

bodies, called *cells* sometimes, arranged in single file, surrounded by a delicate sheath. A good many of these are most always brought together and surrounded by another sheath; this second thread is what is called a muscular fibre. Where much strength is requisite, these fibres are again clustered together, and form what is termed a *fasciculus* (being a bundle of fibres), and in the voluntary division, the fasciculi are aggregated into a very large bundle, termed a *muscle*, the largest assemblage of of fibrillæ—each division receiving its own sheath. It is probable that the fibrillæ are the sole actors in the finest divisions of vessels, that is, they act alone, without being formed into fibres.

A fibrilla is formed by a number of minute bodies, arranged linearly. The individuals of the fibrillæ are said to be oblong, their greatest diameter corresponding with the length of the fibrilla; each of these parts are connected with the brain by the mediation of minute nervous filaments. When the fibrilla acts, the ends of the *cell* are said to approach each other, and their sides to recede from the centre. By the simultaneous action of all the cells in a fibrilla, the two extremes of the fibrilla are made to approach each other—thus visible motion is produced.

The nervous filaments commencing at the *cortical spherules*, and terminating in these microscopic elements of the fibrilla, convey to them an influence which throws their ends into an opposite electrical state, which produces instant attraction. Not a muscular motion in the whole body, whether in the voluntary or involuntary systems of muscles, can be produced, unless there is a free communication, by the nerves, between the brain and these cells of the fibrillæ. Destroy that connection, and all muscular motion is paralyzed. Almost every change that occurs in the body, is attributed to the sympathetic nerve and the brain (the former being an appendage to the latter): all muscular motion is attributable to them. But the changes which take place in the food, chyme, chyle, lymph, arterial blood, venous blood, secretions, the

removal from the tissues any worn-out material, or the addition of fresh material to them, are to be accounted for on chemical affinities. The arterial blood leaves the vascular tissue and permeates the capillary tissue, the tissue of reparation and change; comes in contact with every part of the living body, saturates it as water does a sponge, and while these affinities occur between the moving flood and the various tissues, each tissue meets some ingredient of the nutritive tide that it requires, and forms an union with it; and if any of its old affinities have become weak, they are dissolved, and new marriages permitted and performed. Thus dissolution and reparation go hand in hand. S.

Phy. Med. Recorder.

LETTER FROM DR. PATTERSON.

COLBORNE, 10th Nov., 1849.

MR. EDITOR,

In redeeming my pledge to correspond with you respecting the progress of our cause, and the influence of our principles, permit me to state, that our progress is emphatically *onward*; and such is the influence of our principles, that the man who hesitates to grant his note for our medical services, when desired, is considered to occupy a place, a *little* below that of unqualified meanness. Fortunately, however, few such specimens of unworthy humanity are found in this region—and of these few, not one can be found so utterly lost to virtue, as to openly found his refusal on the ignoble scheme of the medical monopolist. No man refuses to give his note, assigning as his reason, that we cannot collect our fees—any pretext whatever, is preferred to this. One man, for example, whose residence is five miles from my office, refused to give his note because I charged him 7s. 6d. per visit. Several passing visits, and one of consultation, in his case, not being charged at all.—Another, declaring the end is at hand, refused