more or less uniformly between the nodes. These are probably due to the presence of chlorides and especially of chloride of potassium.

Potassium compounds are also found in the medullary clefts or imbrications of Lanterman and in Frommann's rings. The former may in some fibres be brought into view very distinctly by the potassium reaction, while in others the external portion only of the imbrication may be revealed (Fig. 40), and then one may see that there is no break in the continuity of the external border of the sheath.

The material constituting the membranes of the imbrications is continuous with the neurokeratin of the adjacent portions of the medulla and is formed of that substance. This explains the occurrence of potassium therein, for, as it is inert material, it undergoes impregnation with compounds of the element.

The rings of Frommann were only occasionally seen, and when observed they were usually found remote from, or, at least not adjacent to, the nodes of Ranvier. The parts of the rings revealed by the reaction were very thin bands around the axon and disposed at regular intervals along the fibre. They appeared to be independent of the axon and to be formed of neurokeratin. Wherever they occurred there were no other precipitates or collection of potassium-holding material between the sheath and the axon, but the neurokeratin of the former was impregnated with compounds of the element and these were also present in the nodes and their immediate vicinity.

In striated muscle fibre there is a remarkable disposition of the potassium compounds. This is most distinctly shown in preparations from Insecta and Crustacea, particularly on account of the ease with which the muscle fibrils in these may be isolated for the purpose of bringing the reagent into intimate contact with them, and because also of the large size in them of the constituent parts of the fibril. The value of these and other Invertebrate preparations also consists in the fact that they do not, as pointed out above, contain creatin, which is a constituent of Vertebrate muscle and which reacts with the hexanitrite reagent to a considerable degree like potassium. In the wing muscles of beetles and the claw muscles of the crayfish the very clearest results were obtained, the dim band alone giving the reaction, the whole of the light band, including the doubly refractive material of Dobie's line, maintaining, even after long application of the reagent, its pristine clearness. In the wing muscles of the scavenger beetle, in the resting or relaxed condition, the reaction as a rule appears most marked in zones near, but not immediately adjacent to, either end of the disc, the two