What is hunger? It is not a material body. It is not a substance.
It is a simple sensation, more or less painful,
as it becomes protracted. It is seated in the most important
organ of the animal system, to admonish the intelligent faculties,
of the necessity of supplying the materials for
sustaining and sustaining the vital functions of animal life,
without which, all powers must languish, and the stunted
creation become extinct. Then, where does it originate? In the
nervous and vascular tissue of the lining membrane of the stomach,
principally residing in the extreme vessels, terminating upon
the inner surface of this organ, regularly announcing to the central
center of perception, the wants of the system.
How is it created? By the formation and retention of a peculiar
specific fluid, in these extreme vessels, by which they become
gradually and painfully distended, as it is secreted, like other fluids,
from the general circulation, for the particular purposes of
phlogismation. This gastric juice, digesting its containing parts
proportionally to the period of abstinence and wants of the system,
produces all the variety of feelings, from simple appetite, to the
most painful hunger. This painful distinction of the nervous
filaments of the extreme vessels of the gastric cavity, promptly
announcing the sensations to the central center,
of the prehensile faculties, are in turn admonished
and replied, through the medium of intelligence and will, to procure
the alimentary materials for satisfying and allaying these sensations.
These materials, when secured into the stomach, stimulate the
gastric vessels to eject this special fluid, which, chemically
combining with the alimentary matter, forms the new chemical
compound, from which, after undergoing the further necessary
changes of assimilation and transformation, again furnishes the
fluids from which the feeling of pain is again to spring.
- This notion of action and effects, continued to proceed to
infinite extent, time after time.
I believe this gastro-intestinal system
does not form a part of the peculiar
system of fluid organs. The union of
the arterial blood & the nervous fluid takes
place at the termination of these nutritive vessels upon the lining
membrane of the stomach. -- And, is it not probable that
this peculiar fluid of stomach fluid, when accumulated in the
extreme vessels after fasting, in some morbid conditions of
the organ, may, in the absence of organic or other causes, to
waste its discharge & chemical modifications, be taken up by
the absorbins. I return'd into the general circulating mass
of fluids again. The diffus'd throughout the system,
producing a necarious kind of digestion, or solution of the
constituents parts of the cellular tissue? May not the rapid
emaciation & waste of the body, at some pathological condi-
tions of the system, in starvation be accounted for in
some such way? -- I think it not altogether impossible
though it be not susceptible of direct proof. The general
laws of the animal economy show that when a specific fluid
be once formed or secreted, if not discharged or spent for its
intended & appropriate purposes, it will be reabsorbed.
I mention its deleterious effects in some part of the
system. What other effect could be inferred from
the necarious operation of this powerful solvent
than that of destruction of the parts, to which it
was carried. What part more likely to be
carried to than the cellular tissue?
Perfect harmony of action must exist through the whole apparatus or else derangement of the gastric apparatus ensues.

This is clearly demonstrated by introducing food through the oesophagus into the stomach in an entirely empty state. It will not admit pure fluids through the oesophagus only at a certain degree of rapidity. So soon as a few spoonfuls of simple soup or other liquid aliment be put in with a spoon or pellucid, the orifice yields close upon it. Usually this is followed by a gentle ejection from the stomach cavity into the cavity of the stomach of the oesophagus. The orifice yields contractive, becoming upon it takes place. It commences for 16 or 18 seconds, during which a portion of a particle more being introduced till a certain span of time have elapsed. Then the valve may again be depressed, then food put in.

Neither can food of any kind be introduced any further through the apparatus: when the stomach is entirely empty, than it is usually demonstrated that the esophagus. This I have often repeatedly observed.

The gastric motions are observable in the muscle contractions of the cardiac portion of the oesophagus.