the fitting of the sockets, and to the adaptation of these extra pieces of mechanism, without which such cases could not be fitted at all.

The success attained in this department of the working of the Edinburgh War Hospital was much appreciated by those present.

In proposing a vote of thanks to the demonstrators, Dr. BOND said: "Before we go I should like to say there is one thought in our minds, and that is that we would like to express our thanks to those who have given us these most interesting demonstrations. They have been a revelation to a large number. We know the amount of trouble that has been taken, and we want to express our thanks to those who have organised the demonstrations, and to those who have been able to show us so much.

This was seconded in appreciative terms by Lieut.-Col. W. R. DAWSON, R.A.M.C., and carried by acclamation. Mrs. Keay's "At Home" pleasantly concluded the meeting.

## CORRESPONDENCE.

## To the Editors of the JOURNAL OF MENTAL SCIENCE.

MY DEAR SIRS,-I happened to run across the article on "The Psychology of Fear," recently written by Sir Robert Armstrong-Jones, in the issue of the Journal of Mental Science, of July, 1917. I am not a psychology professor or a professional psycho-analyst, but I was so impressed with the article that I am compelled to make a criticism of it.

I am glad to see Sir Robert take a step in advance of most psychologists in maintaining the existence of a conflict of bodily reactions in the case of fear. However, like others of his tribe, he still seems confused in his distinction between instincts and emotions. He makes these two statements: "The fear of solitude, of being without protection, etc., are notable instances of inherited instincts; and "To some natures fear becomes a mental tonic, but perhaps other emotions help to create the motive for action."

He thus classes fear as both an instinct and an emotion. Possibly he, like **James, regards fear as an emotion only in its more complex stages, with no distinct** line of division between the two forms of reactions. He seems to assent to the following order of events in the arising of consciousness, which I believe he credits to MacDougall : (1) Perception of some "existing fact," (2) which sets up reflexly These some bodily disturbance, (3) which commotion is apprehended or realised. three phenomena are respectively stimulus, instinct, and emotion. Sir Robert himself says that an instinct "attended with a mental side is signified by the term 'emotion.'" It necessarily follows that instinctive and emotional reactions do not overlap, but are entirely separate and distinct. The instinct is an unconscious, inherited reaction, but when two or more assert themselves at the same time they must necessarily clash, which results in the arising of consciousness (for the purpose of consciousness is to co-ordinate these conflicting reactions) and the emotion.

All these bodily reactions are purposive, in the sense that they are teleological. In the case of fear, we will find that the conflicting instincts are those of curiosity and flight. There are an indefinite number of kinds of such reactions, depending upon their intensity and general characteristics. The instinct of curiosity may be one of inquisitiveness or wonder, and that of flight one of concealment, while the "Although danger may be a cause of fear," says Sir Robert, "there are

many instances of strong and adventurous persons who long to meet danger in order to conquer it." Using the principles already outlined as a basis on which to work, we cannot say that danger necessarily produces fear. There may be fear without danger and danger without fear. There may be the gravest kind of danger, but if either the instinct of curiosity or that of flight is not present, fear will not be experienced.

When the miner lights the fuse for the blast the instinct of flight compels him to run, but he is not frightened. The instinct of curiosity does not assert itself because he is experienced, and knows when the explosion will take place and what its force will be. If one is fully determined to face danger he may eliminate the assertion of the flight instinct, and thus overcome fear. The experiences of big game hunters bear out this statement. In the *Outlook* (New York) several years

ago was portrayed a vivid description of the emotions experienced by a Montana minister attacked by two famished mountain lions one cold winter morning. While he was running his hair stood on end, and he trembled with fear, but when he could control himself sufficiently to turn round and face the beasts he became very calm, although all odds seemed against him. Through the sudden and unexpected appearance of a freight train he lived to tell the story.

The overcoming of the flight instinct is seen clearly in the action of the soldiers at the Front. Henri Barbusse, in describing a charge, says: "We are now as men possessed; we have forgotten our fears, and all we want now is to meet the enemy face to face; we are lusting for blood." Sir Robert himself tells of a young officer who, being overcome by a sudden fear, began to tremble, but by an effort of will this passed off, otherwise his feeling was to get away from where he was. I believe this illustration discloses one of the most important contributions to mental science—the fact that the cure of fear lies in the will. The generally accepted theory has been that expressed by Helen Williams Post: "Fear, which is only another name for ignorance, is all that ails us. Fear is not a thing that one can drop in obedience to the will; it can only be overcome by an intelligent investigation that leads to a full understanding of it. That which we understand we no longer fear. Understanding alone conquers fear."

However, in the case cited of the mountain lion attack, where all reason showed torture and death to be imminent and certain, all the knowledge and understanding in the world would have been of no avail. Will power, and not knowledge, overcame this man's fear. Truth will make you free, but intellect will only hold the links; it takes something else to strike the blow that breaks them.

Most respectfully yours,

F. LEROY SPANGLER.

3543, 10th Street, N.W., Washington, D.C., U.S.A. August 1st, 1918.

## To the Editors of the JOURNAL OF MENTAL SCIENCE.

SIRS,—I am obliged to you for the courtesy afforded me to read Mr. Le Roy Spangler's criticism of my paper upon the "Psychology of Fear" in the *Journal* of Mental Science last year.

He refers to a misapprehension in the use of the terms "instinct" and "emotion," which he himself appears to share, for he states that in fear "we find that the conflicting instincts are those of curiosity and flight"; yet one is an emotion, and the other a so-called instinct. I confess that I experience a difficulty in appreciating a clear line of demarcation between instincts and emotions, and personally I would prefer to regard all the instincts as reflex actions, and, as we know, elaborate reflex acts may need even a more extensive nervous apparatus than an intelligent act.

The origin of the instincts is probably reflex, but as they become more teleological, and their ends become more adapted to the welfare of the organism, they tend to rise above mere reflexes, and to be expressed either without consciousness along congenitally prepared nervous pathways, or to rise and be presented to consciousness.

The modern definition of the instincts is "inherited perceptual disposition," and if this is accepted the instincts are clearly mental states. We know that they are best seen in the lower animals such as the social bees and ants among the invertebrates and in birds and some of the lower mammals among the vertebrates. Witness the migratory tendencies of birds and the constructive acts of the beaver, and although we have no means of reading mental states into these acts—for only in man can this be effected—yet there must be mental elements present as in man, and we often use the term "instinct" in animals to express mental states.

Further, I fail to see a distinct demarcation between "feeling" in the psychological sense and the emotions, unless it be in the organic visceral sensations which accompany the latter; yet there are probably some *hormones* with corresponding internal sensations accompanying every hedonic tone, as the experiments of Cannon appear to suggest.

My critic denies that danger necessarily produces fear; but if, as I maintain,