Paneth on the Cortical Motor Area of the Dog (*Archiv f. Physiologie*, p. 523, vol. 37, 1885).—The author's experiments were carried out in the laboratory, and under the supervision of Prof. Exner. He used an apparatus constructed so as to furnish galvanic currents of fixed duration and graduated strength in the exploration of the cortex of narcotised dogs. He first determined the excitable areas with reference to certain muscles, especially those of the feet, one of which—the extensor digitorum, for instance—being selected, and attached to the lever of a myographic cylinder. The corresponding excitable area was next circumscribed by means of an incision, which left it connected with the subjacent parts only. Now if there are any fibres establishing direct communication between the latter and the cortex, the effects of electric excitations must remain the same as before; and this too was found to be the case of course. When such fibres (the direct pyramidal tract) were also divided, no effect was obtained by a moderate current. So far Dr. Paneth confirms in every particular the position held by most physiologists at the present day. The original portion of Dr. Paneth's work is his attempt, by means of circumscribing cuts, to isolate a portion of cortex, stimulation of which should cause movements of one limb or one group of muscles only. This, he expressly states, he failed to do, and as his experiments seem to have been performed carefully, this is an important result. Too much stress must not be laid upon it, however, since a circumscribing cut through the cortex is almost immediately filled with blood, and so spread of the current to neighbouring parts is not prevented. The exact determination of representations of groups of muscles surely is not possible in such an imperfectly evolved cortex as that of the dog, and under any circumstances the problem would be more easily solved by attacking lower and less complicated centres. Dr. Paneth does not appear to be aware of Dr. Mariques' recent work in the same direction, viz. the isolation of motor centres from the neighbouring cortex, which was reviewed in the last number of 'BRAIN.'

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