

## A MARVELOUS HEARING DEVICE

Investigation proves that the human ear, like the eye, is a marvel of complicated mechanism. Sound waves cause vibrations in the ear drum, which is connected to three small movable bones called the hammer, the anvil and the stirrup. These bones are arranged in such a way as to transmit a great variety of types of vibrations to the intricate labyrinth of the inner ear, which contains thousands of fibers of differing sizes able to pick up and separate the many types of vibrations. A good ear can distinguish many different pitches, varying from 20 vibrations per second to 20,000 per second, and can recognize a great variety of qualities of sound. Many persons are not aware of this, but if one does much telephoning he soon finds that he can recognize a great many people by their distinctive voice quality alone.

A unique feature of the human ear is its ability to select certain types of sound and to ignore others. When it becomes necessary to use a hearing aid one immediately notices how deficient such instruments usually are in this respect. The rattling of paper, which a person with normal hearing would scarcely notice, may sound so loud in a hearing aid as to drown out all the more important sounds.

Some years ago I conducted a seminar at my home in a room where there was a chime clock. We would meet for two hours to discuss involved problems of Biblical exegesis. From time to time we would glance at the clock, but at the end of the two hours no one of us could have stated that he had heard the chimes ring even once. Yet when the attempt was made to type the discussions from the tape it was very irritating to find that four times each hour a quarter of a minute of discussion had been completely blotted out by the chimes. If two people speak at once during a recording it is usually impossible to understand what either has said. However, when one participates in a live discussion he will often hear only what one person has said and will hardly notice interruptions by others. The remarkable selectivity of the human ear demonstrates the great mind of the wise Creator. If one can believe that all of this developed by pure accident through random mutations he can believe almost anything.

Every ear has within it three small canals arranged in such a way as to convey to the brain information about the effects of gravity. These canals play a great part in the maintenance of equilibrium of each individual. People are seldom conscious of these canals unless something goes wrong with them. After one has seen a person suffering the miserable dizziness that such a disturbance can produce he should realize how important a sense of equilibrium can be, and should be grateful for this wonderful instrument that God has placed in the human ear.

## THE COMPLICATED STRUCTURE OF THE CELL

We cannot now speak of the many other intricate systems in the human body, such as the lymph vascular system and the digestive system, or even discuss the marvelous chemical factory called the liver, which performs many extremely complicated processes in order to produce substances needed for the numerous functions of various portions of the body. We must, however, take a brief time to look at recent discoveries about the tiny components of which all of these organs are formed, and also to glance briefly at the human brain.

There are about one hundred trillion cells in the human body. If this number of cells were placed in a line one inch apart, such a line would stretch 63,000 times around the earth.

These cells are not simply aggregations of material. Improvements in the light microscope and the invention of the electron microscope have made it possible to learn a great deal that was not previously known about the interior of a cell. If the men of the 19th century had had the slightest conception of the complexity of life that has now been discovered, one wonders whether it would have been possible for such a theory as Darwin's ever to have been formed.

Each cell has an intricate structure, as yet only partially understood through microscopic studies. It is a complex mechanism, usually containing a nucleus surrounded by cytoplasm, and enclosed by a membrane. The cytoplasm contains a number of various structures, including from 1 to 200 mitochondria, in which complicated processes are constantly occurring.

Within the nucleus of each body cell there is material called chromatin. When the cell is about to divide this material comes together to form 46 long threadlike structures called chromosomes.

Within the complicated structure of the chromosomes, and to a lesser extent within the cytoplasm that surrounds the nucleus, there is maintained in each cell complete information about all the varied structures of the body to which it belongs. It has been estimated that there are more bits of information contained in a single human cell than are contained in a large encyclopedia volume.

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## ANNIVERSARY SERVICES AT MITCHELL SQUARE

BY Rev. S. A. Tulloch

The stone set in the front of the building bears the inscription "Baptist Chapel 1906". From the Baptist Year Book 1907 for Ontario and Quebec we gleaned some facts about the Mitchell Square Baptist Church. East Oro was listed among the churches that had completed their church building. That Baptist Year Book was the first one where we could find any written reference to the Mitchell Square Baptist Church and in brackets was the name "East Oro". The Year Book records the fact that the church was founded in 1857 with a membership of thirty-two. The new building opened at its present location in 1906 with the undershepherd James Brown of Orillia leading the flock. Mr. David Paisley of Mitchell Square was the Church Clerk.

The Church is located between the eight and ninth concessions of Oro Township on the Mitchell Square Rd. which runs parallel with the number 11 Highway between Barrie and Orillia. Although the church is located on the opposite side of the highway to Lake Simcoe, many of the folks on holiday visit the church during the summer months.

It was our privilege to preach there on May 31st at the anniversary services. Having spent three years on that field as student-pastor 1952-54 we greatly appreciated this opportunity for further fellowship. At the morning

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