distribution. It is, therefore, clear that an impulse passing along a sensory nerve may, by means of the ganglion on the root of the latter, overflow so to speak, into the neighbouring sympathetic ganglion. And the same impulse may be reflected along the fibres from the anterior root of the nerve, which accompany the sympathetic fibres to the vessels, and by this means reach the local ganglion on the coats of the latter.

When the arteries of a given area dilate in response to the stimulation of an afferent nerve, all the other arteries in the body become unusually contracted, and, although, this is to some extent due to the increased quantity of blood in the dilated vessels, yet it may be that the nervous energy which has been prevented from following its usual channels is diverted to other courses, and goes to increase the energy which is being sent to the vessels that have not been deprived of their nervous supply.

Looking at the matter in this light, all that has been attributed to vaso-motor centres in the brain and spinal cord, may be accounted for by considering them centres of inhibition, and the so-called vaso-motor centre in the medulla as a co-ordinating inhibitory centre by means of which the equilibrium of the circulation is maintained.

The following circumstances show that by means of cerebro-spinal nerves, a constant restraint is exercised upon vaso-constrictor impulses. If the pneumogastric is divided during the process of digestion, the vessels of the stomach which had become dilated from the presence of food, at once contract leaving the gastric mucous membrane pale and bloodless. When the trigeminus of a rabbit is divided in the skull, ulceration of the gums, lips and cornea follows, but if the superior cervical ganglion is removed at the same time this ulceration is prevented. In cases of myelitis where the functions of the cord are completely destroyed, the bed sores which so frequently accompany this condition are almost identical in character with the gangrene, which follows obstruction or obliteration of arteries. When, on the contrary, sensory nerves become more than usually sensitive, as in some cases of disease of the brain or spinal cord, the blood vessels in those parts where the nerves are in a state of hyperæsthesia, become very much dilated and there is a rise of temperature. When, however, the disease or injury is of such a nature as to destroy the functions of the cord completely, the parts become paler and colder than natural.

A departure from the normal or healthy state of any part of the body, is usually accompanied by a diminution of arterial pressure. Hence to restore tone to the more or less paralysed muscular coats of the arterioles, and thereby relieve the capillary engorgement is often the object of medical treatment. One method frequently employed to accomplish this purpose is to relieve the ganglia which control the affected vessels from the inhibitory influence of the cerebro-spinal nerves. And this is usually done by excluding air and making sedative and soothing applications to the peripheral extremities of these nerves, or by the administration of such medicines as have a sedative effect on the nerves in question. For instance, belladonna is known to have a sedative effect upon the pneumogastric in particular, while the best effects of opium are probably produced on the sensory nerves of the abdomen.

When it is considered desirable to relieve an engorged district by diverting the blood to another part of the body the inhibitory influence of the sensory nerves in the part fixed upon is increased by making stimulating applications to their terminal extremities, or by giving medicines which are known to have a stimulating effect upon such nerves. As we have seen that the vessels of the salivary glands are dilated by placing certain substances in the mouth, no doubt the vessels in other parts of the body may be dilated by the stimulation of