

without the experience of pain - everyone at times wishes for release from pain. But what is pain? How does it travel in the body? Can it be measured? What can be done to control it? Scientists all over the world have worked long to find the answers to questions like these, and this work goes on. Last year some of the results of their investigations were brought together by H. W. Leggett in a BBC programme Release from Pain. Scientific advice was given by Professor J. Z. Young, Professor of Anatomy in the University of London, who gave the Reith Lectures on Doubt and Certainty in Science, which New Zealand listeners heard some months ago (Professor Young is an authority on the anatomy and physiology of the nervous system), and the programme was produced by Nesta Pain, who has written a number of other features about the mind and the brain. (The most recent of them, on The Basal Areas, will be heard from 3YC at 9.44 p.m. on May 7.) Release from Pain is now to be broadcast from NZBS stations, starting with 2YA at 9.30 a.m. on Sunday, May 11.

Most of us have a general notion that we feel pain when our nerves are stimulated unpleasantly, but science, as everyone knows, isn't satisfied for long with general notions-about pain or anything else. In recent years workers in this special field have been finding out more about the special sense organs in which pain has its origin. They have also discovered that pain can be measured. In scientific terms pain is caused when there is some "change in the environment" of a nerve, such as swelling or inflammation, which causes a discharge of electrical impulses, at a rate of from five to a hundred per second, to the brain. The brain then acts in a way that makes us feel the pain.

Some of the ways in which the individual's reaction to pain—the time taken to reach what science calls the "pain threshold"—can be measured, and whether pain has its origin on or below the surface of the body, are illustrated in Release from Pain. In dramatised scenes listeners will hear how tests are carried out and how the pain threshold is raised by the use of drugs and even by such simple measures of self-distraction as counting backwards and forwards.

As a result of research in the field of pain, diagnosis and the means of relief have been improved. Drugs which operate by damping down the patient's re-

O one can go through life sponse to pain are not, of course, the only means of relieving it, and one of their disadvantages is that they are nearly all habit forming. Surgery may be used if the pain is severe and persistent. One patient whose case is discussed in the programme was taking an enormous dose of drug to relieve pain caused by angina pectoris. Relief was given by cutting the nerve pathways on their way to the spinal column, though it meant that the patient lost all sensation in the arms. In even more advanced surgery the nerve pathways in the spinal column itself may be cut-an example of the sort of thing made possible by new knowledge about the origins and tracks of pain.



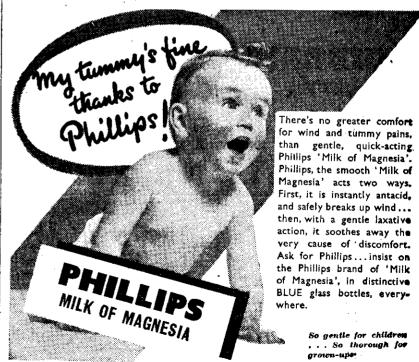
PROFESSOR J. Z. YOUNG

A Bee in His Bonnet

"LAST year I became a little deaf in my left ear; I didn't take much notice, thinking it would pass off," said J. C. Bee-Mason, a bee-keeper of long standing, speaking in a BBC programme. "I stood it for about eight weeks, and as there were no signs of it getting better I went to my doctor. He said he thought I had a hard piece of wax in my ear and prescribed the usual remedy of olive oil and told me to see him again in a week. I did so. The doctor syringed my ear. "Good Lord," he said, "look what I have found!" and produced a bee. Then I remembered that in July, when opening a hive, a bee got inside my ear and stung it. I'm used to that sort of thing, and forgot about it. Some of my friends had told me I had a bee in my bonnet. For once, they were right."



REX LEATHERCRAFTS, CHRISTCHURCH, NEW ZEALAND.



SCOTT & TURNER LTD., Andrews House, Newcastle-on-Tyne, England. M3.1