His investigations into the subject of inflammations turned his attention to the question of the reaction of ordinary tissue cells, whence there resulted a valuable contribution upon the subject of parenchymatous inflammation, opening up a new standpoint, which was most important in the development of his ideas on cellular pathology. In this piece of work he pointed out that the changes which one sees in the parenchymatous cells, *i.e.*, the swelling and increase in numbers of the cells, were simply indications of an abnormal activity of all or certain of the processes of nutrition which ended in degeneration of the cell. In this research the author's attention was especially directed towards the connective tissues, and there resulted the discovery of the connective tissue cell, and of the cells of the bone and cartilage and the demonstration that the cells were all of the same nature, and that the tissues were related tissues. These observations on connective tissue were of the highest importance for Virchow's own development, because they enabled him to clear his mind from the last remaining taint of the humoralists and to understand properly the whole question of cell formation.

Schwann, the discoverer of the animal cell, had propounded a theory for the explanation of the origin of the cell which was entirely based on humoralistic ideas. This was the theory of the blastema; he conceived that the cell originated by a kind of organic crystallization from a plastic material, which he named the blastema, a fluid in fact; that the particles in this fluid became massed together to form the nucleus, and around this the cell protoplasm was deposited by a process essentially similar to crystallization. This blastema theory of Schwann was, as Virchow himself says, the obstacle over which he stumbled.

Not only Virchow, but most of the other younger investigators of that day, accepted the blastema theory, and were looking for facts to support it, and were endeavoring upon this hypothesis to account for the formation of all the different cells of the body. One of the strongest arguments for this view was the occurrence of certain granular cells in those areas, especially inflammatory, where new cells were being formed; besides these granular cells there were found pigment cells, blood-corpuscle holding cells, and others which were taken to be proofs of the origin of these structures from a granular blastema. Virchow was able to show that these cells had acquired the granular character or had become secondarily loaded with the pigment masses or the blood corpuscles. Especially the correct interpretation of the granular cells, the fact that they were degenerating cells, was of the greatest importance. As he says in an article in the hundredth volume, "These investigations have a very great value for the history of a human error; these granular cells were regarded as individual steps in a developmental series, and they had been carefully and accurately placed