The prodigious divisibility of Bodies, but it is not merely from the divisibility of Bodies that they act. Next I proceed to the consideration of taste in the chymical alone, as they are called, viz. salts, which are known especially to act, but it is false to suppose them only the objects of taste. All of them must be in a fluid, and they are commonly in a liquid state: They act on fluids and are enabled to do so by Bodies, they give an opportunity to elective attraction which induces the motion of action of Bodies on one another. It is in the case of mixture that the operation of elective attraction takes place, hence it needs hardly any assemblance of agitation, nor as solution does. Now many of the objects of taste are truly mixtures of salt. In a small quantity they excite a motion in our nervous fluid. But I own that tastes are by no means exactly corresponding to the action of solvent Bodies, the force of compression in taste is not in proportion to the solvent action of the Bodies. The property solvent and antipathetic Bodies are contrary to one another, the latter check the former give motions that wound otherwise not occur. As the operation of heat is directly by the evaporation of a fluid acting upon over 2 or 3 whether or not antipathetic fluids or to receive & not retain the motion of surrounding Bodies the analogy may be admitted with regard to taste. And in this they does add act another theory for the impressions of taste is that. It is now admitted that we consider every material for an inert, and surrounding in an elastic fluid. It has a particular relation to heat, but we know the oscillations of heat, are in no part of the matter, entirely elastic. I have said that odor depends upon elastic vapour flying off from the surface of Bodies, and that every mass of matter sends off such odor, the many of these are not perceived by us. There is probably a particular in this Ether, and perhaps it is the case of elective attraction, accompanying every peculiar mixture. If we admit this we admit that there is an Ether, which is the foundation of mixture, and it may be communicated to our Tongue.
2dly and making impressions on the organs of hearing, or even impressions made upon our senses. All bodies affect our organs of hearing. I am ready to conclude that in smelling not only vibratory impressions but mixture with our nervous fluid takes place, and the extent of our sense is to be taken in. Two hypotheses are made use of here: the first is, that there is a subtle fluid in all bodies and that they discover their elective attraction by that fluid, and that it is in consequence of like notions that our organ of taste receives impressions. The other hypothesis is that the subtle fluid is different in every different body, that is as far as they are different in sight and hears as is described of the senses that gave place. They are diversified by their mixture, so must their action, and the modification of impressions be diversified. You must admit these two hypotheses from the analogy of all nature, and in smelling so in taste, you must conclude for a mixture. The analogy of perception, the oscillation of subtle fluids does conform to this. I make an application of that they seem to depend upon the oscillations of the small parts of body independent of any motion of the matter of bodies. We do not perceive the motion of the whole mass nor do we perceive any thing but the oscillations of subtle fluids in our nose. All different from these are the motions of touch or what is by way of motion called feeling. It depends upon motions of the whole mass producing corresponding motions in our nerves. The several modifications of it are difficultly told apart from one another, and perhaps there is the perception of the roughness or smoothness of bodies, which is performed by a motion of the surface of our bodies upon that of others, and the sense of position depends upon frequent alternate impulse in our body and returning upon an uniformity of impulse in the whole. The invisibility of our senses are divided and extended to give the same impression of inequality there. Next is the perception of figure that of sharp or blunt, angular or round, which depends not only on a single impulse but a number that are simultaneous by which we grasp it about to measure it. A third perception is that of hard or soft, and of the same kind is the perception of fixed or rigid. There are
very nearly in constant all the several parts of our body, some parts may from which of our bodies be least sensible of them. And the something as particularly the last, the sense of resistance, is rather a perception of the motion of our own bodies. Our perception of exten- sion and what attend it, several modes of figure, are fancied by nearly the extent of surface of our body occupied by impressions and more commonly by extending our fingers. Or again, we judge of the whole of figure by the success- sive motions and different directions our hands make around them. You see this is a sense of motion in our bodies with resistance. The sense of force and gives a perception of motion first, but after that it is only a change in the state of our own hands. More particularly our perception of distance the effort we make to overcome it by our sense of gravity is entirely of this kind. Now you will observe that these are called the more obviously mechanical impressions, depending upon the motion of sensible bodies on ours. But they are analogous to what happens to other elastic bodies, the motion of whose parts in com-
The object of chemical imprefrion and that 221
whether you refer this meaning of chemical im-
preffion to the motion being least understood
and therefore for destruction so called, or to the mo-
tion taking place being that excited by chemic-
al Bodies. I must now say that touch in its
full extent is a subject of chemical imprefrion.

You know

take notice that the tongue has
the sense of touch in common with the rest
of the body. Many Bodies act there as they do upon
other sentient parts, and more strongly, as acting
upon a part of more sensibility. And it is certain
that many of these tastes we call acids are effected
by touch upon the Tongue and Tounge. When we
we can perceive such impressions we may conclude
that they are all Impressions of touch and not of
taste, and would have analogous impressions on
other parts of the body. Also the internal nose
is an exquisite organ of touch, hence the wondrous
acid Bodies that produce enerying out more
by touch than smell. In the eye and Ear these
is a peculiar sensibility of touch, the eye is sensible
to the touch of acid Bodies; and the Muzzle of a

Lect. XVI. Jan. 16th.

Haller's chapter of various interior impressions comprehends perceptions. I am here to treat of perceptions of the state of the body, but which are produced always by and relative to the body itself. But it will be difficult to distinguish them from the interior, corporal last physis of a. It will be difficult to distinguish this quality generated in the stomach, borbonomy introduced into it, and acids generated from coruscate. It will be more properly our business in the Phaenology to enquire into the various causes of internal impressions. We often know the internal impressions by the perceptions they produce. We are extremely apt to refer impression to the parts of the body disagreeably affected. So scarce the difficult to say where the seat of it is. We refer to the part we feel most affected, and we generally prefer to touch; yet this sense of touch is not one, but fifty different impressions. Next with regard to internal impressions, as in the other called external, the relation is quite arbitrary, so it is with regard to the internal. Many impressions give no sense of impulse or notion or any modification of it but a want of it. Want of light, or of sense at times give uneasiness, as is clear by this view the uneasiness we feel from the want of usual impressions. Hence the uneasiness of created appetites, when the impression made by their gratification is gone, as appears in opinion when the action is over it such as are accustomed to it. I now speak more particularly. The first internal impression is the most general touch a consciousness of self; it is what Haller and other
Physiologists call the aperceptions. Whether we have notion along with it of the general perception may be doubted. Concise seen, see same. But this I think is certain that we are conscious of our ordinary existences, and have the Idea of Identity, from a full exercise of percepts in our following our ordinary train of thinking, and this has the Idea of coherence or existence. Hence I distinguish between our waking and sleeping thoughts. When a man has been under the impression of a Dream, some of the circumstances of that may shake off sleep; when wake he calls for light, even if it be his own Chamber, he finds that it is and that the perceptions of this Dream were incoherent. We judge whether other people are in their sensorium, from this same coherence of perceptions in them. One chief mark of the alterations is alluded our perception of time and duration. Our ordinary train of thinking gives us our consciousness of existence, by giving us consciousness of time. Ideas of making we forget and hardly refer to our being. The common people think they can recollect dreams if no waking impressions intervene between the dream and the recollection. How this is connected with 328 our present subject will appear presently. We have so much of it as extends to a general manner of our existence. We are conscious of truly perception, truly memory, and clear judgment at one time, and the reverse at another. Also in all our actions we are sometimes conscious of languor and dulness, and at others, of alacrity and vigour. Now that these are not confund to the mind appear from this that all our emotions arise from corporeal ones, internal or external. Too much or too little Blood will produce the difference of the state of thinking. I must observe is illusory. This, that when we come to percepts we take a view of our mind as liable to emotions & passions, and I mention it because it is these we can best exercise. Take the example of the effects of different states of the weather, sadness at one time and alacrity at another. Doubt, despair, fear & resolution are the result of one state of the atmosphere, so another state of it gives alacrity, easy satisfaction, complacency, or joy, or gentleness, and in those hopes, courage and determination.
refers to the place where the impression is made. Hence various from external causes they are on the force of the first impression, and more particularly, arise from the mechanical impressions. I will then prove that I am chiefly to consider the uneasy impressions. Under the sense of uneasiness there is great variety from a great variety of cause or states. First it arises from want of full distinct impressions. Darkens is hardly as disagreeable as imperfect light. Secondly from want of usual impressions; and thirdly from an interruption of our ordinary or usual train of thought. Fourthly a sense of dulness or of resistance between which it is plain that we do not always exactly distinguish. As to them all it is to be observed that they are attended with anxiety or a sense of relief, whether it be a sense of the removal of the uneasy sensation, or of the resistance to motion. Now no impressions are often caused by the perceptions they produce, or these uneasiness are often only known by an anxiety. From all the kinds of these impressions arise from a Volition to omit.
Of course the separation is not distinct. The Sklans, as we would say, that it is always followed by particular motion, as a fuller evaporation takes off the stagnation of blood in the lungs, and the sense of uneasiness in the stomach. But often we are not conscious of the volition or motion. There is always a constant shifting of the motion of the body. It is better founded that you die unausted, for unless we have wanted for this uneasiness that I mentioned in the previous chapter with regard to the several parts of the body. Amongst these is a sense of uneasiness that produces apathy. I am true that nausea is often accompanied by a very general, the indeterminable confusion, to use a general desire to eat, and where it is related to a height we have a sense of more particular pain, but in general there is no pain nor sense of motion.

Lect. XLII. June 5th.

What else I have to say of the causes of imprecation shall refer to the Pathology where I shall enter upon Heaven's indications. I shall enumerate imprecation phenomena. Here is some danger of confusion in these
labourious inspiration occurs in a warmer.

There is an uneasiness produced in the beginning
of bilious fever, viz. coughing. It is difficult in theory to explain the cause of it. Invasion
only one other article of inquiry. The precipi-
tions of coughing, when they act, is not sustained
in our Pathology, when we shall speak of it. No
of the feelings of the Thorax belong to the heart.

As we are not conscious of willing the action of
the heart, yet we are conscious of its manner of
action; we are conscious of the pulsations and
more ordinary motions of its, we are conscious
particular to the interruption made by its ejec-
tion and therefore of the uneasiness partaking
of the same uneasiness arise from

"Deleterious or American obstructing the Blood
in the left ventricle, and from obstruction in the Lung
veins obstruction to the right. At the coming
of syncope, but more at the recovery from it,
there is great uneasiness: But syncope itself is
defauleable. There is in it a peculiar accordance
depending upon resistance to the motion of
the heart. Next are the uneasinesses in the abdomi-
nal viscera. In these there is a sense of anxiety.
measured the quantity to be taken in. Also the stomach is sensible of the state of its own organs, hence various perceptions. Lastly, with regard to perturbations of the stomach, it is so formed as to affect or be affected by the whole of the system. It is the seat of more perceptions than any other organ and hence more application of sympathy than any. The sense of smelling is and there states that are called dyspepsia. I need waste to enumerate these impressions more particularly. We have a sense of the length or fullness, hence dulness of the system and the appetite of hunger, not indicated when it begins but only in a human actual pain in the manual tenderness. On the other hand, a sense of pain is attended with a sense of fulness often from our quantity of contents and from and between liquid and solid and a heat we do not always clearly distinguish. There is also a sense of want of appetite and when food is handed it rises to nausea or unlike. These belong to dyspepsia as attended with a peculiar sense of nausea, this or anxiety that in English we call sickness. The gradations are nausea, sour, nausea and vomiting. You will find it interesting to enquire into the causes. The sensations have a share of the same nei-