hills behind, then she would at least see what the outlines were intended for, and be able to make allowance for shortcomings."

So they all went together into the back drawing-room, and criticised, explained, or admired the work of art in which Grenville claimed partnership, though his share of the work (so Beatrice declared) had consisted chiefly in discovering faults; and then they discussed the pretty neighbourhood and the fine weather till Mrs. Ross gave the signal for departure.

"Well, Emily, and what do you think of them all?" Mrs. Ross inquired, when the two were fairly in the street. "How do you like the heiress, to begin with?"

"She is quite different from anyone I ever saw before. I like her, and I don't like her. She makes me so horribly self-conscious."

"I can't say I saw anything at all alarming about her. She seems to me a charming little person. And Mrs. Somers is evidently very fond of her."

"Oh, yes; so do I. I mean—I see she's very charming. But don't you feel yourself that when people are so awfully perfect, doesn't it ever make you feel uncomfortable?"

"Oh, but people never are perfect: that's a happy provision of Nature. No one cares for dead perfection: 'Faultily faultless, icily beautiful, splendidly null,' you know. But Miss Harker isn't that type of woman by any means. She looks all feeling, all soul."

"Yes, I know. She makes me feel as if I were all body and no soul."

"What an odd fancy you have taken up! Emily, dear, I never knew you so irrational before. You don't look well, either. Do you feel faint? Shall we turn into a shop and get you a cup of coffee, or something?"

"No; I'm quite well," said Emily, trying, as the saying is, to pull herself together: "that is, I shall be all right directly. Really, it's nothing; perhaps the room was rather warm."

Mrs. Ross changed the subject; but she did not dismiss the matter from her mind. Something had come between these two young people. Well, they should have another chance.

When she and Emily were nearly back at the Firs again, she said casually enough—

"I've asked them all down to Ashfield next week for a day or two. I want you to come too, and help me to make them enjoy themselves."

"I don't know," Emily hesitated.

"Oh yes, you do. I can't dispense with your services. You shall make all my flower-pots, and show them about everywhere."

END OF CHAPTER THE TENTH.

A TALK ON ACHES AND PAINS.

BY A FAMILY DOCTOR.

ONE of the commonest signs of being out of sorts is a feeling of discomfort which may become so intense as to cause actual pain. Very frequently we cannot localise it, but usually it settles at some particular spot—a neglected tooth begins to ache, or we suffer from pain in the ear. The more general feeling of weariness and aching is almost considered inevitable to man's existence in this world. It may be induced by comparatively trivial causes, such as unaccustomed exertion, exposure to cold, or indiscretion in diet. A distinction is made sometimes between an ache and a pain—an ache being the name applied to a feeling less acute and more lasting—but the one merges into the other, so that it is often very difficult to decide which is the more appropriate term to use in a particular case. There is reason to believe that the sensitiveness of a people to pain depends on the degree of civilisation and education which prevails. Among savage races men and women often voluntarily, and without flinching, subject themselves, as proof of their fortitude, to painful mutilations the very mention of which makes us shudder. The introduction of anæsthetics into general use seems to have increased our sensitiveness to pain, and we often hear people declare that they are unable to bear the pain of the most trivial and momentary operation without chloroform. As a general rule, men bear pain badly, while women, and even children, are more patient. Whether this greater patience is due to a higher degree of fortitude or to less sensitiveness is a question upon which I dare not express an opinion.

The meaning of aches and pains will be better understood if we consider for a moment the exact significance of pain. Everybody knows that pain is associated in some way with nerves, and people are often heard talking learnedly about nerves when in reality they know very little about them. Every part of the body is abundantly supplied with nerves, which are of two kinds—motor nerves, which carry messages from the brain to the muscles, and thereby enable us to move; and sensory nerves, which convey impressions to the brain from the sensory organs, such as the eye, the ear, and the skin. The brain receives the impressions and interprets them, turning them into what we call sensations, and according to the nature of the sensation we call it pleasurable or painful. We thus see that in many cases the nerves themselves have only a subsidiary share in the matter; they correspond merely to telegraph wires, and transmit

messages from one part of the body to another. If the connection be broken at any point, messages can no longer travel—for example, if the nerves of the arm are cut, we should feel no pain, even if the hand were completely burnt and destroyed. We are now in a position to understand how pain may originate. It may depend upon an unhealthy state of the brain, upon injury or disease of a sense organ, or sometimes it may depend upon the condition of the nerve itself. In many instances the difference between pleasure and pain depends simply on the amount of stimulation which is applied. There may be only a comparatively slight difference between the heat which warms us pleasantly and that which scorches us, giving rise to a distinctly painful sensation. The eye is specially sensitive to such differences. It is stimulated by light, and when the light is too intense or glaring, as when the sun shines brightly after a recent fall of snow, we soon begin to suffer from aching and pain in the eyes.

There may be actual injury, as when we cut ourselves ; or there may be disease, as a decaying tooth or a chronic ulcer or an abscess. Pain may also depend upon the condition of the nerve itself. If a sensory nerve be injured somewhere in its length—as, for example, when we strike the elbow on a particular spot and stimulate the underlying nerve—we do not refer the sensation to the point struck, but to the end of the nerve, and we feel our fingers tingle. The brain has always been accustomed to receive messages from the fingers by means of that nerve, and consequently interprets as usual the message it receives. For a similar reason, after amputation of a leg, pain is often felt as if it were in the toes. The brain occasionally makes a mistake ; the nerves branch very freely, and it sometimes happens that the message is attributed to the wrong branch. Thus a very painful ear-ache is often really due to a decaying tooth, and in hip-joint disease pain may be felt in the knee, though it originates in the hip.

At times a pain is felt for which a local cause cannot be found. This is true neuralgia, and is due to the nerve itself being slightly inflamed. The word is too often used as a synonym for toothache or other ailments for which a definite curable cause exists. Lastly, pain may depend upon the condition of the brain. As long as it is healthy and well nourished it is able to value correctly at their proper worth all the messages it receives. It pays no attention to many of them, others it remembers, while it promptly replies to a few. If it is overworked, confusion results, and we hear of people "losing their heads" in consequence. If it is not sufficiently occupied it pays too much attention to the many trivial messages it receives. It is well known that when people who are martyrs to neuralgia are enjoying themselves they forget all about the pain, but as soon as they find time for introspection, as the habit of closely considering our own feelings is called, the pains return. Many *malades imaginaires*—a polite name for people who fancy themselves ill—are always analysing their own feelings.

It is obvious that the treatment of pain depends upon its cause. If it depends upon injury or overwork, rest is absolutely necessary. Pain is often Nature's way of enforcing rest. The agony experienced when a man attempts to walk with a sprained ankle is a sufficient command for him to keep it at rest. Local irritations must be carefully looked for and avoided, and decaying teeth stopped or removed, ulcers healed, etc. I have in previous papers referred more than once to the benefit and well-being which depend upon useful occupation and regular exercise. I mention these factors again, for in no condition are they more beneficial than in the vague pains, real enough in most cases, included in the word "neuralgia."

MUSICIANS.—II.

HEADS OF THE PROFESSIONS.

TO most people Sir Arthur Sullivan is the high prophet of the lighter school of music. He is that—and something more. He had made a name for himself before he wrote a note of comic opera, and his name would remain although as Mr. Gilbert's partner he should be quite forgotten. "The Lost Chord" and the spirited tune that has made "Onward, Christian Soldiers" popular, are certainly known to thousands who have never had the opportunity of hearing a Savoy opera.

Sir Arthur's early career as a musician was entirely associated with the church, and with the composition of what must perforce be termed serious music. When quite a little fellow he conceived the notion of being a Chapel Royal choir boy ; and so he got his father to take him to Sir George Smart, the organist. Sir George heard him sing, was satisfied, and sent him off to Helmore, the master of the choristers, for a final decision. But the Helmores had left the address given to the elder Sullivan, and the new tenants did not know where they had gone.

"They must have eaten when they were here," said the boy to his father ; "let us ask at the butcher's shop."

The butcher supplied the information, Mr. Helmore was found, the boy was heard, and the following day he made his *début* in the duet of Nares' anthem, "Blessed is he that considereth the poor and needy."

Arthur Sullivan remained at Whitehall for two years, when he succeeded in carrying off the first