

THE  
UPPER CANADA MEDICAL JOURNAL,  
OF  
Medical, Surgical and Physical Science.

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ORIGINAL COMMUNICATIONS.

ART. XLII.—*Pathological Histology*, by DR. GOTTLIEB GLUGE.  
*Translated from the German by JOSEPH LEIDY, ESQ., M. D.*  
*Philadelphia.*

FOURTH SECTION.

*The Histological Metamorphoses of the Blood.*

The blood, which contains all the elements from which the tissues are developed, may organize itself immediately into them. It is not even necessary that it should be exuded through the walls of the vessels to construct new tissues. Hunter asserted the possibility of the immediate conversion of blood into tissue, but latterly the fact has been almost entirely overlooked, and I believe I was the first to prove this transformation by microscopic observation.

Blood may experience a transformation into tissue as readily within as exterior to the vessels, occurring, in the first case, in a very trifling degree in stasis of the blood; in the second, in blood extravasated into the surrounding parenchyma, when the vessels are torn.

23. *Metamorphosis of blood within arteries, veins, and the heart.*

In the organization of blood corpuscles, within the vascular system, they associate in groups of ten or more, and then become enveloped with a grey albuminoid matter, soluble in acetic acid, which afterwards condenses, and thus constitutes a cell membrane.

The blood corpuscles at first retain their hematine, and may either preserve their original size or may undergo diminution. After the cell is formed the red color gradually disappears, and is then observed filled with numerous dark granules (nucleoli), which consist of fat, a proteine substance or pigment.