From the results of about two hundred experiments upon the gastric fluids & functions of the human stomach, made with a view to establish no particular theory or hypothesis, & without any preconceived prejudice or aptitude for popular schools or favorite authors, I feel justified in making the following corollary drawn from unseal facts & observations:

1st. That there is a peculiarly specific fluid secreted into the healthy stomach of man & animals, by the vessels of the stomach only.

2nd. That this fluid (by which I mean pure gastric juice) is a universal solvent of all alimentary matter.

3rd. That it requires the aid of moderate warmth between 75° & 100° Fahrenheit, duly & perfectly to effect this solution.

4th. That it is the principal, if not the agent, in digestion, facilitated by agitation & gentle motion.

5th. That it effects precisely the same solutions of alimentary substances out of the stomach as it does in & with the aid of the same degrees of heat & gentle agitation.

6th. That it acts in the same manner on all substances, not by total conversion into new & different matters, but by modifying the various compounds & reducible these into the elementary principles of living animals.

7th. That it varies only in its purity & quantity, not in its properties or principles, whatever aliment may have found it, or been submitted to its action.
8th - That it is not accumulated in any considerable quantity in the gastric cavity during abstinence. A long fast.
9th - That it is expected to flow into the stomach, in due and healthy quantities only, by agreeable alimentary stimulation of wholesome diet, in proper quantities.
10th - That it is always acid, this of the hydrochloric character.
11th - That it is essentially different from saliva in its physical and solvent properties.
12th - That it is powerfully and speedily antiscorbutic, as it is a very potent marinated mixture of beef, water, being at once effectively corrected and made sweet by mixing.
a valvular formation of the coats of the stomach, adapted itself to the orifice as completely to prevent the efflux of the gastric contents. This valve is rather difficult. It is formed by a slightly invaginated portion of the inner surface of the stomach, filled partly to fill the aperture, with its principal & most external attachment, at the upper gastric edge of the opening, with a free depending portion hanging pendulous of filling the aperture when the stomach is full, playing up & down, simultaneously with the respiratory motions. When empty.

It is about the size of the ball of the thumb, may be very well represented by placing the joints of four fingers beneath of the left hand in contact, then resting the lower end of the metacarpal bone of the right thumb at its palmar joint, upon these points in contact, laying the ball upon the space so traced between them, then moving it up & down by bending the joint. When the stomach is nearly empty & quiescent, by pressing down the valve, its part, the interior of the cavity may be viewed to the depth of six inches: & the food in it may be plainly seen, entering the cardiac orifice through the esophagogastric ring. The perforation in the walls of the stomach is about three inches to the left of the cardiac, near the left subpolar termination of the great curvature of its splenic end.

When the stomach is entirely empty, & contracts upon itself, the valve is forced through up the inner surface protrudes & becomes inverted to the size of a hen's egg, & so retains always, after lying upon his left side or sleeping a few hours, a larger portion of the surface prolonged & spread out over the external margin, from six inches in circumference, fairly exhibiting the natural ragged, villous membrane of mucous coat lining the gastric cavity. This appearance
is almost invariably exhibited in the morning, before rising from bed—

The appearance of this united

portion varies under different circumstances or conditions of the system. When in perfect health, the usual colour is between pink and milliary, with no

even, glossy covering of soft mucus uniformly spread

over the whole surface. The mucus lying in irregular, circumference folded, with their interstices lined with

a thin circumscribed substance, the aqueous humor, and so from

mechanical irritation, or the least alimentary stimulus

come in contact with this surface, a gentle undulatory

motion of these mucus continues. The sensations increase

accumulate & become distinctly acid, the colour

becomes more fluid & incommensurable. Very fine, sharp

pointed papilla appear upon the surface of the

villous mucus, protruding through the mucus coat, from which exhalation a clear fluid, transparent,

as water, distinctly acid, which drops, and

trickle down the sight—

When, from some accident, or even any

appreciable cause, symptoms of disease occur, the

appearance is first indicated by a change of

the healthy appearance to a deeper colour, with red

spots. Small pimples or aphthous patches, here and there, over the surface, with the mucus coat abraded, in

some places, thicker & in others, unequal

over the whole, with the small vessels visible, sharp,

dry, and dilated. Sometimes the mucus coat appears

more milky & paler than natural, exhibiting a

greyish white, sometimes this feverish or unequal thickening

of the mucus coming under these appearances, little or no sensation can be excited, either by me-

chanical irritation or alimentary stimulation. The coat remain dry & irritable, or become pale and

flacid & little or no gastric juice can be obtained.
The first of these distress appearances generally succeed to some excess, or irregularity of diet or drinks or exercise, or suddenly obstructed continuous fermentation, from whatever cause, it is accompanied by pain in the head, hollow countenance, yellow or brown coating of tongue, caducities, languid pulse. I suppose it continues as transpiration.

The last, more generally succeeds to misdistribution of weather, or more particularly to sudden change from a clear day to a dense involved atmosphere.

After excess of eating or drinking, chymification becomes returned, imperfect, though the appetite be not much impaired. The chymic fluid become acids, a sharp, exciting the edges of the aperture, it almost invariably producing asthagus or red spots, patches over the mucous Garner.

To extract the gastric juice & chymic fluid for examination here, considerable management becomes necessary to obtain them in proper quantities & quality, sometimes when the stomach is entirely empty of all solid or secretory chymic matter, after several hours fasting, a fluid very much resembling the pure juice, will flow but poorly & the quantity of 2 or 3 ounces, but when even if the stomach is entirely empty, it contains a large proportion of solid material, as remains following. In proportion of the solid, it's most commonly it can only be obtained in small quantity. From the empty empty stomach, slowly distilling, through the tube, tube of the purest juice.