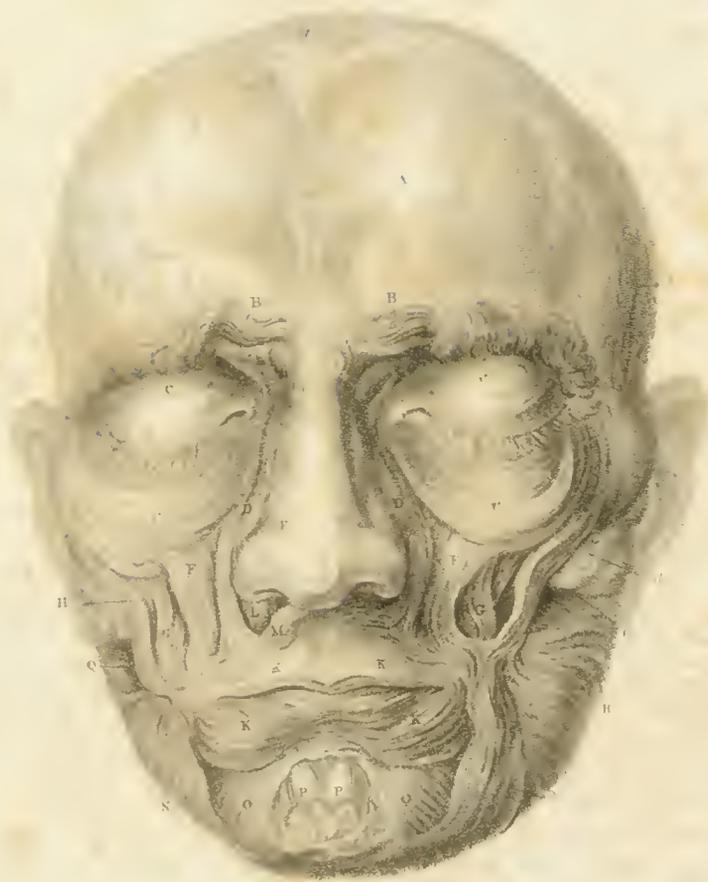
part of the head * or occipital bone, then changing into a sheet of very delicate tendon, it covers all the head, but on the brow it again becomes muscular. This frontal portion of the muscle is inserted into the skin, under the eyebrows †, while some of the fibres make a turn downward, and are fixed into the process of the frontal bone in the inner angle of the eye, and another slip passes down upon the nose (the nasal slip.)

B. B. The CORRUGATOR SUPERCILII, or a transverse slip of muscle which knits the eyebrows. Upon its inner extremity it is fixed upon the frontal bone, while the other is attached to the skin under the eyebrow.

C. C. The CIRCULAR MUSCLE OF THE EYELIDS, (ORBICULARIS PALPEBRARUM.) It consists of circular fibres, somewhat irregular on the outer margin, which by their action close the eye. There is a little tendon in the inner angle of the eye, which may be

* The upper transverse ridge of the occipital bone, and all the length betwixt the mastoid processes of the temporal bones.

† Independently of its action, the mere fleshiness of this muscle gives character. Many of the antique heads of a mature age can have little expression but what is conveyed by the eye and eyebrows, the beard covering the lower part of the face. The brow of Hercules wants the elevation and form of intelligence; but there will be observed a fleshy fullness on the brow and around the eyes. This conveys an idea of dull brutal strength, with a gloomy lowering expression, which accords with the description of the poet, Iliad E. v. 550—560.



London Published by Longman & Co. June 2^d 1819



considered as the fixed point for this muscle, both origin and insertion. Some anatomists describe it as two semi-circular muscles.

The effect of its violent action on the eyelids is seen in the marginal plates illustrative of the expression in Laughter and Weeping.

OF THE ACTION OF THESE THREE MUSCLES.

We see schoolboys moving their hats from their heads by the motion of their scalp, which is by the alternate action of the occipital and frontal portion of the OCCIPITO-FRONTALIS muscle. The portion on the back of the head is the fixed point. What anatomists call a biventer, or two bellied muscle, is a muscle having two distinct muscular bellies, but which act in unison; but these two portions of this muscle are antagonists to each other. When the frontal portion contracts, the eyebrows are raised and arched, and the transverse furrows are strong across the forehead, while the skin of the forehead is raised, the hairy scalp is pulled down, the frontal portion being in action, and the occipital portion yielding or relaxing; but when the frontal portion ceases to act, the forehead is smoothed, and while the posterior or occipital portion draws back the moveable scalp, or integuments of the head, in some degree the action of the circular fibres of the eyelids brings down the eyebrows.

When the brow is furrowed with wrinkles across, by the action of the frontal portion of the last muscle, it is smoothed by the action of the occipital portion in part, but chiefly by the corrugator supercillii, the nasal portion of the occipito-frontalis muscle, and the upper portion of the orbicular muscle of the eyelids.

When the eyebrows are contracted (as in the marginal plates of Rage and Weeping,) it is by the action of the CORRUGATOR SUPERCILII and the descending slip of the occipito-frontalis. Generally in violent contraction of the eyebrows, the orbicular muscle of the eyelids is also in action, as in marginal plate 14.

In the common motion of shutting the eye in a gentle degree, as during sleep, it is the upper eyelid only which moves. When it is opened, it is by the action of the muscle which comes from the bottom of the orbit, and is inserted into the margin of the upper eyelid. The lower eyelid has no muscle which opens it. When the eye is shut with great force, as in laughing and crying, (see marginal plates in the next section,) it is chiefly by the outer and more straggling circle of fibres; during this action the frontal muscle is in relaxation. By this action of the orbicular muscle of the eyelids, the eyeball is pressed into the socket, and the tears pressed out so as to flow over the cheeks*.

* The gland which secretes the tears is seated above, and a little to the outside of the eyeball, the ducts of this gland open under the eyelids, and by the motion of

In a smooth unruffled countenance these four muscles are poised, and counteract each other. When there is a degree of paralysis in the nerves which supply either of them, the opposing muscle acquires a preponderance, and distorts the features, and often from this cause we shall see the eyebrow fallen down.

In drunkenness, which often produces a temporary paralysis, the eyebrows are sometimes unequally elevated. We shall find in Hogarth's print of *A Midnight Modern Conversation*, *Gin-lane*, and several others, that this unequal elevation of the eyebrows produces much of the character of the drunken countenance. It is an unusual exertion of the frontal muscle to counteract the heaviness of the eyelids, which produces the elevation of the eyebrows. The same effect is perceived in the last plate of the next section on expression.

II.

- d. Marks a set of fibres which arise from that part of the upper jaw bones which supports the nasal bones*, and which descend to be attached to the nostrils and to the upper lip. In its action it raises the upper lip and the nostril; it is called, therefore, **LEVATOR LABII SUPERIORIS ALÆQUE NASI.**

the eyelids the fluid is spread over the eye. When the eye is closed there is still a channel left betwixt the margin of the eyelids, by which the tears run to the points of two little ducts near the inner angle of the eye, by which they are absorbed, and carried into the nose.

* By a little double tendon from the nasal process of the upper jaw bone

- E. A set of fibres which compress the nostril, called **COMPRESSOR NARIS**.
- F. The muscle which, raising the upper lip, is called **LEVATOR LABII SUPERIORIS PROPRIUS**. It arises from the upper jaw bone near the orbit, and is attached to the upper lip exclusively.
- G. The **LEVATOR ANGULI ORIS**. This muscle, lying under the **Levator Labii Superioris**, is shorter of course, and runs into the meeting of the lips; it raises the angle of the **MOUTH** directly.
- H. The **ZYGOMATIC MUSCLE**, so called from its origin in the Zygomatic process of the cheek bone*. It passes down to the angle of the mouth.

There is sometimes a **ZYGOMATICUS MINOR**: it is as an additional slip to the last muscle.

We may observe here, that these five last muscles, (excepting the **Constrictor Nasi**) are those which raise the mouth, make the cheek full, and are expressive of cheerfulness. We see from the connection of these with the nostril, that it must move together with the lip. The depressing muscle **M** is particularly strong. Often it is seen distinctly in the living face, and is the antagonist of these so far as regards the motion of the angle of the mouth.

* The Zygoma is the arch formed by the process of the cheek and temporal bone. See p. I. fig. 2. c.

- K. The **ORBICULARIS MUSCLE** of the lips, being a series of circular fibres, which forms much of the fleshy substance of the lips. It closes the mouth, and is in direct opposition to the others, for all the levators and depressors of the lips are opposites and antagonists to these circular fibres.
- L. The **DEPRESSOR ALÆ NASI**.
- M. **NASALIS LABII SUPERIORIS**.
- N. The **TRIANGULARIS ORIS**, or **DEPRESSOR LABIORUM**, which is a strong triangular muscle arising from the base of the jaw and inserted into the angle of the mouth; it is called **TRIANGULARIS ORIS** from its shape.
- O. The **DEPRESSOR OF THE LOWER LIP**. This muscle forms the prominence of the chin, and being of a square form, is sometimes called **QUADRATUS MENTI**.
- P. The **LEVATORES MENTI**. These are small but strong muscles, which arising from the lower jaw near the root of the teeth, descend, and are fixed into the chin, so that by their action they throw up the lower lip with a contemptuous expression.

We see that the muscles have in general a tendency to the two most moveable parts of the face, either to the eyebrows (and particularly their inner extremity) or to the angle of the mouth; evidently

indicating that these are the parts on which the expression chiefly depends. We see that in these muscles in the lower part of the face there is an equipoise produced, first from muscles of either side acting with equal powers, and from both these again being counteracted by the circular fibres of the lips.

q. The *BUCCINATOR*, is a muscle named from its effect in blowing the trumpet. It is attached to the upright part of the lower jaw, and to the alveolar processes of both jaws, and passes forward to the angle of the mouth. It draws the angle of the mouth directly backward, and contracts the cheeks when they are distended with air.

The union of all these muscles in the angle of the mouth causes the fleshy prominence so peculiar to those who have a thin face; but when the cheek is full, the action of these muscles upon this point, produces the dimpled cheek. We see lying on the *BUCCINATOR* (q.) a small quantity of fat, which fills up the deep space in the cheek. When in sickness this fat is reduced, the cheek falls hollow, and the strong muscles, g. m. q. are prominent. (See the marginal plate of the character of Death.) The wasting of the grinding teeth has also an effect in hollowing the cheek.

r. The thin web of muscular fibres, which covers the side of the neck, and which rises over the jaw, and expands upon the face, is called by anatomists the *PLATYSMA MYOIDES*. The painter

will have frequent occasion to attend to its action. The part which we see here passing forward to the angle of the mouth, has been called *RISORIVS*, from its effect in laughing; but the effect of this muscle, in giving a stringy appearance to the skin of the neck, is particularly worthy of notice; as in rage, despair, and all the violent actions of the muscles of the neck and jaw. (See the marginal plate of *Horror*.)

A strong muscle arises from the cheek bone, and the arched process of the temporal bone, and is inserted into the lower jaw near its angle. It is called the *MASSETER* muscle; it closes the teeth with great strength, and, in rage, with gnashing of the teeth, it swells up very strongly. The swelling of this muscle under the fibres *R.* only is perceived.

R. The *TEMPORAL MUSCLE*, being that which arises very broad upon the side of the head, and passing down under the *ZYGOMA*, *JUGUM*, or arch of the temporal and cheek bones, is inserted into the lower jaw, and moves it with great strength in conjunction with the *MASSETER* muscle. These two last muscles simply close the jaws; but there are others concealed in the base of the skull (the *PTERYGOID MUSCLES*), which being oblique in their direction, cause the lateral or grinding motion.

*Additional Plan of the
Muscles of the Face.*

Plate III^d



EXPLANATION

OF

PLATE III.

THIS is to be considered as an additional plan and outline, in which some deep muscles are presented, which cannot be seen in Plate II.

- A. LEVATOR LABII SUPERIORIS ALÆQUE NASI.
- B. CONSTRICTOR NASI.
- C. LEVATOR ANGULI ORIS.
- D. This is a little muscle, which was but imperfectly seen in the former view ; viz, DEPRESSOR ALÆ NASI: it is the direct opponent of A. : it pulls down the nostril, and produces a particular effect in swelling the lip at this part.

- E. Marks a slip of fibres belonging to the **ORBICULARIS ORIS**, which runs up towards the nose. It pulls down the nose somewhat. It is called **NASALIS LABII SUPERIORIS**.

The muscles A. B. C. D. E. give the variety of motion to the nostril. How much the nostril is expressive of emotion is known from vulgar expression, as well as from the Poets*.

F. **TRIANGULARIS ORIS**.

G. **BUCCINATOR**.

H. **MASSETER**.

- I. **LEVATOR MENTI**. This muscle has a very curious effect in raising the lower lip. It is the proper raiser of the lower lip, **ELEVATOR LABII INFERIORIS PROPRIUS**; because, raising the firm integuments of the chin, it produces and elevates the lip, so as to be called **SUPERBUS**.

I have here represented its action, but it will be observed that it seldom acts singly; for while the lower lip is protruded with peculiar meaning over the upper one, the **TRIANGULARIS ORIS**, F. at

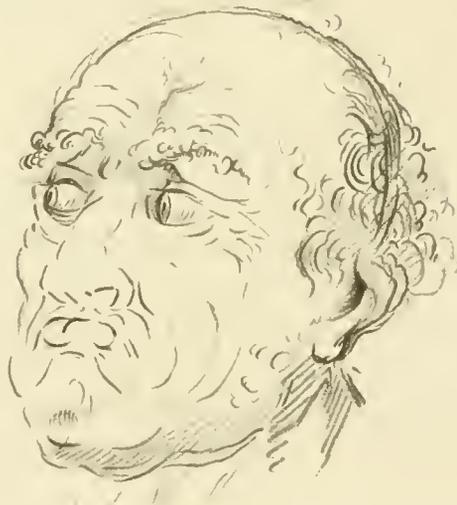
* “ Rides, ait, et nimis uncis
“ Naribus indulges.”—

Pers. Sat. 1.

Minus aptus acutis naribus, &c.

—————Emunctæ naris, &c.

the same time draws down the angle of the mouth, while frequently the nostril is raised by the action of the muscle a.



EXPLANATION

OF

PLATE IV.

OF THE MUSCLES OF THE FACE OF ANIMALS.

THE head of a dog dissected, to shew the muscular apparatus in the
CARNIVOROUS ANIMAL.

- A. A. The circular fibres which surround the eyelids, and which are common to all animals.
- B. C. D. Accessory muscles, which I have called SCINTILLANTES, as they draw back the eyelids upon the eyeball, and give a sparkling fierceness to the eye.

Artists bestow an expression on the eye of the lion, which they suppose gives dignity—a kind of knitting of the eyebrows, whilst the eyelids are straining wide—this is quite incompatible with the powers of expression in brutes. When the lion closes the eyes

in repose, the strength of the muscles of the eyelids produces an effect similar to the morose human expression, but when he is excited, and the eye strains wide, there is no such character.

F. G. H. **MUSCLES OF THE EAR.** These cover the strong muscles of the jaw, and this circumstance explains why these muscles have no proper origin. The under layer of muscles prevents the possibility of these upper muscles being attached to the bone, and they have no other point of origin than in the general expansion formed by the union of their own fibres with each other. There is in all animals a wonderful provision in the numerous muscles of the ear, for its exertion and tension to receive the vibrations of sound, and for the direction of the ear. We have already observed, that the web of muscular fibres, which is expanded on the forehead in man, is reflected off from the skull to the ear in the lower animals; an example of which we have here.

I. K. The mass of muscular fibres, which is always the strongest in this class of animals, and which, with those lying under this outer layer, I call **RINGENTES**, as being the cause of the peculiar and characteristic expression in the **CARNIVOROUS ANIMAL.**

L. The muscle moving the nostril in smelling.

M. The circular fibres of the mouth, which yet do not make a perfect **ORBICULAR MUSCLE.**

N. A muscle which answers to the **ZYGOMATICUS** in man, and which



in this animal must have great power, as it reaches from the ear to the angle of the mouth. It must retract the angle of the mouth, as well as act in mastication, which is probably the reason of its being stronger than in the graminivorous animals.

- o. The CUTANEOUS MUSCLE, which sends up a web of fibres from the neck upon the side of the face. These fibres are much stronger than in man.



I have just observed that painters have given to the heads of lions an expression which we cannot perceive in nature. Rubens, in his picture of Daniel in the Lions' Den, has given human expression to the heads of the lions. Notwithstanding this, it appears to me still a matter of some doubt, whether the mingling of human expression with the features of savage animals, is in the true spirit of that principle of association which should govern the adaptation of expression and character, so as to produce an ideal form.

However this may be, there seems to me a distinction to be preserved when the lion is to be presented in his natural state, and where emblematical. Represented in his den, or in the forest, the picture should be as a portrait, in which the natural character and features are preserved; but where he is couched amid the insignia of empire, the natural character may perhaps be tempered with somewhat of human expression.

I have placed at the head of this section, the head of a horse from the picture of the battle of Constantine, by Julio Romano; I wish that it should now be compared with the engraving in plate V. from our much admired Northcote. We see at once that this of Julio Romano is an ideal head; we say that it is a horse, rather because there is a bridle in the mouth, than because we recognize the natural character of that animal. Instead of the full clear eye standing prominent on the temple, we see an eye sunk deep, with an overhanging eyebrow, the character entirely human, and the expression

thoughtful and suspicious. In the hair of the forehead, and in the ears, we have more of the character of the bull, than of the horse; and in the roundness of the whole head also, and in the form of the neck, the artist has preferred the model of the antique, to what in this instance we may surely consider as the finer forms of nature; we have here the nostril of the horse, but it wants expansion; and what is most monstrous of all, thick and fleshy lips are given, and an open mouth, which no power of association can ever teach us to admire.

There is a spirit and fire, and a kind of intelligence, in the horse's head; there is a beauty in the form of the neck, and an ease and grandeur in the carriage of the head, when a fine horse is untrammelled and free, which, I am afraid, cannot be excelled by the substitution of an ideal form.

The evident intention, however, of the painter, in this instance, is not to be neglected; he wished to avoid that commonness of form which represses the elevation of sentiment in the beholder, and destroys the poetical effect of the picture.

The Essay which follows will point out the distinctions of expression in the face of men and of animals; a subject which I think demands the artist's attention before he deviates from natural character, for I must observe again, that the ideal beauty is not to be attained without preserving some principle of association.



London, Published by Longman & Co. June 24 1806



EXPLANATION

OF

PLATE V.

Fig. 2. EXHIBITS the muscles of the HORSE'S HEAD.

- A. A. THE ORBICULAR MUSCLE OF THE EYELIDS.
- B. AN ACCESSORY MUSCLE to raise the eyelid.
- C. A VERY PECULIAR MUSCLE, since it pulls down the eyelid.
- D. A MUSCLE connected also with the eye, and arising from the cartilages of the ear.
- E. A MUSCLE answering to the Zygomatic Muscle in man.

These muscles, surrounding the eyelids of the horse, sufficiently account for the superior expression of his eye. The muscle D. seems to be calculated to operate upon the outer angle of the eye, and

enable the creature to direct the eye backward. In this it is probably assisted by the muscle *E*.

F. This forms a class of muscles which descend on the side of the face, and are inserted into the nostril.

G. G. MUSCULAR FIBRES also operating in the distention of the tube of the nostril.

H. A STRONG MUSCLE operating upon the cartilage, and inflating the nostril with great power.



We cannot fail to observe the difference in the general direction and classing of the muscles of the face here and in the first figure. In the latter, they all tend to lift the lips from the canine teeth, here they pass to the nose and inflate it with great power: And this circumstance, more than any other, marks the different character and expression of the two classes of animals, the Carnivorous, and Graminivorous.

I. The STRONG MUSCLE of the right side, which lying under *F*. sends its tendon down upon the side of the nose, and then forms with that of the other side the broad tendon *K*. which is inserted into the upper lip.

There is a muscle on the lower jaw similar to this, but which cannot be seen in this view.

L. M. THE CIRCULAR FIBRES OF THE LIPS, which in the horse are particularly strong and fleshy.

N. A WEB OF MUSCLE reaching up from the cutaneous Muscle of the neck.

These muscles, I. K. L. M. have all of them great power, and give very extensive motion to the lips. K. is the tendon of the muscles of the upper lip, which I have called, DEPASCENTES, and it takes this course over the nose to operate upon the fore part of the lips, and raise them from the INCISORES.

I have placed on this plate a very beautiful head of a horse, engraved from a sketch by Mr. Northcote, in order that it may be compared with the dissected head: at the same time, as it possesses a fine natural character, it may be contrasted with the marginal plate.

ESSAY V.

ESSAY V.

OF THE EXPRESSION OF PASSION, AS ILLUSTRATED BY A COMPARISON OF THE MUSCLES OF THE FACE IN MAN AND IN ANIMALS, AND OF THE MUSCLES PECULIAR TO MAN, AND THEIR EFFECTS IN BESTOWING HUMAN EXPRESSION.

IN prosecuting enquiry concerning the principles of expression in painting, I encountered some unexpected difficulties while attempting to explain the peculiar expression of madness and fatuity. This naturally led me into a comparison of the muscles of the face in man, with those of other animals; and although I have not so confirmed or digested my observations on madness and fatuity, that I can venture to lay the result before my reader, the incidental enquiry, which has thus been suggested, has furnished me with some facts which seem to be curious, and some inferences which may not be uninteresting, as connected at once with natural

history, with the principles of the fine arts, and with the philosophy of mind.

The violent passions mark themselves so distinctly on the countenance, both of man, and of animals, that we are apt in the first instance to consider the movements by which they are indicated, as certain signs or characters provided by nature for the express purpose of intimating the internal emotion; and to suppose that they are interpreted by the observer in consequence of a peculiar and instinctive faculty. This view of things, however, so natural at first sight, is not altogether satisfactory to philosophy; and a more jealous observation of the facts seems to suggest an opposite theory, in which instinctive agency is rejected, and the appearances are explained from a consideration of the necessities and voluntary exertions of the animal. With regard to the observer, it has been asserted, that it is by experience alone that he distinguishes the signs of the passions; that we learn, while infants, to consider smiles as expressions of kindness, because they are accompanied by acts of beneficence, and by endearments; and frowns as the contrary, because we find them followed by blows; that the expression of anger in a brute is only that which has been observed to precede his biting, and that of fondness, his fawning and licking of the hand. With regard to the creature itself, it is said, what have been called the external signs of passion are merely the concomitants of those voluntary movements, which the passion or habits suggest; that the glare of the lion's eye, for example, is the consequence of a volun-

tary exertion to see his prey more clearly—his grin or snarl, the natural motion of uncasing his fangs before he uses them. This, however, is not quite true of all animals, and all expressions of passion.

Attending merely to the evidence furnished by anatomical investigation, all that I shall venture to affirm is this, that a remarkable difference is to be found between the anatomy and range of expression in man and in animals: That in the former, there seems to be a systematic provision for that mode of communication and that natural language, which is to be read in the changes of the countenance; that there is no emotion in the mind of man which has not its appropriate signs; and that there are even muscles in the human face, to which no other use can be assigned, than to serve as the organs of this language: That on the other hand there is in the lower animals no range of expression which is not fairly referable as a mere accessory to the voluntary or needful actions of the animal; and that this accessory expression does not appear to be in any degree commensurate to the variety and extent of the animal's passions.



There appears to me to be no expression in the face of any animal lower in the scale of being than quadrupeds; and in them the strongest and most marked expression is that of rage; the object of which is opposition, resistance, and defence. But on examination it

will be found (consistently with the position, that this is merely an accessory of the motions natural to the accomplishment of the object which the animal has in view) that the strength of the expression is in exact proportion to the strength of the principal action in the creature when thus excited.

The graminivorous animals, which seek their subsistence not by preying upon others, nor by the ferocity, contest, and victory which supply the carnivorous with food, have in their features no strong expression of rage. Their expression is chiefly confined indeed to the effect produced on the general system. Thus the inflamed eye and the breathing nostrils of the bull are induced only by the general excitement. His only proper expression of rage is in the position of the head, with the horns turned obliquely to the ground, ready to strike; and indeed it may be observed in general, that animals which strike with the horns show little indication either of fear or rage, except in the position of the head. In all graminivorous animals, the skin of the head is closely attached to the skull, and capable only of very limited motion: the eye is almost uniformly mild, and the lips unmoved by passion.

It is in carnivorous animals, with whose habits and manner of life ferocity is instinctively connected, as the great means of their subsistence, that rage is distinguished by the most remarkable strength of expression. The eyeball is terrible, and the retraction of the flesh of the lips indicates the most savage fury. But the first is merely the excited attention of the animal; and the other a pre-

paratory exposure of the canine teeth. The great animals of prey, the lion and the tiger, are quite incapable of any other expression of feature, than this particular display of ferociousness. When they fawn upon their keeper, there is no motion in their features that indicates affection.

Of all the animals with whose habits we are acquainted, the elephant seems to approach the most nearly to the sagacity of man, and to feel more of the keen attachments and vindictive resentments which distinguish our race. But in the immoveable mask of this creature, there is no expression of peculiar feelings, no consent of feature, no symptom of anger or movement of fondness.

The horse is universally considered as a noble animal, as he possesses the expression of courage without the ferociousness of the beast of prey; and as there is expression in his eye and nostril, accompanied by that consent betwixt the motions of the ear and the eye, which so much resembles the exertion of mind, and the movements of the human countenance. But even this more perfect expression is merely the result of an incidental consent of animal motions, and is not a proof of peculiar intelligence any more than the diminutive eye and unexpressive face of the elephant. The motion of the eye and ear of the horse are physical consequences of the necessities of the animal. His defence lies in the hind feet, and there is a peculiar provision both in the form of

the skull, and in the muscles, for that retroverted direction of the eye, which seems so peculiarly expressive in the horse, but which is merely intended to guide the blow: And from the connection of muscles, the ear must consent in its motion with this expression of the eye. Again, the fleshiness of the lips, and of the nostril of a horse, and the inflation of the nostril, are merely incidental to the peculiar provisions for the animal's respiration, and to the necessary motions of the lips, suited to the habits of his life.

In man we not only see united all the capacities for expression, and all the incidental and necessary effects of the several motions of features, which are to be found in the several classes of quadrupeds, but we find besides, several peculiar muscles, to which no other office can be assigned, than to act as organs of expression; to serve as instruments of that universal language which has been called instinctive, which at least produces something like the effect of innate sympathy, and seems to be independent of experience or arbitrary custom.

It is, in short, of man alone that we can with strict propriety say, the countenance is an index of the mind, having expression corresponding with each emotion of the soul. Other animals have no expression but that which arises by mere accident, the concomitant of the motions necessary to the accomplishment of the object of the passions.

Were my enquiries directed to the philosophy of this subject, this is perhaps the conclusion in which I should be inclined to acquiesce; but without presuming to settle that question finally, I have to remark, as relative to painting, my original subject of enquiry, that this remarkable difference between the expression in man and animals, naturally leads us to investigate what are the peculiarities of mere animal expression? how far they are distinguishable in the human countenance? and what are the traits of expression peculiarly characteristic of human emotion? This is what I propose as the subject of this Essay.

OF THE MUSCLES OF ANIMALS MORE PARTICULARLY.

In order to see distinctly what the peculiarities of mere animal expression are, it seems proper to reduce the muscles of expression in animals to their proper classes. These muscles, as they appear in the several quadrupeds, may be distinguished into, 1. Those which raise the lips from the teeth; 2. Those which surround the eyelids; and 3. Those which move the nostril.

1. The first of these classes, viz. the muscles which raise the lips from the teeth, admit of a subdivision. In the carnivorous animal the muscles of the lips are so directed as to raise the lip from the canine teeth. In the graminivorous they are so directed as to raise the

lips from the Incisores. The former I would take the liberty of distinguishing by the name of *RINGENTES*, snarling muscles; the latter by the name of *DEPASCENTES*.

The snarling muscles take their origin from the margin of the orbit of the eye, and form the upper jaw, and are inserted into that part of the upper lip from which the whiskers grow, and which is opposite to the canine teeth. Their sole office is to raise the upper lip from the canine teeth, and although they are assisted in this office by other muscles, (the masticating and zygomatic muscles) I have ventured to distinguish them particularly as the muscles of snarling. This action of snarling is quite peculiar to the ferocious and carnivorous animals. The graminivorous are incapable of it, and these muscles consequently are to be found only in the former class, not in the latter. In the carnivorous animals there is no perfect or regular orbicular muscle, as in man, for contracting the lips. The lips hang loose and relaxed, unless when drawn aside by the snarling muscles, and they fall back into this state of relaxation, with the remission of the action of these muscles.

The muscles of the lips, which in carnivorous animals are directed to the side of the mouth, are in graminivorous animals directed to the middle of the lip over the Incisores. I have given to these the name of *DEPASCENTES* from their use and destination in enabling the animal to open its lips, so as to gather its food, and to bite the grass. They are long muscles; one set comes down upon the side of the

face, and joining in a broad tendon, passes over the nose to be inserted into the upper lip. Another set runs along the lower jaw, and is inserted by a peculiar feathered tendon into the under lip. The horse has these muscles very strong. In the stallion they give a very characteristic and peculiar expression, when he snuffs the breeze, with his head high in air. When he bites, the expression is entirely different from that of the carnivorous animal. Instead of exposing the teeth, corresponding with the canine, he lifts the lips from the fore teeth, and protrudes them. These muscles of the fore part of the lip, the carnivorous animals have not. In them the lips over the Incisores are not fleshy like those of the graminivorous animals, but they are tied down to the gums, and the fore teeth are uncovered only in consequence of the straining occasioned by retraction of the side of the mouth.

Although the graminivorous animals have not those muscles of the lips, which so powerfully draw back the lips in the carnivorous; they have what the carnivorous animal does not require, an orbicular muscle surrounding the mouth, and regulating the motion of their fleshy lips.

2. Muscles which surround the eyelid. In man, the upper eyelid is raised by a muscle coming from the bottom of the orbit. But besides this muscle, animals of prey, in whom there is that peculiar and ferocious splendour of the eye, which we distinguish in the tiger, for example, or the lion, have three muscles infixed in the eyelids,

which drawing the eyelids backward upon the peculiarly prominent eyeball, produce the fixed straining of the eye, and by stretching the coats, give a greater brilliancy to the reflection. These muscles may be classed under the term *SCINTILLANTES*. In the sheep, there is only a web of fibres to raise the eyelid. In the horse, there is a muscle to pull down the lower eyelid, and one passing from the ear to the outer angle of the eyelid to retract it, and enable the animal to direct the pupil backward where his defence lies.

3. The muscles of the nostril are not less distinct and peculiar in different classes of animals, than those of the eye and lips. In the carnivorous animals the nose is comparatively insignificant, provision being made in the open mouth for any occasional increase of respiration above the uniform play of the lungs; while in the inoffensive animals, the prey of the more ferocious, the inflation of the nostril is provided for by the action of a peculiar set of muscles.

For example, in the horse “the glory of whose nostrils is terrible,” the muscles which inflate the nostril are very peculiar. They arise like the *Ringentes* of the carnivorous animals; but instead of being fixed into the lips, as in carnivorous animals whose lips are to be raised from the canine teeth, they pass to the nostrils, and in combination with some lesser muscles powerfully inflate them when the animal is pushed to his speed, or excited by fear, or inflamed to rage. In the sheep, though the nostril seems to have a very limited power

of expansion, and the animal is soon run down, yet the muscles of the nostril are particularly strong compared with those of a dog, which has only a small muscle for those quick motions of the nostril, which we may observe while the animal is smelling. In the fear and panting of a sheep, the motion of the nostril is perhaps the only trait of expression.

OF THE MUSCLES OF THE FACE IN MAN.

When we turn our attention to the muscles of the human countenance, we perceive, that while the motion of the lips, and nostrils, have not the same extensive range as in the several classes of animals, there is combined in the face of man a capacity for all the variety of expressions which distinguish the several kinds, of whose nature he partakes. He stands, as it were between the carnivorous and graminivorous animals, or rather it were more correct to say, that he partakes of the nature of both. He has the snarling muscles which we have observed so peculiarly to distinguish the carnivorous animals, while he is able to protrude the lips, and uncover the Incisores. In the carnivorous animals we have seen, that while the muscles that descend from the bones of the cheek and upper jaw to raise the lips are very strong, the orbicular, or circular fibres of the lips are very imperfect, the lip being tied down at the fore part to

the gums. And that in the graminivorous animals on the contrary, the orbicular muscle is nearly perfect, while the elevating and depressing muscles of the side of the mouth are deficient. But in man, both those classes of muscles are combined; the elevating and depressing muscles are perfect, while the orbicular muscle completely antagonizes them, modulating and qualifying these actions, and bestowing the utmost perfection on the motion of the lips. The effect of this in laughter, smiling, and weeping, shall be afterwards noticed.

But besides the muscles analogous to those of brutes, there is an intertexture of muscles in the human countenance, which evinces a provision for expression quite independent of the original destination of those muscles that are common to him and animals. There are muscles not only peculiar to the human countenance, but which act where it is impossible to conceive any other object for their exertion than that of expressing feeling and sentiment. These muscles indicate emotions, and sympathies, of which the lower animals are not susceptible, and as they are peculiar to the human face, they may be considered as the index of mental energy in opposition to mere animal expression.

The parts of the human face the most moveable and the most expressive, are the inner extremity of the eyebrow, and the angle of the mouth, and these are precisely the parts of the face which in brutes have least expression; for the brutes have no eyebrows, and

no power of elevating or depressing the angle of the mouth. It is in these features therefore that we should expect to find the muscles of expression peculiar to man.

1. The most remarkable of the muscles peculiarly human, is the corrugator supercilii. It arises from the frontal bone, near the union, with the nasal bones, and is inserted into the skin of the eyebrow. It knits the eyebrows with a peculiar and energetic meaning, which unaccountably, but irresistibly, conveys the idea of mind and sentiment.

The anterior portion of the occipito-frontalis muscle is the antagonist of the orbicular muscle of the eyelid. It is wanting in the animals we have already examined, and in its stead, fibres more or less strong are found to be directly inserted into the eyelids*.

The motion of the features, which, next to that produced by the corrugator supercilii, is the most peculiarly expressive of human sensibility and passion, is at the angle of the mouth; and at one time I had conceived, that the muscle which is called the superbus, and which elevates and protrudes the under lip, was peculiar to man; but I was deceived. The peculiarity of human expression is in the triangularis oris, or depressor anguli oris, a muscle which I have not found in any other animal; which I believe to be peculiar to the

* The expanded muscle of the skull in brutes is reflected off to the ear.

human face, and for which I have been able to assign no other use than belongs to an organ of expression. It arises from the base of the lower jaw, and passes up to be inserted with the converging fibres of almost all the muscles of the side of the face at the corner of the mouth. It produces that arching of the lip so expressive of contempt, hatred, jealousy; and in combination with the elevator of the under lip, and the orbicularis, it has a larger share than any other muscle in the infinite variety of motion in the mouth, expressive of sentiment.

When we compare the dissected muscles of the human head, with those of animals, we may perceive many smaller distinctions, into a detail of which I shall not at present enter. The *DEPRESSOR ALÆ NASI*; the *NASALIS LABII SUPERIORES*; the descending fibres of the *OCCIPITO-FRONTALIS*, are not in the brute; and in general the more minute and fasciculated structure of all the muscles of the lips, in the face of man, indicates a decided superiority in the provision for the motion of the features.

EFFECTS OF THE MUSCLES OF EXPRESSION IN MAN AND ANIMALS.

We have already taken occasion to observe, that the chief expression of which the faces of animals seem capable, are those of rage and

of fear. Even pain is very obscurely indicated, except in the voice, and in the writhing and struggling of the body.

Rage is expressed most strongly by the carnivorous animals: in them it is wild and ferocious and terrifying. In the milder class of animals the chief expression is such as may be called Tonic; the effect of the excited state of the body. The rage of the carnivorous animal, so far as it appears in the expression of the face, is found in the strong action of the Ringentes or snarling muscles, the exposure of the canine teeth, the gnashing of the tusks, and the brilliant state of excitement of the eye. The rage of the graminivorous is chiefly to be found in the eye, and in the inflation of the nostril. The expression of human rage participates of both these; the corresponding muscles of the lips and nostril, producing a similar action with that of animals; an exposure and gnashing of the teeth; a degree of sparkling of the eye, and an inflation of the nostril. And of a face under the influence of such action, a spectator would infallibly say, that the aspect is perfectly brutal, savage, and cruel. But when the Corrugator Supercilii, a muscle peculiar to human expression, is brought into action, the sign is altered. The eyebrows are knit, the energy of mind is apparent, and the mingling of human thought and emotion with the savage and brutal rage of the mere animal.

In man, the action of the frontal muscle, and Corrugator Supercilii, and of the orbicular muscle of the mouth, bestows a greater latitude

of expression: and if in addition to the action of these muscles, instead of the wide drawn lips, and the exposure of the teeth, as in the rage or bodily pain of animals, the mouth is half closed; the lips inflated by the action of the circular fibres, and drawn down by the action of the peculiarly human muscle, the depressor anguli oris, there is then more of agony of mind than of mere bodily suffering; a combination of muscular actions of which animals are incapable.

The action of the orbicular muscle of the lips is indeed as characteristic, perhaps, as any of agony of mind, and of all those passions which partake of sentiment. In grief, in vexation of spirit, in weeping, it modifies the action of the muscles of animal expression into human character.

Fear seems to be characterised in animals chiefly by a tonic effect on the body; by something like a mingling of anger, and a preparation for defence, with the shrinking of alarm in the more ferocious animals; and a straining of the eye and inflated nostril, with trembling in the milder. In human fear and suspicion, the nostril is inflated, and the eye has that backward, jealous, and timid character which we find in the horse, and in all the class of milder animals.

The orbicular muscle of the lips with the complete system of elevating and depressing muscles which is found in man, lead to expressions peculiarly human. And here I may observe, that expres-

sion is not always the effect of an universal tension of the muscles of the face, nor directly of the action of individual muscles. It sometimes is the effect of mere relaxation; and of this smiling and laughter furnish the most apposite examples. The capacity of receiving ludicrous ideas is as completely denied to animals as they are utterly incapable of the accompanying action of laughter. Dogs, in their expression of fondness, have a slight eversion of the lips, and grin and snuff amidst their frolic and fond gambols, in a way nearly resembling laughter; but there is truly nothing in all this which approaches to human expression. That expression is produced by the relaxation of the orbicular muscle of the lips, and the consequent preponderance of the elevating muscles; and of course the expression of laughter can exist only in a face which possesses both the orbicular and the straight muscles of the lips in perfection.

In laughter the cheek is raised, and there seems to be an action of muscles similar to that of weeping and mere bodily pain, but the character of the cheek and lips is quite different. This arises from a difference in the state of the orbicular muscle. In smiling the orbicular muscle is merely relaxed, whereas, in anger and pain it is forcibly drawn by the other muscles. It is in this relaxation, and in the necessary preponderance of the antagonist muscles, more than in the action of the zygomatic and elevator muscles, that the expression of smiling is to be found, and the cheerful fullness of the cheek. In violent laughter there is a further

excitement of the elevating muscles of the cheek, with a greater degree of relaxation of the lips.

In the human emotions of contempt, pride, suspicion, and jealousy, the orbicular muscle of the lips, and most particularly the *Triangularis oris*, produce by their combination the arching of the lips; the depression of the angle of the mouth; the bitter horizontal drawing of the lips which just discloses the teeth, and betrays the several malignant passions.

In grief, the muscles of the eyebrow and those of the lips are combined in expression; hence the combination of that upward inversion of the eyebrow which characterises peevishness, discontent, and sinking of the spirits, with the depression of the angle of the mouth, so distinctly indicative of the harassed and subdued state of the mind.

By the combination of those grosser features of expression, many of the lesser traits, and much of that various play of the features most expressive of human passions are produced in joy, hope, admiration, anxiety, fear, horror, despair; and thus while the human countenance is capable both of the rage of the more ferocious animals, and of the timid expression of the milder, it possesses powers of expression almost to infinity, by the combined action of a few superadded and peculiar muscles.

It is curious thus to observe how the muscles, by producing distinct expression, afford a new occasion of distinguishing the tribes of animals: and, as signs of superior intelligence, become proofs of the higher endowments of man, and a demonstration of the peculiar frame and excellence of his nature.

As the enquiry in which I have been engaged has reference to painting, and the representation of emotion, I may be allowed, while thus considering the peculiarities of human expression, to add, that the imposing effect of a fine head in painting, and in sculpture, depends upon the artist preserving the perfection of human character.

The expression of the whole head, and of the individual features, must be strictly and peculiarly human to be grand or imposing. And although the form of the brute-head is often highly beautiful, yet when transferred to the human, it is found incongruous and incompatible; it produces displeasing associations, and degrades the character as inconsistent with the expressions of that intellect which must always form part of the idea communicated by human physiognomy. So it is also with individual features. Wherever the imagination catches an idea of brutal character in the eye, nose, lips, teeth, or ears, the form by reminding us of animal expression, is found to be incompatible with human beauty.

The character of the human head has reference chiefly to the structure of the bones; a subject which is already treated of

in a former essay. But there is at least one part of the character of human beauty, of which it is not out of place here to take notice, namely, that which is founded on the capacity for expression.

This capacity of expression, this indication of a mind susceptible of great, or of tender emotions, has a great share in human beauty; whether in the living countenance, or in that which the pencil presents. How different the tame regularity of a merely placid countenance, from what strikes the spectator when he beholds the indications of a great mind in that susceptibility of emotion and energy, which marks the brow, and animates the eye of the hero even in the calmest scenes of life. How fascinating when compared with the insipid prettiness and regular features of an inanimate beauty is that susceptibility which lightens up the countenance and plays upon the features of a woman of sensibility, even while she is unmoved by any particular affection.

The full clear eye; the arched and moveable eyebrow; the smooth and polished forehead; as indicating this kind of capacity, this susceptibility of emotion, and power of expression, are grand features of human character and beauty. And the perfection of their beauty is found whenever the spectator is made sensible of this inherent, this latent power of expression, while no prevailing passion gives a cast to the features. But a great portion of the beauty of the human face is in the nose and mouth; in a nostril which has the full capacity for expression, without being too membraneous and in-

flatable, for that produces a mean and imbecile kind of fierceness; and in lips at once fleshy and apparently mobile and capable of that various modulation of form which characterises human emotion.

If I could flatter myself that in this attempt to point out the muscles upon which the peculiar power of human expression depends, I had in any degree succeeded; or that any advances had thus been made towards a scientific principle in the art of representing the character of the passions, I should still be aware how little the painter can be assisted by any speculative enquiry, or theory of his art; and that painting never can, more than her sister poetry, be brought to excellence without the cultivation of the susceptibilities of the mind.

ESSAY VI.

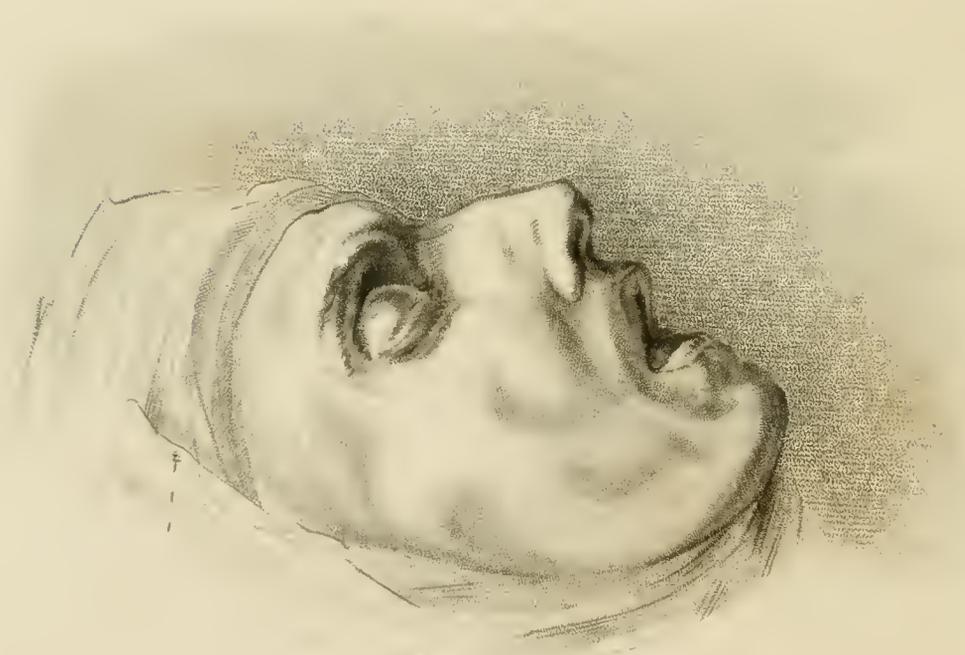


Fig. 124.

ESSAY VI.

IDEA OF A LEADING PRINCIPLE IN THE EXPRESSION OF EMOTION—OF THE ACTION OF
THE MUSCLES OF THE FACE AS EXPRESSIVE OF PASSION.

IT has often been observed that there is in the features of an impassioned countenance, a consent and accordance of expression. It is not upon a single feature that the emotion operates, but the whole face is marked with expression, all the movements of which are consentaneous. This is referable to some cause operating generally on the tone and state of the frame, the particular expression of individual emotion being distinguished by the action and determination of particular features.

Taking indifference as the line of distinction between the two great classes of pain and pleasure, the class of sensations above this line are weak compared with those below. The simple sensations of pleasure, before they are heightened and diversified by the multiplied associations of mental affection, are soft and gentle in their nature. The class of painful sensations is very different in character: they are powerful and overwhelming; they are meant as our guardians and protectors against danger and death, and operate with resistless force. The pleasurable sensations induce a languor and delight, and partake of the quality of indulgence and relaxation; the painful excite to the most violent tension, and make all the muscular frame start into convulsive action.

The emotions and passions of the soul, grounded originally on these great classes of sensation, raised and increased by the mingling of hopes and fears, and the combinations of analogous and associated images of delight or of danger, take their great constitutional traits of expression from the general tone of pleasure or of pain.

In pain, the body is exerted to violent tension, and all the emotions and passions which are allied to pain, or have their origin and foundation in painful sensations, have distinctly this character in common, that there is tension, or a start into exertion or tremor, the effect of universal and great excitement. It must at the same time be recollected, that all the passions of this class, some more im-

mediately, others more indirectly, produce a loss of tone, exhaustion, and debility, from over exertion.

On the other hand, as pleasure is characterized by languor, soft tranquillity, and relaxation from bodily exertion, all the emotions related to it, or deducible from pleasurable sensations, are characterized by the prevailing state of the system, by a degree of inaction, and as it were forgetfulness of bodily exertion, and an indulgence in mental contemplation. The contemplation of beauty, or the admiration of soft music, produces a sense of languor; the body reclines, the lips are half opened, the eyes have a softened lustre from the falling of the eyelids, the breathing is slow, and from the absolute neglect of bodily sensation, and the temporary interruption of respiration, there is a frequent low drawn sigh.

To the distinction now suggested, an objection may occur from the debility of fear, and the high exhilaration of joy. A more particular examination, however, will confirm the argument by these very illustrations. We shall have occasion to see, in considering the individual passions, that there is much variety in the expression of fear; and that where the alarmed senses are accompanied by a strong effort to comprehend the nature of the approaching danger, there is relaxation, or weakness of the bodily frame. Where there is dread of bodily pain and suffering, the body is energetic and full of action; while the distraction of doubt, the effort to comprehend, and a sense of supernatural and resistless

power, produce one of the most peculiar and characteristic states of which the human frame is susceptible.

Joy is distinguishable from pleasure. It consists not so much in the sense of gratification, as in the delight occasioned by the conviction that the long expected pleasure is within our reach, and by the lively review of the enjoyment which is now decked out and adorned in its most favoured and alluring shape. A certain sensation of want is mingled in the feeling of joy; a recollection of the alternate hopes and fears which formerly distracted the mind, as contrasted with the immediate assurance of gratification.

But laughter may also seem to be at variance with the leading principles of my arrangement of the passions. Here also, however, we find another confirmation of our leading principle. Is there any tension or exertion when a smile plays upon the lips? Quite the contrary. Softness and languor spread over the countenance, most especially when the smile is of admiration, of love, or of benevolence. Even when the fancy is tickled by something incongruous and ridiculous, the violent laughter which follows is nothing more than an involuntary and convulsive state of the respiratory organs and muscles of the face, the effect of relaxation, not of energetic action, and it proceeds sometimes to a debility of the muscles, so universal that we can with difficulty keep our feet.

Although I have attempted here to suggest a leading principle for an arrangement of the passions, I do not now intend to follow any very systematical order in the hints which I mean to throw out.

We have already had occasion to remark, that the expression which is peculiarly human, affects chiefly the angle of the mouth and the inner extremity of the eyebrow. And it is to these points that we have chiefly to attend in all our observations concerning the expression of passion. These are the most moveable parts of the face: to these points the muscles are, as it were, concentrated; and it is accordingly upon the changes which they undergo, that expression is acknowledged chiefly to depend.

To demonstrate how important these points of the features are, we have only to make that experiment which Peter of Cortona made before Francis the First of France; to sketch a placid countenance, and touch lightly with the pencil the angle of the lips and the inner extremity of the eyebrows. By elevating or depressing these, we shall quickly convey the expression of grief or of laughter.

These parts, however, and all the features of an impassioned countenance, have an accordance with each other. When the angles of the mouth are depressed in grief, the eyebrows are not elevated at the outer angles, as in laughter. When a smile plays around the mouth, or the cheek is elevated in laughter, the brows

are not raised as in grief. The characters of such opposite passions are so distinct, that they cannot be combined where there is true and genuine emotion. When we see them united by those who have a ludicrous control over their muscles, the expression is farcical and ridiculous. It never is by the affection of an individual feature that emotion is truly expressed; there must be a consent and accordance of expression in the whole countenance systematized (if the expression be allowable) and united by the general tone of tension or relaxation.



I.

OF THE RELAXATION OF THE MUSCLES IN LANGUOR, FAINTNESS,
AND SORROW—OF BODILY PAIN—OF ANGUISH—AND OF DEATH.

I. RELAXATION OF LANGUOR, FAINTNESS, AND SORROW. The muscle which depresses the angles of the mouth (N. plate II.) is often accompanied in its action by that of the corrugator muscle which knits the eyebrows, (B. plate II.) and this again is combined frequently with the action of the central fibres of the frontal muscle (A. Plate II.)

The depressing of the angle of the mouth gives an air of despondence and languor to the countenance when accompanied with a general relaxation of the features, or, in other words, of the muscles. When the corrugator which knits the brows co-operates with it, there is mingled in the expression something of mental energy of moroseness or pain. If the frontal muscle joins its operation, an acute turn upwards is given to the inner part of the eyebrow, very different from the effect of the general action of the frontal muscle, and decidedly characteristic of an aguish debilitating pain, or of discontent, according to the prevailing cast of the rest of the countenance.

But a very limited observation will teach us, that while languor and despondency are indicated by depression of the angle of the mouth, the depression must be slight, not violent: for the DEPRESSOR

ANGULI ORIS (N.) cannot act strongly without the combination of a muscle, viz. the SUPERBUS (plate III.) which quickly produces a revolution in the expression, and makes the nether lip pout contemptuously.

In sorrow, that general languor which we have now described pervades the whole countenance. The violence and tension of grief, the agitations, the restlessness, the lamentations, and the tumult, have, like all strong excitements, gradually exhausted the frame. Sadness and regret, with depression of spirits and fond recollections, have succeeded; and lassitude of the whole body, with dejection of face and heaviness of the eyes, are the most striking characteristics. The lips are relaxed and the lower jaw drops; the upper eyelid falls down and half covers the pupil of the eye. The eye is frequently filled with tears, and the eyebrows take an inclination similar to that which the depression of the angles of the lips give to the mouth*.

I am not quite sure that in the grief of Constance there is not an unnatural mixture of the tumult and violence of grief with the contemplative recollections of sorrow. Her impatience and turbulence, which makes her tear her hair, defy all counsel and redress,

* Some have been so far deceived by the effect of this raising of the eyebrows towards the centre of the forehead as to give the same oblique line to the eyes; but the canthūs or angle of the eye is fixed immoveably, and no working of passion can alter it.

and call on death or madness as her sole relief, seem ill assorted with that calmness of spirit which can stop to recollect and enumerate in detail the figure and endearing manners of her son.

Grief fills the room up of my absent child,
Lies in his bed, walks up and down with me;
Puts on his pretty looks, repeats his words,
Remembers me of all his gracious parts,
Stuffs out his vacant garments with his form,
Then have I reason to be fond of grief.
Fare you well! had you had such a loss as I,
I could give better comfort than you do.
I will not keep this form upon my head

[Tearing off her head clothes.]

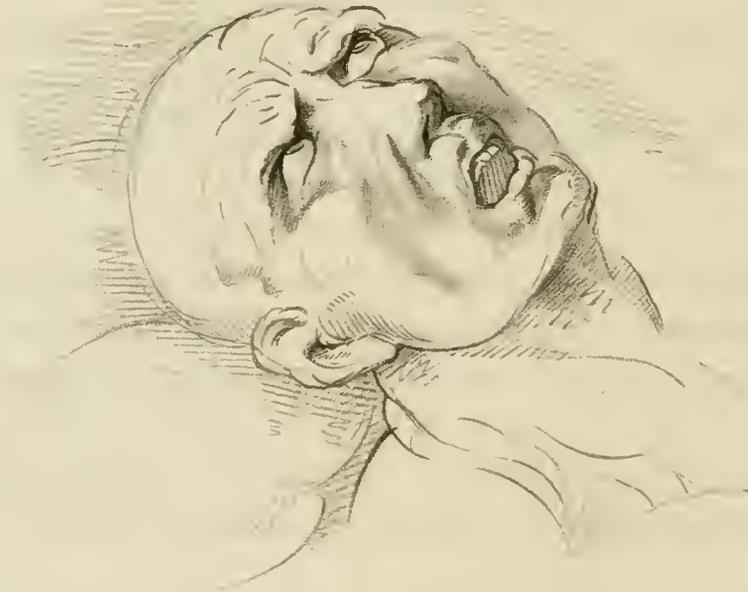
When there is such disorder in my wit.
O Lord, my boy, my Arthur, my fair son!
My life, my joy, my food, my all the world!
My widow comfort, and my sorrows' cure!

This appears to me rather to be the stage of the passion which is properly called sorrow; the indulgence of which is attended with a melancholy delight, and which can sanction the conclusion, "Then have I reason to be fond of grief." Yet as conviction returns at intervals upon the mind, a period of quiet and sorrowful resignation is succeeded by starts and frantic bursts of grief.

Though grief is in general distinguished by its violence, lamentation, and tumult, while sorrow is silent, deep, brooding, and full of depression, there is a stupefaction which sometimes characterises

grief “ the lethargy of woe ;” of which were I to attempt a delineation I should follow the idea of Ariosto’s Angelica : “ She stood on the desert shore stupid and immoveable ; her hair was loose and disordered ; her hands were joined ; and with unmoving lips she raised her languid eyes to heaven.”

2. OF BODILY PAIN, ANGUISH, AND DEATH.



In bodily pain and anguish the general cast of the features is like that of grief; but instead of the torpid state of the muscles, which in faintness, languor, and sadness, allows so total a relaxation that the features gravitate as it were, there is in the muscles much tension and action.

In this plate the pain is that of one sick, and in some degree subdued by continual suffering. One striking feature of this expression is the confined nostril; for I have observed, that when the suffering does not approach to extreme agony, the nostrils are narrow and depressed. But an occasional pang will dilate the nostril, cause the teeth to grind, draw wide the lips, raise the eyebrow, make the eye sparkle as in extreme rage, and inflate all the features.

In the preceding plate, page 112, we have a man forcibly subdued in all his strength. The brows are more violently knit, (which I conceive indicate here somewhat of rage and hatred unsubdued,) and they are less elevated towards the centre of the forehead; the nostril is inflated; the mouth open, but not stretched wide: it is as if in a deep sonorous bellowing, and the whole face is quivering with action.

In the UTMOST EXTREMITY OF PAIN there are yet other distinctions to be marked. In agony we may frequently perceive convulsive motions in the cheeks and lips, and in the throat, which render all

little muscles particularly distinct: a violent tension is upon the whole face, and the painter is constrained to mark the anatomy strongly.

After I had sketched the expression in the succeeding marginal plate, I had within these few days an opportunity of observing the truth of that expression. In extracting a bullet from the arm of a strong young man, I saw on turning my eye to his face that it was turgid with blood; the veins on the forehead and temples distinct; the teeth strongly fixed, and the lips drawn so as to expose the teeth and gums; the brows strongly knit, and the nostril distended to the utmost, and at the same time drawn up.

As expressive of the clinching of the jaws, the muscle which moves the lower jaw must be marked swelling and in strong action, but one great part of the expression is in the action of the strong drawn fibres of the cutaneous muscle (r. plate II.) which gives a stringy tension to the neck, and violently draws down the corner of the mouth.

The mingling of despair and rage and bodily pain is a very difficult study for the painter. But he must be able to express these mingled emotions; else how shall he represent the varieties of death which the historical painter must exhibit? In this marginal plate I have sketched the idea of a man who has received a mortal blow, but who is infuriated like a beast.

Some wounds subdue at once the energies of the mind and body : others shake the whole frame and countenance with horrible convulsions.



The whole muscles are here exerted to the utmost, and the strongest having the preponderance give the character. The muscles which shut the jaw are stronger than those which open it; the jaw is therefore strongly clinched. We see that the muscles

of the throat too (which are also those by which the jaw is drawn down) are in action, and the convulsion of these muscles is to be particularly marked. The nostril is inflated and drawn up, the lips are open, and the angle is nearly drawn into a circle by the simultaneous action of the following muscles in plate II: *LEVATORES LABIORUM* (F. G.) *ZIGOMATICI* (H.) *BUCCINATOR* (G. P. III.) *TRIANGULARIS ORIS* (N.) and *PLATYSMA MYOIDES* (R.) The eyebrows are strongly knit, and the eyeballs as if starting from their sockets.

If a man be shot, there will be no such ferocious expression. There is here often a strange and inexplicable nervous effect, a trembling and sinking of the body, with faintness and oppression; the face and body cold, pale, and livid. In a mortal gunshot wound the character of the hero is lost; it yields to the universal law: yet the feebleness of the palpitating breast, and the bewildered eye in the death of a great man, strike us in certain circumstances more forcibly perhaps than if we saw him in all his glory.

We cannot fail to observe how artfully the poets suit their descriptions of death to that kind of interest in the person which they have laboured to excite; and this a judicious painter will not neglect. The tyrant falls convulsed and distorted in painful agony; the hero, in whose fate the reader has been made to sympathise, expires without the horrors of death; his fall is described with all the images of gentle declension, where mortal languor is succeeded by insensibility, unaccompanied by pangs and struggles.

In the Episode of Nisus and Euryalus, Virgil gives to the death of Sulmo all the horror of violent death.

—————hasta volans noctis diverberat umbras
 Et venit adversi in tergum Sulmonis, ibique
 Frangitûr, ac fisso transit præcordia ligno.
 Volvitur ille vomens calidum de pectore flumen
 Frigidus, et longis singultibus ilia pulsat.

ÆNEID ix. 411.

But in painting the death of Euryalus, the poet recurs to all the images of languid and gentle decline :

Volvitur Euryalus letho, pulchrosque per artus
 It cruor, inque humeros cervix collapsa recumbit,
 Purpureus veluti cum flos succisus aratro
 Languescit moriens, lassove papavera collo,
 Demisere caput pluvia cum forte gravantur*.

ÆNEID ix. 433 †.

It will indeed often be necessary to represent death unaccompanied with the horror by which natural representation must

* Tasso presents us with some very fine contrasts of the same kind ; in painting the death of Argante, for example, he gives a picture of ferocious and savage impetuosity and strength.

Infuriossi allor Tancredi et disse ;
 Così abusi, fellon, la pietà mia ?
 Poi la spada gli fisse et gli refisse
 Nella viscera, ove accertò la via.
 Moriva Argante, e tal moria qual visse :
 Minacciava morendo, e non languia ;

generally be distinguished. We not unfrequently see a young creature in death, as if asleep, with the beauty of countenance unobscured by convulsion; the form alone remains; the animation is gone, and no colour beautifies the cheek.

E, quasi un ciel notturno, anco sereno
Senza splendor la faccia scolorita.

TASSO, Jer. Lib. Cant. 12. 81.

The necessity may occur of representing death as it approaches

Superbi formidabili, e feroci
Gli ultimi moti fur, l'ultime voci.

TASSO, Jer. Lib. Cant. 19. ottava 2.

In the death of Dardinel, the simile of Virgil is beautifully imitated by Ariosto :

Come purpurco fior languendo muore
Che'l vomero al passar tagliato lassa
O come carico di superchio humore
Il papaver ne l' horto il corpo abbassa
Così giu de la faccia ogni colore
Cadendo Dardinel di vita passa, &c.

As a further contrast take the death of the Soldans page :

E in atto sì gentil, languir tremanti
Gli occhi e cader sul tergo il collo mira
Così vago e il pallore, e da sembianti
Di morte una pietà sì dolce spira
Ch' ammolli il cor, &c. ix. 86.

† So of Nisus throwing himself upon the body of his friend, Æneid ix. 444. Contrast also the death of Eumenius, Ib. xi. 664, with that of Acca, and that of Camilla, in the same book.

slowly, or perhaps the care-worn countenance and hectic flush of long sickness, or even that which by physicians is called the *FACIES HIPPOCRATICA*, from the accurate description of it by Hippocrates.

When the eyelids, lips, and nose are livid, death is fast approaching: but often before the last scene the wasted form will rise with an anxious delirious look before finally falling into the embrace of death.

In death the eyes are dull and sunk; the features sharp; the nose pointed; the nostril somewhat contracted; the surface cold and pale and leaden coloured.

The painter must hold in recollection the difference between a dead body which he may have seen on the table of the anatomist, and the dead in battle. It may be sometimes necessary to give the rigidity of death to the figure, but more frequently either the convulsive tension of expiring life, or the relaxation of death; as Homer describes his heroes, rolling in death, with limbs relaxed and nerveless.

It appears to me that the painter is too apt to take his ideas of death from the stage. But it is scarcely possible that from such a source he can derive the materials of a natural, simple, or terrific representation.

Often in death there is a gloom upon the countenance; the eyebrow hangs low; the eye is sunk and the orbit distinct; the nose is compressed and the lines of it sharp. The compression of the nose is occasioned by the falling in of the nostril; the lower jaw falls, and the cheek is hollow. When the dead are dressed by the undertaker for burial, and the jaw bound up, there is still something very peculiar in the appearance of the mouth. There is no breath betwixt the lips and teeth, and the relaxed lips being forced together, there is an unnatural fulness round the mouth, while the lips themselves fall in.

A man who has died in battle lies blanched and very pale; he bleeds to death. But one strangled or cut off by violence in civil broil, amidst his efforts, has the blood settled in his face. The following picture is truly horrible from its truth and accuracy:

But, see, his face is black, and full of blood;
 His eyeballs further out than when he liv'd,
 Staring full ghastly like a strangled man:
 His hair uprear'd, his nostrils stretch'd with struggling;
 His hands abroad display'd as one that grasp'd
 And tugg'd for life, and was by strength subdu'd.
 Look on the sheets; his hair, you see, is sticking;
 His well proportion'd beard made rough and rugged,
 Like to the summer's corn by tempest lodg'd.
 It cannot be, but he was murder'd here;
 The least of all these signs were probable.

KING HENRY VI. Part II.

The character of gross sleep and apoplexy must depend very much on the colouring. The latter especially is to be indicated by

the suffused bloated countenance; the eyes, if open, turgid and red with blood. But Hogarth has shewn us that colours are not necessary to represent apoplexy. We must mark the indolent corpulent habit; the full round head and short neck; the inflated countenance; the valve-like action of the swelled lips upon the breath.

II.

OF LAUGHTER AND WEEPING.



We turn from an unpleasing subject, and it may be well to dissipate the thoughts which it excites by surveying the more ludicrous expressions of the countenance.

We find that the part of the cheek which is over the cheek-bone (*os malaë*, Pl. I. fig. 2.) has no muscles inserted into it, and of course that it cannot be moved directly by the muscles. Yet perhaps the character of the expression in laughter, weeping, or sneezing, depends more upon the motion of this part than on the angle of the mouth, for the cheek rises upon the socket of the eye, and wrinkles play about the eyes.

This rising of the cheek is produced by the conjoint action of the elevating muscles*. By pulling up the lower part of the cheek they accumulate it as it were upon the eye. In this operation the circular fibres of the eyelids (*ORBICULARIS PALPEBRARUM C. C.*) assist, while at the same time they press back the eyeball, so that the eye is nearly closed, and peers through the tears, which in hearty laughter flow in consequence of the pressure of the lachrymal gland.

Laughter makes these changes on the face: the eyebrows are sometimes drawn down, but more generally their outer half is very much arched; while, in consequence of this elevation, their inner extremity is pointed downwards; and this is a turn of the eyebrow

* D. F. ●. H. I. Plate II.

which never fails to give an archness to the expression. The mouth is open, and the teeth appear; the angles of the mouth are drawn backward and upward; the nostrils are dilated; the cheek raised, and in violent laughter tears sometimes suffuse the eye.

The muscles in action are first the OCCIPITO FRONTALIS A. and the orbicular fibres of the eyelids c. c. Plate II.

It is the combined action of these which gives so very particular and acute an arch to the eyebrow, and a different effect to the action of the orbicular muscle of the eye from that which it produces in crying.

Next the LEVATOR ALÆ NASI (D.) raises the nostril, and dilates it in a very particular and characteristic manner.

Further the cheek is raised, and the lips drawn by the combined effect of all the muscles which are inserted into the lips from the surrounding points of bone; if we except the TRIANGULARIS ORIS (N.) The action of this last muscle converts the broad grin into the contemptuous sneer.

The lowest class of the Dutch painters, and the caricature draughtsman, have chiefly to do with broad laughter. It is too ludicrous and too violent a straining of the features for other compositions. Yet as a study, as the means of understanding the action of

the muscles, and acquiring a mastery over the play of the features, the historical painter must not neglect it.

The older painters, perhaps with this view, seem many of them to have indulged in caricature.

When we see a little blackguard grinning triumphantly, and exulting in his mischief, we may see the origin of the thought in the philosopher that laughter is a sudden conception of eminence in ourselves.



A smile has more variety of expression than laughter. It may convey a thousand different meanings. The placid smile of

benignity; the contemptuous arching of the lower lip*; the smile of sorrow; the simper of conceit; the distorted smile of the drunken man, when the eyes with difficulty perform their office; the leer, &c.

The smile is produced by a less degree of the same action as in laughing. The concentrated muscles near the angle of the mouth dimple the cheek, and give it some degree of fulness, while a slighter elevation of the eyebrow produces a cheerfulness in the eyes.

But there is an expression still more charming: a certain mobility of the features which indicates the susceptible mind of a lovely woman, and is more enchanting than the dimpled cheek; an evanescent illumination of the countenance which words cannot convey, and in the representation of which the painter has the superiority over the poet.

* Virg. ix. 710. Ib. x. 742.

OF WEEPING.



I have thrown the expression of weeping, from pain, into the face of a fawn: for laying aside the tear of sensibility and grief, there is in weeping something inexpressibly mean and ludicrous when it appears in the countenance of a man.

In the violence of weeping, accompanied with lamentation and outcry, the face is flushed, or rather I may say, suffused with stagnant

blood, and the veins of the forehead are distended. There is a convulsive action in the muscles about the eyes; the brow is drawn down; the cheek raised; the nostril drawn up, and the mouth stretched laterally.

In weeping also, unless the convulsive action of the muscles be very strong, the general expression of grief affects that part of the eyebrows which is next the nose. It is turned up with a peevish expression: the corners of the mouth also are depressed.

If we had a perfect knowledge of the function of the nerves, they might on all occasions inform us of the causes of those actions which appear to us inexplicable. The distribution of the fifth pair of nerves gives us a physical cause for the expression of the face in weeping: for if we look upon a view of the nerves of the face* we shall find that the same nerve supplies all the parts particularly affected. We may observe that although we can command the features, the tears will not be controlled. The lachrymal gland seems to be the part upon which this sympathy is primarily exerted, when with a pungent feeling in the membrane of the nose the whole of the muscles supplied by the branches of this nerve (*viz.* the ophthalmic and upper maxillary nerve) are strongly convulsed†.

* See Engravings of the Nerves, 4to. Longman's, Plate I. A. B. C. D. E.

† Homer is true to nature in representing this as the sudden effect produced on Ulysses when he sees his father pour the dust upon his reverend head; but his translators do not seem to have understood the full effect of his picture. *Odys.* B. 24.

Through the intervention of the sympathetic nerve, probably there is a strict sympathy betwixt the heart and lungs and the nose and eyes, that may account for the sobbing and outcry, the convulsive and interrupted heaving of the chest in weeping. In a child we see the passion sometimes so violent that the breathing is quite suspended, and the face becomes black.



III.

OF JOY AND DISCONTENT.

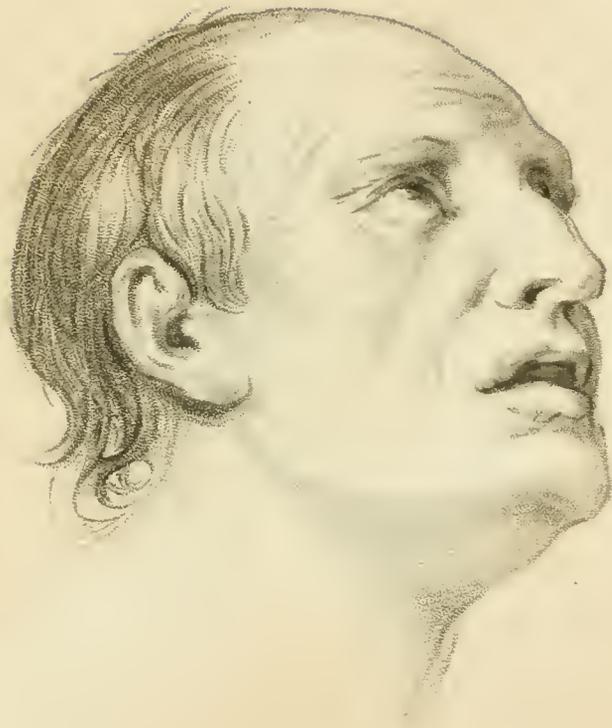
In joy the eyebrow is raised moderately, but without any angularity; the forehead is smooth; the eye full, lively, and sparkling; the nostril is moderately inflated, and a smile is on the lips. In all the exhilarating emotions, the eyebrow, the eyelids, the nostril, the angle of the mouth are raised. In the depressing passions it is the reverse. For example, in discontent the brow is clouded, the nose peculiarly arched, and the angle of the mouth drawn down very remarkably.



I have here given a sketch of the testy, pettish, peevish countenance bred of melancholy; one who is incapable of receiving satisfaction from whatever source it may be offered; he cannot endure any man to look steadily upon him, or even speak to him, or laugh, or jest, or be familiar, or hem, or point, without thinking himself contemned, insulted, or neglected.

This arching of the mouth and peculiar form of the wings of the nose is produced by the conjoint action of the triangular muscle which depresses the angles of the mouth, (N. Plate II.) and the *SUPERBUS* (I. Plate III.) whose individual action protrudes the lower lip.

The very peevish turn given to the eyebrows, this acute upward inflection of their inner extremity, and the meeting of the perpendicular and transverse furrows in the middle of the forehead, is produced by the opposed action of the middle part of the frontal muscle, (*OCCIPITO FRONTALIS A.*) and the corrugator muscle (B.)



I introduce this drawing not as exemplifying the action of the muscles, but chiefly as a contrast to the other sketches. Here there is a placid calmness in the features, a reverent attention with an elevation of thought. The whole is very different from the working of the features in the diversity of worldly passions.

SUSPICION, RAGE, REMORSE.



Habitual SUSPICION and JEALOUSY are symptoms and accompaniments of melancholy. ENVY may be classed with these expressions. But it is an ungenerous repining, not a momentary passion*.

* It consumes a man as a moth does a garment to be a living anatomy, a skeleton, to be a lean and pale carcass quickened with the fiend, "*intabescetque videndo.*"

"La' invidia, crudelissimo dolore di animo, per il bene altrui; fa ritirar tutti i membri, come contraere, et offuscar le ciglia, stringere denti, ritirar, le labra torcersi con certa passione di sguardo quasi in atto di volere intendere et spiare i fatti altrui, &c.

LOMAZZ. p. 130.

Suspicion is characterized by earnest attention, with a certain timorous obliquity of the eyes. Spenser characterizes suspicion as being

—————foul, ill-favoured, and grim,
 Under his eyebrows looking still askance,
 And ever as Dissemblance laught on him,
 Lowring on her with dangerous eye glance,
 Shewing his nature in his countenance.
 His rolling eyes did never rest in place,
 But walkt each where for fear of hid mischance,
 Holding a lattice still before his face,
 Through which he still did peep as forward he did pass.

Jealousy is marked by a more frowning and dark obliquity of the eyes, as if he said, "I have an eye of you:" with the lowering eyebrow there is combined a cruel expression of the lower part of the face.

Jealousy is a fitful and unsteady passion: much of its character is in the rapid vicissitudes from love to hate; now absent, moody, and distressed; now courting love; now ferocious and revengeful—it is therefore difficult to represent it in painting. In poetry alone can it truly be presented in the vivid colours of nature; and even of poets, Shakspeare alone seems to have been equal to the task. Sometimes it may be personified in the countenance of a mean, pitiful, suspicious, yet oppressed creature: or again in a bold lowering countenance, the body as if shrunk into itself like one brooding over his state, and piecing out a tissue of trifling incidents to abuse his judgment.

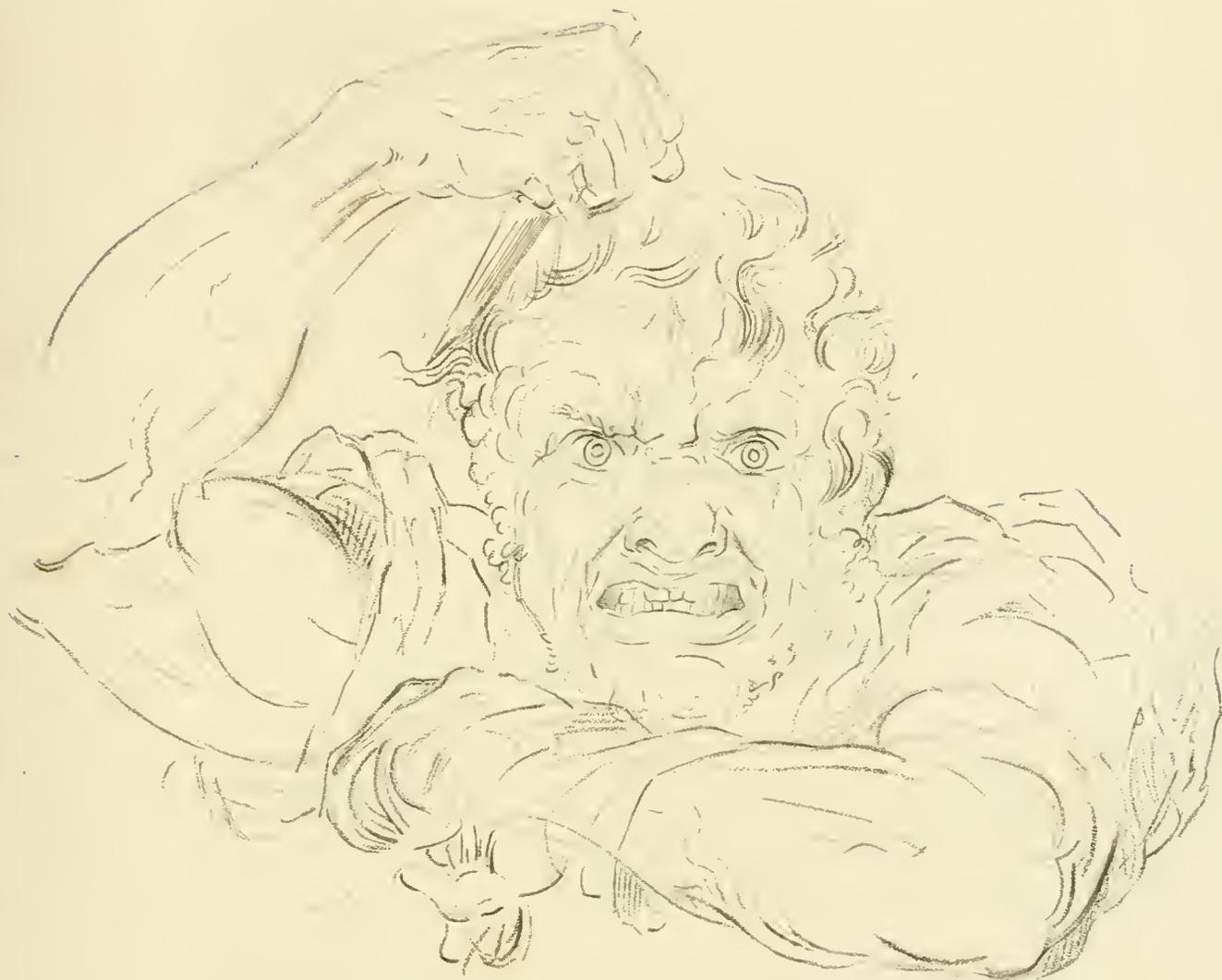
In jealousy the eyelid is fully lifted, and the eyebrows strongly knit, so that the eyelid almost entirely disappears, and the eyeball glares from under the bushy eyebrow. There is a general tension on the muscles which concentrate round the mouth, and the lips are drawn so as to shew the teeth with an expression of cruelty, depending in a great measure, perhaps, on the turn of the nostril, which accompanies the drawing of the lips. The mouth should express that bitter anguish which the Italian poet has rather too distinctly told :

Triema 'l cor dentro e trieman fuor le labbia
 Non puo la lingua disnodar parola,
 La *bocca amara* e par che toscò v' habbia.

Again :

E per l' ossa un tremor freddo gli scorre,
 Con cor trafitto, e con pallida faccia
 E con voce tremante, e *bocca amara*.

There seems to be a natural succession in RAGE, REVENGE, and REMORSE. I do not mean morally, but speaking with an eye to our present enquiry concerning the traits of expression. A slight change on the lineaments of rage gives the expression of revenge, while the cruel eye of revenge is tempered by the relaxing energy of the lower part of the countenance in remorse.



In rage the features are unsteady, the eyeballs are seen largely; they roll and are inflated. The front is alternately knit and raised in furrows by the motion of the eyebrows; the nostrils are inflated to the utmost; the lips are swelled, and being drawn, open the corners of the mouth.

The action of the muscles is strongly marked. The whole visage is sometimes pale, sometimes inflated, dark, and almost livid; the words are delivered strongly through the fixed teeth; "the hair is fixed on end like one distracted, and every joint should seem to curse and ban *."

Tasso thus describes the rage of Argante :

Tacque; e 'l Pagano al sofferir poco uso,
Morde le labbra †, e di furor si strugge.
Risponder vuol, ma 'l suono esce confuso,
Si come strido d' animal, che rugge;
O 'come apre le nubi, ond' egli è chiuso
Impetuoso il fulmine, e sen fugge:
Così pareva a forza ogni suo detto,
Tonando uscir dal' infiammato petto.

Cant. VI. 38.

* La furia, fa gl' atti stolti, et fuor di se; si comme di quelli che si avvolgono ne i moti offensivi, senza riguardo alcuno, rendendosi vehementi in tutti gl' affetti, con bocca aperta, et storta, che par che stridano ringhino urlino et si lamentino, stracciandosi le membra et i panni et facendo altre smanie.

LOMATZZO, lib. II. p. 135.

† As it is thought rather a mean expression in the statue of David with his sling, that he bites his lip, so perhaps the poet should avoid an expression which has so little dignity.

If the painter has any imagination and power of delineation, the reading of the whole passage, being the combat of Tancred and Argante, must inspire him with the grandest conception of the sublime ferocity of the human figure in action.



London. Published by Longman & Co. June 2^d 1806

But the passion may be much varied in the representation: perhaps the eyes are fixed upon the ground; the countenance palè, troubled, and threatening; the lip trembles, and the breath is suppressed, or there is a deep and long inspiration.

The following passage from *Metastasio* seems to me accurately descriptive of suppressed hatred and rage:

Non parli! Iguardi al suolo
 Lasci cader! quel torbido sembiante,
 Pallido insieme e minaccioso, il labro
 Che fremendo sospira,
 Son chiari segni e di dolore, e d'ira.

In the following sketch I have endeavoured to represent those feelings which succeed the last horrid act of revenge: the storm has subsided, but the gloom is not yet dissipated. Some compunctious visitings of nature are in the lips, though the eye retains its severity. By the posture and the fixed attention, I would indicate that the survey of the now lifeless body carries back the train of thought with a less severe judgment of past transactions.



IV.

WONDER, ASTONISHMENT, FEAR, TERROR, HORROR, DESPAIR.

I class these together as nearly allied in expression, and as frequently combined.

WONDER is that state of the mind in which the senses or apprehension are more satisfied than the understanding, in which there is

a conviction contrary to the usual train of our thoughts and conclusions. It is indicated in the countenance by an eager stare, the mouth being a little open, as in earnest attention. When combined with admiration, a smile plays upon the cheek.

ASTONISHMENT is somewhat different from wonder. It overwhelms the faculties, and leaves the mind vacant, and the features stupified and blank.

In FEAR there are several degrees, which it is of some importance to mark.

In SIMPLE BODILY FEAR there is mere animal expression, great meanness, and almost total absence of mind and energy. Mr. Burke, in his speculations on fear, assimilates it, with perhaps too little discrimination, to pain. "A man in great pain," he observes, "has his teeth set; his eyebrows are violently contracted; his forehead is wrinkled; his eyes are dragged inwards, and rolled with great vehemence; his hair stands on end; his voice is forced out in short shrieks and groans; and the whole fabric totters."—"Fear or terror," he continues, "which is an apprehension of pain or death, exhibits exactly the same effects, approaching in violence to those just mentioned, in proportion to the nearness of the cause, and the weakness of the subject*.

* Sublime and Beautiful, part iv. § 3. Cause of Pain and Fear.

But there is one distinguishing feature of the two expressions—The immediate effect of pain is to produce an energetic action and tension of the whole frame; that of fear is to relax all the energy of mind and body, to paralyse as it were every muscle. Mr. Burke seems to have written loosely, in part from forgetting that pain and fear are frequently combined, and partly from taking a view of the subject too much limited to the particular conclusion which he wished to enforce. There cannot be great pain without being attended with the distraction of doubts and fears; dread even of death is a natural consequence of extreme pain, and so the expression of fear in the countenance is frequently mingled with that of pain. But perhaps there are few passions which may not, in consequence of such combinations, be assimilated with equal truth—fear and hatred; hatred and rage; rage and vengeance and remorse. On the other hand, confining the assimilation with pain to the case of simple bodily fear, there is much truth in the observation of this eloquent writer. The fear of boiling water falling on the legs gives certainly an expression of the anticipation of scalding, resembling the meaner expression of bodily pain and suffering. As Mr. Burke says, fear in a dog will no doubt be that of the lash, and he will yelp and howl as if he actually felt the blows. This indeed is the only kind of fear which animals know. The higher degrees of fear, in which the mind operates, and which we shall see characterised in the countenance by an expression peculiar to mental energy, appears not in them.

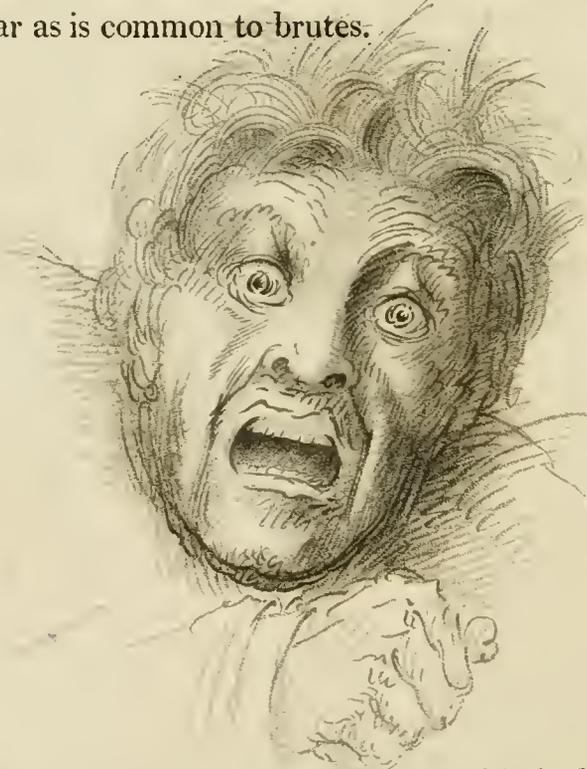
In man the expression of mere bodily fear is, like that of animals, without dignity ; it is the mean anticipation of pain. The eyeball is largely uncovered ; the eyes staring ; the eyebrows elevated to the utmost stretch. There is a spasmodic affection of the diaphragm and muscles of the chest, affecting the breathing, producing a gasping in the throat with an inflation of the nostril, convulsive opening of the mouth, and dropping of the jaw ; the lips nearly concealing the teeth, yet allowing the tongue to be seen, the space between the nostril and lip being full. There is a hollowness and convulsive trembling in the cheek, and lips, and muscles, on the side of the neck. The whole animal functions are affected, and that nerve which is called the sympathetic* seems the master spring. The lungs are kept distended, while the breathing is short and rapid : and from the connection of the nerves of the lungs and midriff† with those of the side of the neck, and with the branches which supply the cutaneous muscle of the cheek and neck, we may comprehend the cause of the convulsive motion of this muscle. The aspect is pale and cadaverous from the receding of the blood. The hair is lifted up by the creeping of the skin.

In the sketch at the head of this chapter I have endeavoured to express fear mingled with wonder. But if we should suppose the fear there represented to have arisen from apprehended danger still

* Engravings of the Nerves, 4to. Longmans, Plate III. where the course of this Nerve is represented.

† See Plate II. of the Nerves.

remote, and that the object of fear approaches, the person trembles and looks pale; a cold sweat is on his face; he apprehends it now about to cleave to him, and in proportion as there is less room for the imagination to range in, as the danger is more distinctly visible, the expression partakes more of actual bodily pain. The scream of fear is heard, the eyes start forward, the lips are drawn wide, the hands clenched, and the expression becomes more strictly animal; of such fear as is common to brutes.



I should give the name of **TERROR** to that kind of fear in which the mind takes part, in which there is a strong working of the imagination with greater energy, a more varying expression in the features, and an action of those muscles which are peculiar to man, and which seem to indicate his superior intelligence and mental feeling. The

steps are hurried and unequal; the eye bewildered; the inner extremity of the eyebrows turned up and strongly knit by the action of the corrugator and orbicular muscles, (B. c. c. plate II.) and distracted thought, anxiety, and alarm, are strongly indicated by this expression, which belongs not to animals. The cheek is a little elevated, and all the muscles which concentrate about the mouth are in action. There is a kind of modulating action in the circular muscle of the lip; the lips are inflated, the mouth less open. The cutaneous muscle, the platysma myoides (R. plate II.) has a strong effect on the angle of the mouth and lower angle of the cheek and neck. It is strongly contracted, and its strong fibres may be seen starting into action like cords under the skin. In *Metastasio*, the description of Cain after the death of Abel affords a good illustration of terror*.

HORROR differs both from fear and from terror, though more nearly allied to the last than to the first. It is superior to both in this,

* The imagination wanders; there is an indecision in the action and speech.

Caust thou quake and change thy colour,
Murder thy breath in middle of a word,
And then again begin, and stop again,
As if thou wast distraught and mad with terror?

Oh come gira
Il sospettoso sguardo
Sollecito d' intorno! onde que' passi
Ineguali, e furtivi? ad ogni moto
D' un aura sol, che tra le fronde gema
Si volge indietro, impallidisce, e trema!

METASTASIO.

that it is less selfish, less imbued with alarm, more sympathetic, having in contemplation the feelings of others, rather than a strict and immediate relation to our own individual suffering. We are struck with horror even at the spectacle of artificial distress, but it is peculiarly excited by the danger or actual suffering of others. We see a child under a waggon wheel, and in danger of being crushed by the enormous weight, with sensations of extreme horror. Horror is full of energy. The body is in the utmost tension, not unmanned as with fear. A sensation of cold seems to chill the blood*, the flesh creeps, and we feel that peculiar sensation which gives its name to the emotion.

It is in the mingling of these emotions that some of the most interesting features of expression, of which the human countenance is capable, are to be found.

Terror, when mingled with astonishment, is fixed and mute. The fugitive and unnerved steps of mere terror are changed for the rooted and motionless figure of a creature appalled and stupified. Spenser characterizes well this kind of terror:

He answered nought at all: but adding new
 Fear to his first amazement, staring wide
 With stoney eyes and heartless hollow hue,
 Astonished stood as one that had espied
 Infernal furies with their chains untied,

* Me damp horror chilled at such bold words.

MILTON, V. ver. 65.

And trembling every joint did inly quake,
 And faltring tongue at last these words seemed forth to shake.

FAIRY QUEEN.

Homer paints the emotion thus: "Terror and consternation at that sound the mind of Priam felt, erect his hair, bristled his limbs, and with amaze he stood motionless."

DESPAIR is a mingled emotion. While terror is in some measure the balancing and distraction of a mind occupied with a possibility of danger, despair is the total wreck of hope, the terrible assurance of ruin having closed around beyond all power of escape. The expression of despair must vary with the nature of the distress of which it forms the acmê. In certain circumstances it will assume a bewildered distracted air, as if madness were likely to afford the only relief from mental agony. Sometimes there is at once a wildness in the looks and total relaxation, as if falling into insensibility; or there is upon the countenance of the desperate man a horrid gloom; the eye is fixed, yet he neither sees nor hears aught, nor is sensible of what surrounds him. The features are shrunk, and pale and livid, and convulsion and tremors affect the muscles of the face. Hogarth has chosen well the scene of his picture of despair. In a gaming house the wreck of all hope affects, in a thousand various ways, the victims of this horrible vice; but in all pictures of despair an inconsolable and total abandonment of those exertions to which hope inspires and excites a man, forms an essential feature. We have two fine pictures of despair painted in detail by English poets. One is by Spenser, in Book I. Cant. 9. Stanz. 35. of the Fairy Queen.

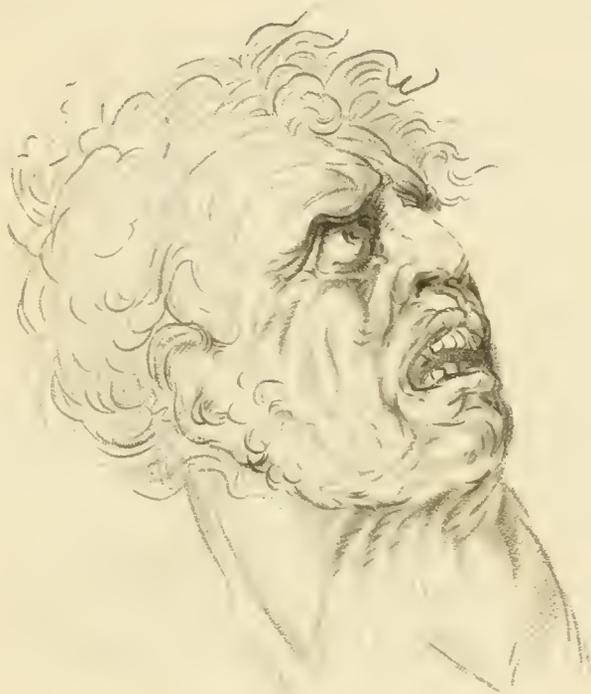
The darksome cave they enter, where they find
 That cursed man low sitting on the ground,
 Musing full sadly in his sullen mind ;
 His griesly locks long grown and unbound,
 Disordered hung about his shoulders round
 And hid his face ; through which his hollow eyne
 Look deadly dull, and stared as astound ;
 His rawbone cheeks through penury and pine
 Were shrunk into his jaws as he did never dine.

The other picture of despair is in the tragedy of the Gamester, where Beverley, after the most heart-rending reiteration of hope and disappointments, having staked the last resource and final hope of his wife and family on one fatal throw, finds himself suddenly plunged into inevitable ruin.

“ When all was lost, he fixed his eyes upon the ground, and stood sometime with folded arms stupid and motionless : then snatching his sword that hung against the wainscoat, he sat him down, and with a look of fixed attention drew figures on the floor. At last he started up ; looked wild and trembled ; and like a woman seized with her sex’s fits, laughed out aloud, while the tears trickled down his face. So he left the room.”

A painter may have to represent terror, despair, astonishment, and supernatural awe mingled in one powerful expression of emotion. In a mind racked with deep despair, conscious of strength and courage, but withered and subdued by supernatural agency, the expression is quite removed from all meanness. It must be

preserved grand and terrific. The hero may still appear though palpitating and drained of vigour*.



* A beautiful example of this, in poetical description, occurs in the passage where Virgil paints the death of Turnus. Conscious of the opposition of heaven, and how fruitless and unavailing all his efforts are, he shrinks unnerved from every exertion. "His spirits, as in a dream, are all bound up."

Neque currentem se nec cognoscit euntem,
 Tollentemve manu, saxumque immane moventem :
 Genua labant, gelidus concrevit frigore sanguis:
 Tum lapis ipse viri vacuum per inane volutus
 Nec spatium evasit totum, nec pertulit ictum:
 Ac velut in somnis oculos ubi languida pressit

In this sketch of terror with despair there is a considerable change in the action of the muscles from the appearance and physiognomy of simple bodily fear. The muscles are trembling in action; there is more energy; the eyebrows are more forcibly knit.

Milton has admirably sketched the nerveless stupefaction of mingled astonishment and horror.

On th' other side Adam, soon as he heard
 The fatal trespass done by Eve, amaz'd,
 Astonied stood and blank! while horror chill
 Ran thro' his veins, and all his joints relaxed.
 From his slack hand the garland wreathed for Eve
 Down drop'd, and all the faded roses shed;
 Speechless he stood and pale! till thus at length
 First to himself he inward silence broke.

B. ix. ver. 888.

Nocte quies, nequicquam avidos extendere cursus
 Velle videmur et in mediis conatibus ægri
 Succidimus; non lingua valet, non corpore notæ
 Sufficiunt vires, nec vox aut verba sequuntur:
 Sic Turno quacunque viam virtute petivit
 Successum dea dira negat.

ÆNEID. xii. 903.

MADNESS.



If laying aside the peculiar expression of the features, I were to set down what ought to be represented as the prevailing character and physiognomy of a madman, I should say, that his body should

be strong and muscular, rigid and free from fat; his skin bound; his features sharp; his eye sunk; his colour a dark brownish yellow, tintured with sallowness, without one spot of enlivening carnation; his hair sooty, black, stiff, and bushy; or perhaps he might be represented as of a pale sickly yellow, with wiry red hair: yet in this I do not proceed upon the authority of the poet, for such I have seen.

His burning eyen, whom bloody strokes did stain,
Stared full wide, and threw forth sparks of fire,
And more for rank dispight than for great pain
Shak't his long locks, coloured like copper wire,
And bit his tawny beard to show his raging ire.

I mean not here to trace the progress of the diseases of the mind, but merely to throw out some hints respecting the character of the outrageous maniac.

You see him lying in his cell regardless of every thing, with a death-like fixed gloom upon his countenance. When I say it is a death-like gloom, I mean a heaviness of the features without knitting of the brows or action of the muscles.

If you watch him in his paroxysm you may see the blood working to his head; his face acquires a darker red; he becomes restless; then rising from his couch he paces his cell and tugs his chains.

Now his inflamed eye is fixed upon you, and his features lighten up into an inexpressible wildness and ferocity.

The error into which a painter would naturally fall, is to represent this expression by the swelling features of passion and the frowning eyebrow; but this would only convey the idea of passion, not of madness. And the theory upon which we are to proceed in attempting to convey this peculiar expression of ferocity amidst the utter wreck of the intellect I conceive to be this, that the expression of mental energy should be avoided, and consequently all exertion of those muscles which are peculiarly indicative of sentiment. This I conceive indeed to be true to nature, but I am more certain that it is correct in the theory of painting. I conceive it to be consistent with nature, because I have observed (contrary to my expectation) that there was not that energy, that knitting of the brows, that indignant brooding and thoughtfulness in the face of madmen which is generally imagined to characterise their expression, and which we almost uniformly find given to them in painting. There is a vacancy in their laugh, and a want of meaning in their ferociousness.

To learn the character of the human countenance when devoid of expression, and reduced to the state of brutality, we must have recourse to the lower animals; and as I have already hinted, study their expression, their timidity, their watchfulness, their state of excitement, and their ferociousness. If we should happily transfer

their expression to the human countenance, we should, as I conceive it, irresistibly convey the idea of madness, vacancy of mind, and mere animal passion.

The rage of the most savage animal is derived from hunger or fear. The violence of a madman arises from fear; and unless in the utmost violence of his rage, a mixture of fear will often be perceptible in his countenance. Often in lucid intervals, during the less confirmed state of the disease, they acknowledge their violence towards any particular person to have arisen from a suspicion and fear of their having intended some injury to them.

This fact accounts for the collected shrunk posture in which a madman lies; the rolling watchful eye which follows you; and the effect of the stern regard of his keeper, which often quiets him in his utmost extravagance and greatest perturbation.

I have thus put down a few hints on a most unpleasant and distressing subject of contemplation. But it is only when the enthusiasm of an artist is strong enough to counteract his repugnance to scenes in themselves harsh and unpleasant, when he is careful to seek all occasions of storing his mind with images of human passion and suffering, when he philosophically studies the mind and affections as well as the body and features of man, that he can truly deserve the name of a painter. I should otherwise be inclined to class him

with those physicians who, being educated to a profession the most interesting, turn aside to grasp emoluments by gaudy accomplishments, rather than by the severe and unpleasant prosecution of science.



ESSAY VII.

ESSAY VII.

OF THE ECONOMY OF THE LIVING BODY AS IT RELATES TO EXPRESSION AND
CHARACTER IN PAINTING.

THE living body consists of parts and functions so intimately combined as to form a perfect whole. The anatomist indeed is too apt to look upon the several parts as distinct systems, but in our present short review we have to consider them merely in their mutual relation and strict dependance on each other.

THE NERVOUS SYSTEM comprehends the nobler division of functions; the brain, the organs of the senses, and the nerves. While this may be considered as the seat of intellect and sensation, the animal functions, otherwise insulated, are by its secret sympathies combined into a system. The will performs the voluntary motions through the medium of the nerves, which having their origin in the brain, are extended to all the parts of the body. But what are

called the vital functions are not under the command of the will. They are too important to life, to be left to the precarious exercise of the intellectual powers, yet these functions are not altogether independent of the influence of the nerves. The nervous filaments are extended to the heart, and wind about the vessels in their course through the body. And thus on the one hand the passions of the mind agitate the heart, and often the feelings seem to centre there with palpitation and a sense of sinking; while on the other, the nerves, when affected by emotion, influence in no less a degree the minute ramifications of the vessels which go to the surface, and produce a visible effect as in blushing, or in the paleness and coldness and shrinking of the skin in fear.

While the nerves have this power over the vascular system, they, and the brain itself, are intimately dependant on the action of the blood vessels; for this inscrutable power of the nerves is preserved to them only by the perpetual contact and supply of the circulating blood.

The VASCULAR SYSTEM consists of the heart arteries and veins. They convey the blood through the whole body. The blood contains the nutritious matter for the support of the body, while it imparts, though in a less palpable way, the power of sensation to the nerves, and the power of contraction to the muscles; or in other words, the principle of life. The impulse of the heart throws out the blood by the arteries to every part of the body; the blood is re-

turned by the veins to the heart; and thus it flows in a perpetual circle.

The heart then is the centre of the system of blood vessels. The arteries are small and pulsating vessels, and the blood thrown out by the action of the heart, and forced on in its course by the arterial power, passes through the arteries with great velocity, so that if an important branch be cut there is immediate danger to life. The arteries therefore run deep, and nature gives them every possible protection of bones and muscles. The artist never sees them unless on the bare temples of old men, where they run a very tortuous course, and may be perceived to beat strongly. The veins by which the blood is returned to the heart have a form different from the arteries. They are larger and more numerous. They run in two sets; one deeper, the other more superficial, and the blood returns through them with a slower and more uniform course.

Of the veins the painter should remark, that in young people they do not appear prominent or turgid, being restrained by the elasticity of the skin: neither are they prominent in women, but appear merely as faint blue lines in the transparent skin. I know not whether the veins of women ought on any occasion to be delineated, but in natural colouring their effect is a faint tinge of blue, which gives a delicacy to the white, and mingles with the prevailing carnation.

The effect of fatigue and strong action is to produce a feebleness and swelling of the veins, which is thus explained. When the limbs are at rest the returning blood is equally divided betwixt the superficial and the deep seated veins; but when the muscles are in strong and repeated action the deep veins are compressed, and the blood must return in greater proportion by the superficial cutaneous veins. Exercise, by accelerating the circulation too, and opening the pores of the skin, relaxes the surface, and thus the veins are allowed to dilate. This acceleration of the circulation gives at the same time a higher colour to the whole surface.

In deep sleep, and especially after wine, the veins are turgid, and the colour high. Virgil's description of Silenus, in the 6th Eclogue is true to nature.

“ ————Chromis et Mnasilus in antro
 Silenum pueri somno videre jacentem,
 Inflatum hesterno venas, ut semper, Jaccho.”

We must not fail to remark how the position alone affects the distension of the veins. When the arm is raised above the head, and remains so for a time, the veins become collapsed, and the surface paler. Should the arm hang, or the veins be compressed, as in the position of the arm of Hercules resting on his club, the veins swell, and the colour is higher; for the same reason, that in a prisoner bound with cords round the wrists, the benumbed and swelled

hands of a dark red indicate the severity of the binding, and bear some relation probably to the expression in the face. Here the arteries are not compressed because they lie deep, and are vessels of powerful action, and therefore the blood has access to the extremities: but as the veins are compressed, the return of the blood is prevented, and hence the turgid appearance of the hands.

We speak commonly of horror running through the veins, and of horror congealing the blood. The sensation is in the nerves; but as the state of the veins is the visible accompaniment of horror pervading the limbs, it sanctions and accounts for the phrase. The circulation is affected through the medium of the nerves. Those depressing passions which induce a debility of the limbs are attended with paleness of the surface. The blood forsakes the minute vessels, and is accumulated at the centre; and this is naturally accompanied with palpitation and irregular motion of the heart: or perhaps it would be more correct to say, that the effect of passion is to disorder the motion of the heart; and the consequence is, that the blood is no longer carried with its usual velocity to the surface. The surface is cold and shrinks, and a shudder is felt upon it like a breeze of air. But again, when the heart is roused by passion to irregular and violent action, it swells up with blood and beats violently; the lungs, being in strict sympathy with the heart, become irregular and constrained in their action, and the blood rushing violently to the surface, and being prevented from returning with

freedom, the face and neck and arms are suffused with red. Sometimes too from this cause there is a very dark livid colour in the face.

It must further be observed, that in the face there is a peculiar provision of nerves, which are entwined round the vessels, and give them a susceptibility corresponding with the passions of the mind, which the general surface does not possess. Hence the sudden blush, and rapid change of colour upon slight emotions. To this greater susceptibility of the head, as well as of the face, is to be attributed the rising of the hair in almost every violent passion.

The skin itself deserves the attention of the artist, for it considerably affects the character of the parts which it covers; the veins, the bones, and the muscles. In a robust healthy child no veins are to be seen; and for the same reason, the points of bone, and the distinction of muscle and tendon are not perceived. In a child, though the surface is smooth and delicate, yet (as anatomists would speak) the integuments are thick and strong; the fat lies chiefly on the surface, and above those parts which in more mature age appear prominent, and mark the character. The consequence of this is apparent in the general form of children. They have their appropriate form and beauty; but in reference to the more perfect state of middle life, they are unformed, the head, joints, and limbs, and even the hands and feet being round and unshapely. Such is the appearance of children at the age at which they are commonly

drawn and modelled : when it seems just doubtful whether they might not be more secure on a broader base than their feet.

Women, like children, have the skin smooth, but the limbs round, polished, and pyramidal. This proceeds from the muscles being less powerful, and the bones less prominent than in man, and from the fat being in great proportion and filling up all inequalities. Time makes its assault on this fair proportion, first by overloading and taking the symmetry from the limbs, and finally by diminishing the fat, so that the skin closes nearer to the bones.

The breathing and the motion of the chest are connected with the circulation of the blood and the general state of the system. The blood is by a peculiar system of vessels made to circulate through the lungs, that it may be exposed to the air inhaled in breathing, and imbibe that vital principle which is necessary to all the phenomena of life. The existence of the animal has a closer dependance upon this operation, than even on alimentary nourishment. And to secure a strict correspondence between the heart and the lungs in this essential and vital action, nature has established the most intimate sympathies betwixt them. When with violent action, as already observed, the motion of the heart becomes irregular, the lungs sympathize; the diaphragm and throat are affected; the voice is choked or tremulous, and there is a sense of tightness of the chest and of suffocation.

The BONES and MUSCLES form a chief object of study for the artist. The bones support the soft parts, and protect the important viscera : they give the form and height : they serve to distinguish the peculiarities of age, and sex, and constitution, and of national and family character. As without the support of the bones the flesh would fall into a shapeless mass ; as they are the levers on which the muscles act, and without which they could not produce the locomotion of the animal ; the proportions and the strength of the body, the beauty of the form, the elegance and ease of the motion, all depend upon the structure of the skeleton. The study of it must therefore be of the last importance to the painter.

The muscles even still more than the bones should be studied. They form the proper flesh of the body. They alone are capable of contraction, in order to produce motion in the animal, and consequently of variation of shape. An individual muscle consists of these parts ; the proper muscle, or belly of the muscle, as it is called, consists of bundles, or fasciculi, like lesser muscles connected together. When minutely examined these are seen to consist again of smaller fibres, diminishing in size till the eye can no longer perceive the threads. The fleshy and fibrous belly of the muscle is concentrated at each extremity into a dense and white tendon, which is supposed to consist of the common membrane of the body, strengthened to an amazing degree by this condensation. These tendons are fixed into the bones. That tendon which is attached to the fixed bone, is called the origin ; the other often heightened to a

long cord, runs down the limb, and is implanted into some moveable part, as the bones of the wrist or fingers. The muscles are of an infinite variety of form, especially those upon the trunk of the body. In the limbs they are more regular, and the force of the muscle is concentrated in general into a very small tendon, which often takes its course in a sheath or groove of the bone, so as to have its force applied according to the direction of its course.

The bellies of the muscles form the thick brawny part of the limb; whilst the tendons allow of a finer form towards the joints. Other muscles spread large upon the chest, or cover and invest the joints, as those of the hip and shoulder, giving the robust form to the trunk.

The power of contraction in the muscular fibres is called the irritability of the muscle, the most distinguishing phenomenon of life. This irritability is renewed, or supported by the influence of the circulation; while the nerves, distributed equally with the blood vessels to the substance of the muscle, convey the influence of the will, and cause the contraction of the muscle. As the incessant transmission of blood is necessary to the usual and moderate action of the muscles, so is their exercise and increased action attended with an acceleration of the blood, and a prominent increase of their vascularity. They assume a darker red, and become more massy and prominent.

The rigidity which appears in the action of the muscles is not apparent only, but real. A muscle in death has but a weak cohesion and is easily torn; but during life and full contraction, it is almost impossible to tear the muscle, so strong is the attraction of the muscular fibre.

In violent action a muscle, it is said, has less sensibility; and by exerting their muscles powerfully, jugglers suffer pins to be thrust into their flesh; but I believe the fact to be, that the muscle is little sensible compared with the skin. It is certain, however, that in contraction the muscles will suffer blows and pressure without injury. And thus we can explain the feat sometimes performed of breaking a poker over the arm, by which, without a strong action and preparation of the muscles, the arm bone would probably be fractured, and the flesh bruised. A more extraordinary instance of the resisting power in the muscles, during their contraction, was exhibited some years ago in the streets of London, by a fellow who went by the name of Leather Coat Jack. For a pot of porter he would lie down in the street, and allow a carriage to pass over him. Jack having died, was dissected in the theatre of Dr. W. Hunter, and the appearance of muscular strength was extraordinary both in the form of the muscles, and in the remarkable processes of the bones into which they were inserted. It could not be the strength of bone which saved him from being bruised in these exhibitions. I conceive the explanation to be this; that being a man of great muscular strength, the power

of habit enabled him to give such exertion to the muscles as not only to defend the bones from being broken, but to save the muscles themselves from being bruised by a weight, which, in a state of relaxation, would have crushed them to a jelly. We have all experienced the difference between a blow received unexpectedly, and one received when on our guard. Even on the same place of the body the effect will be very different. Boxers receive the hardest blows without injury. In consequence of the state of preparation in which they hold themselves when about to receive a blow, and the habit of sudden and powerful exertion of the muscles, the opponent's fist is repelled as from a board.

Although nature should bestow the essential requisites of manly beauty, yet without habitual and general exercise the form will be impaired. The variety of bodily exercises to which the youth of Greece and Rome were inured, must have been a chief cause of their superiority in form. How the handicraft trades disfigure the body, and distort it from its fair proportions, every one must have observed. Persons in that condition are distinguished by an awkward gait, and habits and postures remote from nature or elegance.

In one of our most celebrated public dancers we see the power of exercise in giving an elegant and vigorous character to the thigh and leg, while the arms seem to me disproportionately weak, injuring the effect of the whole figure. I have somewhere seen it remarked, that the over exercise of one part draws the nourishment from the

others; but in these instances there is not an actual diminution of the unexercised limbs, but only a comparative feebleness when contrasted with those limbs, which, being in continual action, have acquired a more vigorous circulation and actual increase of muscular strength. As the limbs increase in power and action, their motion becomes more expressive from the play of the muscles being more apparent.

Violence of gesticulation is indelicate, if not unnatural, in females, and detracts from their beauty. This strikes us strongly in the necks and limbs of opera dancers. That which is beauty in a young man, is deformity in a female. The nymph-like lightness* of a female dancer, which so much charms the eye at a distance, loses much of its grace and beauty, when, the figure advancing, the movements are perceived to be accomplished with violent straining and muscular action. This soon must destroy the natural beauty and symmetry peculiar to the female form.

Rubens, in his theory of the human figure, makes the cube or square the element, as he calls it, of the manly form of the hero and athletic †.

* Milton never loses sight of this feminine lightness and elegance in his description of Eve; he paints her

“ Like a wood-nymph light,
Oread or Dryad, or of Delia's train.”

† Proceeding on the words of Quintilian: *Ex cubo, sive figura ab omni latere quadrata, fit omne masculinum aut virile, et quicquid grave, forte, robustum, compactum, et athleticum est: et quicquid formæ quadrati detraxeris, amplitudini quoque peribet.* QUINCT. Lib. I. c. 10.

The fact must, I think, be acknowledged, that in the general form, in the outline of the particular parts, and in the usual and natural attitudes of a strong man, there is a certain squareness and abruptness; that the outline is not flowing, but interrupted by the prominent processes of the bones, the distinction of muscle and tendon, and the crossing of the veins. This character is particularly evident when he is in powerful exertion*; for though during perfect rest and quietude there prevails a softer outline, with a more uniform sweep of the whole figure, in the instant of alarm and exertion the body and limbs become more squared and angular in their position, and the outline more rugged and abrupt.

In woman, on the other hand, the prevailing outline is soft and undulating. In the entire figure, in the form of the parts, in the attitude and expression, there is nothing irregular, harsh, or abrupt. Rubens says (with Plato and Cicero †) that the circle prevails in the form

* Le cube et le quarré sont, comme on l' a deja dit, les elemens primitifs de tout ce qui a de l' etendue dans le corps humain. Le triangle et la pyramide y president, depuis les epaules jusqu' a la plante des pieds, ainsi qu' on l' a remarqué ci-devant, en parlant de la proportion élémentaire. On voit en effet que, dans la figure humaine, toutes les parties superieures sont plus amples et plus larges, et qu'elles finissent en diminuant vers les extrémités. Ainsi la forme pyramidale domine dans la figure de l' homme; et la cubique dans ses mouvemens; car ce n'est pas le même principe qui preside a ses actions et aux formes de sa figure.

THEORIE DE LA FIGURE HUMAINE.

† Ex circulo, sive globo perfecto, fit omne femineum ac muliebre, et quidquid carnosum, torosum, flexum, tortum, curvatum, et incurvum est. Hac formam ullam negat esse pulchriorem Plato.

CICERO DE NATURA DEORUM.

of woman. I should rather say, that in the feminine form the gentle curve prevails, the undulating line, the easy and insensible swell: and that if these mathematical figures are to be resorted to, I should assign the circle to the form of childhood, for in children there is a general fullness, and prominence, and roundness, not only of the head and joints from the structure of the bones, but in the breast, belly, arms, and thighs.

But to return to the subject of the muscles: as in mechanics, velocity and weight are equivalent, so the human body may be characterized either by such a form as indicates activity, velocity, and vigorous exertion, or by a huge bulk, incumbered as it were with its own strength, and indicating a body slow of motion, but of which the arm would fall heavy and decisive. A young warrior, whose arms are the buckler and sword, should be drawn according to the first of these conceptions. Such for example is the fighting Gladiator, dexterous to avoid his adversary's blow, and with quick resiliency and rapid turns regaining his firm footing to return the stroke.

———Ille ictum venientem a vertice velox
Prævidit, celerique elapsus corpore cessit.

ÆNEID. V. 444.

Thus we are led in sketches to adapt the kind of arms to the proportions of the body and the degree and kind of strength. When the poet describes the power of a giant, or a cyclops,

(“ monstrum horrendum, informe, ingens”) the painter portrays a clumsy strength and unwieldy bulk “ with the might of gravitation blest,” or at least devoid of the energy and activity of the youthful warrior. Such, according to Rubens, are, among the remains of antiquity, the River Gods, and Commodus in the character of Hercules.

The character of the two species of strength is well exemplified in Dares and Entellus.

Ille pedum melior motu, fretusque juvena ;
Hic membris et mole valens : sed tarda trementi
Genua labant : vastos quatit æger anhelitus artus.

ÆNEID. V. 430.

Or again :

Entellus vires in ventum effudit : et ultro
Ipsè gravis, graviterque ad terram pondere vasto
Concidit.

The ideal form of Hercules is the personification of the highest degree of power with every possible or consistent mark of activity. The form of Hercules is not directly taken from natural appearance, but as if by inference and upon theory. The head and limbs are small; the neck, trunk, and shoulders, preternaturally large and strong; the muscles moving the limbs are powerful; the parts moved light. But the idea of power is not more impressed upon us

by the general form, than by the appearance of the individual muscles. They have a sharpness and prominence which could be acquired only by exercise and continual exertion. Indolence and inactivity are remote from the idea suggested by the contemplation of the Farnese Hercules.

The painter must imitate the elevation of language by which the poet prepares the mind. In historical or poetical painting there must be nothing vulgar in the proportions, or gait, or attitude of his figures, else he will fail to produce that elevation of sentiment which is a necessary prelude to all feeling of interest in the otherwise improbable fictions of antiquity. A form must be delineated with which we associate powerful energy of mind, as well as of body, and in this the painter must well examine the extent of his own powers, as he is, equally with the poet, liable to run into bombast and extravagance.

The approach of old age gives another distinction of muscular exertion. In the Laocoon, for example, we have a muscular figure, and much anatomical expression, but it is the powerful exertion of a man advanced in life, whose functions as a priest give no presumption of the acquisition of great bodily power. It bears no relation to either of the characteristic forms of human strength.

In the following passage, in which Pliny describes his favourite statue, the marks of old age are very correct :

“ Effingit senem stantem ; ossa, musculi, nervi, venæ, rugæ etiam ut spirantis apparent : rari et cedentes capilli, lata frons, contracta facies, exile collum ; pendent lacerti, papillæ jacent, recessit venter. A tergo quoque eadem ætas, ut a tergo, æs ipsum quantum verus color indicat vetus et antiquum. Talia denique omnia ut possint artificum oculos tenere, delectare imperitorum.”

The study of character and expression, as exhibited in the body and limbs, is perhaps more difficult than that of the traits of the passions as exhibited in the countenance. The sublime effects produced in the marble, by the expression of the form and attitude alone, strongly prove the superiority of this corporeal expression.

Corporeal expression has a wide range, from the graceful inclination of the head and neck of the Apollo, to the convulsive struggle of the Laocoon. This is the operation of the mind on the body. To bestow grace and propriety of action on the figure, pre-supposes a deep knowledge of the workings of passion ; while the difficulty of execution, however justly the idea may be conceived, makes this the highest department of the art of painting.

The study of the action of the figure admits of a natural division ; first, of motion and exertion simply ; and secondly, of the effects of sentiment and passion. The knowledge of the former is necessary in order to paint the figure with correctness ; to poise it on the centre ; to bestow just attitude ; and truly to express the exertion of the limbs

in loco-motion, and the common exercise of the body. The second belongs more to the province of genius—with invention and deep observation of human character, must be combined judgment and correct taste, in order to make the mind apparent in the body (“in corpore vultus”), and to preserve the peculiarity of character, and all the grace and propriety of action*.

It is this emanation of the mind inspiring the features, and giving grace to the action which produces the enchanting effect in painting. And if there be such a thing as pleasure arising from mere form without expression and character, which I much doubt, it is a pleasure which must be very transient. In every possible condition and state of existence there is a certain character to be given to the body. It is alive or dead; still or in motion; it has the spirit and

* There cannot be a better illustration how much a creative genius, both in painting and poetry, is required to produce this effect of mind on the body, than to contemplate the idea excited by the following description :

After the Duke his father with the knife,—
He stretch'd him, and with one hand on's dagger,
Another spread on's breast, mounting his eyes,
 He did discharge a horrible oath, whose tenor
 Was, were he evil-us'd, he would out go
 His father by so much as a performance
 Does an irresolute act.

KING HENRY VIII.

We have here the picture of the mind wound up to deliberate denouncing of revenge.

buoyant spring of youth, the massiness of manly strength, the grace and elegance of female beauty, or the cautious timidity and constrained motions and postures of old age, legibly impressed on the whole figure, and prescribing every motion and position of the body. In the dignity which becomes the higher strains of composition, the movements and expressions of the body are expressive, but dignified; in the lower scenes of farce and caricature the peculiar habits, and motions, and postures of familiar life and mechanical occupation are as distinct and legible, and the neglect of these appropriate signs are great defects in an artist*. In this difficult study the painter must have recourse to nature, that he may have her habits and genuine language†; rules and descriptions can do little for him. Further than in the mere correctness of drawing, this subject has no intimate reference to anatomy, and therefore I shall not enter at large into this extensive enquiry, but confine myself to a few hints concerning beauty as depending on expression, and concerning the distinction between the form and position of the body in sleep and in death.

I would premise however, with regard to position in general, that considered independently of any particular expression, the figure

* It is one of the things told of the famous Prince of Condé, that he was very expert in this sort of physiognomy, and would sometimes lay wagers with his friends, that he would guess, upon the Pont Neuf, what trade persons were of that passed by, from their walk and air.

† See Mr. Fuseli's third Lecture.

will not stand elegantly, unless it is made to rest more on one leg than on the other—first, because it is natural; and, secondly, because the body in this posture assumes a more varied and elegant outline. It is a natural posture, because, however strange at first sight it may appear, the body is not at rest when it stands equally on both legs; to keep it so there must be an unpleasant tension of the muscles of the body and limbs. When the body rests on one foot, and the trunk is poised so as to relieve the muscles of the other side, and throw the other foot unconstrained, the line of beauty into which the figure falls is elegant and agreeable; perhaps because it conveys to the mind an idea of a natural and unconstrained position, as well as from the pleasing contrast of the limbs*.

* Certain positions of the body and limbs, I have been accustomed to say to my pupils, when the academy figure stood before us, we universally acknowledge to be elegant; let us inquire if all these attitudes be not natural ones, and if they do not result from the structure of the limbs.

The man stands with both feet firm to the ground, and we see that there is a certain tension and squareness over the whole body; but in this position there is no muscle at rest; it is not a position of ease; we know that there is a restraint upon the whole body, and that the bones are universally braced by the action of the muscles. Observe, then, how he seeks relief; he throws the weight of the body on one leg, the other has a position of ease and relaxation; the effect of this is a varied outline through the whole figure: all the limbs are in contrast; and the muscles, which on one side are relaxed, on the other side are in action. Our minds are satisfied that this is a position of ease, and perfectly natural; we feel it to be elegant; and it only remains for you to determine whether this elegance results from the contrast of the limbs, or from a conviction that it is a position of rest and ease; or, in other words, of its being natural.

In the posture of the body and limbs, in the inclination of the head and neck, that is, in the whole attitude of the figure, the elevation or depression of the mind is indicated. The elevation of thought is portrayed in dignity of demeanour, as mildness and amenity, pride and insolence, suspicion and fear, are displayed in corresponding expressions of the body. These ideas of mind enter unconsciously into all our conceptions of the beauty of form, as well as of the propriety and correctness of action. From the philosopher to the peasant, no idea can be formed of life unconnected with motion; and the forms of man and of other animals have, in our judgments, a secret relation to their capacity for motion; nay further, our conceptions of the human figure are never unconnected with the conviction of superior intelligence; and the idea of motion and of expression is inseparably combined with the idea of the form of man.

Beauty is consistent with an infinite variety of forms; and this alone appears sufficient to convince us that its cause and origin is to be found in some quality capable of varying and accommodating itself, which can attach to different forms, and still operate through every change. This quality I conceive to be expression; and although it may be said that beauty is chiefly excellent where there is observed no character of passion; yet in these cases the form we admire is calculated for expression, and has in our secret thoughts a relation to the qualities of mind. The lover sees in the features which he doats

upon, a tenderness of sentiment ; he imagines delicate attractions, engaging endearments, and all the blandishments and lovely qualities of mind which the fondest fancy can conceive. When we discover that all the qualities which we have attributed to the object of our admiration are deceitful illusions, and that the susceptibility of mind which we had imagined to be reflected in the face, and indicated in the graceful movements of the body, has no existence, love and admiration rapidly subside ; and if we are still forced to acknowledge the beauty of the features, they affect us as the beauty of a statue which has a certain relation and association with the feelings which have grown up from our more general experience.

In a child the bloom and freshness, the smooth and rounded form, and even the limited power of expression, accord in our conception with the naivetè and ingenuous simplicity of mind. In a girl we associate with the form a gentleness and elegant simplicity in every motion. The beauty we admire is the capacity for that expression ; and the view of the expression itself conveys to our minds the idea of the more amiable and feminine sentiments.

Why do we so much admire the beauty of the Antinous ? Because, although there is no gesticulation, there is still no want of expression ; on the contrary, there is a voluptuous languor which seems to pervade the whole figure, and which is in strict unison with the sensation the artist wished to communicate. If we

compare this figure with the repose of Hercules, we shall recognize in it the enervating effect of pleasure, instead of lassitude after labour.

We assimilate beauty with the form of that age and sex in which the mind is most susceptible of pleasure; for nature has there established powers of expression adapted to the prevailing character of the mind; but the perfection of manhood is when the form is matured, though it has become more rugged and full of character, and when the higher passions and sentiments prevail. The form no longer corresponds with that voluptuous expression and languor, the concomitant of pleasure, and in the air and carriage there is more of dignity than of grace.

In SLEEP* there is, perhaps, an appropriate attitude; but every limb is at rest; and such an attitude as indicates entire repose and relaxation is the natural characteristic of sleep. When a fine lady throws herself upon the sofa in elegant relaxation, she can preserve while awake the grace of her attitude; but when sleep actually visits her, the wrist falls loose, the arms gravitate into an easy half-bended position, the legs are drawn up, and nature overcomes affectation. The cause is this: when the limbs are stretched, the extending muscles are in contraction, and the bending muscles drawn out; it is not therefore a position of ease and perfect relaxation. If intention, or habit, does not prevent the natural equipoise

* *Dulcis et alta quies placidæque simillima morti.* ÆNEID. V. 522.

of muscular contraction, the joints will in sleep be relaxed, and the limbs nearly half-bent. Perhaps another cause may be assigned for the posture of very sound repose. As the exhaustion of muscular power, in consequence of exercise, leads to an increase of the velocity of the circulation, in order to supply the wants of the system, and as the action of the arteries and veins is least interrupted while the limbs are stretched, we should expect that an animal exhausted by exercise should take a posture different from that of which we have been speaking. On the contrary, as the full torrent of the circulation is not requisite for the little waste of muscular power after rest, it is natural that, when the system is a little recruited, there should be a kind of check and interruption to the velocity of the circulation in the bending of the limbs. Observe a dog returned from the chase: he tumbles down quite resolved and stretched out upon his side; he slumbers for a little; but when he has somewhat recovered himself, he draws up his legs, coils himself into a circle, and falls into sound sleep. So hibernating animals, when found in their cells, are coiled up and pressed together. Such also is the position of the child in the womb.

However unsatisfactory these reasons may be, observation will convince us that there is rather a drawing together of the body and limbs in deep sleep, unless where mere gravitation stretches the legs, or where the posture of the sleeper prevents it.

In sleep, the features are full though relaxed, not shrunk as in death; and the expression of dewy temples, and dewy sleep, suffi-

ciently indicates that full and regular state of the circulation, which gives to the features a form and colour quite the reverse of death.

IN DEATH, the body is heavier; that is, the position of the limbs is more under the influence of mere gravitation, and the solid manner in which they lie, conveys that idea. Rubens has given some very rude sketches, to show that the elemental form of death is the straight line. The first effect of death is relaxation, but the second effect is stiffness and rigidity. Now it is this rigidity which insensibly makes part of our prevailing idea of the characteristic form; and if the body be then moved, this rigidity produces the effect, which Rubens has had impressed upon his mind, of the prevalence of the straight line.

But independently of this straightness and rigidity, there is a distinction between sleep and death, in posture as well as in colour and feature. In sleep there is a certain regard to convenience, and a uniform and gentle curve or flexure of the limbs; while in death there is entire reference in the position to the ground on which the body is laid. The character is most distinctly marked therefore by the position of the head and neck.

—————lentaque colla
Et captum letho posuit caput arma relinquens.

ÆNEID. XI. 830.

Much of the character of death, as contrasted with sleep, is in the colour. The blood having left the surface, the skin shrinks, the features are sharp, and the blood dissolving, gives faint tinges through the gradation of black, blue, lake, faint yellow, and green. The general character however is ashy paleness.

THE END.

WORKS,

PRINTED FOR LONGMAN, HURST, REES, AND ORME,

PATERNOSTER-ROW.

1. THE ANATOMY of the HUMAN BODY. By JOHN and CHARLES BELL, Surgeons, Edinburgh. In four volumes royal octavo. The two first Volumes of the above Work contain the Anatomy of the Bones, Muscles, and Joints; and of the Heart and Arteries; with numerous Engravings. Price 1l. 10s. in boards. The third Volume contains the Anatomy of the Brain, and Description of the Course of the Nerves; and the Anatomy of the Eye and Ear; with Engravings. Price 16s. in boards. The fourth Volume, contains the Anatomy of the Viscera of the Abdomen, the Parts in the Male and Female Pelvis, and the Lymphatic System. With an Appendix, and Engravings. Price 15s. in boards. Superbly printed in Imperial 8vo. and beautifully coloured. Price 1l. 1s. in boards.

“ These elegant and accurate delineations of the arteries must not only facilitate the knowledge of anatomy, but create a taste for it in the most fastidious student. We have seen no work better calculated for giving clear ideas on this important branch of anatomy, and we strongly recommend it to our medical friends, as at once a very useful and highly ornamental addition to their libraries.”
Monthly Review, Sept. 1802.

2. THE ANATOMY of the BRAIN; explained in a series of Engravings, beautifully coloured, with a Dissertation on the Communication between the Ventricles of the Brain. By CHARLES BELL, Fellow of the Royal College of Surgeons of Edinburgh. Elegantly printed in royal 4to. on fine wove paper, hot-pressed. Price 2l. 2s. in boards.

“ We have here a publication, which reflects much credit on the author’s anatomical knowledge, and on his skill as an artist. The plates are executed in a very superior style of correctness and elegance; and, assisted by the concise and accurate descriptions to which they refer, they will have a considerable tendency to facilitate the study of the most complex viscus of the human body. The different synonyma of authors are very properly given in notes, which also comprize some subordinate subjects of discussion, not necessarily connected with the explanation of the plates.”
Monthly Review, Feb. 1803.

“ Since the publication of the splendid work of Vicq. D’ Azyr, we have seen none so well calculated as the present to illustrate the anatomy of the Encéphalon. The plates contained in it are numerous and elegant, the descriptions conspicuous, and the whole execution very creditable to the author.”
Annual Review, 1802.

3. A SERIES of ENGRAVINGS, explaining the Course of the Nerves. By CHARLES BELL, Fellow of the Royal College of Surgeons. On royal quarto, with Letter-press Descriptions. Price 1l. 1s. in boards.

“ These engravings are in the author’s usual style of correctness, and elegance, and they may therefore be regarded as a valuable acquisition to the medical library.”

Monthly Review, Sept. 1803.

4. ENGRAVINGS of the ARTERIES, illustrating the Second Volume of the Anatomy of the Human Body. By JOHN BELL, Surgeon; and serving as an Introduction to the Surgery of the Arteries, by CHARLES BELL, Surgeon. Superbly printed in Imperial 8vo. and beautifully coloured. Price 1l. 1s. in boards.

“ These elegant and accurate delineations of the arteries must not only facilitate the knowledge of anatomy, but create a taste for it in the most fastidious student. We have seen no work better calculated for giving clear ideas on this important branch of anatomy, and we strongly recommend it to our medical friends, as at once a very useful and highly ornamental addition to their libraries.”

Monthly Review, Sept. 1802.

5. THE PRINCIPLES of SURGERY. By JOHN BELL, Surgeon. In two volumes royal 4to. Volume I. contains the Principles of Surgery, as they relate to Wounds, Ulcers, and Fistulas; Aneurisms and wounded Arteries, Fractures of the Limbs, and the Duties of the Military and Hospital Surgeon. Volume II. contains the Operations of Surgery, as they relate to the Anatomy and Diseases of the Urethra and Bladder, and the Anatomy and Diseases of the Skull and Brain. Illustrated by numerous Engravings, many of them accurately coloured from Nature. Price Nine Guineas in boards.

6. ENGRAVINGS of the BONES, MUSCLES, and JOINTS, illustrating the First Volume of the Anatomy of the Human Body. By JOHN BELL, Surgeon. In quarto, with about 200 pages of explanatory Letter-press. Price 1l. 11s. 6d. in boards.

7. SURGICAL OBSERVATIONS: Part the First. Containing the Classification of Tumours, with Cases to illustrate the History of each Species; an Account of Diseases which strictly resemble the Venereal Disease; and various Cases illustrative of different Surgical Subjects. By JOHN ABERNETHY, F. R. S. Honorary Member of the Royal Medical Society of Edinburgh, and of the Medical Society of Paris, Philadelphia, &c. Assistant Surgeon of St. Bartholomew's Hospital, and Teacher of Anatomy and Surgery. In 1 vol. 8vo. Price 6s. boards.

8. SURGICAL OBSERVATIONS: Part the Second. Containing an Account of the Disorders of the Health in general, and of the digestive Organs in particular, which accompany local Diseases, and obstruct their Cure; Observations on Diseases of the Urethra, particularly of that Part which is surrounded by the prostrate Gland; and Observations relative to the Treatment of one Species of the *Nævi Materni*. By JOHN ABERNETHY, F. R. S. In 1 vol. 8vo. Price 6s. boards.

9. THE MODERN PRACTICE of PHYSIC. By EDWARD GOODMAN CLARKE, M. D. Author of “*Medicinæ Praxeos Compendium*,” of the Royal College of Physicians, London, and Physician to the Forces, &c. In 1 vol. 8vo. Price 9s. in boards.

“ This volume may be recommended to the student, as containing the best compendium of modern improvements in Medicine and Therapeutics, which we have had occasion to peruse. The detail of symptoms, under each head, is very comprehensive and correct; and scarcely any remedies, which have stood the test of experience, are omitted to be mentioned.”

Critical Review, Dec. 1805.

“ We have perused the above work with much gratification, and we earnestly recommend it as deserving of the attention, particularly of the junior branches, of the profession, as it is written in an able and scientific manner; and we are well assured that it will not derogate any thing from the reputation the author has already obtained by his *Medicinæ Praxeos Compendium*.”

Medical Journal, Dec. 1805.

SPECIAL
72-F
SECRET

