

defends, and stimulates the inner mechanism more than can easily be conceived.

In order that I may not be charged with running thoughts till they are out of breath, I may bring forth Head's conclusions,¹¹ that each viscus had a definite segment of skin that would show sympathetic pain when the former was irritated. He assumed that impulses can reflex the other way, that irritation of the skin over these areas would have trophic influences on the corresponding viscus. The so-called "lung reflex," described by Abrams,¹² shows that this is true. By irritating the skin over the lung by means of cold friction, or Faradic currents dilation of the lung ensues, and an increase of the blood in that lung follows.

This is evident by obliteration of apex beat, cardiac and splenic dullness, along with the appearance of hyperresonance or percussion, and a more definite lung outline under X-rays.

Whether intra-spinal or intra-ganglionic, excitement inside is communicated to the skin outside, and vice versa. Beneath the skin both superficially and deep are great laboratories that can be aroused to feverish activity by stimulus applied upon the cutaneous surface.

By contraction of this great lymph heart, interchange of lymph and blood is effected, and the lymph passing over is a mixture of excretion and secretion, waste products and proteids, to defend the whole organism. It appears that the outer world excitement is accompanied by increased activity inside, else we had never been in possession of a heat regulating mechanism.

You well know the nervous mother who will make a hot-house plant of her child. There comes a day of exposure, and the child has "caught cold," has bronchitis, pneumonia, nephritis or gastro-intestinal catarrh. The *modus operandi* of "catching cold" is this: the lymph stagnates from want of proper skin stimulus which would be cold. The application of cold to the skin produces a powerful interchange, driving the excretory organs to overwork. Over-stimulation, from clinical evidence, we know can end in inflammation. The child who has daily exposures has his waste products sent into the blood circulation in dosage. The daily exposure is itself a tissue arouser and tonic.

No biological worker now-a-days denies organic evolution, but for the reason that the "how" entirely dominates the "why" it has not been pushed into the explanations of purposeful phenomena. From the inception, there were certain forces that act upon organic growth and will continue to act for all time.

Shall we ever know the full meaning of "sunlight" giving us light